

CAREER OPPORTUNITIES NEUROMARKETING **- GETTING ANSWERS WITHOUT ASKING QUESTIONS -**

This report is to inform students on the career opportunities in neuromarketing. We are trying to identify the future needs of companies, neuromarketing consultants, non-profit government instances and research groups. In addition, through interviews and conversations with people working in this industry we try to evaluate what choices in your academic career are essential to get a job in the neuromarketing industry. This way we hope to create a clear image for students about their career opportunities and how you can choose your academic path accordingly.

1. What is neuromarketing?

Neuromarketing can be best defined as any marketing or market research activity that uses the methods and techniques of brain science or is informed by the findings or insights of brain science.

Neuromarketing nowadays uses brain-imaging techniques including fMRI, EEG, facial coding, biometric indicators and implicit measures to measure an individual's response to marketing elements. As shown in several studies human decision-making is an unconscious process, taking place outside of conscience awareness. Therefore, neuroimaging techniques can be used to acquire information about unconscious decision-making processes improving marketing strategies. The advantage of measuring unconscious decision-making is that the obtained information is unaffected by biases, therefore more accurate information on consumers decision-making processes can be obtained. This knowledge is for example applied in product design, enhancing promotions and advertising, pricing, store design and the improvement of the consumer experience.

2. Neuroeconomics, consumer neuroscience and decision neuroscience

In addition to the term neuromarketing, the tags *neuroeconomics*, *consumer neuroscience*, and *decision-neuroscience* are often seen as well. *Neuroeconomics* describes the modelling and understanding of human choice behaviour and integrating information acquired from neuroscience. *Neuroeconomics* currently has contributed to the understanding of concepts such as ambiguity and risk. The understanding of these concepts attributes to the understanding of choice behaviour. *Consumer neuroscience* is used to describe consumer decision-making behaviour. By integrating neural explanations from neuroscientific research to more traditional consumer research as information acquired from questionnaires (explicit measures). *Decision neuroscience* is a term describing the integration of the scientific fields of neuroscience, psychology, economics and statistics

3. Academic background linked to career paths and job positions

As neuromarketing is still developing there is not (yet) a perfect career path leading to a career in neuromarketing, for providers in particular but also for clients. By talking to many individuals already working in the neuromarketing field and reading [this related article of Roger Dooley](#) we agreed on the distinction of three different career paths for the providers

of neuromarketing; *the science-based careers, the marketing-based careers and the data-focused careers*, and separate path for careers as clients of neuromarketing. However, as neuromarketing is an interdisciplinary field it is extremely important to obtain as much information on all three areas.

Science-based career

For the *science-based career* it is a good start to get a degree in neuroscience or psychology with extra courses on the brain and decision-making. In addition, a postgraduate education (masters and preferably a PhD) is highly recommended.

Marketing-based career

Dooley advises students interested in a *marketing-based career* in neuromarketing to get an undergraduate in marketing, advertising or consumer behaviour with in addition some psychology or neuroscience courses. In addition, other people working in the neuromarketing industry also highly advised to get a master/PhD in marketing, business, economics or psychology to have a good scientific basis for a scientific marketing aimed career as a provider of neuromarketing.

Data-focused career

Lastly, the *data-focused careers* are of high importance since the ability to analyse data is essential in scientific and marketing research. However, this is not specific for neuromarketing. In any scientific field professionals for data analyses are essential for substantial scientific research. Make sure you get at least a masters degree as a data scientist and try to link this to the brain and decision-making to distinguish yourself. In addition, for the science-based career being able to understand and analyse data is of high importance.

Create your own opportunities

However, neuromarketing does not (yet) show a strict and clear academic path that must be followed. Therefore, it is very important to create your own opportunities and figure out which career path suits you best and choose your academic path accordingly. Follow neuromarketing courses if they are available but don't let a lack of neuromarketing courses discourage you. If you cannot take neuromarketing courses, make sure you take a diverse range of courses. In addition, there are many neuromarketing and neuroeconomics books available online. Use this to increase your knowledge on neuromarketing. Further, go to conferences and try to expand your network in the neuromarketing field. In this still developing field it is of great importance to create your own opportunities to create your own path to reach your goal.

