

Learning and memory

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Understand and apply behavioural learning theories of classical conditioning and instrumental conditioning

- Long-standing, learned connections between products and memories are a potent way to keep and build brand loyalty
- Learning
 - **Textbook: Relatively permanent change in behaviour caused by experience**
 - **Lecture: Change in the content or organisation of long-term memory that occurs as a result of information processing**
 - Can also learn by observing events that affect others
 - Ongoing as we are exposed to new stimuli and receive ongoing feedback
- Incidental learning
 - Casual, unintentional acquisition of knowledge
- Learn from
 - Culture
 - Social class
 - Family
 - Friends
 - Institutions
 - Personal experiences
 - Advertising
 - Mass media
 - Other
- Behavioural theories
 - Stimulus-response connections
 - Mind is a black box
 - Focus on observable aspects of behaviour
 - People's experiences are shaped by the feedback they receive as they go through life
- Classical conditioning
 - Stimulus that elicits a response is paired with another stimulus that initially does not elicit a response on its own
 - Applies to responses controlled by autonomic and nervous systems
 - Common in low-involvement situations
 - Expertise, low-risk
 - Unconditioned stimulus (UCS)
 - Naturally capable of causing the response
 - Conditioned stimulus (CS)
 - Neutral
 - Didn't initially cause response, but did after being associated with it
 - E.g. bell
 - Conditioned response (CSR)
 - E.g. salivation
 - Repeated exposure
 - Increases the strength of stimulus-response associations and prevents decay
 - Application
 - Anything more than three exposures is wasted
 - First: Awareness
 - Second: relevance to consumers
 - Third: reminder of benefits
 - If time between exposure was < a week = no long term impact
 - Adaptation
 - ◆ So used to hearing/seeing stimulus they no longer pay attention to it
 - How often should advertiser repeat ads on a website

- ◆ Depends on
 - ◇ Whether ad relates to website's content
 - ◇ Whether competing ads are also present on the site = more effective
- Extinction
 - When effects of prior conditioning are reduced and finally disappear
 - E.g. When product is overexposed in marketplace
- Stimulus generalisation
 - **Tendency of stimuli similar to a CR to evoke similar conditioned responses**
 - Piggybacking strategy
 - E.g. Home brand packaged in the same style might evoke similar response
 - But if quality is lower than that of original brand, consumers may exhibit more positive feelings towards the original
 - Masked branding
 - Deliberately hides a product's true origin
- Stimulus discrimination
 - **When consumers learn to differentiate the original stimulus from another stimuli**
 - Only respond to the original stimulus
 - Manufacturers urge consumers not to buy cheaper imitations because the results will not be what they expect
 - Companies with well-established brand image try to encourage stimulus discrimination by promoting their unique attributes
- CS should be presented prior to the UCS
- Applications
 - The transfer of meaning from an unconditioned stimulus to a conditioned stimulus explains why made-up brand names like Nike have powerful effects
 - When marketers pair nonsense syllables with evaluative words such as beauty or success, the meaning is transferred to the fake words
 - **Marketers use image, people and sensory stimulation to evoke unconditioned responses aimed at transferring to the product**
 - Associations crucial to marketing strategies that rely on creation and perpetuation of brand equity
 - Brand has strong positive associations in a consumer's mind, commanding loyalty
 - **Foreign branding**
 - Ethnic-sounding names for their products to transfer positive thoughts and feelings about that country to their products
 - E.g. Old El Paso Mexican food
 - **Strategies**
 - Family branding
 - ◆ Capitalise on reputation of a company name
 - Product line extensions
 - ◆ Related products are added to an established brand
 - ◆ But extension has potential to weaken the parent brand
 - Licensing
 - ◆ Well-known names are rented by others
 - ◆ E.g. NY fire fighters
 - Look-alike packaging
 - ◆ Generic or private label brands who wish to communicate a quality image put their products in similar packaging
 - Naming
 - ◆ Sounds that come to a full stop connote slowness
 - ◆ f/v/s/z are fast
 - ◇ E.g. Amazon
- Instrumental/operant conditioning
 - When a consumer learns to perform behaviours that produce positive outcomes and avoid those that yield negative outcomes
 - Responses deliberate, more complex, to achieve goal
 - Shaping

