

Contribution of mindfulness-based theory to product testing: a pilot study

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AIM OF THE STUDY

Effectively predicting final consumers experience and their willingness to like, consider or buy a product through sensory testing

1. Consumers **may not be able to access consciously to their subjective experience** because their ability in focusing attention is not so developed or trained.
2. A contextual framework of product testing is not effective enough **to prevent the participant to escape from the pure description of the experience** to go and use her comments, assessments or judgments about the experience, or digressions in relation to its current concerns.

Some methods are needed **to help stabilizing her attention** → to test one of them, an exercise of focused attention coming from **mindfulness programs** (Crane, 2009) and to investigate its effect on product characterization and evaluation by consumers.

MINDFULNESS

Mindfulness allows enhancing one's sensitivity to one's perceptions by adopting an **open-minded** and **non-judgmental** approach (Lutz et al., 2008).

→ **Mindfulness = experiential approach**

The mindfulness concept comes from classical Buddhist meditation = distinction between two different meditative categories: focused attention (*samatha*) and open monitoring (*vipassana*) = two mental abilities **that work in combination**.

Focused attention = engaging and sustaining attention on an object, while detecting mind wanderings and disengaging the attention from distractions (Smallwood & Schooler, 2006).

CONSUMERS SENSORY ANALYSIS

= Using the human being as a measurement tool by benefiting from its visual, olfactory, gustatory, auditory and tactile capabilities **to characterize and evaluate products** (≠ standard physico-chemical measurements).

→ A tool for decision making in particular before new product launch provided that consumers' responses for qualifying products and their characteristics are **the least biased possible** (d'Hauteville, 2003).

METHODOLOGY

2 studies were designed to explore the possibility to improve consumers responses by inducing mindfulness through a focused-attention exercise.

→ **Can a focused attention exercise help to better characterize a consumer perceptual experience with a product?**

STUDY 1

- Non experts consumers
- Standard product (chips) from a middle range brand
- Grapes exercise as the focused-attention exercise
- Implicit and explicit measures



Procedure

- Participants were randomly assigned to either the Focused Attention Group or the Control Group → Grapes mindfulness exercise (Crane, 2009) vs. Grapes simple tasting
- Then, each participant made a Chips tasting
- Measurements:
 - Reaction Times to lexical decision task with words representing product sensory and evaluative characteristics (implicit measure)
 - Time to taste the product
 - Quantity eaten by the participant (25g max)
 - Questionnaire about product sensory and evaluative characteristics, satisfaction, buying intention and mindfulness

STUDY 2

- Non experts consumers
- Standard product (chips) from a middle range brand, but "unbranded"
- Chips exercise as the focused-attention exercise
- Implicit and explicit measures



Procedure

- Participants were randomly assigned to either the Focused Attention Group or the Control Group → Chips mindfulness exercise vs. Chips tasting
- An encoding phase allowed the participants to learn to associate 2 bowls with 2 categories: Premium vs. Low end

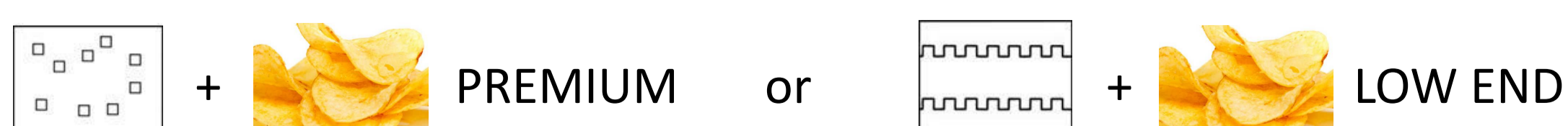
PREMIUM category
Visual texture



LOW END category
visual texture



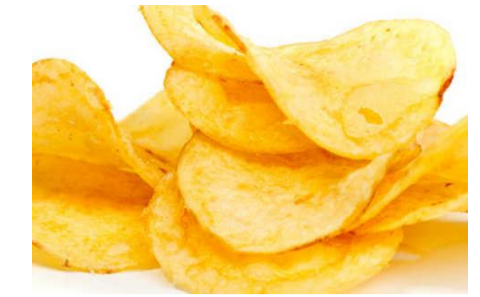
- Then, each participant made a 1st Chips tasting displayed in one of the 2 bowls associated with one visual texture or the other, thus to Premium or Low-end products.



