MARKETING RESEARCH ETHICS: HOW CONSUMERS FEEL ABOUT NEUROMARKETING

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Abstract

This study examines marketing research from a marketer as well as a consumer standpoint. Using primary data collected through surveys, the researchers attempt to bridge the gap between researchers needing data and consumers being hesitant to share information. The primary area of research focus in the study is Neuromarketing. While this may be the only unbiased way to collect research, this study also looks at the potential downside to using this method. Finally, this study takes the primary data collected, as well as the secondary data on Neuromarketing to conclude the best strategy for everyone involved.

The Future: Neuromarketing

Neuroeconomics combines psychology and physiology with economics to study decision making and economic behavior; from neuroeconomics a new science emerged-neuromarketing. Neuromarketing is a field of research developed in the 1990's by Gerry Zaltman of Harvard; where marketing experts and neuroscientist use scientific methods such as functional magnetic resonance imaging (fMRI), Quantitative electroencephalography (QEEG), and magnetoencephalography (MEG) to study consumer's preference, consumer behavior, responses to brands and advertisements (Lewis, Bridges, 2005).

Using these as well as several other methods, scientist then use brain imaging to study the brains reaction stimulus such as brands, preference, perceived quality and price. The most famous of the neuromarketing studies conducted at Baylor College of Medicine is what researcher Montague referenced as the 'Pepsi Paradox'; where in blind taste test participants favored Pepsi (this was depicted in the Pepsi Challenge advertising campaign)(Lewis& Bridges, 2005). In the study that Montague conducted the volunteers were evenly divided between Coke and Pepsi until told which one was Coke—at which time 75% preferred Coke. The scans of the volunteer's brains reveled activity in the prefrontal cortex indicating a higher thought process associated with emotions and memory. The researchers concluded, "that the subjects were associating the drink with positive images and branding messages from Coke commercials." (Du-Jian Gang, Wang-Li, Zheng-Qi, Liu-Li Yan, 2012, pg.285).

However, neuromarketing according to Lee, Broderick, and Chamberlain (2007), "can simply be defined as the application of neuroscientific methods to analyze and understand human behavior in relation to markets and marketing exchanges." (pg.200). The definition they offer of neuromarketing reduces the implication that it is just a method of utilizing neuroimaging to benefit commercial enterprises. The authors explain, "the scope of neuromarketing research is widened from solely consumer behavior, to include many more avenues of interest, such as inter and intra-organizational research, which are common in the marketing research literature." (Lee, Broderick, Chamberlain, 2005).

Currently however, neuromarketing is intently focused on understanding how consumers determine preference. A common tool that is used in marketing research is the 'interest lever' the participants are ask to move the interest lever up or down when something catches their attention in a television commercial (this is also the same technology seen in political campaigns and debates). It allows the researcher to determine the parts that are most interesting to the participants. However this is a flawed system as it depends on conscience

awareness and not all consumers are aware of what influences their decisions and not all decisions are rational.

Marketing professionals learned long ago that certain smells, colors and designs can influence decision making. Realtors at an open house will often brew coffee as the smell makes people feel at home. Neuromarketing is taking these techniques to a new level to discover what the brain response to in everyday situations. Using fMRI the researchers scan a resting brain they then perform an experiment intended to activates specific brain functions and quickly scan again, often times repeatedly to record the results. Using a software program the researchers are able to discern which area of the brain was activated. (Wilson, Gains & Hall, 2008).

The information gained through neuromarketing has created both supporters and opponents. The supporters of neuromarketing argue it allows organizations to meet the needs of the people and offer products that consumers prefer; opponents are asking the cost to individuals' free will and choice. The issue of transparency in marketing is not a new debate organizations have been using product placement in video games, movies and television for years as well as paying celebrities to wear, eat and drink certain products. This paper examines how consumers regard marketing techniques and the concept of neuromarketing.

Why is Neuromarketing Important to Marketers?