- Learning a desired behaviour over time by rewarding intermediate actions until the final result is obtained
- Positive reinforcement
 - Reward
 - Response is strengthened
- Negative reinforcement
 - Take away unpleasant stimulus
 - Response is strengthened
- Punishment
 - When a response is followed by unpleasant events
 - Stop response
- Extinction
 - When positive outcome is no longer received
- Reinforcement schedules
 - Fixed-interval
 - First response is rewarded only after a specified amount of time has elapsed
 - Responses speed up the next time the reinforcement looms
 - Variable-interval
 - Reinforcement is given to a response after a specific amount of time has passed (unpredictable), but this amount of time is on a changing/variable scheduled
 - Person doesn't know when to expect the reinforcement, so responses more consistent
 - Fixed-ratio
 - Reinforcement occurs only after a fixed number of responses
 - Motivates people to keep performing behaviour
 - E.g. Coffee reward cards
 - **Variable-ratio**
 - People don't know how many responses are required
 - People respond at high, steady rates
 - Hard to extinguish
 - **E.g. Gaming machines**
- Applications
 - Tinder swipes reflect variable-ratio
 - Frequency marketing
 - Reinforces purchases by giving them prizes with values that increase along with the amount purchased
 - E.g. Frequent flyer programs
 - Gamification
 - The application of game elements such as points, competition and rules to encourage engagement with a brand, product or organisation
 - Endowed progress effect
 - E.g. Preload frequent buyer card with a few punches
 - Makes reward look more attainable and motivates consumers to complete the rest
 - Store and brand loyalty
 - Social marketing
 - Energy company that awards badges to customers when they reduce their energy consumption
 - Employee performance
 - Rank the performance of wait staff on a leader board

Understand and apply cognitive learning theories of developmental and observational learning

- Cognitive theories
 - Stresses internal mental processes
 - Consumers are complex-problem solvers
 - Learn abstract rules and concepts by processing information or observing others
 - Mindlessness
 - Nonconscious procedural knowledge

- Process some information in an automatic, passive way
 - Respond to new product using existing categories we have learned
 - Trigger feature
 - Some stimulus that cues us towards a particular pattern, activating a reaction
 - E.g. Men rated a car as superior if a woman (trigger feature) was present
- Studies using masking effects, which make it difficult for subjects to learn CS/UCS associations, show substantial reductions in learning
- Jerome Bruner
 - Cognitive learning was the result of environmental experiences
 - Instructional scaffolding
 - People learn based on progressing through three stages
 - ◆ Enactive representation
 - ◇ Action based
 - ◇ Largely unconscious, through action or movement
 - ◆ Iconic representation
 - ◇ Image based
 - ◇ Requires consumers to store information as images in their mind
 - ◇ E.g. Order process at cafe
 - ◆ Symbolic representation
 - ◇ Language based
 - ◇ Information is stored as code
 - ◇ E.g. Product category labels such as soup present hot, watery food
- Jean Piaget
 - Cognitive learning is the result of maturation/age
 - Failure of existing information drives consumers to new information
 - Schemata
 - Cognitive structure that influence thinking and therefore learning
 - Assimilation
 - Process where we respond to a situation based on existing knowledge
 - Accommodation
 - When there is no schematic for a situation, and cognitive structure needs to be modified through learning
 - 0-12yo: Concrete concepts
 - Then more abstract ideas
 - Young children cannot easily distinguish between TV content and ads
- Albert Bandura
 - People learn by watching the actions of others and taking note of the reinforcements they receive for their behaviours
 - Modelling
 - Imitating the behaviour of others
 - Conditions must be met for modelling to occur
 - Attention to the model
 - ◆ Attractiveness, competence, status or similarity
 - Remember what is said or done by the model
 - Must convert the information into actions
 - Must be motivated to perform actions
- Application
 - People do not have to be directly rewards/punished for their actions
 - Can show what happens to models
 - Learn to be consumers
 - Consumer socialisation
 - Process by which young people acquire skills, knowledge and attitudes relevant to their functioning in the marketplace
 - Grown-ups are significant models
 - ◆ Passing down of product preferences helps to create brand loyalty
 - ◆ Authoritarian - restrictive and emotionally uninvolved

- ◇ Censor media and have negative views about advertising
- ◆ Neglecting
 - ◇ Detached and don't exercise control over what children do
- ◆ Indulgent
 - ◇ Communicate more with their children about consumption-related matters and are less restrictive
 - ◇ Children should be allowed to learn about the marketplace without much interference
- Notion of what is normal is being shaped by social media
 - ◆ Facebook depression
 - ◇ Effect of self-comparison on Facebook, with teens feeling depressed if they compare unfavourably

Explain and apply learning processes to memory storage and retrieval

- Acquiring information and storing it over time so that it will be available when needed
- Information-processing approach
 - Data inputted, processed and outputted later
- Stages
 - Encoding
 - Information enters system
 - More likely to retain incoming data when we associate them with other things already in memory
 - E.g. Brand names linked to physical characteristics- e.g. Napisan - are more easily retained than abstract brand names
 - Storage
 - Knowledge integrated with existing memory and warehoused
 - Retrieval
 - Person accesses the desired information
- E.g. Grocery shopping list is a powerful external memory aid
 - Buy approx 80% of items on the list
 - If marketers can induce a consumer to plan an item in advance, there's a high probability it will be purchased
 - E.g. Peel-off stickers on packages to put on list
- Cognitive outsourcing
 - Use of people or digital devices to perform mental tasks such as calculations, reminders or managing lists
- **Types of meaning**
 - Sensory
 - Colour or shape
 - Meaning may be activated when the person sees a picture of the stimulus
 - Semantic
 - Symbolic associations
 - E.g. Fashionable men have eyebrow piercings
- **Encoding memories**
 - Episodic memories
 - Those that relate to events that are personally relevant
 - Motivation to retain is stronger
 - Products and ads themselves can serve as powerful retrieval cues
 - Mnemonic qualities
 - ◆ Aspects of a consumer's possessions that serve as a form of external memory which prompts the retrieval of episodic memories
 - Nostalgia is powerful
 - Narratives
 - Persuade people to construct a mental representation of the information they are viewing
 - Flashbulb
 - Especially vivid associations

