

# OPINIONS ON XBODY FITNESS TECHNOLOGY

Stefan DINU-CRISTINESCU<sup>1</sup>

Virgil TUDOR<sup>2</sup>

---

## Abstract

*XBody World training is a widespread social phenomenon, a form of addiction that millions of participants "feel" acutely and "consume" with tenacity, pleasure and immense benefits. In modern society, participation in XBody workouts using electric muscle stimulation technology through fitness exercises is a phenomenon which importance has grown considerably, becoming more and more present in daily life. The novelty of the topic consist in the need to improve the organization and promotion of XBody training, as well as to increase the number of participants. In this context, our paper aims to analyze the way in which the electrical muscle stimulation trainings through fitness are organized and carried out by the XBody Titan Club from Bucharest, through the feedback received from the participants in these training EMS (Electric Muscle Stimulation) Fitness but also from specialists in the field of sports science and physical education. The methods used are data processing and interpretation, as well as the comparative study of the information collected, through questionnaires applied to the mentioned samples. From the analysis undertaken, we can conclude that the way of organization and conducting of XBody training has improved and the online promotion system has led to an increase in the number of participants.*

**Keywords:** XBody, fitness, EMS technology, workout, participants,

**JEL classification:** I20, I29, M31

**DOI:** 10.24818/mrt.22.14.01.02

---

## Introduction

Time constraints are often reported as the main obstacle to frequent exercise; thus, time-saving exercise protocols are attractive to people who want to increase their performance, attractiveness and health. In terms of XBody means, training protocols seem to be the most effective time method to gain muscle mass and increase strength compared to classic fitness training. [1]

Electromyostimulation of the whole body (XBody -EMS) is becoming more and more popular in Europe. Unlike the well-known local application EMS (Electric Muscle Stimulation), XBody-EMS fitness technology is able to stimulate all major muscle groups with dedicated intensity simultaneously. XBody workouts are often considered to be just as effective and safe over time; however, a few studies

---

<sup>1</sup> National University of Physical Education and Sports, e-mail: stefan\_dinu17@yahoo.com, Telephone: 0729.712.130

<sup>2</sup> National University of Physical Education and Sports, e-mail: virgiltro@yahoo.com, Telephone: 0722.740.366



comparing the effects of both methods on muscle mass and / or strength are not appreciated enough. [2]

However, suppliers of XBody technology advertise that this cutting-edge technology offers all the benefits of a classic 90 minute workout in just 20 minutes, and 2 workouts per week is enough! [3]

In the 21st century, the organization of such training has a significant impact on the development of the population, from a motor, psychological, social and cultural perspective. For example, one of the skills developed by XBody technology is topographic memory characterized by spatial orientation, which is relevant for the manifestation of cognitive aspects. [4]

Promoting both traditional and online XBody EMS fitness training is very important for their development, as well as for increasing the number of participants.

However, XBody technology works the whole body and is becoming more and more popular in Europe and worldwide but XBody training is able to stimulate all major muscle groups with personalized intensity and frequency depending on the physical condition level of each individual.[5]

### **Purpose of the study**

The actuality of the subject is the need to improve the organization and promotion of XBody training, as well as to increase the number of participants. In this context, our paper aims to analyze the way in which the EMS fitness trainings are organized and carried out by the XBody Titan Club from Bucharest, in the light of the feedback received from the participants in these trainings. We have taken into consideration the growing impact of EMS fitness training on the adult population as well as on younger generation.

### **Material and methods**

In this research, we focused on opinions regarding the participation of those who wish to participate and the development of muscle electrical stimulation training through fitness exercises they participated in, but also about the aspects that need to be improved.

Current XBody EMS technology allows the simultaneous activation of 10 major muscle groups (pectoral, lumbar, latissimus dorsi, trapezius, arms with option triceps or biceps brachii, legs or deltoid, biceps femoris, quadriceps, gluteal and abdominal region) with different stimuli, which can be adjusted according to the resistance of each participant.

