



# I SIMPÓSIO INTERNACIONAL DE SAÚDE ÚNICA

I INTERNATIONAL ONE HEALTH SYMPOSIUM

# III SIMPÓSIO PARANAENSE DE SAÚDE ÚNICA

III INTERNATIONAL ONE HEALTH SYMPOSIUM OF PARANÁ



## Saúde única sob a Ótica Econômico-Comportamental

*One Health from a Behavioral Economics Perspective*

Prof. Luiz Maia

Curitiba, Outubro de 2019

# LUIZ MAIA

*Luiz Flávio Arreguy Maia Filho*

PhD em Economia pela *North Carolina State University* (EUA, 2004). Exerceu, entre 2013 e 2016, a função de Pró-Reitor de Planejamento da UFRPE. Atuou como consultor e palestrante para organizações como Grupo Ibmecc S.A., Confederação Nacional da Indústria (CNI), *Amcham* de Franca (SP), Federações das Indústrias dos Estados de Pernambuco, Minas Gerais, Paraná, Secretaria da Fazenda (PE) e Programa das Nações Unidas para o Desenvolvimento (PNUD). Leciona disciplinas de graduação e pós em economia comportamental, planejamento e finanças públicas na **UFRPE** (regularmente, desde 2007).



## O que MAIS me interessa, hoje...

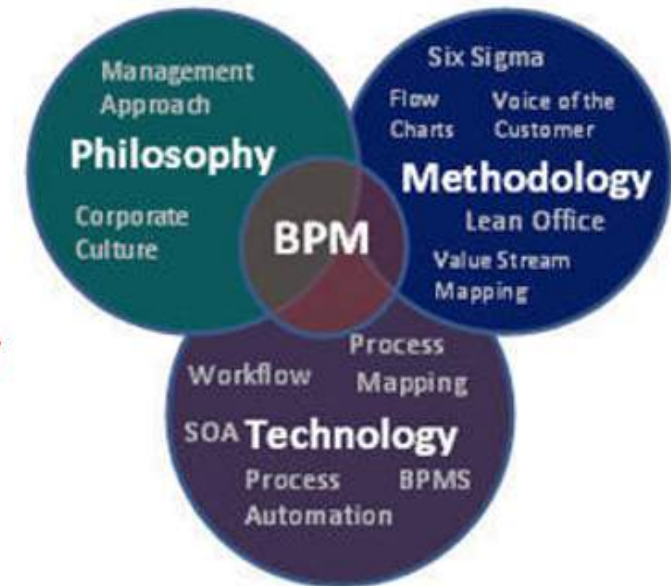
**Desenho  
comportamental de  
políticas públicas**



Hyperbolic discounting,  
conservatism, planning  
falacy, commitment  
devices...

