

NEUROMARKETING – CHANCE OR DANGER FOR CONSUMERS IN OPINION OF MCSU'S STUDENTS

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Abstract:

Development in neuroscience have created possibilities of using neuroscientific methods in marketing. Neuromarketing beside benefits for organisations that use this method of research is also an important subject for discussion about ethical issues associated with research using data collected from consumer's brains. The purpose of this article is to analyze opinions of young consumers and define ethical issues of using neuromarketing by for-profit organisations. The article will present synthetic results gathered during the survey addressed to students of the Maria Curie-Skłodowska University's Faculty of Economics in Lublin. Conclusions taken from the research will provide information about attitudes towards neuromarketing research.

Keywords: neuromarketing, ethical issues, consumer behaviour, neuroscience.

1. INTRODUCTION

Neuromarketing is an area of science that connects neuroscience with marketing, mostly on the field of studies of the human brain and its reaction for marketing tools and actions. Possible benefits for organisations are very attractive, even if this method of research is very expensive one. Beside the costs, neuromarketing is gaining popularity very quickly but at this same time customers does not have big knowledge about this area of science and that fact might result in seeing such methods as dangerous for them.

2. LITERATURE REVIEW

Neuromarketing is giving a chance to discover customer's subconscious and since 95% of decisions are made without awareness of that fact, it is very attractive to use this research method. At first, the only way of study human brain was to observe patient's behaviour and to examine their brain after the death. Later on analysis of brain injury and behaviour of patients, helps to build hypothesis about how the specific areas of brain are affecting people's perception, understanding and behaviour. Nowadays discovers about how human brain works are possible to achieve with using non-invasive tools and procedures, that are providing results in real time (Trębicki, 2011).

Among the tools used for neuromarketing research, that are focused on providing the analysis of the brain and relations between the neuronal system and behaviour, we can identify: Lesion Studies, MRI, fMRI, Near Infrared Spectroscopy (NIRS), PET, Single Cell Recording, EEG, ERP, MEG, TMS, Eye Tracking, Measurement of Physiological Responses, Face Reading and Response Time Measures (Zurawicki 2010).

The use of neuromarketing by organisations concentrated on making profit can be a reason for discussion on ethical issues such as (Airely & Berns, 2010):

- lack of regulations,
- possibility of reading consumer's minds,
- privacy of information about preferences,
- possibility of using collected data to discriminate against individuals or larger groups of consumers,
- which influences and manipulations in preferences are more or less ethical,
- generalization of research data that was obtained from a small group to a bigger population,
- abnormal findings,
- consumer's perception on using neuromarketing research by for-profit organisations,
- possibility of lack of interest of consumer welfare.

Using neuromarketing may not be seen by consumers with enthusiasm but instead can cause feeling manipulated by companies that use this technique, which can create negative reactions. Implications of use of neuromarketing can be significant as well for non-profit , as for profit organizations, mostly due to lack of consumer and business partners knowledge (Flores & Baruca & Saldivar, 2014). Although it is very common that companies do not consider that such research methods as neuromarketing can induce negative moods (e.g. anxiety, fear) which might have influence on ethical considerations (Pop & Dabija & Iorga, 2014).

3. RESEARCH PROBLEMS AND METHODOLOGY

The main aim of this article is to analyze opinions of young consumers and define ethical issues of using neuromarketing by for-profit organisations. In particular, to answer the following research questions:

- RQ1: Is the term neuromarketing commonly known among young consumers?
- RQ2: Are the methods used during the neuromarketing tests safe and are young consumers likely to take part in the research?
- RQ3: Are the data received during neuromarketing tests going to be used in compliance with their original purpose?
- RQ4: Does the neuromarketing test allow companies to tailor their offers more effectively to the consumers' needs?

To verify research questions the authors implemented a qualitative study. The study involved a group of 561 students (351 women and 210 men) of Faculty of Economics at Maria Curie-Skłodowska University.

Table 1: Age distribution of the respondents

Age	Under 18 years old	18 -25 years	More than 25 years old
Number of Respondents	21	526	14
Percentage	3,7	93,8	2,5

Source: On the basis of surveys's results

The questionnaire consisted of a set of closed questions. The survey was conducted in January and February 2016. The respondents took part in the survey voluntarily.

In the first stage of the survey, the respondents were asked whether they are familiar with the term neuromarketing and what are their experiences connected to it.

In the next set of questions respondents were asked to what extent are they willing to take part in following test: ERG, Eye Tracking, fMRI. All existed forms of tests were presented to the students by the means of short descriptions:

- EEG – enable the presentation of the brain's activity during mental states like: vigil, relaxation, calm, light and heavy sleep, which allows to test mental states more precisely. The test consists on placing on the head 20 databridge electrodes which record the data while presenting the tested material. EEG test does not have any influence on the organism although the tested person is aware of being tested.
- Eye Tracking test measures the point of gaze, the motion of the eye relative to the head and the dilation of the pupil, using the special glasses.
- MRI is not only a safer technique but also show much more details than Radiography scans. The image of the brain is formed by the means of magnetic waves. Then, the brain's structures are differentiated thanks to different signals that each of them emits. The special kind of the MRI test is functional magnetic resonans imaging (fMRI) that allows measuring an increase in blood and oxygen flow in an active brain area.

