



**NEURODIAGNOSTICS
THE WAY TO THE HEART
VIA THE BRAIN**

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*"With neuroscience
we bring our market
research to an unseen
level of precision"*



FOREWORD

BY JAN CALLEBAUT

It has been a real pleasure witnessing the invigorating introduction of neurodiagnostic market research inside our company, **WHY5Research**. All of our team members are very passionate about market research and have accumulated great expertise over their loyal years with the company. Now our company is announcing the much awaited marriage of biology and psychology using neurodiagnostic research techniques. We feel confident that this new research approach will help WHY5Research offer even more reliable and concrete advice to our clients.

For Aristotle, biology and psychology were intertwined. The Greek philosopher treated the two subjects as one science.

One of the earliest textbooks in that field, The Principles of Psychology by William James (1890), argues that the scientific study of psychology should be grounded in an understanding of biology - "Bodily experiences (...), and more particularly brain-experiences." Knowledge of the biology of the brain helps psychologists to understand the impact various stimuli have on consumer motivations. It is impossible to escape the fact that how we think, what we do and the underlying motivations that influence our brand and product decisions are greatly impacted by our biology.

We are very excited to announce that psychology and biology have come together to create a new added value service in the field of diagnostic market research. We can now directly observe how the human brain responds to marketing stimuli, including TV/radio commercials, print advertising, packages and slogans/taglines.

Humans are like Plato's man in the chariot, riding a black and a white (biological) horse.



Plato developed the analogy of the chariot to illustrate the process of making moral decisions. There is a white horse, a black horse and of course the man driving the chariot.

The black horse is what Plato describes as Passions. To him, passions are worldly pleasures, such as the love for food, sports, romance, etc.

The white horse represents *Spirit*. According to Plato, Spirit is anything that keeps someone from quitting. Spirit can be expressed positively through a desire for fame and success, negatively through feelings of anger and resentment.

And, finally, there is the charioteer who represents *Reason*. Neither the black horse nor the white horse is bad. Yet, the charioteer needs both in order to get where he is needed, rather than where he wants to go. It is reason that eventually decides the path.

What Plato tells us with his analogy is that passion should be used to choose the things we enjoy and should not be used to make foolish decisions that we will later regret. Another thing to learn from the analogy is that in order to be successful, when we make a decision, we need to make sure it is made for a good reason. For the white horse needs the charioteer to steer him.

Plato's analogy is still very much relevant today. By combining brain physiology and neurodiagnostics (i.e. combining the Charioteer, the Black and the White horse), we are able to provide more objective insights and recommendations to our clients.

By integrating neurodiagnostics and psychological motivational insights, we add objective reasoning to our subjective qualitative expertise; the end result is better diagnostic precision and actionable recommendations for our clients.

Therefore, the combination and final integration of neurodiagnostic research with diagnostic in-depth interviews constitute WHY5Research's unique methodology. This, to me, is the cutting edge approach of modern market research.



Jan Callebaut
FOUNDER AND CEO WHY5RESEARCH



“It seems like a small step in market research to use neuroscience, but we strongly believe this will be a giant leap forward that will forever change the reputation, effectiveness and precision of market research. And, we’re only at the beginning of a fascinating evolution.” says Madeleine Janssens who is heading the ‘EVALUATE’-branch of the Antwerp based ‘WHY5Research’-center.

With EVALUATE, WHY5Research successfully introduces the use of neuroscience, which adds objective reasoning to our traditional qualitative market research approaches.

With the use of neuroscience and a detailed understanding of consumer psychology combined, it is now possible to get an objective confirmation of findings, much to the benefit of EVALUATE’s clients.

This is how *Sigmund Freud* put it:
“Let biologists do their job and we, psychologists, will do ours. One day, we’ll meet each other along the way.”

This is exactly where we are now.



COMMERCIAL SUCCESS IS DEPENDENT ON IDENTIFYING RELIABLE INSIGHTS INTO HOW AND WHY PEOPLE BUY WHAT THEY BUY.

Marketing and consumer psychology have considerably improved the understanding of human behavior and its emotional drivers. Commercial success is dependent on identifying actionable insights into how and why people buy what they buy. Only when we know exactly how products and brands appeal to our unconscious and subconscious, we can then anticipate how consumer choices and behavior impact commercial endeavors. Better insights will allow marketers to more accurately meet consumers' aspirations.

We have all known for a long time that people do not act upon what they say. Most don't have the faintest understanding of the deeply rooted emotions that influence their choices. Take the simple notion of 'water'. It has many different connotations including: refreshing, pleasure, thirst quenching, purity, transparency, the source of life, the very beginning of life, diet, etc. When developing a brand positioning and marketing stimulus, we need to understand how consumer psychology influences brand choices and how our brain reacts to different marketing stimuli. We need to know how the charioteer interacts with his black and white horses; we need to know how biology and psychology interact and join forces.



“BY SENSING BRAIN ACTIVITY, NEURO-DIAGNOSTICS ALLOWS US TO DIVE INTO THE CONSUMER’S COGNITIVE AND AFFECTIVE RESPONSE TO BRANDS AND PRODUCTS.”

With the introduction and integration of neuroscientific techniques, such as the Electro Encephalogram (EEG) and the fMRI (functional Magnetic Resonance Imaging) marketing and consumer psychology are taking a remarkable step ahead. These new research methods do not take the place of traditional qualitative research. Instead, neuroscience advances the learnings of a proven and established research methodology.

“By measuring brain activities, neurodiagnostics allow us to dive into the consumer’s cognitive and affective response to brands and products,” says Madeleine Janssens. “At EVALUATE, we record, decode and interpret brain wave activity and then process this information using validated models. The derived insights allow us to cross validate and enhance the findings of our qualitative diagnostic research. Qualitative diagnostic research is still the corner stone of the analysis. In our practice, we continue to successfully apply qualitative diagnostic research for our clients to address their ongoing commercial opportunities.”



“We are on our way to getting a clear view of how brainactivity can have an impact on consumer decision making,” says EVALUATE’s scientific backbone, radiologist Dr. Luc Denis, “The way we now measure brain activity allows the WHY5 market researchers to understand and interpret how underlying emotional patterns are impacted by marketing stimulus. The future growth in this field however, will prove to be even more stunning. The integration and cross diagnostics of biology and psychology have a very promising future.”



"IT'S LIKE PUTTING A MAGNIFYING GLASS ON WHAT WE SUSPECT TO BE DETERMINING PEOPLE'S COMMERCIAL CHOICES. NEURODIAGNOSTICS GIVE US A DEEPER UNDERSTANDING OF CONSUMER BEHAVIOR." *Madeleine Janssens*

Qualitative diagnostic market research is based on established psychological interviewing techniques. It enables WHY5Research to expose and explore people's emotional drivers. The key techniques are comparisons, graphical language, allegories, metaphors and association exercises. These motivational measurements allow the marketer to understand the **WHY** (motivations), **WHO** (target consumer), **WHAT** (product choice), **WHERE** (channel management) and **WHEN** (contextual relevance and brand touch points) that influence consumer's brand choices. These 5 parameters are the foundation of why the research center, founded by the internationally renowned market researcher Jan Callebaut, is called 'WHY5Research'.

Madeleine Janssens: "Human motivations are not openly displayed, although they are very much present in our hearts and minds. Motivations are complex psychological constructs that cannot be directly measured. WHY5Research's diagnostic research approach is a proven methodology for understanding consumers' underlying motivations. Today, we continue to successfully apply diagnostic research on all continents of the world.

WHY5
research
IT'S ALL ABOUT PEOPLE



The use of brain wave analysis allows us to augment the worth of our qualitative findings with precise and objective insights. It's like putting a magnifying glass on what we suspect to be determining consumer's brand and product choices. We now have a better methodology for understanding the complexity of motivational drivers. Neurodiagnostics give us a deeper understanding of consumer behavior. In the end, we are generating more actionable recommendations for our clients."



