Servicescape – Retail atmospherics

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Introduction

(Bitner, 1992)

Holistic environment

- Multisensory interaction effects between atmospheric cues

- Congruent cues >> Incongruent cues

    (e.g., Mattila & Wirtz, 2001; Michon & Chebat, 2004)

  - Processing fluency

    (e.g., Schwarz, 2004; Winkielman et al., 2003)

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Holistic environment

- **Multisensory interaction effects between atmospheric cues**

    - How to create congruity?

        - Previous research:
            - Sharing of one specific characteristic (e.g., Mattila & Wirtz, 2001)

            - Atmospheric cues are associated with diverse sensory characteristics (e.g., brightness, lightness, softness, warmth, Adams & Doucé, 2019)

            - Partial congruity is not enough to trigger positive consumer reaction (e.g., Doucé, 2022)

        - Incorporating multiple cue characteristics when choosing the appropriate atmospheric cues
            - Multisensory congruity via crossmodal correspondences

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Crossmodal congruency

- A crossmodal correspondence (CC) refers to the tendency of one sensory modality to be matched with another sensory modality

Spence (2012)
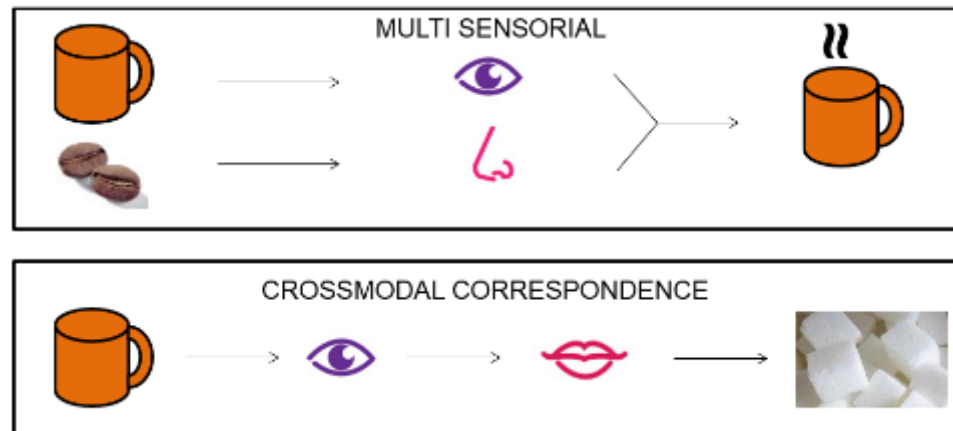
- Crossmodal congruency

Adams & Doucé (2017)

= congruency between the CC elicited by an atmospheric cue and the CC elicited by the store environment

Crossmodal congruency index (CMCI)

= index composed of 11 bi-polar items

Star-shape	Spot-shape
Bright	Dim
Cold	Hot
Fragile	Sturdy
High	Low
Light	Dark
Light	Heavy
Loud	Quiet
Rough	Smooth
Shallow	Deep
Soft	Hard

used to inventarize on a 100 mm VAS for each dimension which CC is being elicited by a stimulus (e.g., environment, scent, music …)

Adams & Doucé (2017)

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Crossmodal congruency score (CMCS)

= the sum of the absolute difference between the score for the two stimuli (i.e., environment and musical piece) on each dimension divided by the number of dimensions (i.e., 11)

$\Rightarrow$ a score between 0 and 100

The lower the score (= fewer differences)
=> the more crossmodally congruent

Hypotheses

The presence of a **crossmodally congruent** atmospheric cue will lead to more positive affective, evaluative, and behavioral consumer reactions than the presence of a **crossmodally incongruent** atmospheric cue (a) or the **absence** of that cue (b).

Crossmodal congruency in online setting

- 3 conditions
  - No music
  - Crossmodally incongruent music
  - Crossmodally congruent music
- Shopping task online store
- 243 respondents
- Dependent variables

  (a)pleasure experienced

  (b)arousal experienced

  (c)store evaluation

  (d)approach behavior

  (e)money spent

Selecting the musical pieces to be used

- Pretest
  - 34 respondents

  - 11 bi-polar items of CMCI
    - Online store environment
      - Fashion store
    - Musical pieces
      - 10 musical pieces
        - Pop music – equal BPM
        - Instrumental versions
      - Pleasantness and fit with fashion store
        - 7-point Likert scale

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Selecting the musical pieces to be used

- Calculating the CMCS
  - 2 musical pieces not different in pleasure and fit
    - One with the lowest possible difference
      - Dancing in the Moonlight of Toploader
    - One with the highest possible difference
   - Get lucky of Daft Punk