- Systems

	Sensory memory	Short-term memory	Long-term memory
Definition	Temporary storage of sensory info	Brief storage of info currently being used	Relatively perm storage of information
Duration	< 1s (vision) or a few seconds (hearing)	Less than 20 seconds	Long or permanent

- Chunking

- A process in which info is stored by combined small pieces of information into larger ones
- Three-to-four chunks is the optimal size for efficient retrieval

- Activation models of memory

- Interdependence of STM and LTM
- Different levels of processes that occur and activate some aspects of memory rather than others
- Depending on the nature of the processing tasks
- Associative networks/knowledge structures
 - Incoming piece of information is stored in an associative network containing many pieces of related information organised according to a set of relationships
 - Consumer has organised systems of concepts relating to brands, manufacturers and stores
 - Developed as links form between nodes
 - Data that are connected by associative links within knowledge structures
 - Proposition
 - Nodes linked together to form a more complex meaning, which can serve as a single chunk of information
 - E.g. Chanel is a perfume for elegant women
 - Schema
 - Propositions integrated to form cognitive framework developed through experience
 - Information that is consistent with existing schema is encoded more readily
 - E.g. Script
 - ◆ Sequence of events that is expected by an individual
 - ◆ Service scripts guide behaviour in service settings
 - Similar info are chunked together under a more abstract category
 - E.g. Perfumes
 - New incoming information is interpreted to be consistent with the structure already in place
 - Evoked set
 - Those products already in memory plus those prominent in the retail environment that are actively considered during a consumer's choice process
 - New entrant must provide cues that facilitate its placement in the evoked set
- Hierarchical processing model
 - A message is processed in a bottom-up fashion
 - Basic level to increasingly complex operations that require greater cognitive capacity
 - If processing at one level fails to evoke the next level, processing is terminated
- Spreading activation
 - Meanings are activated indirectly
 - As a node is activated, other nodes linked to it are also activated so that meanings spread across the network
 - Bringing up concepts including competing brands and attributes that help form attitudes towards the brand
 - Memory trace for an ad could be stored in one or more of the following ways
 - Brand-specific claims
 - Ad-specific - content of ad
 - Brand identification - brand name
 - Product category - how the product works or where it should be used
 - Evaluative reactions - positive or negative emotions

- Emotions strengthen the storage of information in memory

- When consumers use a brand/product and receive a dopamine release, they are more likely to

- recall info about it
- Retrieving information for purchase decisions
 - Physiological factors
 - Older adults display inferior recall
 - Situational factors
 - Recall enhanced when a consumer pays more attention in the first place
 - Information about a pioneering brand is more easily retrieved than follower brands
 - Viewing environment of a message
 - E.g. Commercials shown during baseball games yield the lowest recall because the activity is stop-and-go rather than continuous
- Factors influencing forgetting
 - Decay
 - The structural changes in the brain produced by learning decrease
 - Interference
 - As additional info is learned, it displace earlier information
 - Retroactive interference
 - Stimulus-response associations will be forgotten if consumers subsequently learn new responses to the same or similar stimuli
 - When new info gets in the way of trying to recall older information
 - Additional attribute information regarding a brand may limit the person's ability to recall old brand information
 - Calling a competitor by name can result in poorer recall for one's own brand
 - Proactive interference
 - Prior learning can interfere with new learning
 - Part-list cueing effect
 - Marketers use the interference process strategically
 - If only a portion of the items in a category are presented to consumers, the omitted items are not as easily recalled
 - E.g. Include less threatening brands so consumers don't remember unmentioned brands
 - Products can be powerful retrieval cues
 - They call forth memories of the past
 - Pictures we take of ourselves using products and services can serve as powerful retrieval cues
- Problems with memory measures
 - Response biases
 - Results obtained from instrument not due to what is being measured, but due to something else about it or the respondent
 - E.g. Desire to make a good impression on the experimenter leads respondents to modify their true answers
 - False memories
 - Mistaken belief that something has occurred
 - False mem about consumption experience = false product evaluation which could affect future purchases and word-of-mouth encounters
 - Consumers report experience with fictitious brand with confidence
 - Illusion of true effect
 - Telling people that a consumer claim is false can make them misremember it as true
 - Repetition of the claim increases familiarity with it but respondents don't retain their memories of the context
 - Memory lapses
 - People are prone to forgetting information unintentionally
 - Omitting - leaving facts out
 - Averaging - tendency to normalise memories by not reporting extreme cases
 - Don't adequately tap into the impact of ads where objective is to arouse emotions rather than convey information
 - Effective strategy relies on a long-term build-up of feeling rather than a one-shot attempt to persuade consumers to buy the product
 - Not clear whether recall translates into preference