Psychological environment

Environmental influences on consumers
Wayfinding in shopping malls

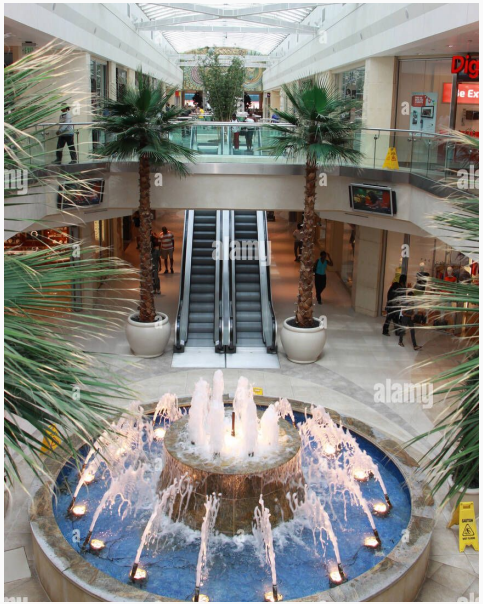
Wayfinding = ability to know where we are and to plan a route to desired destination

Wayfinding in shopping malls - are “You are here” maps useful ?

Tools to help wayfinding:

- Visible cues
- Architectural design
- Signage
- Building configuration

Features	Description	Example
Visible cues	Access to visible, familiar cues or landmarks within or outside a building.	A fountain/water feature, escalators or lifts/elevators in the middle of the mall might provide a central landmark to help shoppers to orientate themselves.
Architectural design	Architectural differentiation between different areas of a building that aid **orientation** and spatial recall. Creating a sense of identity/character for different zones will help shoppers to break the mall down into smaller chunks, making it easier to recall.	The walls of different 'zones' of a mall might have different colours or finishes or there might be different lighting.



Signage	Using signs and room numbers for identification or directional information.	Signage with arrows showing toilets, parking, food and drink, exits, etc.
Building layout	The **building configuration** can influence how easy it is to understand the overall plan of the building. A well-organised, simple floor plan will help shoppers move easily around the shopping environment.	Malls where shoppers can look down onto lower floors from upper galleried areas may help them to encode an effective mental map of the layout of the mall.

Example study: Dogu and Erkip (2000)

Aim:

Understand the importance of signage and building configuration on wayfinding and orientation in a shopping mall in Turkey.

Hypotheses:

- signage more important than building configuration
- frequent visitors better at mall wayfinding
- gender differences

Key terms:

Wayfinding
Building configuration
Pictographs
bureaucratic hierarchy

Methodology

- Questionnaires given to 155 adult shoppers at
- Karum mall in Ankara, Turkey
- Data collection on weekends when the mall was busy

Karum mall description: Fountain at main entrance, central atrium with main elevator, signs use pictograms, (except the words 'WC' and 'Exit'), shops are numbered and "You Are Here' maps on all three floors

- Questionnaires included closed multiple choice items about familiarity with the mall, perceived usefulness of signage/maps and wayfinding strategies.
- Participants asked to point in the direction of a randomly chosen store

Results

- Signage not found more helpful than building configuration for wayfinding and orientation
- Those who consider wayfinding easy found signage significant and sufficient (for others - not noticing or considering it insufficient)
- Majority found 'You Are Here' maps useful BUT 47% claimed there were no such maps at Karum😅 → showing the maps were not well positioned
- Frequency of visits and space browsed not associated with better wayfinding
- No gender difference in accuracy of pointing task, but more males made close guesses

Conclusions

- The central open space (atrium) allowed high visual perception of the whole space and this improved wayfinding
- The lack of gender difference in wayfinding was seen as reflecting women's greater familiarity with Karum
- Degree to which landmarks, floor plan and signage are helpful is different different for different individuals. Their effects are probably combined with shoppers' familiarity and preferences, but needs further research

Evaluation

Strengths:

Standardized wayfinding task, ecologically valid data

Weaknesses:

Validity of answers and truthfulness can't be checked (e.g. 'I know which direction I am facing within the building, without thinking about it. Always, sometimes, never.')

Small sample size, limited generalizability

Nomothetic versus idiographic

A strength was the use of a nomothetic approach to the data collection. Why?

1. Closed questions in the questionnaires allowed the researchers to gather **quantitative data that is easy to analyse**
2. Nomothetic research allows conclusions to be **generalised** to a wider target population and **more applicable** than idiographic approach

TEST YOURSELF

1 Christobel and her friends are visiting a mall on a school trip to Rome. They have an hour to explore and want to visit as many of their favourite shops as possible before returning to the school minibus.