The XBody EMS training device has a pulse frequency of 7 to 100 Hz, alternatively with a pulse depth between 50 - 450  $\mu$ s (microseconds), has a special protection system designed to partially prevent the occurrence of unpleasant



reactions and is applied to the motor point of the muscle [6]. The pulse intensity can be selected and changed individually during an EMS fitness training session [7].

The questionnaire method was used for the research. We chose this investigative technique because it is based on logically and psychologically ordered questions that require written answers [8].

For each training held at XBody Titan Club in Bucharest, the questionnaires included both closed and open-ended questions. The content of the questions and the answer patterns are revealed along with the presentation and analysis of the results.

The interpretation of the data was done by completing the questionnaires that were filled online by XBody training participants and by specialists in the field of sports science and physical education, after the data were analysed eventually, we have interpreted the results.

The analysis of the results was done using mathematical and statistical methods, and the data obtained were synthesized in order to perform their statistical processing and interpretation.

The survey was conducted starting with December 2020 until April 2021, and two questionnaires have been developed:

- a 17-item questionnaire that was applied to XBody training practitioners. They are between 18 and 56 years old, being 86% female and 12.2% male.
- and a 14-item questionnaire for sports and physical education specialists. Specialists are between 20 and 60 years old, with 45.5% males and 54.5% females, which shows that females are more interested in improving their physical condition.

## Results

The number of respondents to the questionnaire is 124 on XBody training practitioners and 78 responses from specialists in sports science and physical education (Table 1), which indicates an increased interest in providing feedback on XBody EMS fitness technology.

**Table 1. Number of respondents to feedback XBody**

<b>Rrespondents</b>	<b>Units</b>
XBody practitioners	124
Specialists in sports science and physical education	78

The results obtained from the application of the feedback questionnaires were divided into descriptive data categories.

The data analysis and interpretation for the questionnaires is addressed both to the XBody practioners and to the specialists in sports science and physical education.



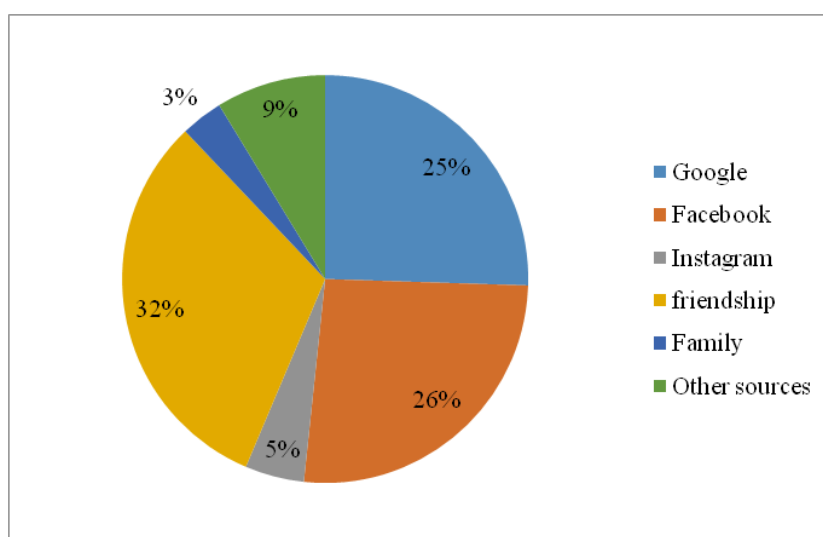
We chose to apply the questionnaires to physical education and sports specialists to find out their opinion, their knowledge of XBody technology, if they tried the technology, if they saw a training, compared to the questionnaires applied to XBody training practitioners who do not have specialized knowledge in the field of sports science and physical education.

Specialists in sports science and physical education are bachelor graduates, Master graduates and / or PhD graduates and they work in the field of physical education and / or leisure motor activity.

- Evaluation of the organization of the survey regarding the XBody Titan Bucharest training practitioners as well as on the physical education and sports specialists.

