NEUROMARKETING APPLICATIONSIN CONSUMER PSYCHOLOGY

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Abstract

The present study is focused on highlighting the main network in consumer choice on mobile market. In the last decades the mobile phone market has been developed fast and launched very attractive products that enchant the consumers. Hence, the perceptual maps combine the graphical representation of the product qualities with the main concepts related with its. The method: participants were a number of five young people aged 22-27 years with the average age of 24.2 years, voluntarily participated in the research ethics. A consent certificate was completed. There were a number of five associative map completed and one overlap map. The overlap map evidence the mental representations of the consumer choices regarding the mobile phones. Perceptual maps are important in developing marketing strategies for increasing product sales based on consumer perception about products.

Keywords: perceptual maps, associative network, mobil phone, affect vision.

1. INTRODUCTION

Perceptual maps can be of several types (Pecher, 2013; Gordon, Ruzek Bass, (2007); Gordon & Bass) because it focuses on certain approaches used in market research applied in consumer psychology and marketing.

Two of the most important are "Perceptual map" - perceptual map and "Associative network" (Solomon, 2007) associative charter.

On the individual associative map for each potential consumer there is finally added a modal map meaning the map of the overlapping of the associations. A

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perceptual map is a visual technique designed to show how the average consumer perceives the positioning of competing products on the market.

In other words, it is a tool that attempts to model consumer perceptions and understandings in a chart. The word "perceptual" comes from the word "perception", which essentially refers to the consumer's understanding of competing products and their associated attributes.

The most common presentation format for a perceptual map is the use of two attributes that determine the X and Y axes of a graph, but there are other formats that are sometimes used.

Perceptual maps measure how products are placed in the minds of consumers, and these perceptions are presented on a graph whose axes are formed by the attributes of the product (Kardes, Cronley, & Cline, 2011).

"A perceptual map represents customer perceptions and spatial preferences through a visual display" (Ferrell & Hartline, 2008).

A perceptual map model with 2 attributes: caffeine content and sugar content can be seen in figure 1.

Figure 1 Perceptual map regarding beverages consumptions.

Perceptual Map: Soft Drinks   Source: www.marketingstudyguide.com
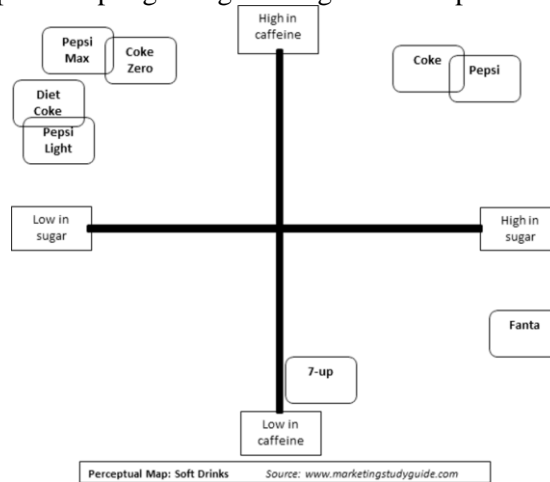
The main types of perceptual maps are the followings:
1. Perceptual maps that use two attributes of the product
2. Perceptual maps that use multiple product attributes
3. Common / mixed perceptual maps

2. SURVEY ON THE USE OF MOBILE TELEPHONES FOR YOUNG PEOPLE

2.1. METHOD

Within this Survey, a number of 5 participants, young people aged 22-27 years with the average age of 24.2 years, voluntarily participated in the research ethics.

Three of the participants are female and two male and three are from the respective two rural environments. The average usage time for the five mobile phone participants was 10, 6 years. One participant has Iphone, three have Samsung and one participant has the Motorola brand.

3. RESULTS

A first set of data collected was designed to produce a perceptual map on the quality and price of five brands of mobile phones on the Romanian market.

In Tables 1 and 2 you can see the likelihood of respondents who participated in this survey on questions about quality perception and price perception for the mentioned mobile phone brands.