Marketing research is a very important part of marketing and top business professionals are always looking for the next best way to ensure they get the most accurate results. Just like in other areas of business; marketing research can prove to be both costly and time consuming. With this said who wouldn't want to produce the most accurate results to help in making their marketing decisions. Neuromarketing seems to be the answer to what many marketers are looking for. When Google started using Neuromarketing as their research method, they learned so much about how consumer's perceived the different web pages. "By using sophisticated imaging equipment to analyze how the brain processes information, we now know that the part of the brain that DECIDES is 45,000 times older than language and writing, and struggles to process both (Associated Press, 2013)."

As most people have experienced before, a good search can produce an overwhelming number of web pages. Knowing this, many companies are using search engine optimizers to ensure that they are top pick of their target market. Neuromarketing has assisted in helping businesses become that top pick. According to Korolak, "if you are using lots of big words, telling them why you got into business, and listing your features and benefits, chances are you are pushing customers away and killing your Google page ranking." (Associated Press, 2013) So what does it take to have a high Google page ranking? "For those websites that have strong visual appeal, unique content that solves pain and emotional engagement that retains users longer, Google rewards them with coveted page 1 placement (Associated Press, 2013) While other research methods may tell Google that emotional engagement helps to retain users longer, really understanding what type of stimuli consumers are responding to can help them pinpoint what will work best for their target market.

Outside of better placement on Google, it's important to understand what other popular Marketing strategies that Neuromarketing can help with. Frequency of a creative exposure is an area of marketing and advertising that is often discuss. The maximum exposure without spending too much money is a constant battle. "Measuring brain waves responsible for engagement and consideration, neuromarketing techniques can evaluate for agencies an audience's neural response over the course of exposures, and thus more precisely determine what media weight to invest behind it against a competitive set. (Brain Insights, 2013)" This can

help save money on unnecessary medium outlets as well as help decide how many exposures are needed! This is a win-win for the industry!

Another area of interest would be content priming. "Several studies have investigated the impact of priming, with variations in behavior between test and control groups of almost 50%. (Brain Insights, 2013)" Understanding when your target audience will be most receptive to your ad can help pinpoint when to air a commercial. Again, this can save the business some money as well as enabling them to maximize intended results.

Overall, while there are many who are still skeptical about this area of research it has been proven to help in multiple areas of marketing. While ethics are a concern, if the information is handled and used correctly, this area of marketing can help both the business as well as the consumer!

Ethics in Marketing

Ethical questions and guidelines in the field of marketing is not a new area of concern. Marketing professionals and researchers have been challenged for over 40 years with what is and is not an ethical and acceptable practice in marketing. There is not a standard international guideline that offers a clearly defined list; there is however many resources that offer best practices standards but even these do not match.

Questions such as, is it ethical to market to children under the age of 12 years? In the United States television stations dedicated to only children's programming such as Nick Jr. or Disney Jr. have some regulations, even though research has indicated that children are highly vulnerable to advertisers at these young ages. Children also lack the means to be consumers. In countries such as Sweden and Norway it is illegal to market to children. Marketing professionals have been plagued with ethical dilemmas and choices for years.

Palmer and Hedburg (2013) argue that marketing to the vulnerable in an honest and accurate manner is not different than marketing to the general population even when using their vulnerabilities. The ethical questions that arise in neuromarketing are very similar to the existing catalog of concerns. The biggest concern with neuromarketing is that it will allow advertisers to manipulate consumer behavior. When in actuality it allows researchers to study and better understand consumer behavior and preference.

Murphy et al.(2008) explains, "The implicit question in the present discussion is whether the new tools of neuromarketing will provide sufficient insight into the human neural function to allow manipulation of the brain such that consumers cannot detect the subterfuge" (p. 279). The authors go on to state, "and that such manipulations result in the desired behavior in at least some exposed persons. Such stealth neuromarketing is not possible with current technology."(p. 279). The ethical concerns of advertisers using subliminal techniques is not new with product placement in movies, video games and television this method of advertising is already an acceptable practice.