To assess X Body training practitioners, they answered 17 questions, and here are some of the questions:

1. How did you find out about X Body technology?

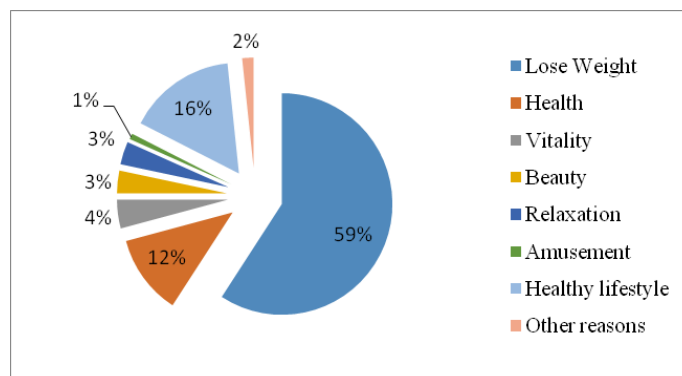


**Figure 1. XBody practitioners' answers to question 1**

Figure 1. shows that friends communication is the most frequent way of transmitting the information in which participants in this research are involved, registering a percentage of 32%. Facebook ranks second with a percentage of 26%. Surprisingly, for the survey participants, the google engine talks a lot about the new activities, and is very popular after the Facebook socialization site, with 25% of the answers here. In third place are other sources with 9% followed by 5% Instagram and in last place the family, which means that there is a very low degree of communication in the family.



## 2. Why did you choose X Body training?

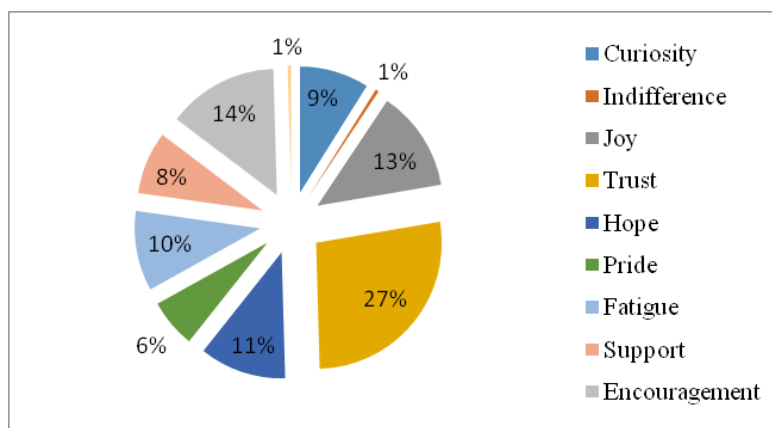


**Figure 2. XBody practitioners' answers to question 2**

Figure 2 shows that a large number of respondents, 59%, choose X Body to lose weight, because this aspect is the most visible and felt by the body, followed by the participating team in this research, of which only 16% engage in X Body training for a healthy lifestyle. In contrast, the majority of subjects, with a percentage of 12%, engage in for health with the X Body coach, while for the respondents surveyed online, this exercise option is adopted in proportion of only 4% for beauty and vitality.

However, among our respondents 3 % have chosen this kind of training for relaxation (3%) and 1% for amusement.

## 3. How would you describe your emotional state during your X Body workout?



**Figure 3. XBody practitioners' answers to question 3**



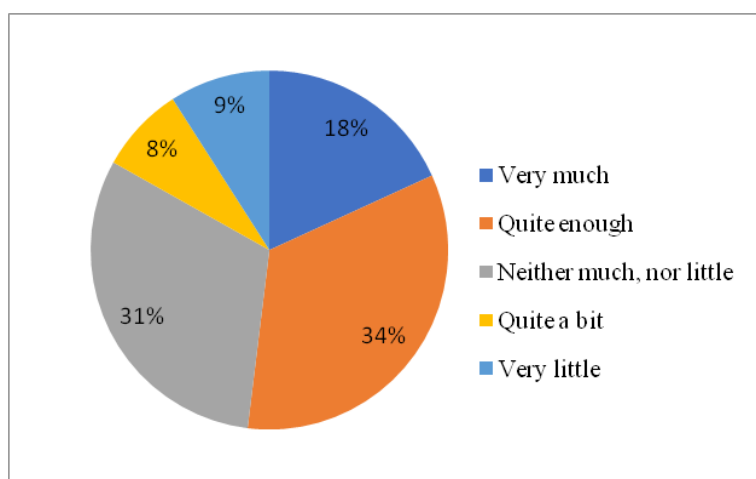
Figure 3. shows that confidence is the most common emotional state that subjects feel during X Body training, the activity in which X Body participants are involved in this research, with a percentage of 27%. On the second place ranks the emotion of encouragement with a percentage of 14%. Surprisingly, for online subjects, the emotion of joy is more agreeable, with 13% of the answers being included here.