For clients of neuromarketing it is important to get a bachelor and preferably also master degree in marketing or psychology (with some understanding of neuroscience). As Naomi Sparks Grewal (Neurotalent of the year 2013) said, it is also important for this career path to get experience by doing internships and getting loads of work experience.

A few possible job positions linked to an individual's academic path and their advice is listed below divided in the three different career paths: Marketing, Science and Data.

Table 1. Academic background linked to jobs and career paths.

Career path Provider or client	Job	Academic background	Was your academic path a good choice?	Advice
Science <i>Provider</i>	Neurometric and biometric signal processing	Masters: biomedical engineering PhD: biophysics	Yes, I would have done the same	Read into the subject to obtain better knowledge of neuromarketing.
<i>Provider</i>	Scientific Articles Consultant	Masters: neurobiology PhD in clinical experimental Neuroscience	Yes, it gave me knowledge about research approach and human brain physiology.	Do your master thesis at a neuromarketing company.
<i>Provider</i>	Founder of Neuromarketing company	Bachelor: Cognitive Science Master: Statistics	Yes, knowledge of brain functions is extremely important.	Invent new solutions and opportunities to apply neuromarketing.
<i>Provider</i>	Research scientist	Bachelor: Psychology Master: Cognitive Psychology PhD: Cognitive Neuroscience	Yes and no. Understanding more about marketing and market research would be good.	Learn about methodology, statistics, the neuroscience of the technology used, and how they will help people market their products.
Marketing <i>Provider</i>	Client Account E- Neuromarketing Project Leader	Bachelor: Economics and Business Administration. Masters: Marketing intelligence + PhD	Yes I would do the same.	If you like to know how the brain works and if you want to improve the knowledge of the wonderful marketing' world, neuromarketing is the best choice!
<i>Provider</i>	Logistics manager	Tourism and recreation	I would have chosen a study related to my responsibilities (preparing recruitment materials and conducting the research).	Learn about neuromarketing. It's worth it!
<i>Provider</i>	Marketing Coordinator	Bachelor in Business Administration	Yes, I think my bachelor perfectly fits my current position at the NMSBA.	Find out what you really enjoy doing and make that a goal worth striving for.
<i>Provider</i>	Neuro Web and Mobile Usability Test	Psychology focused on marketing	Yes. My previous job (Psychologist and web designer) also helped me get the skills for this job.	If you love psychology, marketing or engineering, well you should get deeper on what neuromarketing can offer to you nowadays
<i>Provider</i>	Director Neuromarketing company	Bachelor: psychology and medical biology Master: psychology and neurobiology	Yes, although a masters in Business Administration would be nice as well.	Try to get an internship in neuromarketing.

		Phd: neuroscience		
<i>Provider</i>	Research & Development Coordinator	Masters: International Business Postgrad: User Experience Design	Good choice but I would consider attending design school as well.	Read into it expanding your knowledge and meet people interested in this topic.
<i>Provider</i>	Marketing Manager	Master: Marketing	Yes.	You must learn to apply Neuromarketing every day.
<i>Provider</i>	Neuromarketing Researcher	Bachelor and Master: Business Administration	Yes, Because in depth knowledge in marketing is needed in this field.	Keep your passion up to develop this field of science.
<i>Provider</i>	Chief Strategy Officer	Bachelor: marketing Master: neuromarketing	Yes.	To go beyond the comercial books, if you want to be a professional neuromarketer you need to make your own recipe, not only take one that its already done.
<i>Provider</i>	Business Manager	Marketing background	Yes, but a more hands on approach on manufacturing (direct mail) is also important.	Think how this science either drives retention or acquisition of customers.
<i>Client</i>	Director consumer Insights	Master: Marketing	Yes, I deal with Marketers and need to know marketing to be successful.	Understand the marketing side and learn how to communicate in marketing.
<i>Client</i>	Manager	Bachelor: Biotechnology Master: Rural Management	Yes.	Be open-minded when applying for a job in neuromarketing.
Data Provider	Data specialist	Masters: (Social) Psychology	Yes.	You should remember that everything depends on your own capabilities, skills and the efforts made in self-study.
<i>Provider</i>	Technology Director	Masters: Mathematic Postgrad: Management	Yes.	Study hard, don't lose focus.
<i>Provider</i>	Technology assistant	Masters: Sociology	Yes but I would also liked to choose a more technical study.	Go for an internship in a neuromarketing company.