The person tested lies down on a movable table that slips into the device. During the test, the person tested must lie still but may communicate with a person that conduct a test thank to the microphone and the speaker located inside.

The questions from the last set concerned the opinions about neuromarketing techniques' effectiveness as well as their safe usage and an impact on consumers' decisions.

4. RESULTS

As the survey's results have shown, the term neuromarketing is relatively new for the young consumers. 73 % of the respondents states that they have never heard about neuromarketing before. Solely 5 in 561 have undergone neuromarketing tests.

The analysis of the first research question reveals that neuromarketing is not a commonly known term among young consumers.

Table 2: The distribution of young consumer's willingness to take part in neuromarketing test (in %)

	Yes	No	It is hard to say
EEG	65,8	8,9	25,3
Eye tracking	85,6	7,1	7,3
fMRI	51,2	22,3	26,6

Source: On the basis of surveys's results

The table above shows to what extent the young respondents are willing to take part in the neuromarketing tests presented earlier. Students are most likely willing to take part in the Eye Tracking method (85,6%), the next method was EEG (65,8%) and fMRI appeared to be the least popular (51,2%). The last method is the one that the half of the respondents are reluctant to take part in because they would be afraid of being tested by fMRI.

Table 3: Respondents' evaluation of the safety factor and their willingness to undergo the tests (in %).

	I agree	I partially agree	It is hard to say	I partially disagree	I disagree
These methods are controversial	5,2	23,5	36,2	24,8	10,3
These methods allow companies to „read” people's minds	15,5	32,8	25,1	16,6	10,5
The tests are safe	16,8	35,7	34,9	10	2,7
I would like to know the results of my tests	54,9	24,6	9,1	7,5	3,9
The clear rules concerning processing and use of the data should be established.	62,7	23,5	8,2	1,2	4,3

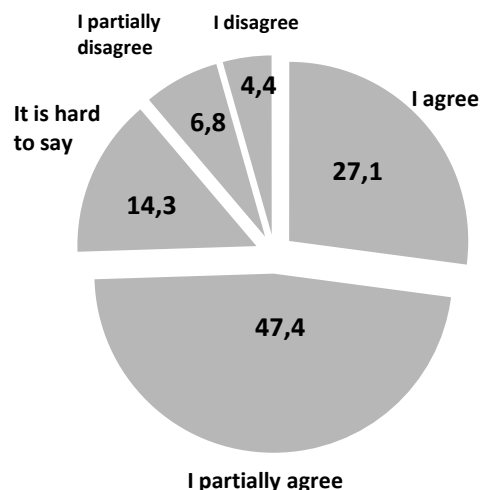
Source: On the basis of surveys's results

The table above shows the opinions of the young consumers concerning the neuromarketing tests and whether they would like to undergo these tests. The answers to the questions divided equally. More than 50% of the young consumers would like to know the results of the tests although the clear rules concerning processing and use of the data should be established. The respondents encountered difficulties to establish whether the neuromarketing tests are controversial matter. More than 25% of them states that the test may be a controversial matter, 30% of them think it may not. The rest of respondents could not decide. Majority of the respondents conclude that the tests are safe.

Providing the answer to the second research question, the survey revealed that the majority of the young consumers are minded to take part in the marketing test. Eye tracking is considered as the most attractive method. 52,5 % of the respondents consider the tests safe, the opposite opinion state 12,7% of them.

The analysis of the third research question reveals that 25% of the respondents conclude that the results of neuromarketing tests may be used to other purposes than they are supposed to. More than 50% of the subjects state that the data are used for the right purposes. The same distribution of opinions may be observed when it comes to the question whether the data may be sold to other companies.

Picture 1: An impact of the neuromarketing tests on the acknowledgement of consumers' needs (in %)



Source: On the basis of surveys's results

The analysis of the fourth research question reveals that 75% of the respondents agree that the neuromarketing tests may result in acknowledging the consumers' opinion and thus tailoring more effectively their offers to the consumers' needs.

5. CONCLUSIONS

Neuromarketing is not a commonly known term among young consumers and according to them, it may cause some advantages as well as some threats. As this method is nowadays more and more often used by big corporations it is important that people are perpetually informed about it.

It is crucial to present precisely the devices used during these tests and to provide explanation for what purposes exactly are used the data. It will increase the subjects' sense of security.

It is worth to conduct research in that matter and to acknowledge respondents' opinions. The respondents' evaluation of the neuromarketing will help to adjust the devices so they would be as safe as possible and perhaps less controversial.

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