On the fourth place is the emotional state of hope with a percentage of 11% followed by the fatigue emotion with 10%, and on the last three places there is curiosity with a percentage of 9%, followed by support (8%) and finally the category pride with a percentage of 6%.

- For the category of physical education and sports specialists, 14 questions were address for both male and female.

Below we will present three questions with answers that the specialists in sports science and physical education (77 in number) have completed with the help of technology and the google form.

#### 4. Does electrostimulation (XBody) exercise relieve back pain?



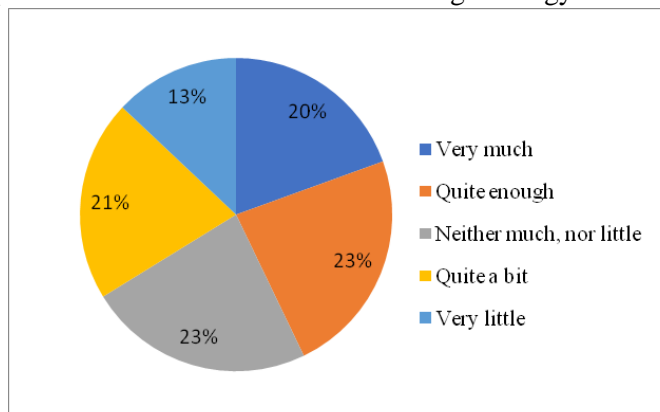
**Figure 4. Physical education and sports specialists' answers to question 1**

Following the analysis of this graph (figure 4.), it is found that the survey participants, attach great importance to EMS fitness workout and consider that it relieves back pain quite enough in proportion of 34%, and survey participants consider neither much, nor little that EMS motor activities relieve back pain.

In third place is the answer very much with 18%. The option very little is in fourth place (9%), for the participants while for the option quite a bit there was a percentage of 8%.



5. Do you believe in the statement that "20 minutes of XBody training is the equivalent of two hours of fitness training at the gym"?

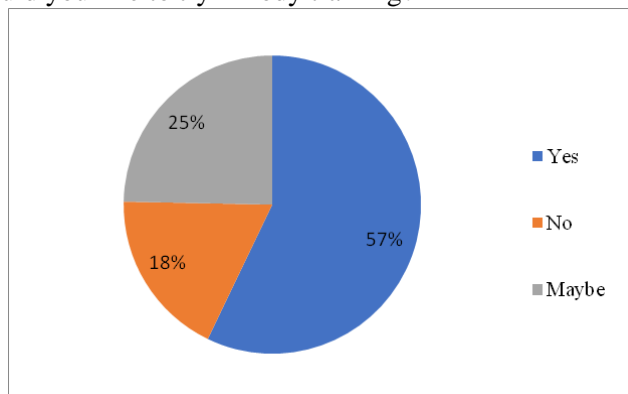


**Figure 5. Answers of physical education and sports specialists to question 2.**

The graph above (Figure 5.) shows that 23% of physical education and sports professionals addressed the option quite a bit for the statement that 20 minutes of XBody training is the equivalent of two hours of fitness training at the gym, that indicates that they are well informed and have tried XBody technology. For the online specialists who took part in the survey, the option does not condition the equivalence of 20 minutes of engaging in XBody sports activities with those at the gym for 23% of the respondents, and this percentage still indicates insecurity about XBody technology.