"THE EEG MEASUREMENT APPROACH PROVIDES US WITH AN OBJECTIVE UNDERSTANDING OF NEURODIAGNOSTICS MARKETING WITHOUT HAVING TO PUT UP WITH ALL THE fMRI-DISADVANTAGES."

There are two ways to visualize what goes on in the brain. One is an Electro Encephalogram or EEG. It measures brain activity that takes the form of electric pulses. The electricity is the result of a chemical process that occurs in the brain.

Only a simple device is needed to measure the electrical pulses in the brain, not more complicated than a headphone. Using a simple device is less bothersome to respondents. An EEG can detect changes in electrical activity within a millisecond. After careful and thorough evaluations of many different brain wave measurement approaches, WHY5 Research's EVALUATE team is confident that EEG is the best tool for providing functionally useful neurodiagnostics data.

Another option however, is functional Magnetic Resonance Imaging (fMRI). "In our blood, oxygen is transported by hemoglobin molecules," explains radiologist and EVALUATE expert

Dr. Luc Denis. "When a brain zone

is activated, the blood in the zone will use more oxygen. However, it takes up to 5 seconds before the fMRI can detect a change in the brain, whereas an EEG senses brain activity within milliseconds."



DR. LUC DENIS

According to Madeleine Janssens, using an fMRI for neuromarketing has significant disadvantages. "An fMRI is intrusive since the research usually occurs in a hospital or clinic, being the place where these highly expensive machines are located. A medical setting is somewhat sterile, unpleasant and maybe even destabilizing because respondents lie down in a narrow chamber to be monitored. This does not create a consumer experience that is similar to real life decision making, on the contrary."

When using an fMRI, the general practice is to expose respondents to each marketing stimulus at least three times in order to get reliable results. However, if you unexpectedly shout at a person one time (boo!), his reaction will be spontaneous. If you do it a second time, he will be prepared and not repeat his original reaction. The intensity of his response diminishes each time he is exposed to the stimulus. Naturally, the average result will be less accurate.

So, the suggestion that stimuli need to be shown multiple times is a myth."

Madeleine Janssens continues, "Using an fMRI is time consuming and expensive. As EEG measurement provides us with an objective assessment of neuromarketing without having to put up with all the fMRI-disadvantages, we have clearly opted to use EEG. An fMRI may be OK for medical use, but not to understand consumers' reaction to marketing stimuli in a (near) real life context."

Dr. Luc Denis states further that "On top of that it is also a myth that complex brain processes like emotions and particular behaviour (such as purchase) can be precisely pinpointed in the human brain. If this was the case, psychiatry would be light-years ahead of where it is now"



The location where the brain waves originate is not of most importance. It is about the total activity resulting from the cooperation of the different parts of the brain that results in a particular reaction.

All the waves that are sent by the neurons in the brain are measured together, but can also be identified individually.

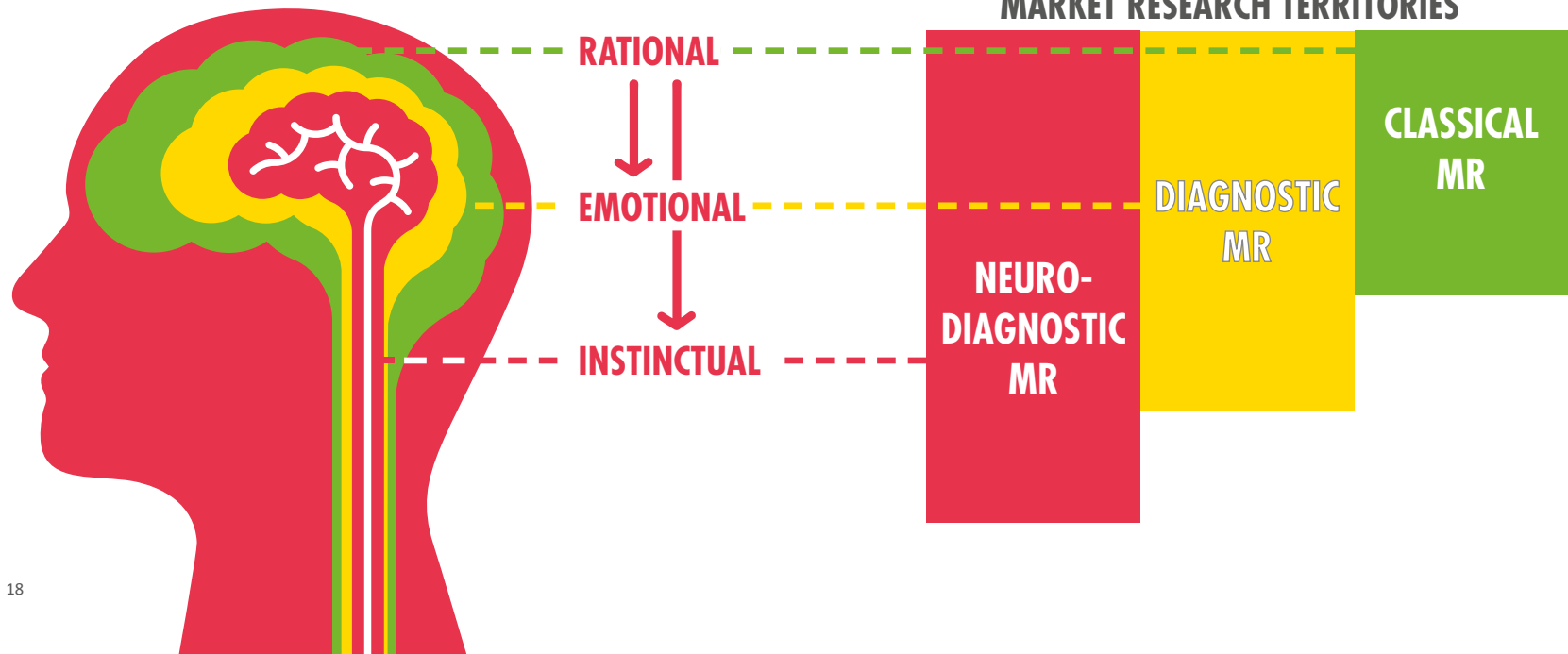
figure 1



ADDED VALUE VS. CURRENT QUALITATIVE RESEARCH

Instinctive reaction Universal OLD BRAIN REPTILLIAN	Emotional behaviour Assigns values MIDDLE BRAIN LIMBIC	Conscious Gives meaning, Provides reason NEW BRAIN NEOCORTEX
INSTINCTUAL	EMOTIONAL	RATIONAL

MARKET RESEARCH TERRITORIES



“THE NEUROSCIENCE APPROACH HAS THE UNIQUE BENEFIT OF GETTING RESPONSES FROM OUR “INSTINCTUAL BRAIN”, WHICH ALWAYS PROVIDES ACCURATE FEEDBACK TO MARKETING STIMULI AND NEVER LIES OR MISLEADS.”

Figure 1 (previous page) shows the evolution of consumer understanding from classical marketing research over psychological diagnostic research to the newest frontier, neurodiagnostics research, WHY5Research’s latest innovation.

Classical marketing research allows us to understand rational and conscious decision making. This process occurs in the neocortex, also called the “new brain”. We are able to get insight into and measure conscious perceptions and behavior using classical marketing research approaches.

WHY5Research’s diagnostic research approach takes consumer understanding one step further by also identifying behavioral and motivational drivers, which find their origin in the middle brain. It processes emotions and co-determines our emotional behavior. This approach allows WHY5Research to uncover unconscious drivers and motivations.

WHY5Research now introduces EVALUATE neurodiagnostics research which has the added benefit of being able to understand the instinctual brain or “reptilian brain”. The brain waves from the Instinctual Brain are always objective, they never lie or deceive.