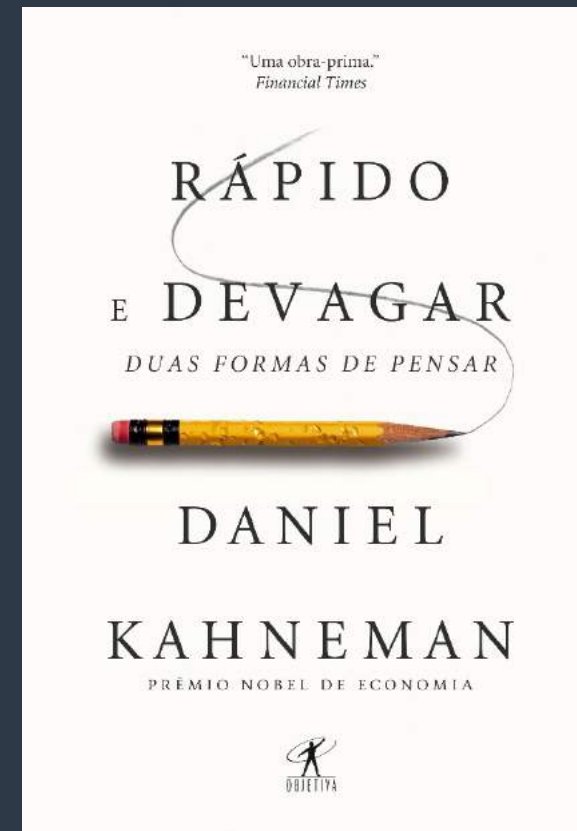
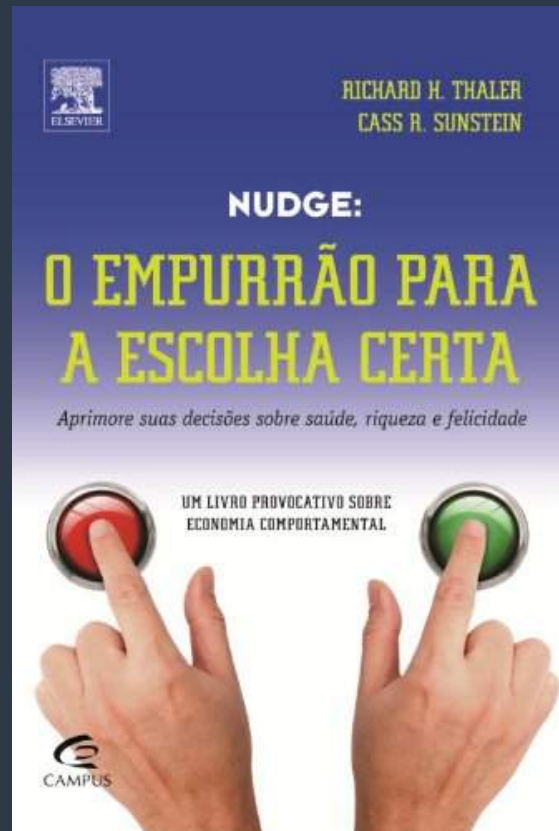
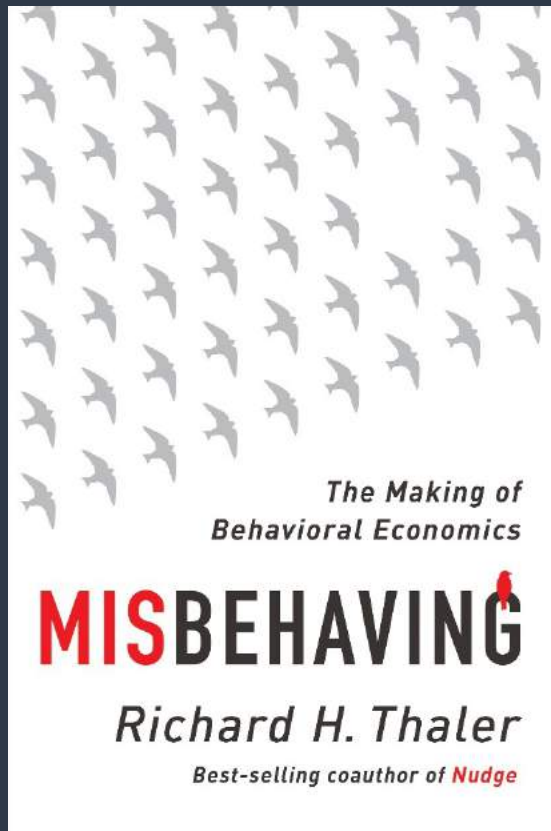
Moral disengagement,  
ethical blindness,  
reluctant compliance...