It has become such a common practice to use everyday media to influence and educate the public that according to Blood and Cohen of the Associated Press, "The California Endowment, a private foundation spending millions to promote President Barack Obama's signature law, recently provided a \$500,000 grant to ensure TV writers and producers have information about the Affordable Care Act that can be stitched into plot lines" (2013, pg.1) Blood explains, "The aim is to produce compelling prime-time narratives that encourage Americans to enroll — especially the young and healthy, Hispanics and other key demographic groups needed to make the overhaul a success" (2013, pg. 2).

Other ethical concerns that are more easily addressed regard the privacy and protection of the research subjects, the validity and scope of the findings, and accuracy and representation of the results. Each of these areas of concern can be easily addressed by having a code of ethics and adhering to already established protocols for research involving human subjects. The Neuromarketing Science and Business Association does have a well-established code of ethics for their members. The ethical concerns that need protocols would involve how the information is used and to what degree. When the technology allows for looking into a person's brain to determine what motivates them and how they determine preference—what is going to stop them from manipulating decision making?

Data Collection and Results

To collect data about marketing research and Neuromarketing, the researchers decided to create a survey using surveymonkey.com. The survey consists of 10 questions and is administered online via social media such as Facebook and LinkedIn. This is an anonymous survey. The questions on the survey include the following:

- 1) What is the highest level of school you have completed or the highest degree you have received? What is the highest level of school you have completed or the highest degree you have received?
- 2) In which region of the United States do you live?
- 3) Are you White, Black or African-American, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific islander, or some other race?
- 4) In what year were you born? (enter 4-digit birth year; for example, 1976)
- 5) How ethical do you consider marketing professionals to be?
- 6) In general how comfortable are you with marketers collecting research on you and your family?
- 7) Do you know what Neuromarketing is?
- 8) Neuromarketing- helps to study the brains responses to certain marketing stimuli to get an unbiased response in marketing research. How do you feel about this type of research?
- 9) Please rate the importance of the following in Marketing research
- 10) Are there any other thoughts you have on marketing research, or any tips you would like to share with the researchers?

The researchers designed the questions to first collect demographic information to understand the segment that responded. Next, they wanted to understand their general thoughts on marketing research and how ethical the individuals considered the science to be as well as the people who conduct marketing. Finally the researchers wanted to understand how much the individuals knew about Neuromarketing.

One hundred forty-seven individuals completed the survey online remotely and anonymously. Demographically, the segment who responded represents a wide range of individuals from all over the country, with the largest number, 74%, of the respondents coming from the Middle Atlantic and Southern States. 72% of the respondents to the survey had Bachelors or Graduate level college degree and, average age of the 147 individuals is 43 years old.

The second section of the survey really focuses on how the respondents feel about marketing research in general. The researchers asked the question "How ethical do you consider marketing professionals to be?" The four options are: very ethical, ethical, some-what ethical, and not ethical at all. As illustrated from the chart below 54% percent of those survey felt that marketers are "some-what ethical".

Answer Choices –	Responses –
Very ethical	6%
Ethical	26%
Some-what ethical	54%
Not ethical at all	14.%
Total	100%

The next question on the survey asks the respondents "In general how comfortable are you with marketers collecting research on you and your family." The options are: very comfortable, comfortable, somewhat comfortable and uncomfortable. The chart below reveals that 42% of the surveyed feel they are somewhat comfortable and 34% responded that they are uncomfortable with marketers collecting research on their families.

Answer Choices –	Responses –
Very comfortable	5%
comfortable	19%
Somewhat comfortable	42%
Uncomfortable	34%
Total	100%

The next two questions on the survey focus on Neuromarketing. The researchers first ask if they know what Neuromarketing is. Then after a brief definition, Neuromarketing- helps to study the brains responses to certain marketing stimuli to get an unbiased response in marketing research, the researchers ask how the respondents feel about this type of research. From the first question it is clear that 72% of those surveyed do not know what Neuromarketing is.