“So far, we have developed a very complete picture of in depth motivations,” says EVALUATE’s Madeleine Janssens, “Using diagnostic research we are able to understand motivations: why people do what they do. Using neuroscience we get an understanding of consumers’ underlying, instinctual motivations which adds an objective assessment to why consumers do what they do. Neuroscience gives us a record of an immediate, direct and unfiltered reaction to marketing stimuli based on consumer instincts. This is very powerful as EVALUATE can now observe and integrate direct and unfiltered information from the brain. This enables EVALUATE to provide very objective and indisputable insights to our clients using a high level of precision.”

“Neuroscience gives us a record of an immediate, direct and unfiltered reaction to marketing stimuli based on consumer instincts.”

“BRAIN WAVES ARE DIVIDED INTO 4 DISCERNIBLE WAVES REFLECTING DIFFERENT NATURES OF BRAIN ACTIVITY. EACH OF THEM PROVIDES DEEP INSIGHTS INTO HOW CONSUMERS REACT TO MARKETING STIMULI.”

EVALUATE’s neurodiagnostics research detects and measures brain activity via electrical impulses from the brain. Alexei Novoseltsev is director of quantitative diagnostic research at WHY5Research, the parent company of EVALUATE.

He studied marketing management at the University of Louvain, Belgium. At the same time, he clearly has the genes of his father, a well-reputed professor of Engineering at the electro-technical University of Saint-Petersburg. Professor Novoseltsev’s area of research is related to signal processing, a technique used to filter out noise from electrical information by using algorithms. This approach allows us to reliably extract isolated information from major occurrences.



ALEXEI NOVOSELTSEV

Alexei joined EVALUATE to develop neurodiagnostic market research techniques and brain wave analysis.

“Brain processing information produces electric signals that reach the skull,” he explains.

“The signals are very weak, yet we can measure them. The trouble is that a lot of “noise” occurs when measuring brain waves. For example, even when our muscles contract, electricity is produced. Even the blink of an eye creates electricity.

So, using an EEG measurement approach, we get a lot of information that we do not need. Using EEG measurement is analogous to listening to a trumpet player on the street. We hear the trumpet, but we also hear the laughter of by-passers, traffic noise, and a passing ambulance.”

Although the human brain has the ability to filter the noise from the trumpet, when you use an EEG to record brain waves, you get the whole lot. The noise can mask the signal. The challenge is to identify the pertinent information. You have to reach a maximal signal to noise ratio. This means the signal should be as clear and prominent as possible, and the noise as reduced as possible. WHY5Research’s EVALUATE has developed proprietary algorithms to subtract the noise. This allows us to understand how marketing stimuli affect our brain waves.

EVALUATE uses learnings from the four different types of brain activity waves to interpret different types of marketing stimuli including TV/radio commercials, print advertising, packaging, slogans/taglines, merchandising, and digital content.

The brain activity groups were originally identified in 1924 by Hans Berger. He was a German psychiatrist and neuroscientist who succeeded in recording the first human electroencephalogram (EEG). By 1938, electroencephalography had gained widespread recognition by eminent researchers in the field, leading to its practical use in diagnosis. **See Figure 2.**



figure 2

4 FUNDAMENTAL BRAIN ACTIVITY WAVES

- Data aggregated into **4 fundamental brain activity waves**
- Where basically detected by **Hans Berger** (German Psychiatrist and Neuroscientist)
- Re-defined for marketing by **WHY5Research** and approved by our radiologist



MENTAL RECEPTIVITY WAVE

Is a state of awareness in which one is not focused on specific things in the environment



ACTIVE PROCESSING WAVE

Logical, concentrated thinking, mental effort and assessment



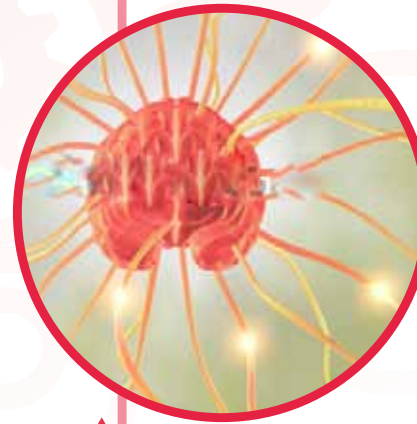
EMPATHIC OPENNESS WAVE

Provides empathic attunement and emotional involvement



SUBCONSCIOUS REACTIONS WAVE

The subconscious mind, intuition, GUT feelings and instinctual insight



“BIOMETRIC EVIDENCE COMBINED WITH PSYCHOLOGICAL INSIGHTS – ON AN INDIVIDUAL AS WELL AS AGGREGATED LEVEL – DELIVERS A PROFOUND INSIGHT IN CONSUMER MOTIVATIONS AND MARKET DYNAMICS”

As you can see in Figure 3, the EVALUATE process uses 5 steps to generate integrated actionable insights.

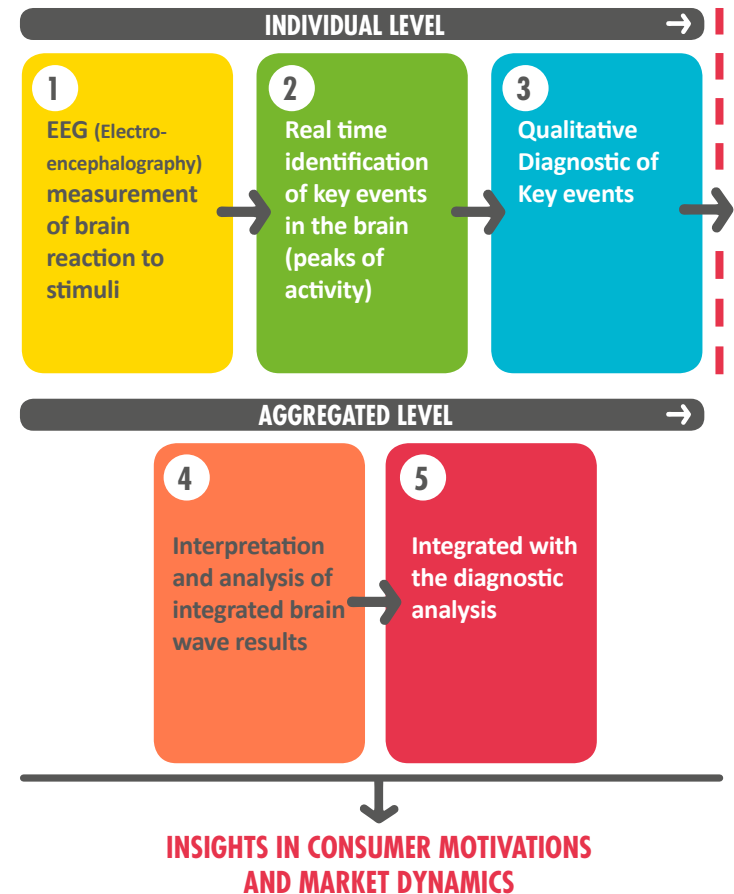
1. EEG-measurement
2. Real time identification of key events in the brain (peaks of activity) during the individual measurement
3. Qualitative Diagnostic analysis of Key events
4. Interpretation and analysis of integrated brain wave, using AERA process (see figure 4)
5. Integrated with the aggregated diagnostic analysis

This results in integrated actionable recommendations, a holistic analysis based on the instinctual EEG analysis and the psychological diagnostic insights. Doing so we can provide very actionable, client-ready insights and management recommendations to improve marketing stimuli.

figure 3 - Our Approach: Biometric Evidence + Psychological Analysis

OUR APPROACH: BIOMETRIC EVIDENCE + PSYCHOLOGICAL ANALYSIS

5 STEPS  **WHY5**
Brains at work research
IT'S ALL ABOUT PEOPLE



“IN ‘AERA’, EVALUATE HAS IDENTIFIED FOUR KEY DIAGNOSTIC IMPERATIVES THAT ARE MOST IMPORTANT WHEN EVALUATING AND INTERPRETING BRAIN ACTIVITY AS REACTION TO MARKETING STIMULI. THE AERA DIAGNOSTIC APPROACH HELPS MARKETERS TO MAKE BETTER DECISIONS. ”

Market researchers are looking for actionable techniques to help them develop and improve the stimuli that are being used to connect with consumer’s underlying motivations to increase consideration and brand engagement. EVALUATE developed a diagnostic approach called ‘AERA’, which we use to interpret the four brain wave fields. The insights we generate from an AERA analysis provide actionable recommendations for enhancing marketing stimuli. **We have successfully applied ‘AERA’ to improve TV/radio commercials.**

The AERA diagnostic approach interprets brain wave results using the four key diagnostic questions that are essential to developing effective marketing stimuli (Figure 4)

ATTENTION

When is the respondent’s attention triggered? In other words: does the test material immediately appeal to the respondent?