Explain two features of the mall that might affect how many shops Christobel and her friend can visit before they have to return to the minibus. [4]

2 Wayfinding in shopping malls can be difficult even when there are signs and 'You Are Here' maps available. Explain one or more reasons why signs and 'You Are Here' maps can sometimes make it more difficult for shoppers to find their way. [4]

3 a Describe what psychologists have discovered about environmental influences on consumers. [6]

b Evaluate what psychologists have discovered about environmental influences on consumers. [10]

4 Give one strength and one weakness of questionnaires as a way of investigating wayfinding in shopping malls. [4]

5 Explain one ethical guideline that researchers should consider when carrying out research into wayfinding in shopping malls. [4]

Environmental influences on consumers
Spatial movement patterns

- **Shopper behavior and movement patterns are influenced by the purpose of the trip and the shopper type**
  - Different types of shopping trips, such as a big weekly shop or a quick visit for specific items, can lead to varied movement patterns
  - Different shopper types also contribute to diverse spatial movement patterns in a retail environment
- **Utilization of CCTV for Behavior Analysis:**
  - innovative use of existing CCTV cameras in a supermarket for tracking shoppers, shifting the focus from traditional surveillance to data-driven analysis.

Example study: Gil et al. (2009)

Aims:

- Investigate the impact of shop's layout on shoppers' behavior
- Examine the duration of store visits and interactions with products
- **Identify distinctive movement patterns** among **different types of shoppers.**

➔ The study is non experimental (no manipulation of any variables)

Methodology:

- Shoppers were initially approached to take part in a survey (opportunity sample of more than 480 shoppers) and basic information was gathered (age, gender and size of group of shoppers)
- CCTV (video surveillance) was used to track their journey around the shop, using a coloured tag to identify them
- As they left the store, they were given a more detailed interview

➔ The interview covered a range of topics, asking the shopper about the purpose of their trip, their use of a shopping list, satisfaction with their shopping and the amount of money spent (recorded variables)

- The CCTV recordings were processed to extract data on the store areas visited, the time spent in each area and the type of product interactions.

Results

- Shopper behavior primarily based on product location.
- Milk, bread, fruit, and vegetable sections had highest shopper interaction, whereas baby products and non-food (CDs, DVDs, books, etc.) products were interacted with least.

But more important results: identified four different types of supermarket visit

- **Short, round, central, wave**

raiders were more likely to be male and lone females were more likely to be explorers

And five distinct types of shopper

- **Specialist,Native, Tourist, Explorer, Raider**

Type of visit (n = number of participants)	Shoppers' movement
Short trip (n = 32)	A quick, in-and-out visit, few specific targets
Round trip (n = 173)	Up and along the main/furthest aisles with short episodes in the side aisles, mainly in the vegetable, fruit and bread sections
Central trip (n = 110)	Up the main aisle, then into the top aisles, back down the main aisle to the bottom side aisles and out
Wave trip (n = 166)	Up the main aisle, zigzagging left and right along the side aisles to the exit at the far end

Type of shopper (n = number of participants)	Description of shopper movements	Aim of shopping trip
The specialist (n = 19)	A long time spent looking at a few items	Top-up or non-food shop
The native (n = 161)	A long trip to specific aisles, likely to make purchase	Main or top-up shop
The tourist (n = 101)	Fast movers staying mainly in the main aisles near the entrance, unlikely to purchase	Food or non-food shop
The explorer (n = 67)	The longest trips, slowly doubling back down the aisles, buying a great deal	Main shop
The raider (n = 113)	Fast-moving and decisive shoppers, clear preference for main aisles unless necessary to go further; highest number of male shoppers	Top-up or for tonight

Little bit more about type of shoppers

- The Specialist
  - focusing on a few products and spending a lot of time with each product, though not necessarily resulting in a purchase.
  - These shoppers are mainly on 'top-up' or 'non-food' mission.
  - 19 shoppers, 25% males, 58% use baskets, 85% shop for less than 20 minutes.
- The Native
  - A long trip visiting relevant aisles, and interactions are most likely to lead to purchases.
  - They are mainly on 'main' or 'top-up' mission.
  - 161 shoppers, 98% use a trolley, 90% are satisfied with their shopping experience.
- The Tourist
  - Fast-moving shoppers who don't stray too far from the entrance and tend to stay on the main corridor.
  - They look more than buy and some are on 'non-food' mission.
  - 101 shoppers, 80% have short or medium trips, 35% are of the mature profile, only 28% are very satisfied with their experience.

