Selected Issues in Psychology of (Information) User Behaviour

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What is your **basic orientation** in attending the summer school and individual lectures?

a) **rather focused** - e.g., primarily on issues relevant to the subject of your thesis

b) **more open?**
In general, do you prefer to **possess some knowledge on a given topic** (any definite knowledge) rather than being in a state of confusion and ambiguity?

“I'd rather know bad news than stay in a state of uncertainty”
Compared to other people you know, you:

a) tend to **think more extensively** about a variety of issues (and enjoy the activity of thinking)

b) are **not particularly motivated to think extensively** unless an incentive (internal or external) is provided
How much do you rely on your intuition, emotion and images in making judgments, decisions etc?
MINDSET
(COGNITIVE ORIENTATION)
concept originally advanced by early cognitive psychologists

- e.g., Külpe, 1904; Marbe, 1901, 1915; Orth, 1903; Watt, 1905

“becoming intensively involved with solving a given task activates exactly those cognitive procedures that help task completion”
Mindset theory (Gollwitzer, 1990)

- Deliberative mindset
- Implemental mindset

⇒ functional to effective goal pursuit, as they provide the cognitive orientations most useful to solving the tasks of choosing between potential goals and implementing chosen goals
2 tasks in the course of goal pursuit:

- Choosing among potential action goals
- Promoting the implementation of chosen goals

When people get involved in these tasks, different cognitive orientations emerge that affect the processing of information and the control of action.
The two mindsets affect differently our information processing – as reflected in:

- the degree of receptiveness to available information
- the cognitive tuning toward preferential processing of task-congruent information
- the partial vs. impartial analysis of desirability-related information
- the realistic vs. overly positive illusory analysis of feasibility-related information
Receptiveness (openness) to available information

- **Deliberative** mindset → associated with **heightened** receptivity for ALL available information
- **Implemental** mindset → associated with **reduced** receptivity

Deliberative mindset creates a higher openness for available information – not only by a heightened speed of processing heeded information, but also by an increased readiness to process peripheral information
Cognitive tuning toward preferential processing of task-congruent information

- **Deliberative** mindset → creates cognitive tuning toward information relevant to making goal decisions (info. on feasibility and desirability) → pros and cons

- **Implemental** mindset → tunes our cognitions to implementation-related information (i.e., on where, when and how to act)

**Deliberating** people report thoughts that are much more concerned with the **goal’s desirability** (e.g. Reaching the goal is important because…) and **feasibility** (e.g. I should be able to reach the goal because…)

People in the **implemental** mindset report more implementation-related thoughts – e.g. I will get started with X and then do Y
partial versus impartial analysis of desirability-related information

- **Deliberative** mindset $\rightarrow$ impartial analysis
- **Implemental** mindset $\rightarrow$ partial analysis

**Deliberating** people start with reflection on the positive consequences of goal attainment but turn to reflection on the negative consequences at the end of deliberation.

People in the **implemental** mindset show instead a strong partiality in favour of the chosen goal.
realistic vs. overly positive illusory analysis of feasibility-related information

- **Deliberative** mindset → **accurate, realistic** assessment of the feasibility of potential goals (including personal control over desired outcomes, personal attributes necessary to perform instrumental actions)

- **Implemental** mindset → **optimistic inferences** and assessments that **overestimate actual feasibility** (positive self-evaluations that create the optimism needed for the successful and undelayed initiation of goal-directed actions)
As one progresses from choosing a goal to actually implementing a chosen goal, individuals make more biased inferences to defend their goal decision and to protect the realization of the chosen goal.
Be aware of the theories and models’ focus and scope!

- Some theories start analyzing goal pursuit at the point in time **when a goal has been set**
- Other theories **focus on the issues of goal setting** and are therefore ill suited to describe and predict phenomena that occur at the later phases of goal pursuit

- More comprehensive theories and models?
Model of action phases

- **Predecisional phase**
  - **task**: setting the preferences among our wishes and desires by deliberating their desirability and feasibility

- **(Postdecisional) Preactional phase**
  - **task**: getting started with goal-directed behaviours

- **Actional phase**
  - **task**: bringing the initiated goal-directed action to a successful ending

- **Postactional phase**
  - **task**: decide whether the desired goal has indeed been achieved or whether further striving is needed.
Goals influence on information processing and judgments

“hot cognition” - mental processes that are driven by our desires and feelings (those cases where our goals and moods color our judgment)

Kunda (2002): 3 types of goals that influence our processing of relevant information and the resulting judgments
Kunda – 3 types of goals:

- **Directional** goal → goal of arriving at a **particular** conclusion (cf. implemental mindset!)
- **Accuracy** goal → goal of arriving at the **most accurate** conclusion possible (cf. deliberative mindset!)
- **Closure** goal → goal of arriving at a **clear** conclusion

 abusive

Kruglanski (1980, 1996): sometimes achieving closure becomes a goal in its own right
The need for (cognitive) closure

(Kruglanski, 1980, 1989; Kruglanski & Webster, 1996; Kruglanski & Fishman, 2009)
The need for (cognitive) closure

- desire for a definite answer to a question, as opposed to uncertainty, confusion or ambiguity (Kruglanski, 1989).