**Redesenho  
de Processos  
Organizacionais**



## Vários vencedores de Prêmio Nobel, ampla sequência de *best sellers*... o que é isso, mesmo?

*Various Nobel Prize winners and a large sequence of best sellers... what is that, again?*





## Segundo a Economia Comportamental:

*According to Behavioral Economics:*

- As pessoas nem sempre são indivíduos egoístas e calculistas;  
*People do not always behave as selfish and calculating as one thinks*
- Elas não detêm preferências estáveis e bem-definidas;  
*They do not hold stable and well defined preferences for all their choices;*
- Muitas de nossas escolhas não são o resultado de deliberação cuidadosa.  
*Many of our most important choices are not the result of careful deliberation.*

Ao invés daquelas hipóteses da economia convencional, nosso raciocínio:

*Instead of those maintained hypothesis of conventional economics, our reasoning:*

- ❖ tende a sofrer de conhecimento e cognição insuficientes;  
*tends to suffer with insufficient cognition capacity and knowledge;*
- ❖ a ser submetido com frequência a decisões mediante incerteza;  
*is frequently dealing with at least some level of uncertainty;*
- ❖ ser impactado de modo significativo pelo contexto das decisões.  
*is significantly affected by the context of our decision making.*

## E a coisa não para por aí...

*Furthermore...*

- ❖ Somos inconscientemente influenciados por informações mais facilmente disponíveis na memória, e por sentimentos gerados automaticamente diante das informações mais evidentes ao nosso redor;

*We are unconsciously influenced by readily available information in memory, automatically generated feelings, and salient information in the environment;*

E tem mais... não lidamos bem com o futuro... nem com o passado...

*Even more... we don't deal so well with the future ... and with the past...*

❖ nós ainda vivemos muito “no momento”, no sentido de que resistirmos a mudanças, somos pouco capazes de prever nossas preferências futuras; formamos memórias distorcidas e somos previsivelmente afetados por estados psicológicos e emocionais.

*We also live in the moment, in that we tend to resist change, be poor predictors of future preferences, be subject to distorted memory, and be very much affected by physiological and emotional states.*



E, finalmente...

*And, finally...*

❖ somos animais sociais, com preferências sociais, como as expressas na forma de confiança, altruísmo, reciprocidade e senso de justiça, e nós temos um desejo por coerência pessoal e um apreço por normas sociais.

*Finally, we are social animals with social preferences, such as those expressed in trust, altruism, reciprocity and fairness, and we have a desire for self-consistency and a profound regard for social norms.*

*Please, don't shoot the messenger!*





# Too Much Information

Store memories differently based on how they were experienced

and lists  
elements

- Ending effect bias
- Negativity bias
- Prejudice
- Social bias
- Types
- Leveling and sharpening
- Peak-end rule
- Misinformation effect
- List-length effect
- Duration neglect
- Modality effect
- Memory inhibition
- Primacy effect
- Recency effect
- Part-list cueing effect
- Serial position effect
- Suffix effect

Levels of processing effect

- Absent-mindedness
- Testing effect
- Next-in-line effect
- Google effect

Tip of the tongue phenomenon

- Availability heuristic
- Attentional bias
- Illusory truth effect
- Mere exposure effect
- Context effect
- Cue-dependent forgetting
- Mood-congruent memory bias
- Frequency illusion
- Baader-Meinhof Phenomenon
- Empathy gap
- Omission bias
- Base rate fallacy
- Bizarreness effect
- Humor effect
- Von Restorff effect
- Picture superiority effect
- Self-relevance effect
- Negativity bias

We notice things already primed in memory or repeated often

Bizarre, funny, visually-striking, or anthropomorphic things stick out more than non-bizarre/unfunny things