- The Explorer
  - The longest trip, visiting all aisles in the store and often visiting places more than once.
  - This involves spending a long time with products and buying a lot and involve a 'main' shopping mission.
  - 67 shoppers, 62% females shopping alone, 87% take a trolley, 43% have a shopping list (highest of all categories).
- The Raider
  - Involving fast movements and fast decisions, showing preference for the main corridor but going where necessary.
  - These have the highest proportion of male shoppers and are on 'top-up' or 'food for tonight' missions.
  - 113 shoppers, 33% male (biggest proportion of all categories), 100% walking at medium or fast speed.

Gil et al. concluded that this information about shopper behaviour could be further investigated in other stores with other layouts.

Conclusions

1. **Shoppers' movements within grid layout supermarkets are not same among all**
2. **Different groups of people with different purposes adopt distinctive spatial strategies for their shopping**

Evaluation:

- Strengths:
  - Everyday location increases ecological validity.
  - Detailed procedures for easy replication.

➢ *This is important as the researchers only examined behaviour in one supermarket and, therefore, replications are necessary in order to see whether these categories apply to other types of store*

- Weaknesses:
  - Observational data may lack validity due to awareness of monitoring.
  - Opportunity sampling from one supermarket introduces potential sampling bias.

Issues and debates

Reductionism versus Holism

Holistic approach using various methods (observation, interviews, CCTV) to capture diverse aspects of shopper behavior.

Balances individual explanations (shopper types) with situational explanations (store layout effects).

TEST YOURSELF

1 Francisca is having a dinner party; she spends ages in the supermarket looking for all the ingredients for the recipes she intends to make. Just an hour before her guests are due to arrive, she realises she does not have enough wine glasses and runs back to the supermarket to get some more.

Outline two of the five spatial behaviour types that Francisca might have shown on her two shopping trips. [4]

2 Describe two findings relating to spatial movement patterns in supermarkets. [4]

3 a Describe what psychologists have discovered about shopper behaviour using CCTV tracking. [6]

b Evaluate what psychologists have discovered about shopper behaviour using CCTV tracking. [10]

4 Psychologists sometimes use naturalistic observations as a way of investigating environmental influences on consumers. Explain one strength and one weakness of this methodology for investigating shopper behaviour. [4]

5 Jorge is investigating time spent interacting with non-food products and the five spatial behaviour patterns.

Write a suitable fully operationalised null hypothesis for his study. [2]

6 Explain one way that Jorge could ensure that his study is reliable. [2]

Menu design psychology

Eye-movement patterns, framing and common menu mistakes

Menu Importance:

- Vital marketing tool for restaurants
- Critical for increasing sales and fostering customer loyalty (likely to return and recommend the restaurant or café to others)
- **Menu as a silent salesperson**. The menu is one of the first things customers see outside or inside the restaurant.

! A well designed menu can create a positive mindset, educate and even entertain, as well as increase the average spend per diner

- **menu as the restaurant's business card**
- ! matching colour and style with the decor and price range of the dishes

Influential research here: Pavesic (2005)

Common mistakes	Explanation
Inadequate management commitment	Not treating the design of the menu as important, not being involved with it, not realising the impact on sales.
Hard to read	Not checking font size, crowding and background colour so the print fails to stand out clearly and items may not be seen.
Overemphasised prices	Putting prices in a column so people reading will choose a dish based on price, possibly ignoring more costly items.
Monotonous design	Not varying the graphic design to make certain items stand out, not making the menu look interesting.
Poor salesmanship	Not emphasising in a visual way the items you most want to sell so they may be overlooked.
Poor use of space	Not using part of the menu, such as the back, to identify the restaurant, address and contact details, as some guests will take the menu away. Menus can be your business cards.
Incongruent	Failing to match the menu design to the restaurant, communicating a lack of care about the business.
Too big	This can make the menu difficult to hold, flap around or get in the way.