Results of Main Study

	F	p	M (SD)		
			No music[a] (N = 83)	Crossmodally incongruent music[b] (N = 77)	Crossmodally congruent music[c] (N = 79)
Dependent variables					
Pleasure	14.16	< .001	4.89 *c* (1.26)	4.52 **c** (1.11)	5.48 *a***b** (1.02)
Arousal	8.10	< .001	4.29*c* (1.42)	4.10 **c** (1.10)	4.93 *a***b** (1.51)
Online store evaluation	14.29	< .001	5.13 (1.21)bc	4.59 a**c** (1.20)	5.61 a**b** (1.15)
Approach behavior	12.18	< .001	4.70c (1.25)	4.26 **c** (1.30)	5.24 a**b** (1.19)
Money spent	7.25	< .001	96.60**c** (54.06)	119.67 (69.77)	135.77**a** (72.94)

Bonferroni corrected post hoc tests were conducted, except for money spent (Tamhane - unequal variances). Superscripts indicate the significant difference at p < .05 (in italic when p < .01 and in bold when p < .001) with the mean of the respective column.

Moderating role of shopping goal
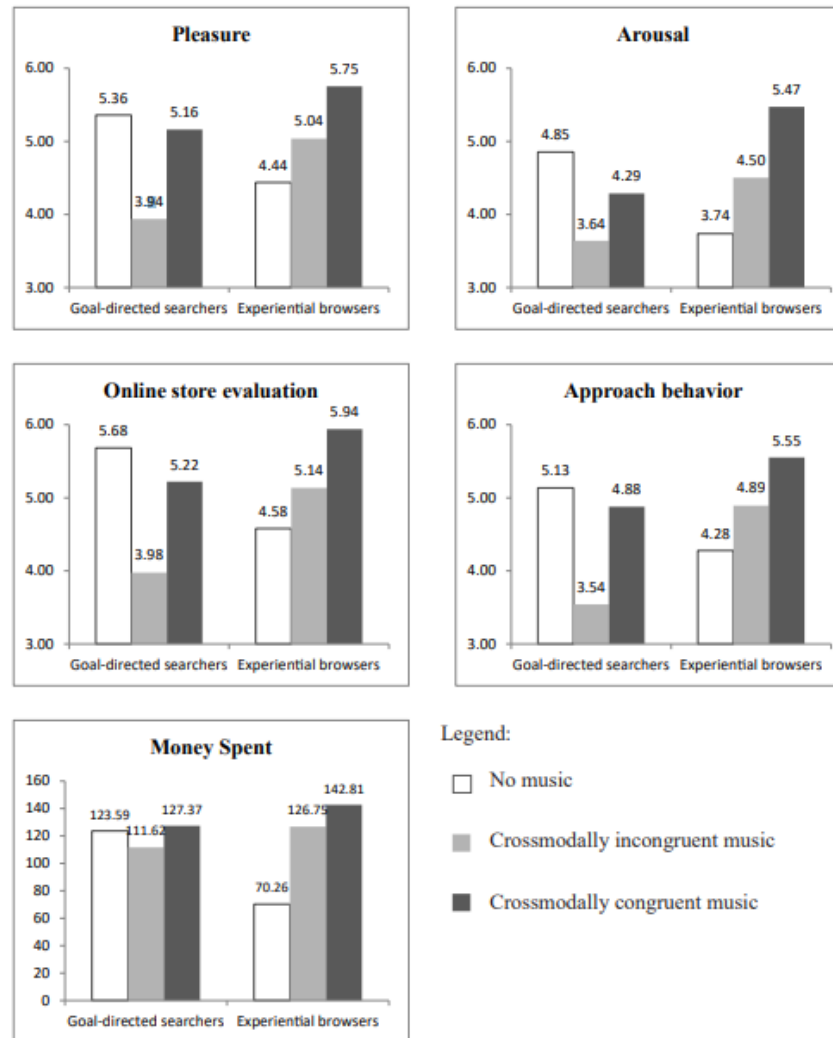
Crossmodal congruency in offline setting

Adams & Doucé (2017)

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Conclusion

- Is crossmodal (in)congruency important?
  - Crossmodally congruent background music/ambient scent leads to more positive consumer reactions than
    - (a) crossmodally incongruent cue or
    - (b) the absence of that cue

  - For goal-directed shoppers: Crossmodally incongruent cue leads to more negative reactions than the absence of the cue

- For (e-)retailers:
  - Select the right atmospheric cue considering the crossmodal profile of the cue they want to add and the (online) store environment

Thank you for your attention!

Questions/Suggestions?

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