EMOTION

Are/is emotion(s) triggered? To which emotion(s) does the test material appeal?

RATIONAL PROCESSING

Does the test material engage the respondent to take action? For example, is the respondent open to checking the website of the product. Here, we assess rational processing brain waves.

AFFECTIVE RESONANCE

How does the respondent feel after having experienced the stimulus. What is his or her emotional take-out? Is this consistent with the intended message of the brand? How does the stimulus affect the respondent?

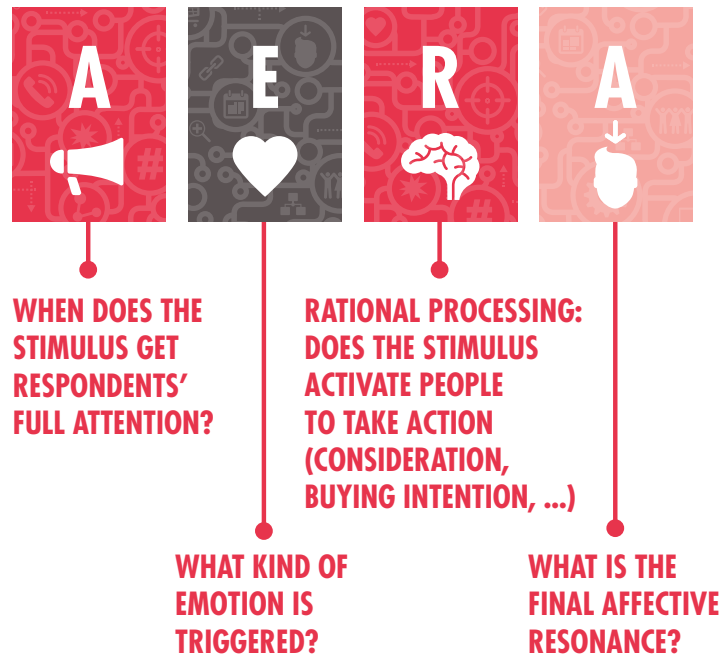


figure 4

ANALYTICAL FRAMEWORK FOR ANALYZING THE NEUROSCIENCE AND DIAGNOSTIC RESULTS

AERA analytical model*: Attention, Emotion, Rational processing and Affective resonance

- **EEG results**
- Key analytical dimensions: AERA model.
Each dimension is connected to a combination of waves



**The analytical framework is accustomed to static material*

What kind of benchmarking do we use?

A key question we are asked when we discuss neurodiagnostics research is "What type of benchmark do you use?"

When EVALUATE conducts neurodiagnostic research, we recommend using a competitive standard as the benchmark. The benchmark should be tied to the key objective the marketing stimuli is trying to achieve. The objective is based on the particular motivational strategy identified from the qualitative diagnostic research. For example, overall waves will be lower when addressing the motivations of relaxation and comforting and need to be more intense when addressing the motivation of energizing.

As such it makes no sense to use the pool of all commercials ever tested as a benchmark. Same as we also wouldn't benchmark the performance of the national football team next to the performance of cyclists nor racers.

LEARNINGS FROM AN EVALUATE TEST UNIQUELY GENERATE INTEGRATED INSIGHTS USING BRAIN WAVES AND QUALITATIVE DIAGNOSTIC RESEARCH THAT INSPIRE ACTIONABLE COMMERCIAL AND MARKETING RECOMMENDATIONS.

Let's get into some recent examples.

Spa Reine: a perfect match of brain waves and research

Case Study: testing a Spa Reine TV commercial in Belgium and the Netherlands using brain waves and qualitative diagnostic research. By integrating the two approaches, we were able to develop actionable learnings and recommendations for the client.

The EVALUATE process successfully identified deep insights that enabled the client to enhance the follow up campaign.



figure 5 - Spa Reine Research

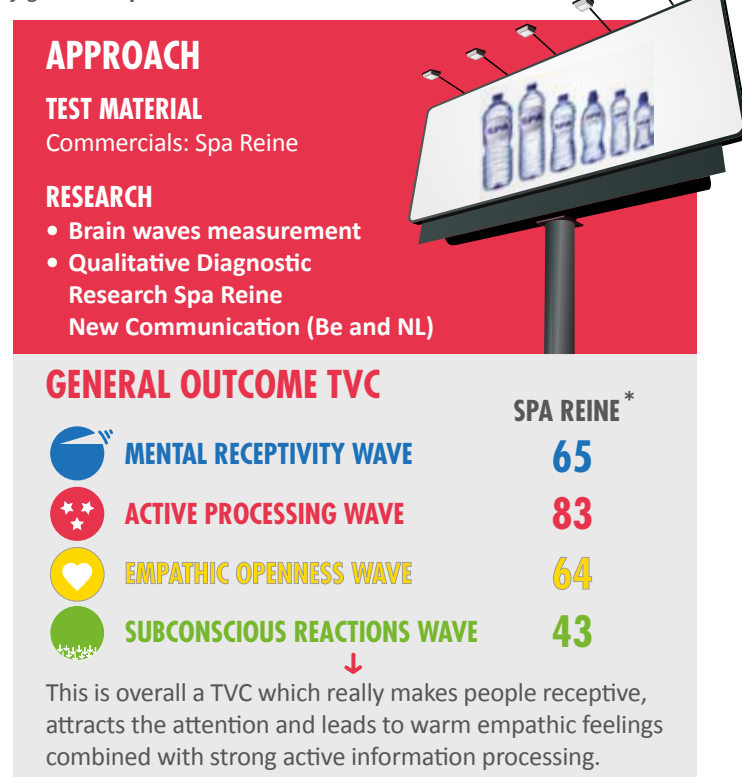


Figure 5 shows the outcome of the neuro-measurement.

The percentages in the Spa Reine column show relatively high brain wave activity. We see that the Active Processing Wave is more dominant compared to the other 3 waves. Our analysis showed that the TV really captures people's active interest combined with a strong mental openness and emotional engagement.

*Numbers are ratings on a 100 point scale. For each wave the value of 100 indicates the moment when the highest brain power is achieved. The numbers should be interpreted as an indication of the relation between the waves.