Some tips from Pavesic:

‘eye magnets’ - graphic techniques which attract the diners’ eyes to specific areas of the menu

Organisation of the menu

- highlight the most profitable dishes
- use 'eye magnets' such as boxes, colors, fonts, and graphics for effective menu organization, to speed up the selection time

! time is everything → anything that decreases time spent looking at the menu helps to increase revenue as it means customers receive, consume and pay for their orders more quickly, leaving tables free for further diners

Some tips from Pavesic:

Cognitive load → diners spend an average of 109 seconds before choosing their meal, suggesting that if menus are too long and complicated, diners simply won't process all of the information

- Limit menu options to 18–24 dishes for simpler decision-making
- Shorter menus are easier for customers to process and decide, less overwhelming, improving overall satisfaction

*Pavesic used eye tracking devices in his research

Eye-tracking, ‘heat’ and gaze motion maps

- Eye-tracking technology - using computer to record pattern of eye movements - objective measure of visual attention
- Eye-trackers can be fitted into glasses, they are easy to wear, allowing studies to be conducted not only in the lab, but also in more naturalistic settings, such as supermarkets or restaurants
- The data can be sent wirelessly to a researcher’s tablet or computer for analysis
- Analysing images can show where and for how long a person looked, such as which area of the supermarket shelf, product packaging or menu.
- These images are called ‘heat’ maps.
  https://www.youtube.com/watch?v=R2rj7hcviwk
  https://www.youtube.com/watch?v=yE_C_i3uv1E

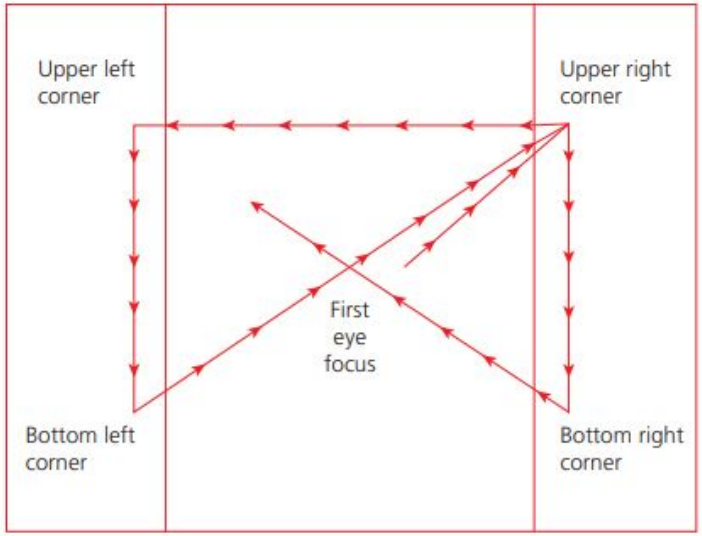
- Aside heat maps, also can create gaze motion plots(maps) -showing how the eyes move around or scan a document such as a menu
- Menus often group dishes into courses, which are listed in the order in which they would be eaten, such as starter, main course, dessert, coffee.

➔ Although this may seem logical, the list-style menus mean diners are not guided to the dishes the owner/chef wishes to promote.

One **application** of this research: adapt the layout of the menu so that the **most profitable dishes** are showcased **in the positions** that the eye-tracker suggests **the diner looks** at either:

first, last or for the longest amount of time → that would be **the centre and corners.**

This method is sometimes called "framing"



▲ Figure 7.20 Typical eye movement track when reading a two-page, three-column menu (Pavesic, 2005)

Cognitive psychologists have long known that people tend to remember items from the beginning and the end of a list more than they remember the items from the middle - PRIMACY and RECENCY effect

https://www.youtube.com/watch?v=jEUoQVN80Jw

Researchers have questioned whether this effects might also extend to making choices from a menu **Example study: Dayan and Bar-Hillel (2011)**

- Aim: to investigate whether menu position affects customer choices
- Background (previous research) : **edge bias,** but sometimes also **edge avoidance** (also called middle bias)
- Two studies (lab and field exp)

Study 1 – laboratory experiment

- 240 students randomly allocated to 4 conditions → 4 different menu designs

➔ Menus offer same items, differing only in terms of order of item presentation within each category

➔ Items categories: appetisers (A), entrées (main courses, E), soft drinks (S),desserts (D)

➔ No prices were displayed

Designs explained:

- baseline: arbitrarily ordered (no particular order)
- mirror: complete reverse of the baseline
- inside out baseline: reversed the baseline order by turning middle items into top/bottom items and vice versa
- inside out mirror: like previous, but reversing the mirror version this way

The participants were each given one version of the menu and asked to choose one item from each of the categories.

