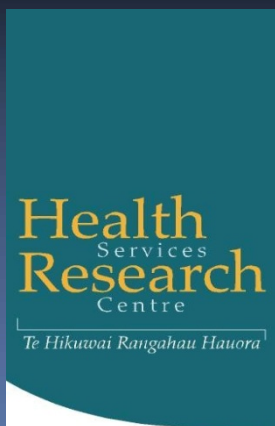


Health, Economics, Psychology

Connecting the dots



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Basics

- Our lives are
- Composed of several actions
 - Habitual
 - Novel
- Lived with other humans (who are like us)
 - Selected & familiar
 - Unfamiliar
- Have predictable moments and phases
- Have unpredictable events

Human Actions: Variety

- A typical day, week, year, life time
 - Normal day-to-day
 - Eating, drinking, sleeping, cooking, cleaning
 - School/work
 - Caring for others – in family, outside
 - Leisure – hobbies, socializing
 - Non-normal but not unexpected
 - Caring for sick self/family
 - Events and social functions
 - Non-normal & unexpected
 - Coping with accident/injury
 - Seeking healthcare for (serious) illness
 - Coping with financial shock – economy-wide, theft, fraud
 - Coping with individual/social threat (crime, unrest, political turmoil)

Cognitive Overload

- Do we make decisions about all of these actions?
 - Are all of these decisions rational ones?
 - Types of mistakes
 - Heuristics, framing, hyperbolic discounting, social utility
- Do we behave “as if” we make decisions about all of these actions?
 -so...we engage in some actions that are akin to decision-driven actions?
- What if we act without deliberation/decisions?

Psychology lens (or lenses)

- Human actions
 - Automaticity-Conscious processing
 - Emotions
 - Motivations
 - Self-control
- Differences between individuals
 - Cognitive skills (IQ)
 - Personality traits

Dual processing

- Automatic processing
 - Parallel, Effortless, Reflexive, No introspective access (under the radar)
- Conscious processing
 - Serial, Effortful, Evoked deliberately, Good introspective access

Other Dual-processes

- Automatic and conscious processing in
 - social attitudes, stereotyping, social cognition
 - person perception
 - self-regulation, attention
 - moral psychology (intuitive judgment)

Emotions – what role?

- Affect is “first on the scene” – primacy of affect
- Affective evaluations - “somatic markers” - used in cognitive evaluation
- Collaboration and competition between cognitive and affective systems depends on intensity of affect
 - Intermediate levels – awareness of conflict
 - High intensity – impairment of decision-making

Motivations

- Intrinsic goals – inherently satisfying
 - Competence
 - Autonomy
 - Relatedness
 - Coherence
- Extrinsic goals – external rewards
 - Social rewards, recognition
 - Material rewards

Self-control

- Controlling/overriding impulses
- Delaying gratification
- Measurable personality trait
- Causally related to externalizing disorders (violence)
- Evidence that it is a fixed resource
 - Greater use in one task implies less available for following task

Health

“A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity ” (WHO, 1948)

Health- – physical and mental

Health Economics

- Market for Health Care Services
 - Demand side
 - Derived demand – from underlying demand for good health
 - Demand is a function of preferences, prices, resources
 - Constrained rational choice
 - Supply side
 - Service/product providers
 - Costs
 - Financing
 - Regulation
 - Insurance

Health-related behaviors

- Healthcare
 - Preventive, Curative, Palliative
- Health-producing
 - Eating
 - Hygiene
 - Entertainment
 - Physical exertion

Characteristics of Health

- Outcome of **interaction** between..
 - Genes, Biological systems, Behavioural inputs, Environmental influences
- **Cumulative** outcome
- **Adaptability** of biological and behavioural inputs
- **Partial information** on actual health functioning
- Pervasive **uncertainty** – about future illness
- **Infectability** - risk to others, others to me



Implications

1. Interaction
 2. Cumulation
 3. Adaptability
 4. Partial information
 5. Uncertainty
 6. Infectability
1. Equifinality, same outcome diff. mix of causes
 2. Path dependence, inertia, resistance to change
 3. Self-correcting conditions, wait-and-see
 4. Deliberate action based on scraps of information
 5. Risk-taking, desire for insurance
 6. Social impacts, concerns