- Measurements: same as Study 1
- Then, each participant made the 2nd Chips tasting presented in the other bowl.
- Finally, the same measurements associated with the second bowl were collected.

RESULTS STUDY 1

96 participants: 51 Focused Attention FA et 45 Control CO



The same product was categorized differently on typical chips sensory characteristics:

	Focused Attention	Control	Sig
Conscious of perceptual characteristics	4.14	3.71	F(1, 94) <1
Crispy	4.33	4.09	F(1, 94) = 2,86, p < .10
Salty	3.71	4.11	F(1, 94) = 3,88, p = .05
Industrial	3.92	4.31	F(1, 94) = 5,38, p < .03
Homemade	2.1	1.78	F(1, 94) = 2,80, p < .10
Natural	2.51	2.09	F(1, 94) = 5,66, p < .02
Pleasant mouthfeel	4.00	3.62	F(1, 94) = 4,42, p < .04
Tasting time	24 sec	27 sec	F(1, 94) <1
Quantity	8g	11g	F(1, 94) = 1,80, p = .18
RT to Tasty	598 ms	513 ms	F=3,55, p<.06
RT to Sweet	562 ms	499 ms	F=3,01, p=.05

→ Focused Attention Group is less biased?

→ What causes the differences between groups?

- Taking better account of experience with the product itself
- No systematic transfer of the exercise of grapes on tasting chips → to be controlled

→ Study 2: **Forcing the transfer** of the mindfulness exercise by training directly with chips & **Associating the same chips artificially to different categories** (premium vs. low end) through a training phase where participants learned to associate one visual texture to one category.

→ **Group CO : influenced by artificial characterization** → should evaluate the same chips differently. **Group FA not influenced, only focused on their experience with the product.**

RESULTS STUDY 2

107 participants: 54 Focused Attention FA et 53 Control CO

The same chips were categorized differently according to the learned categories only by the CO group: FA group was not influenced by the training phase:

Group	Focused attention		Control	
	PREMIUM	LOW END	PREMIUM	LOW END
Tasting time F(1,79)=11.51, p=.001	53 sec		29 sec	
Conscious of perceptual characteristics F(1,79)=3.68, p<.06	4.2	4.1	4.1	4.3
Tasty F(1,79)=12.75, p<.001	3.6		2.9	
Yellow F(1,79)=5.02, p<.03	3.8	3.9	4.2	3.8
Pleasant taste F(1,79)=4.36, p<.04	3.6	3.8	3.1	2.9
Taste appreciation F(1,79)=4.8, p<.03	3.6	3.8	3.3	3.0
Buying intention F(1,79)=7.01, p<.01	3.3	3.6	2.9	2.4
RT to Natural F(1,79)=4.15, p<.05	562 ms		506 ms	

CONCLUSION

The objective of this pilot study was **to test whether a mindfulness induction can help non-experts consumers to characterize their experience with a product by stabilizing their attention** (Lutz et al., 2009). Our results showed that indeed a focused attention exercise allowed participants to be **closer to their sensory experience with the product itself**.

Allowing consumers to be more conscious about their experiential responses to products is important for consumers sensory analysis as these data are exactly the ones of interest. The results from the implicit testing showed nearly no differences between the 2 groups indicating that focused attention cannot help uncovering automatic associations.

If mindfulness approach seems interesting for consumers testing, it may also be helpful for experts testing who can also be biased by their expectations and expertise (d'Hauteville, 2003, Lange et al., 1999).

Finally, our results also showed that participants, **by being closer to their sensory modalities, declared to overall better appreciate the tested product**. This has marketing implication in relationships with the experiential approach developed by Carù & Cova (2001) which **associates pleasure and multiple sensory modalities activations**.

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