Condition	List order	Example
Baseline	1, 2, 3, 4	juice, Sprite, cola, Fanta
Mirror	4, 3, 2, 1	Fanta, cola, Sprite, juice
Inside-out base	2, 1, 4, 3	Sprite, juice, Fanta, cola
Inside-Out Mirror	3, 4, 1, 2	cola, Fanta, juice, Sprite

Results

→ Participants were significantly more likely to select items at the beginning or end of the list than they were to select items placed in the middle (these items were 56% more likely to be chosen than middle items)

- No difference between primacy and recency effect (both equally strong)

Study 2 – field experiment:

» A 15-day study at a café in Tel Aviv, Israel

» Participants were genuine customers

» Independent variable: position of menu item:

➔ standard or experimental menu (items from top and bottom of the list were moved to the middle and vice versa)

*three of the categories of items (coffees, soft drinks and desserts)

» Dependent variable: how often target items were purchased

Results2: findings from the field experiment also supported - an edge bias not a middle bias!

» The majority of choices were from the first or last two dishes (extreme edges)

Example: Croissant was chosen twice as often when it was first on a ten-item menu compared with fifth (18:9)

Conclusions: dish popularity can be increased by moving dishes from middle to first or last position due to edge bias

Evaluation

Applications to everyday life: place items at the beginning or end of the category if you want them to be ordered more often. - good purpose - not only for higher profit, but also manipulating people's choices towards healthier options :)

Strengths: Diversity in Settings: Conducted both lab and field experiments

- ➔ Controlled Conditions: Lab study allowed control over variables, enhancing replicability.
- ➔ Real-world Applicability: Field study in naturalistic cafe settings provides ecological validity.

Weaknesses: Only one location

- ➔ specific coffee shop with young customers may not apply universally; Data from one city cafe with specific offerings might not represent broader restaurant contexts.

TEST YOURSELF

1 Businessman Gordon is visiting Bobo's Bistro. Profits are so low that owner Bobo is worried he might lose his business. Gordon says some simple changes to Bobo's menu could help.

   a Explain two or more possible features of the menu that may be having a negative impact on the restaurant's profits. [4]

   b Outline one piece of advice Gordon might give to Bobo that could have a positive impact on the restaurant's profits. [2]

2 Explain how the use of eye-tracking has contributed to menu design psychology. [2]

3 a Describe research into menu design psychology, including menu item position. [6]

   b Evaluate research into menu design psychology. [10]

4 Explain one strength and one weakness of using field experiments to study menu design psychology. [4]

5 Clarice's kiosk sells cakes to passers-by as they walk along the seafront. She records the number of customers who order each of ten different cakes listed on her menu. Write a suitable non-directional hypothesis for Clarice's research based on what you have learned about menu design psychology. [2]

6 Mauritz is interviewing diners at Noga's Noodle Bar to gather qualitative data about their attitudes towards the menu. Noga is worried that Mauritz's data will be too subjective.

   a Explain what is meant by subjective with reference to research into menu design psychology. [2]

   b Explain one way Mauritz could collect more objective data from Noga's customers regarding how they view the noodle bar's menu. [2]

The effect of food name on menu item choice

‘Not just food’ - Marks and Spencer’s campaign
https://www.youtube.com/watch?v=5lwMQYxm23U&list=PL_yW5gr0lcwW3bfb0bTXEhhRs09ie-kX3&index=8

➔ the power of descriptive language in marketing food products

New methodology here:

- focus groups

special type of group interview. brings together a small group of people to answer questions in a moderated setting. their reactions to specific research questions are studied

- content analysis

research tool used to determine the presence of certain words, themes, or concepts within some given qualitative data. researchers can quantify and analyze the presence and meanings of such themes

Lockyer's Study

- Aim: To investigate how menu wording affects menu item selection
- Methodology: **Focus groups** followed by survey (questionnaires)
- The groups discussed five versions of a menu offering the same dishes but with different descriptions
- asked to indicate how appealing they found each menu, from 1: most appealing, to 5: very unappealing
- Later they had a group discussion about their impressions, reasons for such ratings...

Sampling technique? ***This is for focus groups. Different sample will be used for survey.***

➔ Letters were sent to random addresses in Hamilton, New Zealand, offering book vouchers and refreshments for participation in a focus group. Forty-eight participants replied (72% female) and were divided into several focus groups.