We notice when something has changed

We are drawn to details that confirm our own existing beliefs

We notice flaws in others more easily than than we notice flaws in ourselves

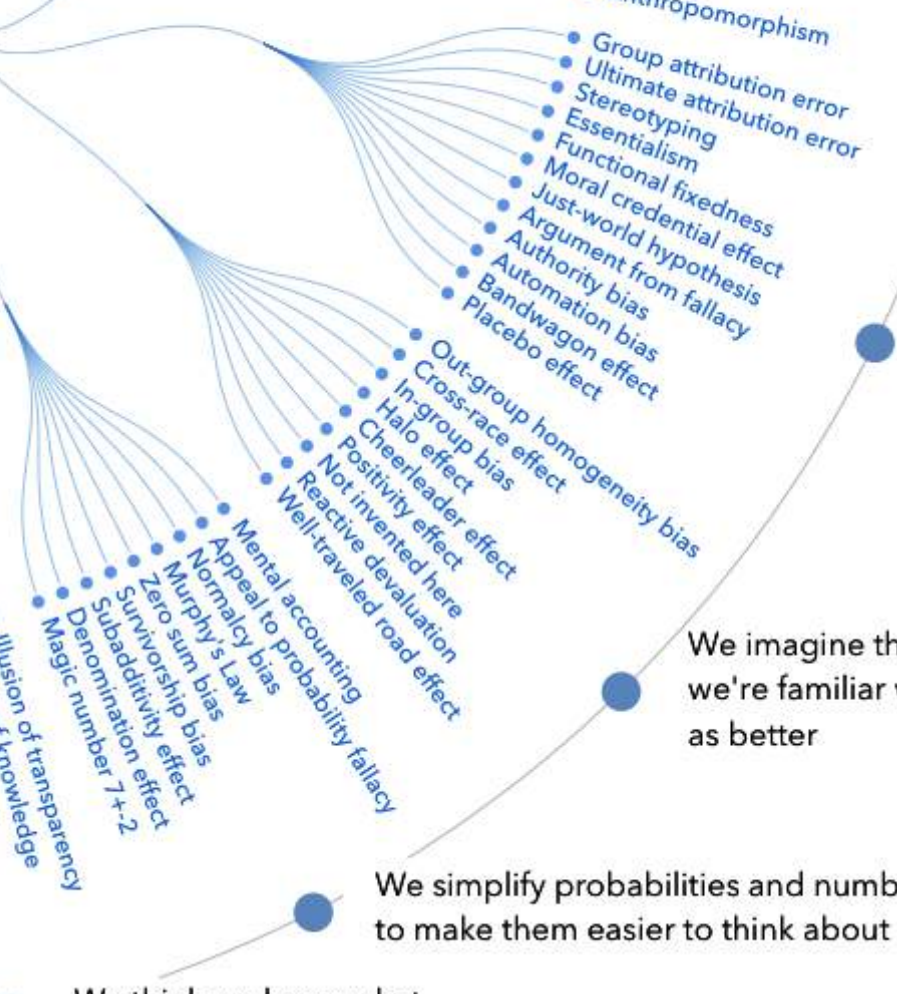
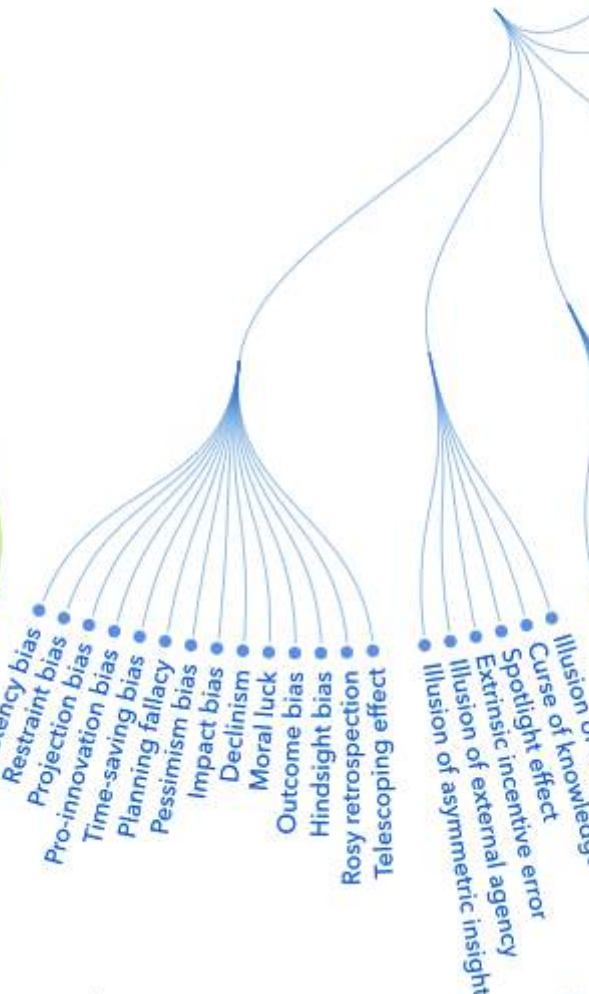
- Anchoring
- Conservatism
- Contrast effect
- Distinction bias
- Framing effect
- Money illusion
- Weber-Fechner law
- Confirmation bias
- Congruence bias
- Post-purchase rationalization
- Choice-supportive bias
- Selective perception
- Observer-expectancy effect
- Experimenter's bias
- Observer effect
- Expectation bias
- Ostrich effect
- Subjective validation
- Continued influence effect
- Semmelweis reflex