Table 1. Perceived the quality of the mobile phone brand

Brand	Apple	Samsung	Motorola	Blackberry	Sony	Nokia classic
Telephone		android				
	5	5	3	5	3	2
	4	5	4	4	4	3
	5	4	4	4	3	1
	5	4	4	4	3	3
	5	5	5	5	4	2
mean	4.8	4.6	4	4.4	3.4	2.2

Table 2. Perception of the price of the mobile phone brand

| Brand	Apple	Samsung	Motorola	Blackberry	Sony	Nokia classic
telefon		android				
	5	4	5	5	4	1
	4	4	4	5	4	2
	5	4	4	5	5	1
	5	3	4	4	3	3
	5	5	5	5	4	2
media	4.8	4	4.4	4.8	4	2

Figure 2. Perceptual map of the brands chosen by the five participants in quality and price.
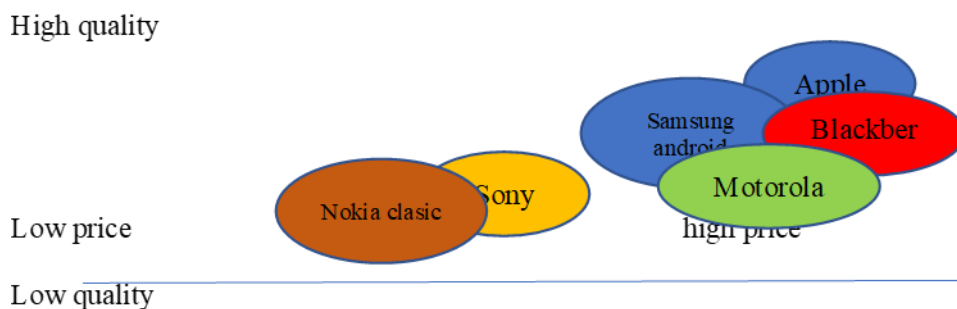
**Associative maps for the five survey participants** (Solomon, 2017, p. 154)

Participant No.1 biographical data: MP, feminine, 27 years, urban, 12 years mobile use. This is specific that affects vision, migraines, addiction, saves lives in emergencies by location and emergency call, guiding books. Uses mobile for: WhatsApp, Facebook, talk, pictures, music, internet, movies. Classic Nokia does not affect the view.

Figure 3. Associative map for participant no.1 at survey
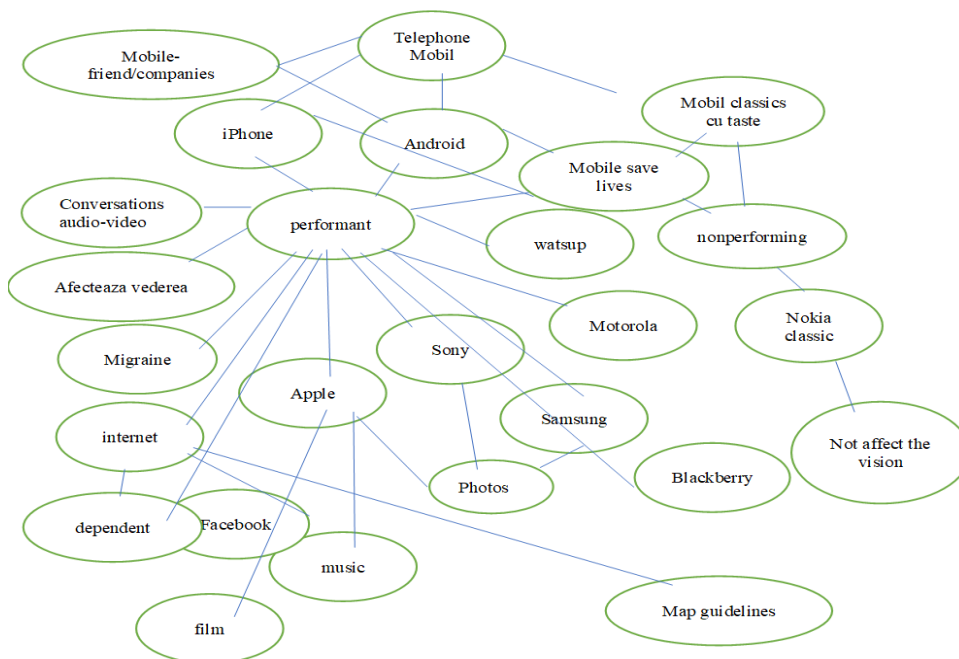
Participant No 2 biographical data: NB, feminine, 23 years old, rural, 9 years mobile use. This is specific that affects vision, migraines, addiction, saves lives in emergency situations by location and emergency call, map guidance. Uses mobile for: WhatsApp, Facebook, talks, pictures, music, internet, stored data, Skype.