Menu	Description of chicken dish
French	Poulet sauté chasseur
English with French	Chicken sautéed in butter and served with sauce Chasseur
Seasonal	Spring chicken cooked and served in a sauce flavoured with new season mushrooms, shallots and tomatoes
Elaborate	The most tender chicken cooked till golden and served with a delicious sauce finished with tomatoes, shallots and mushrooms
Organic	Free-range organic chicken cooked and served with mushrooms, shallots and tomatoes in a naturally produced sauce

All focus groups discussed these 5 versions of menu

Results - Focus groups

- ➔ Majority of the participants favoured the seasonal menu (42 per cent); only 2 per cent rated the seasonal menu as very unappealing
- ➔ French menu was the least favourite (very unappealing) for the majority (favoured by just one person)

keywords that were identified in the content analysis of the transcripts:

Clusters of key words	Interpretation
Fresh, interesting, pure, natural, healthy	Words that can give clues to the feel of the restaurant.
Feel, image, mystique	Menu descriptions give clues about the dining experience; there should be some mystery and not something the diners would cook at home.
Occasion	Different wordings may be appropriate for different types of occasion, such as a romantic meal and a business meeting.
Trends, organic, season	Reflected current trends for organic, fresh food.

Second phase: survey

- ➔ Following the focus groups, the researchers used the information gathered to create a survey **to test the validity of the initial findings.**
- ➔ The surveys included open and closed questions, including Likert-type rating scales.

Sample: Approximately 1800 surveys were distributed to randomly selected homes in Hamilton and there were 200 usable responses.

the survey asked respondents to say:

- ❑ which menu items they would choose for different occasions
- ❑ to comment on the reasons for their choices

content analysis was carried out again to identify the most common reasons for each choice.

Results from survey:

- the survey found menu 4 (elaborate style) to be the most selected for all the dining experiences.
- Organic was the top choice for meal with their mother-in-law
- Seasonal - for a business meeting
- Elaborate - any occasion

Reasons for the choice of a chicken dish from each menu include:

- Menu 1: Poulet sauté chasseur: 'feels romantic', 'sounds sophisticated'
- Menu 2: Chicken sautéed in butter and served with sauce chasseur: 'sounds delicious', 'appears to have the nicest flavour'
- Menu 3: Spring chicken cooked and served in a new season mushrooms, shallot and tomato flavoured sauce: 'not too fussy', 'tells me basically what I get'
- Menu 4: The most tender chicken cooked till golden and sewed with a delicious sauce finished with tomatoes, shallots and mushrooms: 'mouth-watering', 'chicken sounds tender'
- Menu 5: Free range organic chicken cooked and served with mushrooms, shallots and tomatoes in a naturally produced sauce: 'organic', 'I like to know what I'm eating'

Conclusions:

Menu wording has an impact on the selection of items; clear and precise descriptions are favoured but occasion can also influence the style of description that is preferred.

Strengths and Weaknesses

Strengths:

- Collection of qualitative and quantitative data
- Random sampling **BUT** only urban areas (Hamilton) limiting generalizability

Weaknesses:

- Small sample size of focus groups, **BUT** supported with the views of 200 respondents in survey

Applicability to everyday life:

Affordable and impactful menu changes

Using focus groups has its own strengths and weaknesses.
W: people sometimes censor what they say to conform with the majority

Consumer behaviour and personal space

- Personal space - area surrounding a person, which they consider to be psychologically theirs
- People will feel discomfort, anxiety or anger if their personal space is invaded

How much we are comfortable with others being close to us depends on:

➔ Individual factors (eg. gender, age, **culture!**)
➔ Situational factors(someone standing close to us on a crowded train vs someone sitting close to us on an empty train; bus crowd vs concert crowd...)

Important author: Edward T. **Hall**

Hall's zones of personal space

Zone	Who can enter?	Size of zone
Intimate	Romantic partner, children and other close family and friends	<46 cm
Personal	Friends, family, colleagues	46–122 cm
Social	Acquaintances, strangers	122–210 cm
Public	The wider, more impersonal space, reserved for public lectures/speeches, etc., more anonymous	>210 cm

Also → Hall divides cultures into 'contact' and 'non-contact' cultures.

'Contact' cultures - closer interpersonal distances and more touching

'Non-contact' -greater distances and less touching between people

Responses to the invasion of our personal space can be explained with reference to three concepts: overload, arousal and behavior constraint.

