psyc3122 lecture 11

Categorisation, schemas, and stereotyping

next week: Schema change and use; affect and social cognition

Today

- Review of last week
- Revisiting social cognition’s big picture
- Schemas
- Stereotypes
  - About others
  - About relationships
  - About the self
  - About groups
Motivation and effective self-change

- Most people have erroneous beliefs re stability of self
- Most people have erroneous beliefs re nature of change as all or nothing
- Most people have goals without plans
- “IF-THEN” contingencies of when, how and where to do target behaviour and when how and where to avoid undesired behaviour increase speed, intensity, perseverance and % of beh change
- Point is to change automatic attention, perception and memory processes vs over-relying on conscious choice / will-power

Revisiting Topics in Social Cognition

- **Group social cognition:**
  - Stereotype formation, activation, change
  - Liking and disliking groups
  - Changing group relations
- **Interpersonal social cognition:**
  - Impression formation
  - Attribution
  - Liking & disliking people, partners
  - Changing relationships
- **The social cognition of the self:**
  - How do you know who you are?
  - Liking and disliking yourself
  - Changing yourself
Revisiting the comparison to attitudes: Social Cognition is more minimalist, segmented, lab-based

- What do I attend to in myself? You? Other people? Society?
- What do I remember about myself? You? Other people? Society?
  - How do my pre-existing beliefs and emotions shape my thinking?
    - Representations, schemas, scripts!
  - In social cognition attitude objects are people (including the self)
    - All the attitude research can be mapped onto social cognition
    - Social cognition people have done really groovy lab studies on these topics

Schemas

- Pre-existing knowledge structures which guide perception, attention, encoding, judgement, and memory
  - Wait ... isn't that attitudes?
- Useful to say, attitudes can be schemas (cognitions) + evaluation (like / dislike - affect) + [depending on the measurement!] behaviour (approach / avoidance)
  - But an attitude can exist for an attitude object without having a pre-existing knowledge structure, let alone a stable schema
- Social cognition people often try to study the beliefs / knowledge we have about others and ourselves
  - less often extend their research to emotion and behaviour
  - When they do study affect & behaviour, generally see as DVs
  - In this sense many social cognition people implicitly work from the old framework: COGNITION \(\rightarrow\) EMOTION \(\rightarrow\) ACTION
  - You can easily think of how this might lead to gaps in the literature

NB - Technically the plural of schema is schemata – but most people just go with schemas. Either is fine.
Schemas: How they work

Schema: a proposed organizational structure for the knowledge that comprises one’s categories (Moskowitz, 2005)
- Features are stored in abstract form
- Also contains relationships among features
- And rules that govern the features
- Describes generalized or idealized prototypes
- May or may not contain specific exemplars
- If so these vary in their prototypicality

Penguin

Duck

Birds

Fly

Have wings

Because

Have beaks

Schemas, cont’d

Rich web / network of associations interconnects schemas
- Features / attributes of schema may be features / attributes of other schemas
  - Remember, strong attitude -> attributes implies > likelihood of using attribute in encoding (e.g., John -> Psychologist <- Winnifred)
- Features / attributes of higher-order schema may also serve as lower-order schemas (Psychologist -> Interested in people)
Schema research

We know from two weeks ago that schemas as pre-existing knowledge structures should be linked to:
- Strong, stable attitudes
- Greater knowledge / exposure
- Biased (schema-congruent) knowledge search
- Attention directed to schema's core / prototypical attributes; encoding and judgement weight these heavily; memory greater for schema-congruent attributes

Stability vs Change

**Assimilation** is the reuse of schemata to fit the new information. For example, when an unfamiliar dog is seen, a person will probably just assimilate it into their dog schema. However, if the dog behaves strangely, and in ways that don't seem dog-like, there will be **accommodation** as a new schema is formed for that particular dog. -- Wikipedia on schema
Other-schemas

- Impression formation research – ‘getting to know’ people
  - Zadny & Gerard (1974): Read about a college student who is either a music / chemistry major -> recall different (congruent details better) (e.g., book title vs. course selection)
- Role schemas: info about behaviour and norms (social rules)
  - Ask a police officer for directions?
  - Cohen (1961): Watch video about librarian / waitress -> recall of different details (e.g., listened to classical music vs drank beer)
- Relationship schemas: info about actions sequences, thoughts and feelings that characterise a relationship
  - People describe significant other (‘e.g., Dad is an extrovert’) then later in the year (!) read about a stranger who does / does not have traits linked to S. O. (priming S.O. schema) then asked whether stranger has attributes of S.O. not mentioned in description – find transference as SO’s attributes inferred in stranger (Chen, 2001)

The God schema

- ½ of a sample of theists & atheists unscramble 10 5-word sentences, dropping the extra word
  - Dessert divine was fork the
  - The dessert was divine
- 5 of 10 sentences contain primes to God (spirit, divine, God, sacred, prophet)
- “You can take as many $1 coins out of 10 as you like; the other participant gets the rest & your identity is hidden from him.”
How do you know who you are?