Answer Choices –	Responses – 28%
Yes	72%
No	100%

Total

After the researcher's brief definition of Neuromarketing, the respondents answer a question on how they feel about Neuromarketing. They are given the options "this is great; I'd love to participate in something like that", "Sounds interesting, I would need to hear more", "This sound like it may be intrusive to privacy", or I'm appalled that marketers are using such invasive tactics. Over half (55%) of the respondents recorded that it sounds interesting and they would need to hear more.

Answer Choices –	Responses –
This is great; I'd love to participate in something like that	14%
Sounds interesting I would need to hear more	55%
This sounds like it may be intrusive to privacy	25%
I'm appalled that marketers are using such invasive tactics	6%
Total	100%

The next question on the survey uses a five point rating scale: Very important, important, neutral, not very important, and not important at all. The respondents are asked to rate the following in importance pertaining to marketing research 1) The researcher gets my permission 2) My information is protected 3) I see some benefit as a consumer 4) I benefit the marketing industry. From the survey results it is clear that researchers asking for permission as well as the information being protected ranks highest on the priorities list. Seeing benefit as a consumer ranked in between important and neutral, while, benefiting the marketing industry ranks closer to neutral.

-	Very important –	Important -	Neutral -	Not very important –	Not important at all –	Total	Average Rating –
The researchers get my permission	71%	17%	8%	4%	0%	100	1.41
My information is protected	86%	11%	2%	1%	0%	100	1.19
I see some benefit as a consumer	33%	40%	22%	4%	1%	100	2.02
I benefit the marketing industry	19%	28%	33%	9%	11%	100	2.65

The final survey question asks respondents to share any additional information they would like to on marketing research with the researchers. While only 25 of the surveyed responded in this section the only repetition in remarks is the important of consumer privacy for this group of respondents.

What Does This Data Tell Us?

The data collected reiterates the consumer's concern about privacy of information, as well as permission based marketing. Some-what comfortable with marketers collecting information, and the some-what ethical behavior when describing the ethics of marketers explains why marketing researchers often struggle to collect information on consumers. While most of those surveyed where not familiar with Neuromarketing, the highest percentage found it interesting and would like to hear more.

So how can we use this data as markets? In marketing research it is important that we use the best practices. Right now, it appears Neuromarketing may be the best way that we collect information in an unbiased fashion. Given the consumers need for privacy, information and permission; this should be on the top of all researchers list of priorities. Communication, asking for permission as well as explaining the many safety measures taken may help for consumers to feel more comfortable and supportive with the process. Knowledge is power, and explaining the importance of a study as well as safety measures taken with personal data may help to comfort hesitant consumers!

Conclusion

Neuromarketing is still a young science but it is gaining popularity there are already over 35 neuromarketing institutes in the United States. Neuromarketing can help producers make the products consumers want to buy, or adapt a product to better meet the consumer's needs. The future of neuromarketing is bright—this new way of identifying consumer preference and decision making allows for researchers to actually identify what is going on in the consumers brain and why. This information can be used to help business streamline their product mix; it also helps ascertain consumer's opinions on packaging and presentation.

Individuals cannot always articulate why they are attracted to a product or why they make the purchasing choices they do. Marketing research has been using interviews, surveys, loyalty cards, focus groups and many other methods to track purchasing behavior-- all of these techniques have one common flaw—they rely on the individual to tell the truth and be able to consciously identify the reason for their preference. Neuromarketing relies on the reaction of different regions of the brain when a stimulus is introduced during a fMRI or other neurological study.

Neuroscientist can use the information collected to accurately determine the consumer's brain reaction to products, prices, brands, and packaging. This information can be analyzed and interpreted for organizations. The field of neuromarketing is growing as more firms are looking to this as a solution to determining the best product mix.

In the research that was conducted for this study there was an overwhelming interest in the people surveyed to learn more about neuromarketing. Over 72% of the individuals surveyed were not familiar with the concept or term neuromarketing. This indicates people are open to the idea of organizations better researching to make products that meet their needs. Future research is needed in this area and should include studies such as difference in demographic attitudes toward this invasive type of research.

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