Healthcare behaviours

- Discrete events
 - Some completely new
 - Some familiar
- Deliberation
 - Depends on perceived urgency, information
- Affect-marked
 - Worry, sadness, joy, anxiety
- Accessing requires effort
- NZ: Universal coverage

Healthcare behaviours

- Preventive
 - Children – universal: pre-birth through pre-school
 - Adults
 - Females – pregnancy-activated use, later years ?
 - Males – no trigger points except symptoms, weak incentives for monitoring
- Curative
 - Primary healthcare
 - Hospital use
 - Excessive use for ambulatory sensitive care conditions
 - Moral hazard because of universal coverage
 - Gradual build up of conditions

Health-producing behaviours

- Regular, daily activities
 - Eating, drinking, hygiene, entertainment, social interaction
- Dual motivation/goal activities
 - Health + pleasure
- Automatized
- Affect-marked, affective context
- Consequences
 - Immediate – Marginal, unobservable
 - Longer term – cumulative, unknown, individual-specific

Eating

- Strong affective association ...
 - starting with breastfeeding
 - Part of Entertainment activities
- Impact is ..
 - Person-specific (genetic x biological x inputs)
 - Marginal from day to day, but cumulative
 - Unobservable from day to day
- Disjunction between purchase & home consumption

Thinking differently

- Type of action
 - Regular
 - Discrete/novel
- Consequence characteristics
 - Observability (Small/Large – personal experience/within-group/outside group)
 - Salience (marginal/significant)
- Information processing
 - Active, deliberative
 - Automatic, nonconscious
- Affect/emotion
 - Salience of memory encoding
- Motivation
 - Physiological
 - Psychological – Autonomy, competence, coherence, relatedness
- Self-control



Policy

- Justification for public intervention
 - Neo-classical economics
 - Market failure
 - Externalities
 - Public goods
 - Equity
 - Merit goods
 - National goals
 - Behavioural economics
 - Asymmetric paternalism
 - Libertarian paternalism

Nudging-Libertarian paternalism

- Libertarian – freedom to choose
- Paternalism – facilitating choices that individuals consider best for them
 - Why don't they choose these? – decision errors
- Who judges?
- Who nudges?

Objections to Nudging

- Slippery slope – overreaching
- Bad nudges, self-serving agendas
- Right to be wrong
- Replacing private sector nudging (advertising) with public sector
 - Can private sector not “nudge” public sector nudging?
- Compromising self-esteem

More basic questions

- How do we know an outcome is sub-optimal?
- Is it a result of “inadequate” deliberation?
- What if it is because of automaticity?
 - Given unobservability of priming cue, how do you decide what to change?
 - Different cues for different people?
 - Multiple cues?
 - Interactions – multiple actors x multiple cues!!!!

Nudging Health

- Physical health - obvious outcome deficiency
 - Curative care
 - Is moral hazard (due to universal coverage) an issue?
 - Preventive care
 - Default checkups
 - Altering access, rewarding use (conditional transfers)
- Mental health – is deficiency obvious?
 - Diagnosed disorders
 - Problem behaviours
 - Onset, early stage & marginal different from embedded offenders



Nudging Health-Producing Behaviour

- Healthy eating
 - Outside the home
 - Altered choice architecture at the market & in public places
 - Altering affective connection in social gatherings
 - Inside the home
 - Altering food purchase – to alter in-home choices
 - Altering portions HOW?

Conclusion NO Beginning

- Non-ideological, observe-describe-analyze-act approach best
- Some obvious nudges
- Policy debate needed for...
 - Scope of intervention
 - Limits to intervention
 - Publicity principle/transparency
- 2nd/3rd generation of automaticity research to know more

The Policy/Nudging Challenge

- Individually-specific conditions
 - Observable conditions
 - Known & unknown antecedents
 - Known – visible, collectible
 - Unknown
 - Partially knowable
 - “Unknowable” antecedents
- Intervention
 - Necessarily some element of standardization
 - How individualized can we make an intervention?