Arousal

- ➔ When our personal space is invaded, we may feel a heightened sense of arousal
- ➔ Our response may be positive (such as at a concert, or if someone hugs you) or it may be negative (such as a stranger sitting too close)

Overload

- ➔ negative emotions can result from sensory and cognitive overload
- ➔ individual may be unable to cope with the amount of environmental inputs
- ➔ If people are too close, we must process information relating to their features

Behaviour constraint - when behavior is not under our free will, but constrained by the physical, psychological, and social environment in which individuals are situated

- ➔ crowds behave very differently from individuals, often leading to increased aggression and a decrease in prosocial or helping behaviours
- ➔ stress experienced by lack of personal space may be responsible for these changes in behaviour

Key study: Consumers' responses to table spacing – Robson et al. (2011)

Context Individual, situational and cultural differences affect the amount of personal space individuals require.

Examples:

- I: men and older people require more personal space than women and younger people.
- S: size of a group (larger groups requiring more space per person than smaller groups; whether you are with partner, friend or colleague...)

* interesting finding - we need smaller personal space at the sides and larger at the front and behind us.

Main theories and explanation

Restaurants need to find balance between maximizing seating capacity for financial gain and creating a pleasant dining atmosphere.

- Research emphasizes that overcrowding, especially in the space between tables, can lead to discomfort, reducing the likelihood of customers staying longer, spending more, and returning.
- Previous research had examined seating preferences, including spacing between chairs at a table, but before this study there was no research looking at table spacing.

Aim: to explore perceived adequate distance between tables and how this is influenced by social context/familiarity and culture.

Research method(s) and design:

» Method: experiment.

» Design: independent measure with random allocation.

» Data collection technique: web-based questionnaire with images of restaurant tables.

Variables:

» Independent variables: **table spacing** – 6, 12 or 24 inches apart; **dining partner** – a business colleague, friend or romantic partner.

» Dependent variables: seven-point Likert scales (1 = strongly disagree to 7 = strongly agree), measuring **beliefs, emotional responses and behavioural intentions.**

Sample: » Size: 1,013 » From the USA, with a good balance of:

- gender (53% F, 45% M)
- location of residence (urban suburban, rural)
- ethnicity ! not very balanced actually
- age range: from less than 21 to over 50

» Sampling technique: volunteer

Ethics: » Confidentiality was maintained

» Privacy was not invaded, as might be the case if observed in a restaurant.

Procedure: participants were told to answer questionnaires as though they were dining with one of three different types of dining partner

- There were 32 statements to answer on a seven-point Likert scales (1 = strongly disagre and 7 = strongly agree)
- The statements measuring emotional responses were taken from from the Stress Arous Checklist (SACL) an instrument that clearly measures and differentiate between stress and arousal

Controlled variables: random allocation - to control participant variables

Results:

Closer table spacing made respondents feel less private, more crowded, less likely to have a positive experience and more dissatisfied with their assigned table.

Those with the 6-inch distance were also more concerned about being overheard or about disturbing other diners.

Arousal score did not vary significantly between table spacing, but stress levels were significantly higher for the 6-inch spacing, and feelings of control and comfort were lower than for wider spaced tables.

Closely spaced tables lead to highest levels of stress when dining with a romantic partner, less when with friends, and least when with colleagues

Table spacing	Participants' reactions
6 inches	Participants worried about being overheard, disrupting others; 70 per cent said they would ask to be reseated; particularly stressful in the romance scenario.
12 inches	There were negative feelings but respondents felt more in control than those in the 6 and 24 inch groups.
24 inches	This was the condition with least negativity, yet 35 per cent said they would feel uncomfortable.

Individual differences	Effect on attitudes/preferences
Age	Younger participants were more positive than older participants at 6 inches and more stressed at 24 inches.
Gender	Women felt more stress, less control and greater discomfort than men, who felt more arousal at each distance.
Ethnicity	Asian participants were more comfortable and in control at both 6 and 24 inches than other groups.
Frequency of restaurant visits	Frequent restaurant diners were more comfortable at all distances than non-frequent diners.
Residence	People from densely populated areas were more aroused by close proximity than those from less densely populated areas.

Conclusions:

Consumers dislike closely spaced tables in restaurants and this was generally the case regardless of individual differences. Generous spacing is more desirable, especially for romantic dates.

Evaluation:

Strengths:

- Good controls: control questions asking about different experiences from the restaurants
- Online survey created carefully: pilot study and pre-testing of the items increased validity
- Ethics

Weaknesses:

- Sole reliance on closed-ended questions
- Limited Generalizability: Uneven participant demographics

Applications: The research recommends a minimum 12-inch distance between tables for improved customer satisfaction

Defending your place in a queue

- queue as small-scale social system
- people are very protective of their position in a queue and there are certain expectations that we have about the behaviour of other people in the queue
- e.g. someone pushing into a queue is seen as socially unacceptable
- however, there are many factors that may influence a person's response to someone pushing into a queue
- Some factors: nature of the intrusion is important, number of intruders...