When respondents viewed the commercial, their brain activity showed high interest in the brand which can also indicate higher purchase intentions.

figure 6 - Spa reine research - TVC: Waveflow/Highlights



HIGH RECEPTION OF THE COMMERCIAL AT INTERESTING KEY MOMENTS: BEGIN, MIDDLE AND END

- 1 High level of engagement fully reached at 3"
- 2 Waves show interesting peak of attention when light beam occurs
- 3 People are fully open to accept the message



MENTAL RECEPTIVITY WAVE



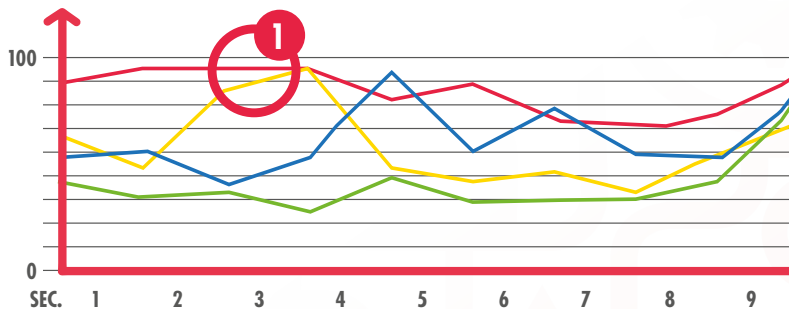
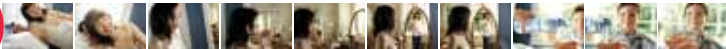
ACTIVE PROCESSING WAVE



EMPATHIC OPENNESS WAVE



SUBCONSCIOUS REACTIONS WAVE



Which diagnostic (AERA) does this refer to?

Figure 6 identified the key learnings from our brain wave analysis.

Learning 1.

Respondents are actively interested in the brand message as from the beginning. Also emotional engagement peaks as from the moment the woman starts drinking.

Learning 2.

The respondents attention is peaked after the light flash, 10 seconds into the TVC. The ad successfully communicates the story of the origin of Spa Reine at the beginning of the commercial. Respondents are actively engaged in the TVC as evidenced by the Active Processing wave pattern and peaks of Emotional Engagement.

Learning 3.

Consumers are fully open to accept the message of the TVC. The TVC communicates high Mental Receptivity and Active Processing which results in strong acceptance of the main message.

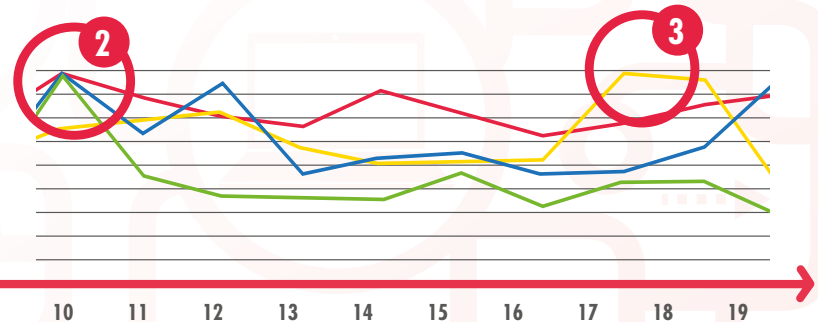


figure 7 - Spa reine research - TVC: Key Observations



STRONG FOCUSED ATTENTION WITH PEAKS OF REAL ENGAGEMENT

- This TVC conveys strong emotions of **care, purity, love and warmth at significant moments**: mother and kid drinking water, **1** the transfer to the spring **2** and the final message claim **3**
- There is **no moment in which the attention of people gets lost**
- People are open to the final message **4**

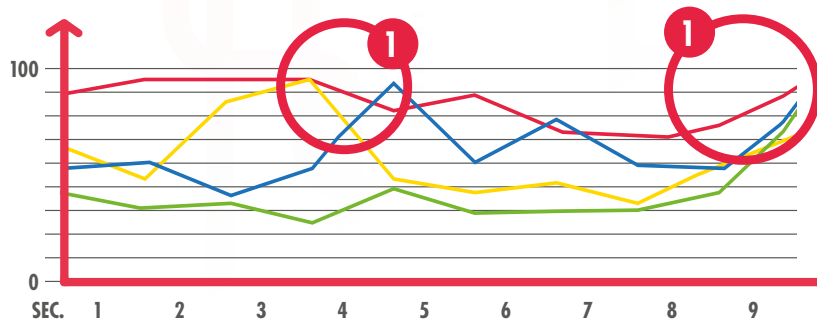
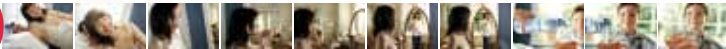


Figure 7 illustrates that the strength of the TV spot results from a very consistent high brain wave pattern for Active Processing which indicates focused attention and important peaks of engagement (Empathic Openness wave) at important sequences in the commercial.



MENTAL RECEPTIVITY WAVE



ACTIVE PROCESSING WAVE



EMPATHIC OPENNESS WAVE



SUBCONSCIOUS REACTIONS WAVE

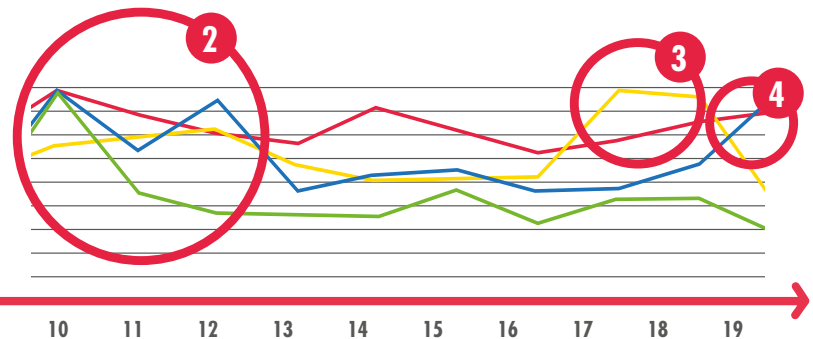


Figure 8 - Spa reine research - TVC: AERA analytics

Figure 8 shows how we uniquely identify deep insights using EVALUATE's AERA model.



ATTENTION

- 3"-4" is a **key sequence**
- **Start of engagement:** people are triggered, story **gets their full attention and holds the attention**
- Sign of **empathetic attunement**

EMOTION

- **Strong emotional resonance at key sequences** like woman and son drinking water, the reference to the natural spring and the final message claim
- Combined with a state of **strong focus and attention**

RATIO

- **Focused alertness** on a more conscious level
- **Indicates active brand interest**

AFFECTIVE IMPACT

- **Receptive state** of mind
- **Open and sensitive** to message



figure 9 - Spa reine research - TVC: Strong & Weak sequences



TVC IS ABLE TO CATCH PEOPLE'S FULL ATTENTION AND CONNECT WITH PEOPLE ON AN EMOTIONAL LEVEL



- The brain waves measurement shows that the **attention is high** as from the first scenery (couple/bed – making love) On an emotional level the **engagement increases as from 3th second**



Figure 9 clearly shows the stronger and weaker scenes within the TV commercial. Using EVALUATE's AERA model, we identified specific recommendations for the next campaign which optimized the weaker scenes and enhanced the stronger sequences within the TVC.

- **People are really attracted as from the moment the woman stands up (3'') and refreshes herself**
- **(Self-) care and care for others is a key emotional mood in the TVC and this feeling is immediately installed in the beginning (3''-5'' – transfer from woman into mother): a very primary, deeply rooted emotion, able to make people receptive and hold their attention**
- **As from 12'' (after the beam of light) the waves show that people stay focused:** these images are not felt as disconnected from the rest of the story
- **At the final end people are open to integrate the message**



"The EVALUATE research we did for a 'Cup a Soup' commercial shows that the spot communicates the main message and emotion of the brand quite well, with exception of the last ten seconds. In fact, these last ten seconds are too much and even counterproductive."