- Bias blind spot
- Naïve cynicism
- Naïve realism

- Confabulation
- Clustering illusion
- Insensitivity to sample size
- Neglect of probability
- Anecdotal fallacy







We project our current mindset and assumptions onto the past and future

We think we know what other people are thinking

We simplify probabilities and numbers to make them easier to think about

We imagine things and people we're familiar with or fond of as better

We fill in characteristics from stereotypes, generalities, and prior histories

We tend to find stories and patterns even when looking at sparse data

# Not Enough Meaning





To get things done, we tend to complete things we've invested time & energy in

- Backfire effect
- Endowment effect
- Processing difficulty effect
- Pseudocertainty effect
- Disposition effect
- Zero-risk bias
- Unit bias
- IKEA effect
- Loss aversion
- Generation effect
- Escalation of commitment
- Irrational escalation
- Sunk cost fallacy

To stay focused, we favor the immediate, relatable thing in front of us

- Identifiable victim effect
- Appeal to novelty
- Hyperbolic discounting
- Peltzman effect
- Risk compensation
- Effort justification
- Trait ascription bias
- Defensive attribution hypothesis
- Fundamental attribution error
- Illusory superiority
- Illusion of control
- Actor-observer bias
- Self-serving bias
- Barnum effect
- Forer effect
- Optimism bias
- Egocentric bias
- Dunning-Kruger effect
- Lake Wobegone effect
- Hard-easy effect
- False consensus effect
- Third-person effect
- Social desirability effect
- Overconfidence bias
- Self-consistency effect

## Need To Act Fast

To act, we must be confident we can make an impact and feel what we do is important

- Restraint bias
- Projection bias
- Pro-innovation bias
- Time-saving bias
- Planning fallacy
- Pessimism bias
- Impact bias
- Declinism
- Moral luck
- Outcome bias
- Hindsight bias
- Rosy retrospection
- Telescoping effect