4. Skills that are considered important when applying for a job in neuromarketing.



5. Possible job positions in the different sectors of neuromarketing

Table 2. Possible job functions in the three different career paths

Marketing-based career	Data-focussed career	Research-based career
<ul style="list-style-type: none"> • Possible job functions • Logistics Manager • Research & Development Coordinator • Consultancy • Product manager • Marketing Communication Manager • Advertising Director • Brand Strategist • Media Director • Marketing Relations Coordinator • Public relations Coordinator 	<ul style="list-style-type: none"> • Possible job functions • Data Analyst • Marketing Research Analyst • Data Focussed Business Analyst • Statistical analyst • Financial Analyst • Online Marketing Analyst • Product analyst • Statistician • Predictive Analytics Professional • Web Analyst • HR/people Analyst • Database Analyst 	<ul style="list-style-type: none"> • Possible job functions • Neuroscientific/marketing/neuromarketing researcher • Head of research • Clinical research assistant • Data analyst • Eye tracker analyst • Scientific Article Consultant • Data specialist • Repeating and improving research • Customized client-based research

6. Advice from finalists of 'Neurotalents of the Year' competition (2013 – 2015):

Students in the field of Neuromarketing can enter the 'Neurotalent of the Year' competition. They are asked to submit a video and paper about a recent topic of research that builds a bridge between the science of the unconscious and its marketing and advertising applications. Finalists of the neurotalent competition 2013 to 2015 are asked what their vision on neuromarketing is and what their advice is for students interested in neuromarketing.

Table 3. The career paths and advise of finalists of the Neurotalent of the Year Award.

<p>Naomi Sparks Grewal</p> 	<p>Naomi Sparks Grewal divided working in neuromarketing in two groups: researchers and client seeing people. Research requires classified training; therefore it is essential to do a master, PhD or to get experience in lab work after completing your bachelor. Another approach would be to take a more applied client-services focus in market research – get a bachelor's degree and get a lot of work experience – become an expert in market research and try to make the move from "traditional" to more innovative methodologies. Transitioning from the market research industry into the consumer neuroscience industry is definitely a possible path.</p> <p>Naomi Sparks Grewal's advice is when there are specific courses in neuromarketing or consumer neuroscience, grab the opportunity and take them since she had to piece together her own mix between marketing, neuroscience, economics and psychology at Columbia University, New York City. The best way to get into the industry is to network. Meet people in the industry, talk to people, and ask if you can shadow someone at a company to get more experience. Be respectful but persistent; if you really want something you can get it!"</p> <p>– Naomi Sparks Grewal, Neurotalent winner 2013, Surveymonkey.</p>
<p>Madvi Sood</p> 	<p>Madvi Sood self-read herself into neuromarketing while relating tourism with neuromarketing in her master thesis in Singapore. Her advice is: "It is a very interesting field to me since it is the present and future of marketing. Also many people raise the questions of this field being ethical, the technique is a help to understand people's perspective and it is not manipulative as some people say."</p> <p>– Madvi Sood, Neurotalent finalist 2013, business analyst.</p>
<p>Giovanni Vecchiato</p> 	<p>Giovanni Vecchiato is currently trying to study various subjects in order to obtain as much information in order to fulfil his duties to design new experiments. His advise is: "It is not easy for students to make the right choice because sometimes they are not aware about the whole landscape of possibilities they have. Carefully find people who do research in the way they imagine and then follow them. In this way they will believe in what they do."</p> <p>- Giovanni Vecchiato, Neurotalent finalist 2013, research associate department of Physiology and Pharmacology, Sapienza University of Rome.</p>