- Values, aspirations, beliefs, and behaviours organized into self-schemas (Markus, 1977)
  - I am _____________ (?)
- Quickly and easily make judgements about schema-relevant behaviour and attributes;
  - Flash up words related to independence, dependence, or creativity (control) – people who were “schematic” for independence or dependence quicker to label as “me” or “not me” than “aschematics”
- Predict beh relevant to schema accurately & readily;
  - People schematic for independence were able to write down more e.g.s of behs they had performed that illustrated words
With the usual trade-offs ....

- Values, aspirations, beliefs, and behaviours organized into self-schemas (Markus, 1977)
  - I am _____________ (?)
- resist discovering new incongruent information
  - Like other “exposure” effects we saw 2 weeks ago -- confirmation bias for self
  - Bogus feedback that people were highly suggestible was rated more accurate and more self-descriptive by aschematics; those schematic for independence discounted feedback
- Especially negatively weighted incongruent information
  - We don’t notice our own bad behaviour; if we notice it we discount it; then we forget it!

In these matters the only certainty is that nothing is certain.

-- Pliny the Elder (23 AD - 79 AD)
All schemas create self-fulfilling prophecies

From a social justice perspective, schemas about social groups (stereotypes) can be especially disturbing

– Researchers in intergroup relationships sometimes distinguish between stereotypes, prejudice, and discrimination
– Stereotyping can lead to hostile emotions and discrimination for all the reasons we have seen:
  – Bias in pre-existing exposure / info justifies hostility
  – Selective attention → evils of outgroup vs goodness of ingroup (Recall the Princeton football game e.g.)
  – Biased judgement
    – of ambiguous info
    – Weighting the attributes differently
  – Biased recall

Stereotypes
Stereotyping and race
(Revisiting first year!)

Duncan (1976) had White students observe on TV what they thought was a live conversation between a Black man and a White man.

The conversation degenerated into an argument in which one person lightly shoved the other.

Participants then had to provide their interpretation of the events.

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Duncan (1976)

![Bar chart showing percentage of participants who saw it as violent for white and black pushers.](chart.png)
Stereotyping and race

Correll et al. (2002) constructed a computer game in which people had to decide whether to shoot or not shoot people.

The targets were either armed or not armed, and were either Black or White.

The police officer’s dilemma
This shooter’s bias occurs for both White and Black participants.

Shifting standards

An important point about social judgement is that the standard is inherently relative
- Paul is 170 cm tall. Is he tall?
- He is 15 years old. Is he tall?
- The meaning of tall shifts depending on the social category that the person is placed in.

American participants estimated the height of a man and woman target as different using feet and inches but rated them equally tall (Biernat et al., 1991)

Similarly apparent equality (rated Black and White target as equally athletic) disguised prejudice (Biernat & Manis, 1994)
- Black target rated athletic <- higher standard
- White target rated athletic based on more feeble performance
Shifting standards

- Good news for disadvantaged groups?
  - “You’re really smart (for a girl)"

- Problem is that shifting standards apply when targets judged independently and group stereotypes used to anchor

- When judged comparatively, stereotypes lead to perceptual, cognitive, evaluative, behavioural bias
  - Typically boost advantaged group
  - Discount disadvantaged group

Recall of group-linked info

Illusory correlation research (Hamilton & Gifford, 1976)

- Thirty-nine statements:
  - “Paul, a member of Group A, volunteers at a shelter”
  - “Roger, a member of Group A, repaired his neighbour’s lawnmower”
  - “Anne, a member of Group A, always talks about herself and her problems”
  - “Kate, a member of Group B, cheated on an exam”

- Two-thirds (26) about Group A, one third (13) about Group B

- Same ratio of positive : negative info in each (9:4)

- People recalled > negative behaviours by minority group members

- Evaluated the minority group negatively

- Distinctiveness heuristic
  - More likely to notice and recall negative behaviour (because it is uncommon) paired with minority group member (because they are uncommon)
  - Subsequent research confirms if positive behaviours are in minority, exposure to equal information elicits positive stereotype!

