A new design approach for cosmetic sensoriality: using neuromarketing to understand consumer feeling about the "Face Cream Experience"

SS_382

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Introduction:

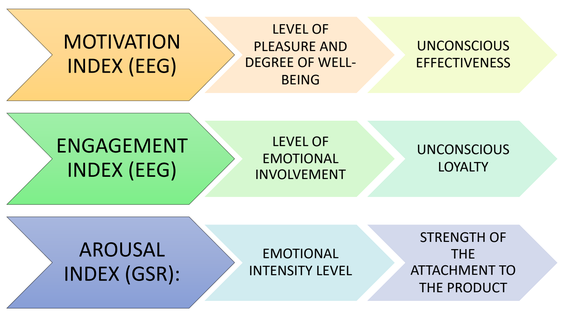
The texture of a cosmetic product has the power to activate specific brain areas, generating a precise perception of pleasantness.
These sensory characteristics play an important role in the purchase process and cosmetic industries often conduct consumer tests and focus groups to predict customer preferences. However, this evaluation is strongly influenced by the personal and previous experiences (1,2).
To bypass those biases, we used **neuromarketing techniques to make objective** the **experience of applying a cosmetic product**, that until now has usally been measured through subjective evaluations.

Materials & Methods:

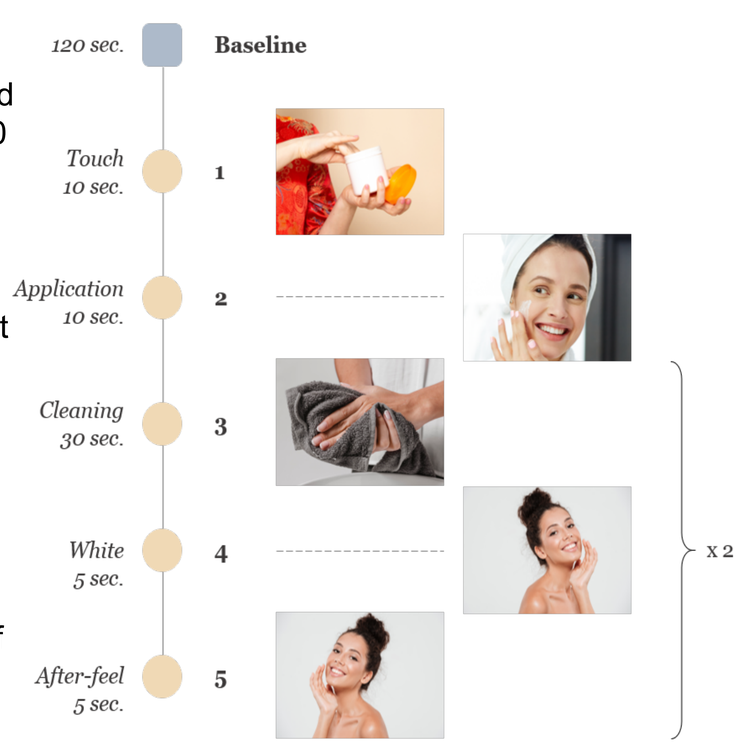
Sample:
- **32 female participants**, age from 25 to 40 (mean age = 35.25; SD = 5.76).
- Two groups: one group applied **cream A** (undisclosed formula), the other applied **cream B** (undisclosed formula).
- All the participants were asked not to use other skincare products on their faces during the previous 24 hours.

To monitor the psychophysiological experience, we used:
- **EEG** (electroencephalography - Cognionics 20) **to measure indices of motivation and involvement.**
- A wearable **GSR sensor** for skin conductance (Shimmer 3 GSR +) **to measure index of emotional intensity or "arousal".**

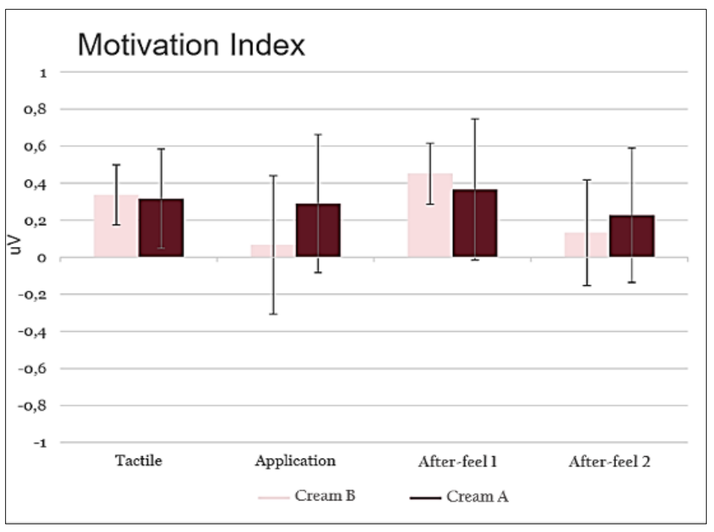
The various indices can be divided as follows:



The steps of the application ritual are five (the last three phases are reproduced a second time to measure the after feel 60 seconds after product application):
1. A first touch of the product (pick up).
2. The application of the product on the cheek (rub out).
3. A waiting phase of 30 seconds to allow the time necessary to pass the final phase (cleaning).
4. A touch phase of the cheek without product (white).
5. The last phase of after-feel of the skin after use (after feel 1/2).



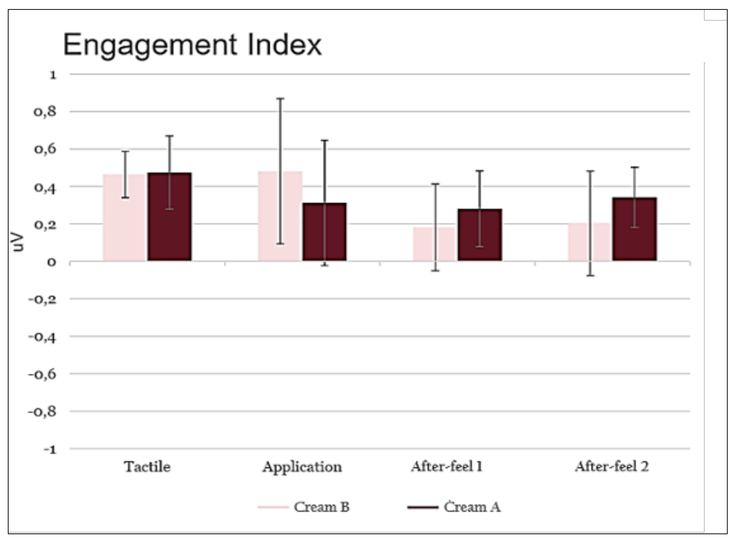
Results & Discussion:

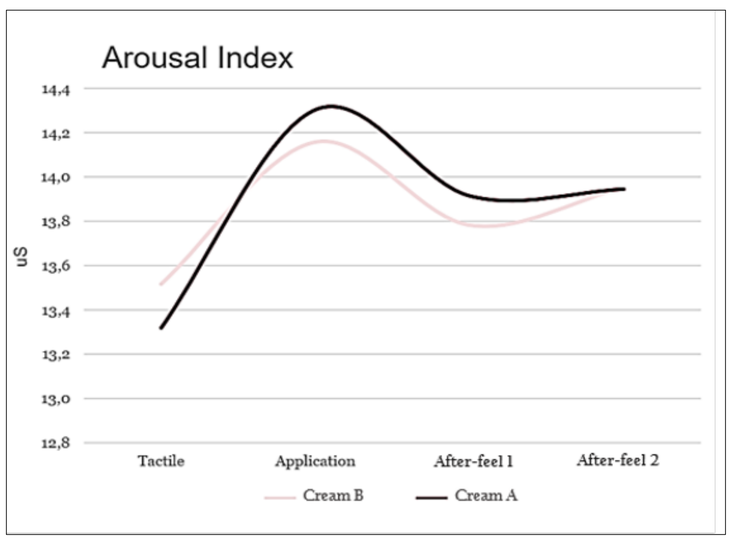


Through the M.I. it is possible to observe how the use of both creams generates **a level of pleasure and well-being during practically all phases** of use of the two products.

In the application phase (rub out) cream A generates a feeling of well-being superior to cream B.

Even **with the E.I. it is possible to find** that the use of both cream A and cream B produces **a high degree of emotional involvement** in the brain during all phases of use, while there are not significant differences between the two creams.





The A.I. shows how the experience has **a growing trend of emotional intensity** during use, in particular the application step (rub out) is the most pleasant phase.
Also in this case, there are not significant differences between the two creams.

Conclusions:

Our study proposes **a model to objectively measure the unconscious feelings** that emerge **during the application of a cosmetic product**.
This model **will allow designing new studies able to bring objectivity** in a field, such that of cosmetics, **where emotions play a pivotal role** in the purchasing process.

References:

(1) Gallucci F., Marketing emozionale e neuroscienze, (2014), Milano, EGEA S.p.A.
(2) Lombardi S.A., Ratti A., Emotional effects induced by lip balms containing different emollients: neuroscientific approach to studying the tactual experience, HPC Today, Vol. 12(3)