<p>Peter Lewinks</p> 	<p>Peter Lewinski graduated with a double master in 'privacy law' and 'economic psychology'. Peter Lewinski expressed that neuromarketing in general and facial coding in particular brings many privacy and ethics related questions. He chose 'privacy law' and 'economic psychology' because he wanted to know more about current (European) legislation as to use and measure of face signals for commercial purpose.</p> <p>Peter Lewinski's advice is: "I think it depends if you as a student want to go to academia or industry. If you want to go to academia then you need to study something like computer science, neuroscience, biology, engineering, statistics and less something like psychology or marketing to have competitive advantage over others or get very good in one tool and then build on from there. If you want to go to industry, then a standard path of like getting business bachelor and master in marketing and then getting great GMAT scores and doing a couple of internships with the [best] companies from the NMSBA website would probably be the best option to go."</p> <p>- Peter Lewinski, Neurotalent finalist 2014, postdoctoral researcher at the faculty of Economics at Université de Neuchâtel.</p>
<p>Benny Briesemeister</p> 	<p>Benny Briesemeister is the founder of the company Neurospective, Germany. Benny Briesemeister conducts research, analyses data but also acquires customers, gives talks and educates. His advise is: "Try to find you own path. I imagine it can be hard to get into neuro with a business background. But wherever you can get your hands on neuro, do so."</p> <p>- Benny Briesemeister, Neurotalent winner 2015, owner company Neurospective.</p>
<p>Dalia Bagdziunaite</p> 	<p>Dalia obtained a bachelor's degree in Business Administration, a master's degree in Marketing Communication Management at Copenhagen Business School and studied at the Multimedia design school. In her last year of her masters she took an elective course on neuromarketing and decided to do her thesis on neuromarketing. Currently Dalia is in her last year of her PhD at Copenhagen Business School. Her major job duties are teaching, research and publications. During her professional career Dalia had the opportunity to take part in some commercial projects within neuromarketing. She believes combination of scientific and business surroundings are the most interesting ones as science is inspiring to develop extraordinary solutions and business gives the possibility to test them in practice.</p> <p>Her advise to students interested in neuromarketing and especially students interested in the creative/media side of neuromarketing is; 'The main thing is for all students who want to work in neuromarketing is to learn the basics of cognitive sciences. While having the core skills and basic understanding, being creative works only advantageously. Your creativity can serve a tremendous role in brainstorming new ideas and enhancing projects. Neuromarketing is all about the interdisciplinary approach!'</p> <p>- Dalia Bagdziunaite, Neurotalent finalist 2015, PhD Copenhagen Business School.</p>

The overall message from these Neurotalents is; it might be difficult to get into neuromarketing. Study hard and get good core knowledge in marketing or neuroscience. In addition, try to get an internship at a neuromarketing company or write your thesis at a neuromarketing company. If there are a degree or any courses available in neuromarketing for you to take, grab this opportunity and do the course. At www.nmsba.com/education you can find a list of degrees (bachelor and master) and courses in neuromarketing/neuroeconomics/decision neuroscience all around the globe. Lastly, work hard and if you really want to work in neuromarketing you can make it happen!

7. What can we conclude from this?

The jobs are very diverse and a neuromarketing background is not essential. Most people did not follow any courses in neuromarketing in their academic career. However, many of them are content with their academic path. Therefore we can say with confidence that even if there are no courses or degrees in neuromarketing available in the region you live in, it should not negatively influence your goal of working in neuromarketing. Focus on the information you can get by buying academic books on neuromarketing, reading articles with recently published neuromarketing studies and try to get an internship/doing your thesis at a company working as a provider or client of neuromarketing.