- Effect would then be reinforced by biased info processing as well as self-fulfilling prophecy (i.e., unjustified hostile behaviour -> minority elicits aggressiveness, anger, mistrust, withdrawal)
Stereotypes as saving effort

Cognitive Miser perspective (Fiske & Taylor, 1984)
- Use stereotypes as heuristics to guide information processing because don’t want to ‘spend’ brain power
- Just as use attractiveness as heuristic instead of evaluating persuasive argument, use stereotype as heuristic in evaluating person
- Stereotyping is basically lazy and wrong and leads to bad decisions

Irrational stereotyping studies

Self: False feedback -> info that participants are all ‘socially sensitive’ – much more than average – asked to elaborate on how this was true / flesh out self-schema then told test = false. People still self-rated as more socially sensitive. (Ross, Lepper, & Hubbard, 1975)

Other: See “Hannah” video playing in rich / poor neighbourhood; parents described as rich / poor occupations; see Hannah’s ambiguous performance on academic test – “Poor” Hannah rated as below average in academic ability.

If someone behaves in a way consistent with our expectation of them we attribute their behaviour to stable personality traits but if inconsistent we attribute it to the situation (Wigboldus et al., 2000)

Asked to test the hypothesis that student = extrovert vs introvert -> selection of biased questions (“What do you like about parties” vs “what factors make it hard for you to open up to people”)

Groups: E.g., illusory correlation

Solution to prejudice: More effort -> Piecemeal or Attribute-based Information processing
Evidence of cognitive efficiency

Participants watch a computer monitor and use traits presented about the individual to form an impression, e.g.:
- “rebellious” “aggressive” “dishonest” “untrustworthy”
- “dangerous” “lucky” “observant” “modest” “optimistic” “curious”
  - Half of traits were linked to a schema
  - Half of participants received a label for schema

At the same time listened to a recorded description of the geography and economy of Indonesia

People with category label remembered more traits and got more correct answers on quiz about Indonesia
  - i.e., really do save cognitive resources, which can be applied to other tasks

But it’s not just about “making an effort”

Many aspects of stereotyping’s influence on info proc are non-conscious (e.g., perception & attention)

Given an initial bias, deliberating about a set of information often leads to more extreme attitudes (polarisation)
  - Recall: Reflecting on a two-sided article about capital punishment made people more extreme in their views
  - greater weighting and recall of stereotype-congruent info in judgement and memory

Groups of people with biased views who debate a topic often make more stereotyped judgements
  - Everyone brings up the congruent information which persuades people to stereotype
  - plus a norm is established, which legitimises the stereotype
Schemas for Self and SOs

- Group-level easy to see operating
- Self-schemas easiest to detect in others:
  - Depressed friend always sees the worst in herself, pays little attention to her own positive attributes / behaviour, discounts it, forgets it
- Other-person schemas easiest to detect when people misjudge you
  - Get the wrong idea you are “confident” “shy” “smart” “arrogant” -> strong (mis)evaluations and self-fulfilling behaviours
- Relationship schemas
  - Friend lets boyfriend yell at her because relationship is similar to abusive father
  - Criticism -> friend makes her ‘feel like you’re my mother’ leading to rude defensive behaviour based on baggage from that relationship

Defeating schemas?

- Sometimes relevant, accurate, helpful!
- Where not, eliminating their influence is extremely hard.
- Requires you to know you have an active schema & its contents! – self-reflection
- Consciously search for disconfirming information relative to active schema (accuracy)
- Consciously attempt to activate alternative schemas to consider the same information (relevance)
  - Paul is a White person – does that make a difference? He’s a guy .... He’s a psychologist ... He’s my friend ... What if he were a stranger?
  - What would you say to a friend who told you this?
- Can try to develop objective information (e.g., rely on test scores vs. interviews)
- Diversity – people with different types of biases cancel each other out & get to the right choice!
- All have approaches have trade-offs.
Next week: **Emotions, schemas and the quest for happiness**

– Reading: none

In the **tutes** this week:

– Social cognition prac I – Schemas
– Social cognition prac II - Stereotypes