Also in their case, in proportion of 20%, they chose the option very much, which means that they recognize the importance of the possibilities of equivalence in practicing different XBody sports activities, compared to the classic fitness room. The percentages recorded for the category quite a lot being 21% and the category with the fewest answers is very low with a percentage of 13%.

6. Would you like to try XBody training?



**Figure 6. Answers of physical education and sports specialists to question 3**



The sports and physical education specialists we interacted with during this study 57% said that they want to try XBody training and we believe that nowadays XBody technology offers many opportunities and benefits for our bodies and also XBody training offers greater accessibility to the practice of leisure sports because free time has unfortunately become limited in the contemporary life of a modern man.

In diagram 6, above, respondents answered 25% that maybe they will try XBody training and in last place is the “No” option with an answer rate of 18%, being a small one compared to the other options in figure 6. It can be seen that we need to further promote this type of XBody EMS fitness technology to encourage people to engage in XBody workouts during their free time.

### **Conclusions**

From the analysis undertaken, we can conclude that the XBody training and the organization and conduct of the two questionnaires between physical education and sports specialists and EMS fitness training practitioners, have positive feedback.

This study helps to increase the number of XBody training participants due to the improvement of the conditions offered during the electrical muscle stimulation with fitness exercises, but also due to the increased amount of information provided on the XBody Titan website and on social networks. However, media promotion should be improved in order to promote both XBody technology and the benefits of practicing EMS fitness training at most twice a week.

Reasons for participating in XBody training are potentially changing from being focused on results to focusing on physiology, health, and the social environment, as can be seen in part by more people participating in training.

From the specialized literature study related to the research topic, we concluded that both the health risks and the costs of health care caused by a sedentary lifestyle are considerable.

According to the literature, the use of XBody EMS technology is an effective alternative medical strategy for re-education, training and prevention. After an injury or a surgically healed injury, the XBody EMS fitness device allows the maintenance of muscle groups and contributes to the fight against muscle atrophy.

Research shows that XBody EMS technology seems to be effective in improving the field of contemporary fitness.

### **References**

1. Carpinelli, R. N., Otto, R. M., Winett, R. A. (2004). A critical analysis of the ACSM Position stand on resistance training: insufficient evidence to support recommended training protocols. *Journal of Exercise Physiology Online*. 7(3):1-60. <https://doi.org/10.1371/journal.pone.0160650>.





2. Boeckh-Behrens, W. & Treu, S. (2002). Vergleich der Trainingseffekte von konventionellem Krafttraining, maxxF und EMS-Training in den Bereichen Körperzusammensetzung, Körperformung, Kraftentwicklung, Psyche und Befindlichkeit. Bayreuth, Germany: Institut für Sportwissenschaften der Universität Bayreuth; <https://doi.org/10.1155/2016/9236809>
3. About ems training. Xbody ems training. Available at: <https://ca.xbodyworld.com/about-ems-training/> [Accessed 07 April 2022].
4. Tüdös, Șt., Predoiu, R., Predoiu, A. (2015). Topographical memory and the concentration of attention in top female tennis players. *Social and Behavioral Sciences*, 190, 293-298.
5. Kemmler W, Teschler M, Weißenfels A, et al. Effects of Whole-Body Electromyostimulation versus High-Intensity Resistance Exercise on Body Composition and Strength: A Randomized Controlled Study. *Evid Based Complement Alternat Med*. 2016;2016:9236809. doi:10.1155/2016/9236809
6. Tudor, V., & Crișan D. I. (2007). Forța – Aptitudine motrică [Strength - Motor ability]. Ed. Bren.
7. Dinu-Cristinescu, S., Tudor, V. (2021). Discobolul – Physical Education, Sport and Kinetotherapy Journal, Volume 60, Supplementary Issue, 672-685, <https://doi.org/10.35189/dpeskj.2021.60.s13>
8. Chelcea, S. (2007). Metodologia cercetării sociologice. Metode cantitative și calitative. București: Editura Economică.