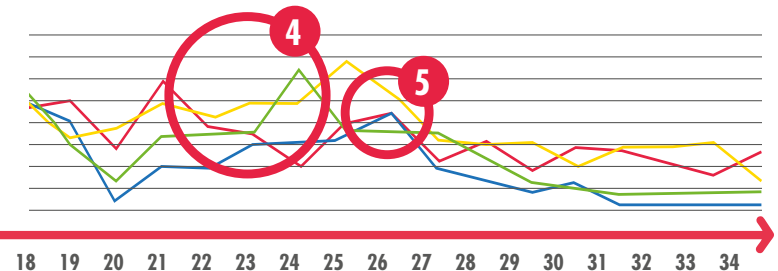
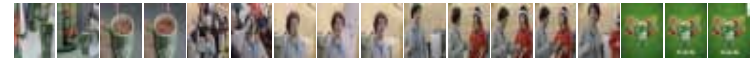
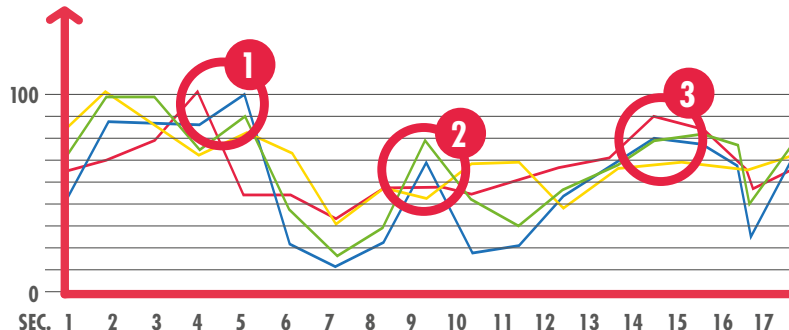
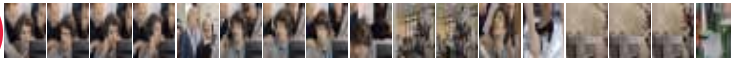
See Figure 10

figure 10 - Cup a soup research - TVC mountain: key observations



VERY STRONG START, BUT INVOLVEMENT OF WATCHER CANNOT BE MAINTAINED TILL THE END

- 1 First 5" get immediate attention which results in a high willingness to look further.
- 2 After a short collapse, the waves peak again at 9" when the whole mountain is shown → curiosity and excitement
- 3 At 14"-15" all waves score high: the attention is fully drawn towards the start of the break with Cup a Soup.
- 4 Between 21" and 25" important peaks showing engagement on different levels.
- 5 BUT = As from 26" the waves are significantly lower: the end is not able to capture full attention. The whole ad risks to have a more limited impact because it lingers on.



"One of the things that struck me in this test," says Madeleine Janssens, "is that, having watched the commercial in Figure 10, respondents in the qualitative diagnostic research did not say or express in any way that they were not impressed by the last part of the commercial. They did not say it was boring or irrelevant.



Yet, here, the brain wave analysis says otherwise: the commercial is not able to retain people's attention or engagement during these final 10 seconds, in spite of the little joke with the delivery guy or the brand information part. Thanks to the EEG we are also able to accurately diagnose specific ad sequences." For the commercials mentioned, see website: <http://youtu.be/gD8TYxMaZxQ>



"We have also successfully used EVALUATE to pre-test communication concepts. We used a "Narrative story" to pre-test a commercial for the funeral insurer, DELA. The insights we identified generated very decisive recommendations that helped to make selections for further execution and improve the effectiveness of their campaign."



DELA

OBJECTIVE AND APPROACH OF THE RESEARCH

OBJECTIVE

Get a clear insight in the intrinsic communicative value of

- The alternative executions of the campaign
- The campaign as such

TEST MATERIAL

Narratives DELA

- Stubborn Donkey
 - Grandma Frying Pan
 - Supermarket
 - Doing the dishes
- Agency 1
- Agency 2

APPROACH

- Brain waves measurement
- Qualitative Diagnostic Research

The key message from the following DELA-spots is:

The passing away of a beloved is a very drastically event. We are not able to spare this grief to the loved ones. The costs and worries we can. With the DELA funeral care plan you can provide that your surviving relatives can take leave of you in all serenity, not hindered by financial and practical burdens

The main objective is therefore to create awareness and openness towards the concept of using funeral insurance. This resulted in the following detailed objectives the new campaign had to fulfill

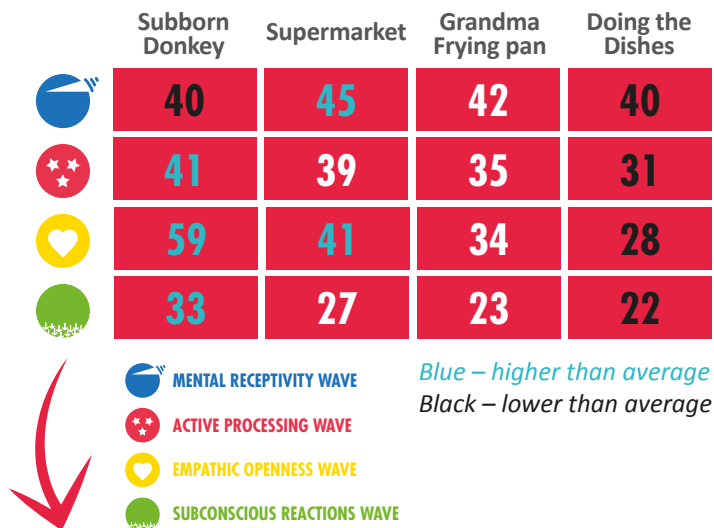
- ✓ It should be **in line with the essence of DELA's strategy and positioning**
- ✓ It should **raise brand fame**
- ✓ It should make **speaking of death / funerals part of the public sphere**
 - Make them less of a taboo subject
- ✓ It should **enable the receiver's identification with the message**
- ✓ It can draw **unexpected attention to the subject by daring to face the facts**
 - **But should in no way shock or offend**
- ✓ It should **convey care and should show emotional involvement**
 - **But without becoming sentimental**
- ✓ It should **stimulate thought / preferably even action (to inform / to sign in)**

Related to this, the following research objectives were defined:

- ✓ **General perception and experience**, message and relevance
- ✓ **Detailed analysis**: analysis of the story-line, settings, characters,...
- ✓ **Analysis of the way the TV campaign represents the desired DELA experience (see objectives)**
- ✓ **Analysis of the way in which campaign propositions manage to connect to underlying needs of the target group:**
 - To what extent can this **create target's liking** of the brand when they have not yet signed in for a funeral insurance
 - To what extent **does this call to action (to inform / sign in)**
- ✓ Recommendations with respect to **main guidelines for further development**

The neuro measurement showed the following results across the different scenario's

DELA RESEARCH - NARRATIVES GENERAL OUTCOME



Aggregated values

- ✓ Stubborn Donkey scores high on 3 of the 4 waves.
 - A **balanced and warm story that inspires people and offers trust** which is why the brand is in the consideration set.
- ✓ Supermarket is a **surprising story in a rather banal and familiar context but is not really able to anchor the message at the fullest.**
- ✓ Grandma Frying Pan is a **rather neutral story.**
- ✓ Doing the dishes scores lowest on all waves. This story is **not able to attract the attention nor to bring the brand into the consideration set.**

LET'S NOW HAVE A CLOSER LOOK TO STUBBORN DONKEY AND DOING THE DISHES

We invite you to first read the narratives.
The first is the Stubborn Donkey narrative.