Figure 4. Associative map for participant no. 2 la survey
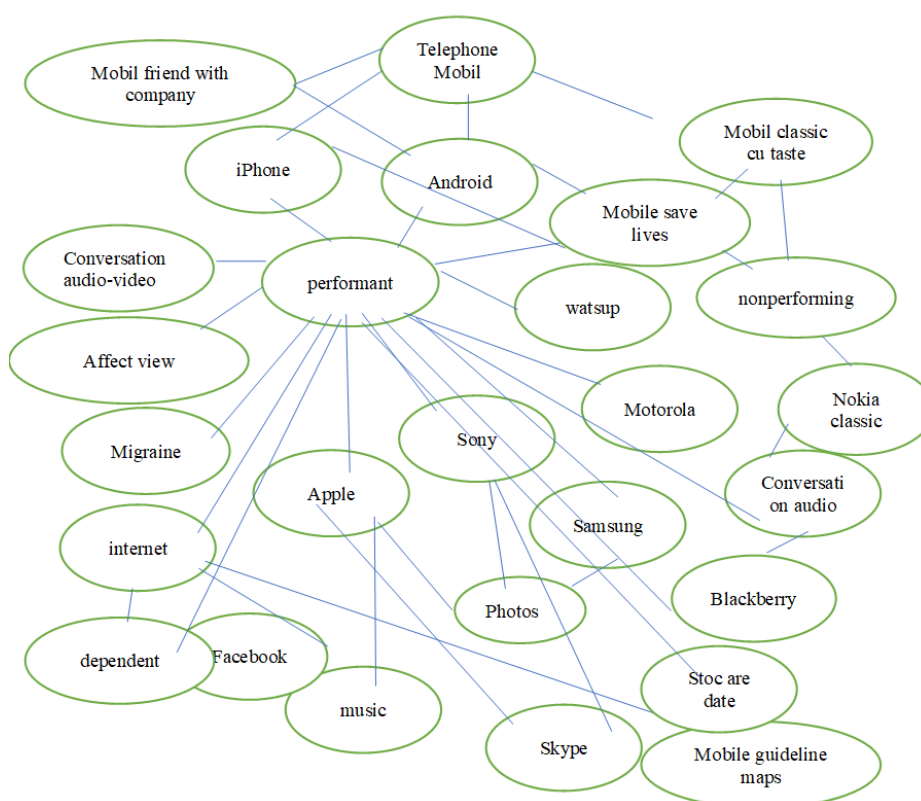
Participant No. 3 biographical data: MB, feminine, 24 years, urban, 10 years mobile use. It has specific headaches, spoils sight, creates addiction, saves lives in case of emergency by location and emergency call, map guides. Uses mobile for: WhatsApp, Facebook, talk, pictures, music, internet, Skype. Children under 10 years old should be banned.