Below you can find the focus points for neuromarketing companies when students apply for a job or internship at a neuromarketing company:

- Academic record (subjects taken, grades, institutions you have studied at).
- A degree in neuroscience or a related area is clearly an advantage, however it is by no means essential, the level of general academic excellence is more important.
- Evidence of relevant work experience. Show that you have worked in a commercial environment in order to obtain the necessary people skills.
- Willingness to be hands-on; to work on a range of tasks, from running fieldwork to writing final reports. Your attitude is extremely important!

8. What is the future of neuromarketing?

Predicting what is going to happen determines your process of choice. Google trend shows the interest in neuromarketing over the past 10 years together with the prognosis of interest in future. The prognosis displays an expected gradual and fluctuating rise of interest in future.

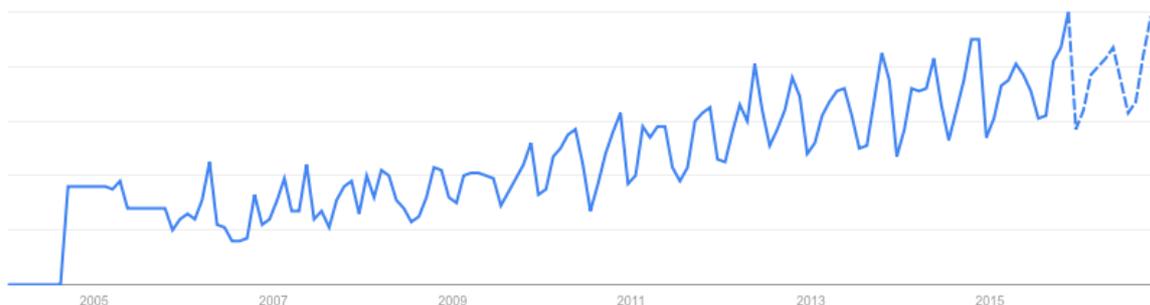


Figure 1. The interest in Neuromarketing over time and the prognosis of interest in future. The blue line shows interest in neuromarketing measured by Google Trend over time. The dotted blue line displays the prognosis of interest in neuromarketing measured by Google ([Google trend neuromarketing](#)).

Speaking to several people in the industry, the main thought is that there is going to be a rise in neuromarketing. As the knowledge in neuroscience is increasing, the knowledge of neuromarketing is also increasing. However, neuromarketing research is more expensive than normal research. It is essential that the price of neuromarketing research decreases to make it more profitable for frequent use by companies. The thought of several people is that neuromarketing will be incorporated with marketing science as any other marketing field in the past.

Naomi Sparks Grewal (Neurotalent of the Year winner 2013) noticed a shift in terms of increasing interest in consumer neuroscience/neuromarketing with clients, and also an increase in interest in employers hiring people with these skills. This bodes well for the future of the industry.

Michał Matukin, scientific director at NEUROHM (Poland), noticed that the growth in neuromarketing is related to the hardware development of the past few years. In future, neuromarketing is, again, dependent on the development of the online world making everything smaller, cheaper and more available. Michał Matukin suspects that neuromarketing going 'mobile' is not going to happen in the next few years. "We first need to learn more about the human brain and cognitive processing. The goal for the next 5 years should be to educate people how neuromarketing can, for example, be used in the healthcare system." Researches similar to our 'Neuro against smoking' research are great to see that Neuromarketing can be useful in various areas.

To summarize, neuromarketing is still in its developing phase but neuromarketing is probably going to develop and will get bigger in future. So if you are interested in neuromarketing and aspire a career in neuromarketing grab all opportunities and be responsible for your own success!

What is the NMSBA?

The Neuromarketing Science & Business Association (NMSBA) is the global trade association for everyone with a professional interest in neuromarketing. The NMSBA represents Neuromarketing organizations and companies situated in 92 countries around the world and members in 91 countries around the world.

The NMSBA has three main goals:

- Knowledge sharing and univocal interpretation of new data
- A strong international network
- Protection of general social interests related to the discipline

The Neuromarketing Science & Business Association welcomes all those who have a professional interest in the neuromarketing discipline. We have different types of memberships available to adapt to everyone's needs and wishes.