Fragrances That Relax vs. Fragrances That Convince: Combining Neuroscience and Self-Report in Cosmetic Fragrance Evaluation

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Bridging neurophysiological responses and self-reported perception to reveal the true emotional impact of fragrance.

01 BACKGROUND

Functional fragrances are increasingly used in cosmetics to elicit emotional benefits beyond pleasantness.

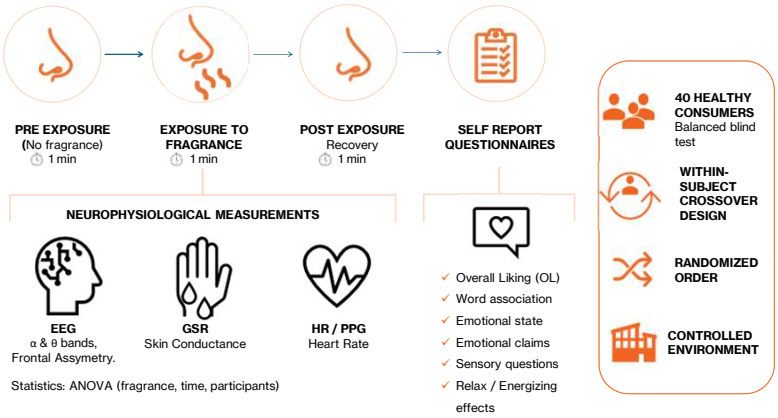
Consumer self-reports may be influenced by hedonic preference, expectations or cognitive interpretation, while neurophysiological measures provide insights into implicit body-level responses.

02 OBJECTIVE

To compare the emotional effects of two fragrances, F1 and F2, combining self-reported consumer evaluation and neurophysiological measures for the assessment of emotional fragrance performance, with a specific focus on relaxation-related responses.

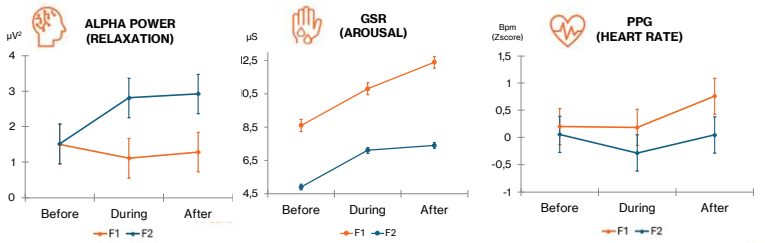


03 METHODOLOGY

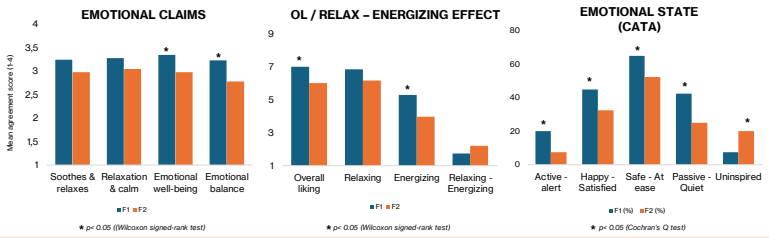


04 RESULTS SUMMARY

NEUROPHYSIOLOGICAL RESPONSES



SELF-REPORTED RESPONSES



05 INTEGRATED INTERPRETATION AND CONCLUSIONS

Although F1 received a more positive conscious evaluation, with higher liking and stronger self-reported emotional benefits related to relaxation, positive emotions and energizing effects, F2 produced stronger neurophysiological indicators of relaxation. No significant differences were found between F1 and F2 in the Acceptance/Rejection Index derived from frontal asymmetry.

Neuroscience and self-report captured different dimensions of the emotional response. Neurophysiological measures can help identify implicit emotional responses, while self-reported evaluations reflect conscious appraisal, preference and perception. In addition, self-reported emotional effects may be influenced by fragrance acceptability. Combining both approaches may provide a more robust assessment of fragrance functional claims.

> Combining neuroscience and self-report reveals the full emotional impact of fragrance. From feelings to formulations.

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