A man in his forties is standing behind the pulpit at the front of the church. With a slightly fragile voice, he says:

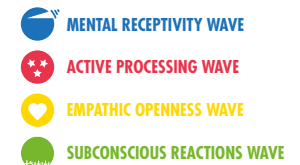
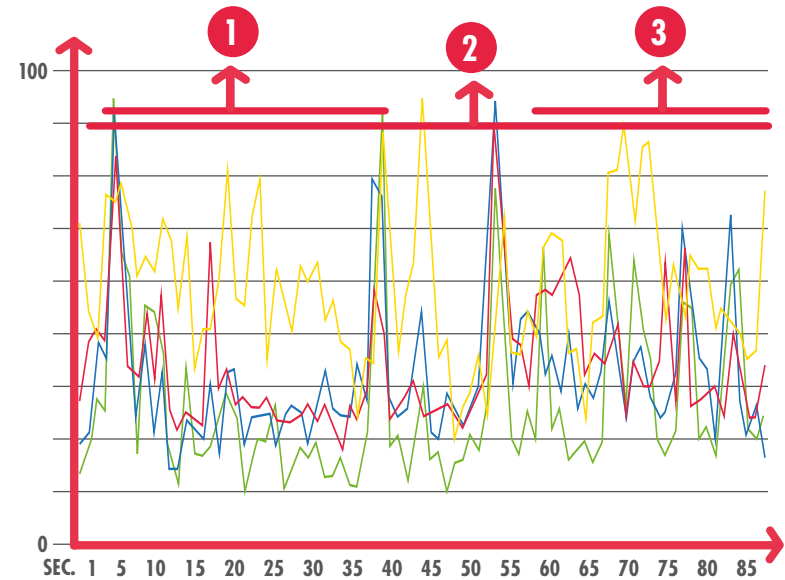
"Mom deserves a statue for living with dad... Such a stubborn person. I had my first skiing trip with school. It was years later when I learned he had done extra shifts to be able to pay for it. The day I graduated, he came to my dorm with a small car "Here, you need to move forward in life", he said. When we bought our house, he helped us out with the painting. And he brought his own paint! On his birthday, he asked for garden utensils... So he could come help out his children with their yards. The last time we went for dinner together, to celebrate his birthday, he paid the bill without me noticing. So stubborn... He wouldn't even let us pay for his own funeral. Well dad, the doctor was right. You should've rested more. Now you have to. Thanks. For everything.

At the end of the spot this message appears:

"Let good memories be the only thing you leave behind.
No unforeseen costs or practical matters.
With DELA's Funeral Care Plan.
DELA. Take care of each other.
More on www.DELA.be"

Figure 11 shows the brain measurement as respondents listened to the 'Stubborn Donkey' narrative. Figure 12A and 12B show us the AERA analysis. From the result we can tell that respondents feel involved in the story from beginning to end. You will notice that the 'Empathic Openness' brain wave is very high. Respondents are very focused on the story that is being told. At the end of the story the brain wave pattern goes up, particularly for the Active Processing and Empathic Openness waves. This indicates that the consumer action that DELA is communicating at the end of the spot (i.e. call the 0800-number or go to their website) is being positively received and that respondents are open to DELA's call to action.

figure 11 - Dela Research – Narrative Stubborn Donkey: Waveflow / Highlights



1 STRONG ATTENTION AND ALERTNESS AS FROM 3"

2 OVERALL STRONG EMOTIONAL ENGAGEMENT

3 FINAL MESSAGE IS WELL CAPTURED AND MAKES PEOPLE REFLECT ON IT

figure 12A - Dela Research – Narrative Stubborn Donkey



DELA RESEARCH NARRATIVE STUBBORN DONKEY

Attention

Strong attention as **from sec 3-5:**

"He stands on the podium and speaks ..."

- Indication of **strong relaxed alertness**
- High subconscious reactions wave shows not only curiosity but also the **fact it inspires people on a more subconscious level**



MENTAL RECEPTIVITY WAVE



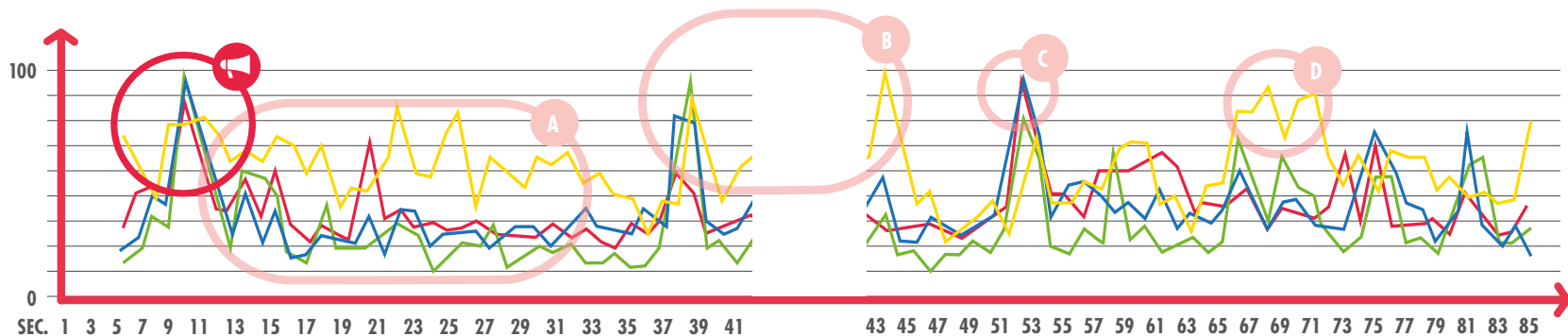
ACTIVE PROCESSING WAVE



EMPATHIC OPENNESS WAVE



SUBCONSCIOUS REACTIONS WAVE



Emotion

Strong dominance of Empathic Openness wave with high peaks:

- A Sequence 11" tot 33"** ("Mom deserves a statue for living with dad")
Is the sequence in which the story about the "Stubborn Donkey" is told. Evokes **deep basic emotions of warmth and respect**
Strong empathic attunement
- B Sequence 36"- 44"** ("When we bought our house, he helped us out with the painting. And he brought his own paint! ")
Emotional **comprehension, care and empathy** as central emotions
- C Sequence 51"-53"** ("he paid the bill without me noticing. So stubborn...)
Waves show **identification** but also a feeling of positive surprise
- D Sequence 67"-72"** ("a voice says: only leave good memories behind...")
Indication of **empathic attunement with strong active resonance**

figure 12B - Dela Research - Narrative Stubborn Donkey



DELA RESEARCH NARRATIVE STUBBORN DONKEY



Ratio

Dominance of empathic openness wave till final end indicate **openness and receptiveness for the final message**



Affective impact

Sequence

("no extra costs with DELA... More on WWW...")

Indicates people's **receptiveness for the information next to the fact that they are willing to think about it or reflect on it**



MENTAL RECEPTIVITY WAVE



ACTIVE PROCESSING WAVE



EMPATHIC OPENNESS WAVE



SUBCONSCIOUS REACTIONS WAVE



DELA-narrative: Doing the Dishes.

A couple is doing the dishes. He washes plates, she dries them. They are talking about their daughter that apparently didn't have a good report card ... and how they would discipline her. When he passes a plate to her ... the plate hits the floor. His wife is no longer standing next to him.

This is the off screen narration:

"You are never prepared for the passing away of someone you love. That's why DELA makes sure that relatives are immediately looked after and guided. All practical matters and the funeral are fully arranged. So if you're no longer here tomorrow, your family won't be left on their own."

This text appears:

DELA's Funeral Care Plan. DELA,
take care of each other
More on www.DELA.be

So what did you think about the two narratives?

Here are the overall conclusions that the EVALUATE team gleaned from the two narratives.

'Doing the dishes' fails to sufficiently meet the aims of the campaign, particularly when compared to the **Stubborn Donkey** alternative.

The link with the baseline remains vague, so the spot is not likely to enhance the popularity of the brand.

The '**Doing the Dishes**' narrative evoked little emotional involvement compared to the Stubborn Donkey narrative. The narrative does not engage respondents to be open-minded about death and the use of funeral insurances. The story is less inspiring and more traditional than Stubborn Donkey. The respondent appears to be somehow perplexed by the outcome. So, at the end of the narrative, we noticed that respondents are not open to receiving or acting upon the message.

