The experience of coldness in supermarkets and consumer shopping behavior of chilled groceries, what is efficient?

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Display of chilled food

Supermarket Environment
- Food (food quality)
- Personnel (working conditions)
- Customers

Interactions between
- Display cabinets
- Ambient climate
- Customers and personnel
CONSUMER INSIGHTS

- The experience of coldness in supermarkets and consumer shopping behavior of chilled groceries, what is efficient?
Supermarkets are facing challenges in terms of understanding consumer behavior and experiences in relation to energy efficiency improvements in the physical environment.

Closed cabinets – can decrease thermal energy up to 80 % for the display of chilled food for the supermarket.

Fear among retailers that doors might have a negative impact on sales.
Background and purpose

Introducing doors represent an important detail in the retail servicescape and there is a knowledge gap regarding the effects of doors on consumers and customer behavior.

**Purpose:**
Investigate *how consumers behave* and *what consumers perceive* in supermarket store settings when being introduced to closed vertical display cabinets for chilled groceries.
Theoretical framework

- Elaborate on the term “servicescape” to understand consumers.

- Focus on the physical surroundings, a mix of environmental dimensions that form the theoretical concept of servicescape.

- Importance of servicescape and sensory aspects in the retail foodscape, for example due to coldness.
SERVICESCAPE

- Servicescape as a concept was coined by Bitner (1992) and its meaning was earlier described by Booms and Bitner (1982, p. 36) as:
  - “[...] the environment in which the service is assembled and in which seller and customer interact, combined with tangible commodities that facilitate performance or communication of the service”.
Method

- Qualitative research approach combined with a quantitative approach – in store observations

- Focus group interviews - semi-structured, questions based on results from the observations

- Three categories of chilled food displayed in cabinets:
  1) dairy products
  2) meat and
  3) fruit and vegetables
OBSERVATIONS

FOCUS GROUPS

- In total 317 consumers observed in-store.
- Three age groups, two of each group: in total six groups.
- A total of 32 attended the interviews. Each interview app. two hours and was audiotaped and transcribed.
- Discussions focused on different experiences; - how they behaved and their perceptions - how they do and feel while shopping chilled food

Asked about their likings of cabinets, either with or without doors, and the experience of the servicescape in general.
Results

- Informants related to the perception of “freshness”

- Three forms of subthemes, all relate to consumers’ senses: Vision, olfaction and tactility

- Consumers’ experiences and behaviors in-store when introduced to closed cabinets for chilled food is a new topic in servicescape
DOORS AND FRESHNESS

▪ Chilled products:

Informants stress they must be easy to access, independently where they are placed and what or who the consumers bring along for the shopping, i.e. children, a trolley, a bag or basket.
THREE SUBTHEMES
& THREE SENSES

- Vision
- Olfaction
- Tactility
Subtheme 1 - vision

- Freshness as experienced through vision related to the perception of cleanliness.

- Difficult to get information about temperatures in the cabinets.

“They have re-arranged the store. It is so fresh, as they replaced all of its refrigeration and freezer cabinets with glass-doors on the cabinets.”[...]“It looks better with doors, it looks very fresh, easier to find products.”

“It is quite important to keep the correct temperature.”

“I always touch milk cartons to see if my fingers feel frozen by the packaging - then it's cold!”[...]

“When there are doors, it feels like the cold is more isolated and being kept in its place. I like doors.”
Subtheme 3 - olfaction

- The informants described that they usually find the odors in-store as good.

- They reacted negatively to “bad” odors that sometime arouse in the ambient, in the area for fruit and vegetables, or from cabinets when they opened the doors:

  “You know immediately that it is something rotten somewhere” [...] “...and the products are not good any longer, no matter how they look.”

  “I want to smell it.” [...] “even if it’s well packaged, I think that if it’s really, really bad, I have to be able to smell something, even if it is packaged.”
Subtheme 2 - tactility

- Doors experienced as less clean due to that people need to use door handles to open them.

- The need to touch and feel products is described ambivalent.

- A cold temperature in the environment where chilled food is displayed is also associated with freshness.

“I am happy to squeeze and feel the products, especially salad bags.” [...] 

“For me it is important that things aren’t dirty; trolleys, doors or broken things. If they are it’s not fresh”.

“It’s hard to both bend and stretch while keeping a door open. This happens when products are not fronted and difficult to reach, i.e. milk cartons standing at the back and bottom.”

“I touch the products very often, especially fruit and vegetables. I almost always touch it.”
SUMMARY AND CONCLUSION

- Chilled products are perceived as special products for the informants and they want them to be fresh.

- With doors on cabinets – the perception of freshness arises.

- Freshness is related to three specific senses: vision, olfaction and tactility.
More innovative installations.

Add values for the consumers and retailers.

Include closed cabinet were chilled food is stored.
Consumer perception and behavior in the retail foodscape—A study of chilled groceries

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EX. TEMPERATURES WITH AND WITHOUT DOORS ON CABINET

- Tested 6-shelf cabinet side view (left side) and loading pattern for the test packages.
Cooling demand depends on interactions between:

- Performance of cabinets
- Ambient climate
- Customers and personnel

in the building are complex control systems for Refrigeration, ventilation and lighting.
Doors on cabinets not only reduce energy 
*but* can also improve perceived freshness and cleanliness.
DOES IT MAKE SENSE

Questions?

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