Figure 5. Associative map for nr 3 la survey
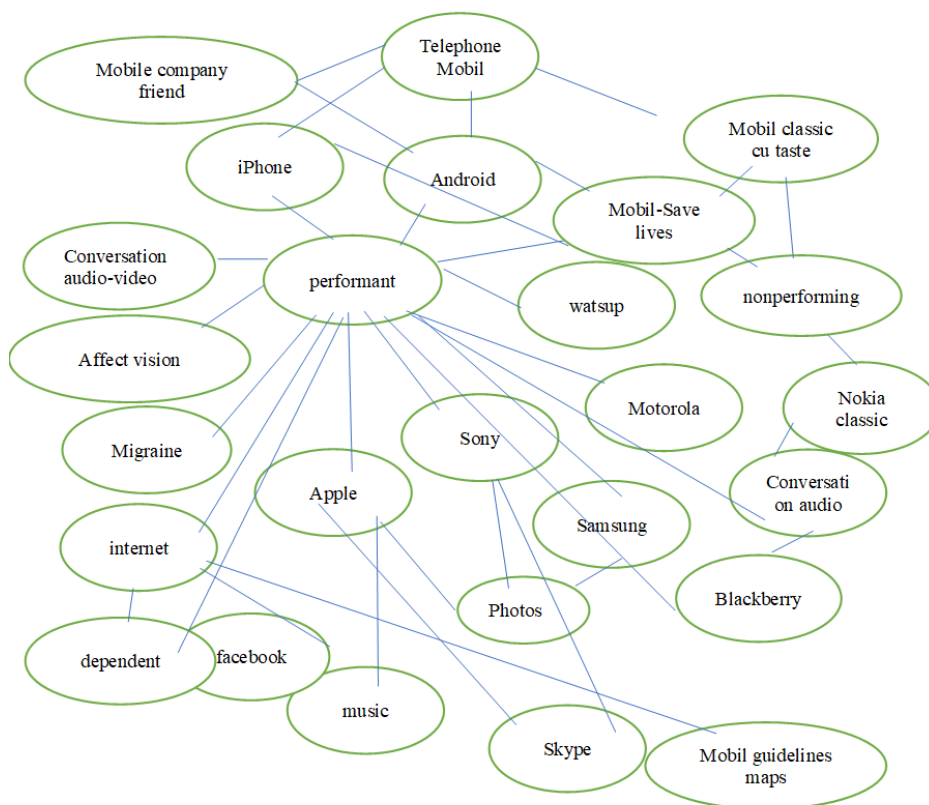
Participant no 4 biographical data: MP, male, 25 years old, rural, 12 years android use. This has the specificity of headaches, stinging vision, addiction, saving lives in case of emergency by location and emergency call. Uses mobile for: talk, music, WhatsApp, Facebook, pictures, internet, stored data, guides books. Children under 10 years old should be banned.