Example study: Milgram et al. (1986)

Aim: to investigate factors affecting reactions to queue jumpers

Prediction: people would be less likely to show defensive behaviour if other members of the queues also behaved passively, accepting the behaviour.

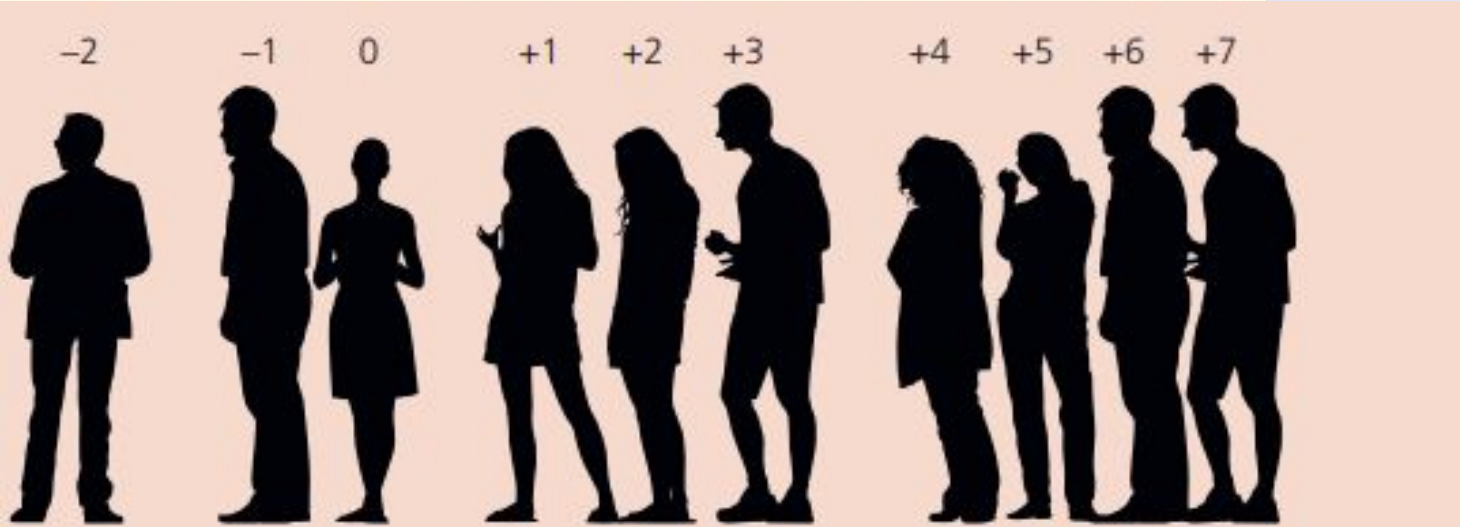
Methodology:

» Confederates tried to queue jump 129 times in various locations in New York.

» **IVs:** number of intruders and presence/ number of buffers

» Responses were noted by a non-participant covert observer

» **DV**: number of times other queue members demonstrated defensive behaviour



▲ Figure 7.26 '0' marks the position of the experimental intruder in the queue

- Number of intruders - 1 or 2 confederates jumping in at the point labelled 0
- Buffers - sometimes 1, sometimes 2 of the additional confederates joining in at the point +1 and +2 ; sometimes there were no buffers here, just genuine participants

Results:

Type of objection	Examples	Frequency
Physical	Touching, sleeve tugging, shoulder tapping, pushing	10%
Verbal	'Excuse me, you have to go to the back of the line'	22%
Non-verbal	Hostile stares and gestures	15%

▼ Table 7.23 Frequency of objections under the different conditions

Number of intruders	Number of buffers	Frequency of objections
1	0	54%
	1	25%
	2	5%
2	0	91%
	1	25%
	2	30%

Conclusions:

Objections to queue jumpers are more common with two intruders and no buffers.

Strength - Observations were both qualitative and quantitative

e.g. counting how many times + describing → verbal, non-verbal and physical reactions,

Weakness - All observations took place in New York, USA + the contexts of the queue are very trivial

➔ what about queuing to get over the border in a war zone or waiting for emergency aid in a natural disaster?

ISSUES AND DEBATES

Individual and situational explanations - research focuses situational explanations of queuing behaviour - fails to acknowledge the role of individual explanations relating to personality, gender and cultural differences