See our analysis in figures 13 and 14

figure 13 - Dela research – Narrative doing the dishes

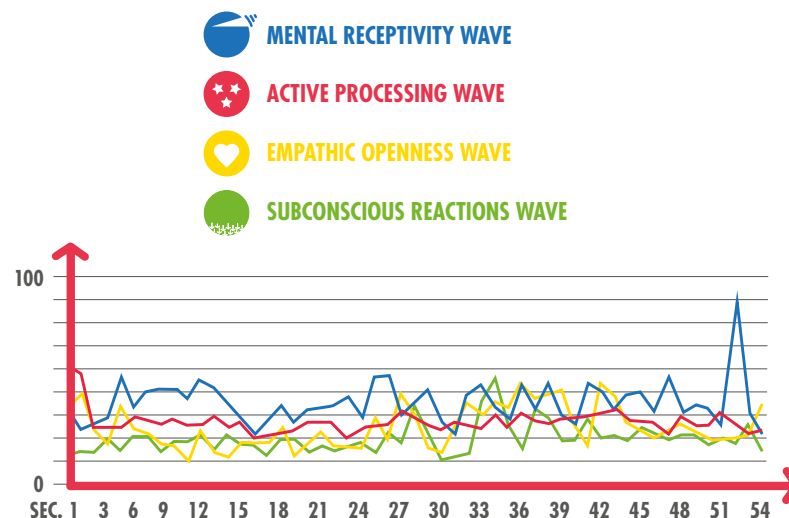
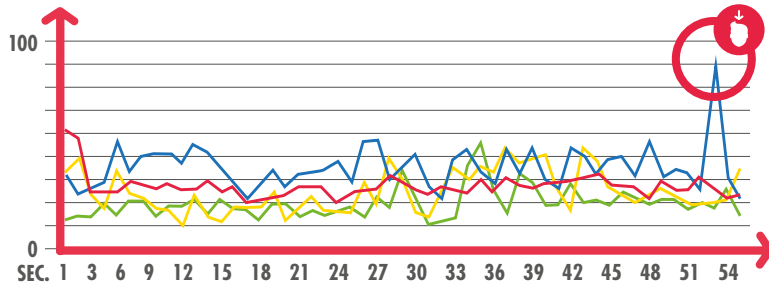


figure 14 - Dela Research – Narrative Doing The Dishes



Attention

- Poor attention as from the beginning
- Nothing particular that attracts people:
 - Shows **undirected focus**
 - Exception: Sequence sec 50"-51" ("DELA the funeral specialist..."): indicating some **alertness or interest in brand name**

Emotion

- Some **recognition in a classic, traditional context**
- Twist in the story is not picked up (overall same wave pattern)

Ratio

- No conscious information uptake

Affective impact

- The **openness for the brand** is an isolated sequence, **disconnected** from the rest of the story

✓ Achieved objective: it should stimulate thought/preferably even action (to inform/to sign)

- In real life, the commercial worked very **activating** and really called to action. This resulted in an **increasing amount of calls**, simultaneously with broadcasting period: during broadcasting period of the campaign at the beginning of 2012 the **amount of calls increased by 47% in comparison to the same period of 2011**, when there was another campaign in order. Analysis learned that:
 - The **potential clients** called mainly to **make appointments**, secondarily to **ask for a brochure** and followingly to **ask questions about the funeral care plan**
 - Call center needed more staff in order to be able to take all calls while broadcasting commercial
- At the same time, there was also a **rising amount of visitors on the website**.
- Overall there was also a rising amount of **leads, resulting ultimately in a higher overall production**

✓ Achieved objective: it should be a "wake-up call" that draws unexpected attention to the subject by daring to face the facts, but can in no way shock or offend

- Although dealing with a very sensitive subject, hardly any complaints were received, as opposed to previous campaigns

✓ Achieved objective: it should make speaking of death/funerals part of the public sphere and make them less of a taboo subject

- This objective was also **successfully reached**. This shows in the fact that more and more info on funeral insurances is given on radio/TV/newspapers as well as more and more info on what to do in case of the passing away of a loved one and how to prepare for your own passing away

✓ Achieved objective: it should have a positive influence on the general perception and experience of DELA.

- This was also successfully realized.
The results of the annual **brand tracker** are **positive**

OBVIOUSLY THE STUBBORN DONKEY WAS BROUGHT TO A FINAL EXECUTION. IT'S RESULTS WHEN BEING AIRED WERE AS FOLLOWS:

“Neurodiagnostics research is not just about reading the peaks and valleys displayed from brain waves. The science EVALUATE has created will allow our clients to improve their marketing stimuli by understanding the motivations that are associated with brain wave activity. We are able to integrate objective instinctual measurement along with diagnostic motivations. This is the real value of neurodiagnostic research.”

By pre-testing the DELA funeral insurance service using a narrative, EVALUATE was able to provide decisive and helpful insights to increase the effectiveness of the campaign. Our qualitative research concluded that ‘Stubborn Donkey’ is more effective at achieving the stated objectives than ‘Doing the Dishes’. Thanks to our neuro-analysis, DELA was able to make a clear stand for the ‘Stubborn Donkey’ story. It is more appealing and the campaign did a better job of raising awareness and creating website traffic for DELA’s funeral insurance service.

“One might think that neurodiagnostic research is all about detecting peaks in brain activity,” says EVALUATE’s Madeleine Janssens, “However, it’s not about just identifying the peaks in brain wave activity. A neurodiagnostic analysis identifies how

individual brain waves and combinations of brain waves react to marketing stimuli. For each brain wave activity (individual and combined) we identify the underlying consumer motivations based on diagnostic research that are influencing the brain wave activity.

If we look at the Spa Reine-example, we see higher activity by both the empathic openness and active processing brain waves. Having only strong performance by the Active Processing wave would mean respondents are open to the message but are not integrating this in their overall experience and not engaged to take action. So, in effect, nothing really happens in terms of marketing.



"THE KEY TO SUCCESS IS IN OUR EXPERTISE IN QUALITATIVE DIAGNOSTIC RESEARCH COMBINED WITH EXPERTISE IN BRAIN WAVE ANALYSIS AND THE TRANSLATION OF THIS INTO A HIGHLY RELIABLE RECOMMENDATION TO CLIENTS."

Says Madeleine Janssens:



"The key to success is in how we intertwine our expertise in qualitative diagnostic research with newly developed expertise in brain wave analysis and the translation of the two into a highly reliable recommendation to clients."

"So far, we have developed a very complete picture of in-depth motivations. When using diagnostic research, we are able to understand motivations: why people do what they do. When using neuroscience, we get an instinctual understanding of consumers' underlying motivations, which adds an objective assessment to why consumers do what they do. Neuroscience gives us an immediate, direct and unfiltered reaction to marketing stimuli based on consumer instincts. This is very powerful because **EVALUATE** can now observe and integrate direct and unfiltered information from the brain. This enables **EVALUATE** to provide very objective and indisputable insights to our clients using a high level of precision"

"We are very enthusiastic about what we have achieved with **EVALUATE**. It is of great benefit to our clients. Our recommendations are highly specific, easy to put in practice, more detailed and have a strong base."

"By measuring brain activities, neurodiagnostics allow us to dive into the consumer's cognitive and affective response to brands and products. The way we now measure brain activity allows the WHY5 market researchers to understand and interpret how underlying emotional patterns, issuing from different parts of the human brain, are impacted by marketing stimuli. Our AERA diagnostic approach interprets brain wave results using the four key diagnostic questions that are essential to developing effective marketing stimuli. The insights we generate from this AERA analysis provide actionable recommendations for successfully enhancing marketing stimuli."

"So far, we have successfully applied 'AERA' for communication pre-testing, commercials and narratives, **radio spots, for print advertising, TV programs, post-testing of TVC's, print, packaging, slogans/taglines, merchandising, label design, taste research and digital content**. Neurodiagnostic research can be applied for developing as well as for finalizing stimuli."

WHY5Research successfully tested its neurodiagnostic approach with a dozen of clients and is very happy to work with you using this highly developed technique.

THE WHY5RESEARCH TEAM IS INTERESTED TO HEAR FROM YOU!

Do contact us on
office@why5research.com



SCAN & CONTACT US



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