Figure 6. Associative map for participant no 4 la survey
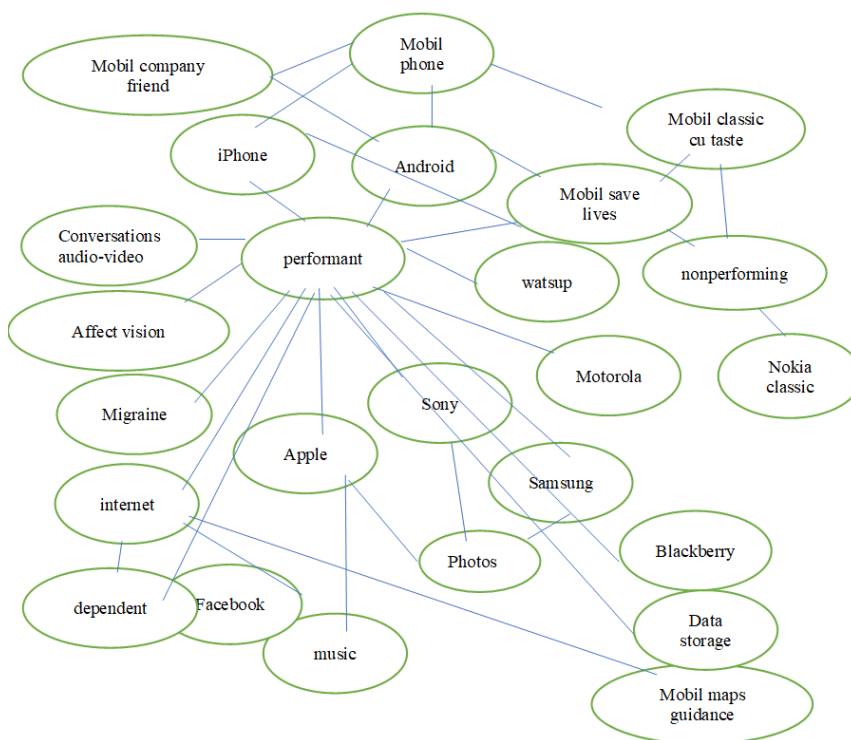
Participant No. 5 biographical data: MP, male, 25 years, rural, 10 years android use. It's specific that headaches, stomach vision, addiction, save lives in case of emergency by location and emergency call and guiding books. Uses mobile for: talk, music, WhatsApp, Facebook, internet. Children under 10 years old should be banned.
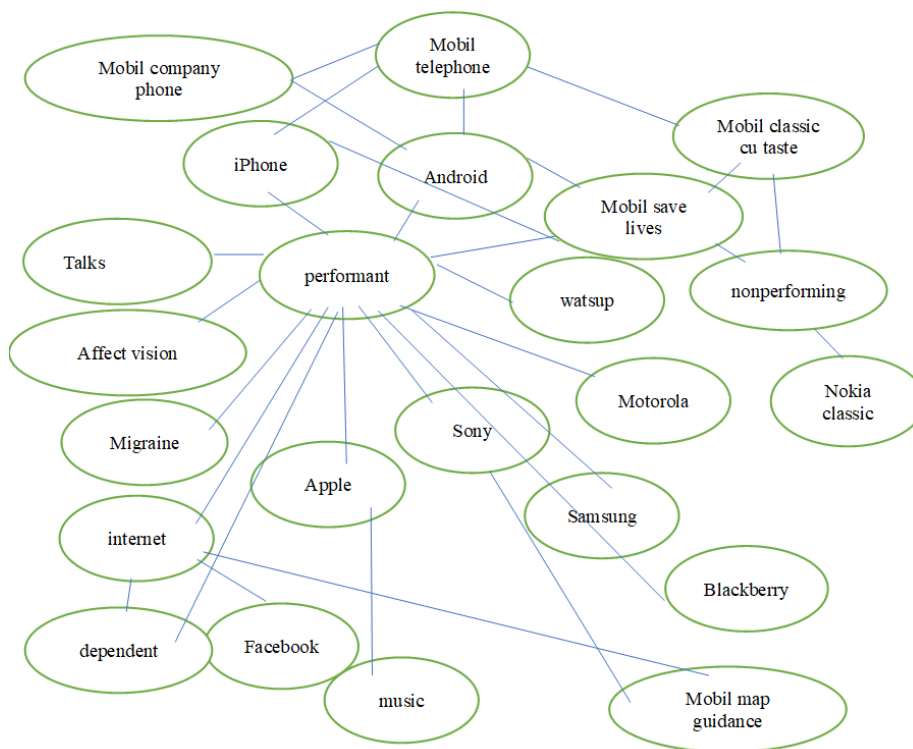
Figure 7. Associative map for participant no 5 la survey
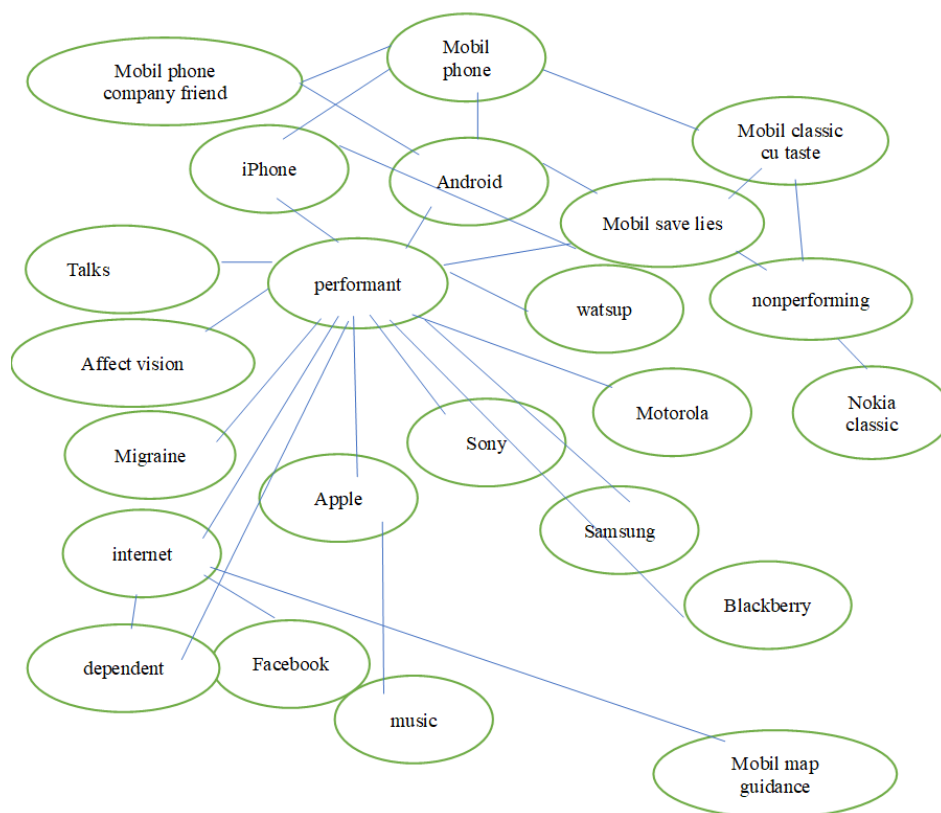
Modal overlap map