Situational determinants of motivation to obtain quick closure:

- if we are operating under **time pressure**
- if we find the decision-making task so **tedious** that we are eager to get it over with
- if we know we can **turn to a more enjoyable activity** as soon as we have completed the one we are working on
- we “freeze” our thinking process early on, as soon as we have arrived at what seems like a **good enough solution** (“satisficing”)
Motivation to avoid closure

- Can be provoked by accuracy goals
- If we find the judgment process inherently enjoyable

  - Increased effort on the judgment (and greater accuracy if it relies on better reasoning strategies)
Need for Closure Scale
(Webster & Kruglanski, 1994)

- Measures individual differences in the need for closure

- Assesses the following factors:
  - The desire for order and structure
  - Desire for predictability about the future
  - Decisiveness
  - Discomfort with ambiguity
  - Closed-Mindedness
Need for Closure Scale
- sample items -

- I dislike it when a person's statement could mean many different things.
- Even after I've made up my mind about something, I am always eager to consider a different opinion.
- When I am confused about an important issue, I feel very upset.
- I'd rather know bad news than stay in a state of uncertainty.
Need for Cognition

- originally conceptualized by Cohen, Stotland & Wolfe (1955) as reflecting a need to make sense of the world

- Cacioppo & Petty (1982):
  - developed a new conceptualization but retained the term *need for cognition* in acknowledgement of the pioneering efforts of Cohen and colleagues
  - tendency for people to vary in the extent to which they engage in and enjoy effortful cognitive activities
Need for Cognition Scale
- sample items -

- I find satisfaction in deliberating hard and for long hours
- The notion of thinking abstractly is appealing to me
- Thinking is not my idea of fun*
- I usually end up deliberating about issues even when they do not affect me personally
• The NC construct was developed by Cacioppo and Petty at a time when dual-process theories were beginning to become popular in psychology
  • elaboration likelihood model (Petty and Cacioppo, 1981, 1986)
  • heuristic systematic model (Chaiken, 1987)
Dual-process theories

- Propose that some judgments are thoughtfully based on a careful consideration of the information presented, whereas other judgments are based on a more cursory analysis.

- Individuals low in NC are – absent some incentive to the contrary – more likely to rely on simple cues in a persuasion situation and on stereotypes information alone in judging other people than are those high in NC.
1980s and 1990s - dominated by dual-process models of judgment

the most recent decade - dual-systems theories

- One system has been referred to as emotional, impulsive, intuitive, implicit...
- The other system - cognitive, reflective, rational, explicit...
### e.g. Cognitive-Experiential Self-Theory
*(Epstein, 1994)*

<table>
<thead>
<tr>
<th>Experiential system</th>
<th>Rational system</th>
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<tbody>
<tr>
<td><strong>Automatic, effortless processing</strong></td>
<td>Intentional, effortful processing</td>
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<tr>
<td><strong>Affective processing:</strong> pleasure- or pain-oriented</td>
<td>Logical processing: Reason-oriented (what is rational)</td>
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<tr>
<td>(what feels good or bad)</td>
<td></td>
</tr>
<tr>
<td><strong>Encoding of reality in concrete images, metaphors, and narratives</strong></td>
<td>Encoding of reality in abstract symbols, words and numbers</td>
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<tr>
<td><strong>More rapid processing:</strong> Oriented toward immediate action...</td>
<td>Slower processing: Oriented toward delayed action...</td>
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Rational-Experiential Inventory (REI, Epstein, Pacini, & Norris, 1998)

- self-report inventory devised to assess individual differences in the level of rational and experiential (intuitive) thinking

- 2 scales:
  - **Rational Scale** - assesses a system of thinking that is conscious, relatively slow, analytical, relatively affect-free
  - **Experiential (Intuition) Scale** - assesses a system of thinking that is preconscious, rapid, automatic, holistic, intimately associated with affect
Rational-Experiential Inventory
- sample items-

- I have a logical mind.
- I believe in trusting my hunches.
- I am not a very analytical thinker.
- I trust my initial feelings about people.
- I try to avoid situations that require thinking in depth about something.
- I like to rely on my intuitive impressions.
- I don’t like situations in which I have to rely on intuition.
- Thinking hard and for a long time about something gives me little satisfaction.
- Intuition can be a very useful way to solve problems.
Croatian version of the presented scales is available for research purpose from vcubela@unizd.hr