Following the detailed analysis of the five maps of the Solomon association (2017), a more simplified map for overlapping was reached (Figure 6).

Figure 7. The overlapping map shows the common choices made by the five survey participants.

The most important elements (as shown in the overlapping modal map) highlight how to use the mobile phone: internet, Facebook, WhatsApp, music. These overlapping is since the five participants are young, students and master students and they are at the same university in Bucharest, Romania. Thus, they share the use of the phone because they communicate with each other, they often know and share Internet, media and mobile phones together. From the point of view of market segments in marketing, they are part of the same market segment for mobile telephony consumers. Other repeating modalities are: the phone saves lives, it should be forbidden to children under the age of 10, the mobile phone affects health because it: creates migraines, affects vision, creates addiction. It also emerged as a good mapping and mapping through the Internet connection and is a friend / company of the owner of the user. There were no differences between male and female participants probably due to the size of very small samples (three male and female participants). In order to highlight possible gender differences, two

samples should be drawn with at least 30 participants of both sexes: men and women.

4. CONCLUSIONS

The most important elements (as shown in the overlapping modal map) highlight how to use the mobile phone: internet, Facebook, WhatsApp, music. These overlapping is due to the fact that the five participants are young, students and master students and they are at the same university in Bucharest, Romania. Thus, they share the use of the phone because they communicate with each other, they often know and share Internet, media and mobile phones together. From the point of view of market segments in marketing, they are part of the same market segment for mobile telephony consumers. Other repeating modalities are: the phone saves lives, it should be forbidden to children under the age of 10, the mobile phone affects health because it: creates migraines, affects vision, creates addiction. It also emerged as a good mapping and mapping through the Internet connection and is a friend / company of the owner of the user. There were no differences between male and female participants probably due to the size of very small samples (three male and female participants). In order to highlight possible gender differences, two samples should be drawn with at least 30 participants of both sexes: men and women.

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