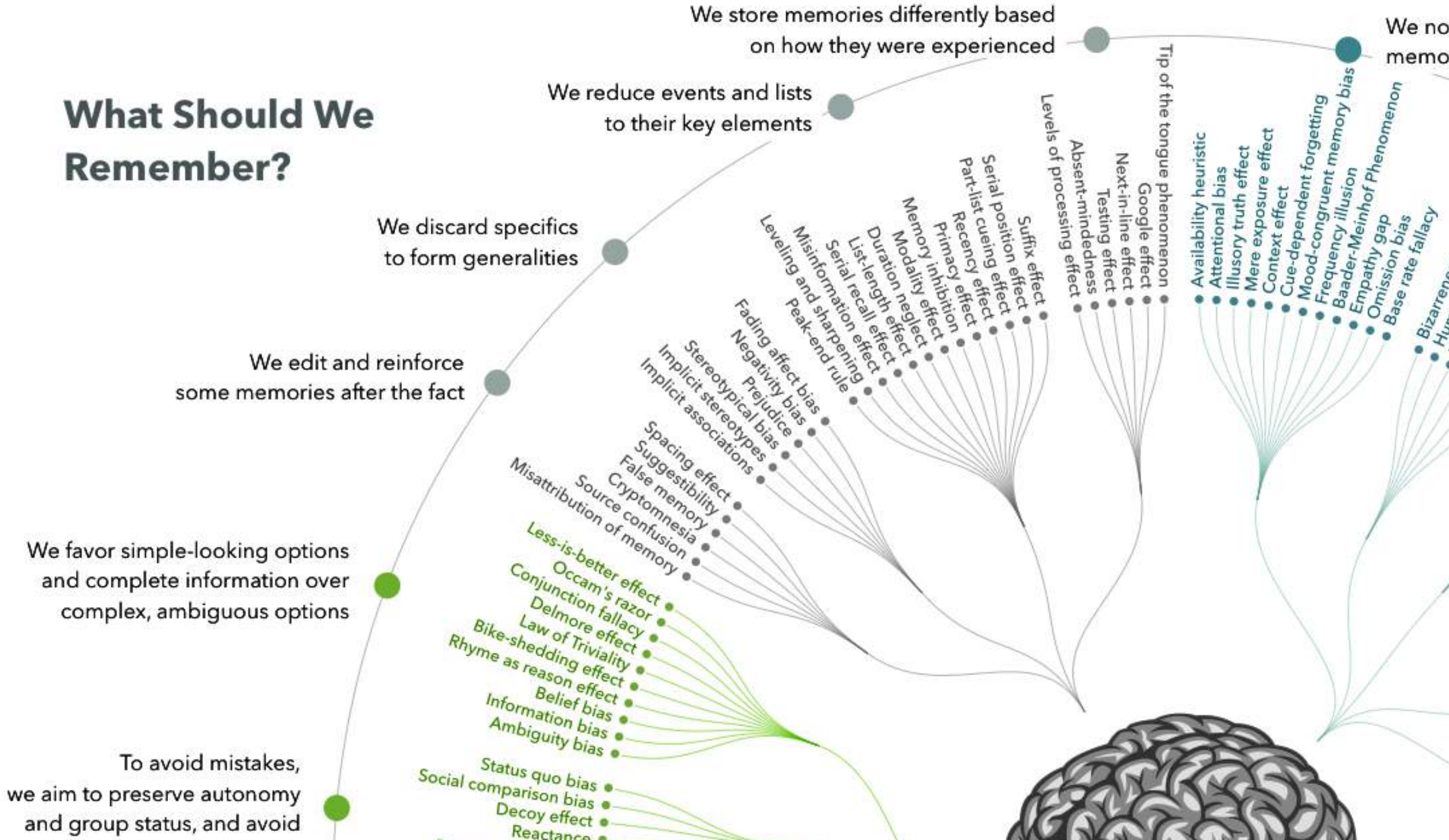
We project our current mindset and assumptions onto the past and future

- Illusion of transparency
- Spotlight effect
- Extrinsic incentive error
- Illusion of asymmetric insight

We think other p...

- Magic number 7+-2
- Subadditivity error
- Survivorship bias
- Zero sum

# What Should We Remember?





Saúde única sob a Ótica Econômico-Comportamental, Luiz Maia (UFRPE)

I Simpósio Internacional em Saúde Única – CRMV-PR, CFMV e CESU-PR



**PMPSU**  
PROGRAMA DE MESTRADO PROFISSIONAL EM SAÚDE ÚNICA






Ok, mas qual é a boa notícia, para quem quer promover a Saúde Única?


*Ok, but what is the good news for those who seek to promote One Health?*

- ❖ O desenho comportamental de políticas públicas amplia sua eficácia;  
*The behavioral design of public policies raises efficacy.*
- ❖ Há crescente atenção aos problemas “danados”, como os nossos;  
*There’s growing attention to **wicked problems**, like ours;*
- ❖ Extraordinárias teorias de aprendizagem social estão disponíveis!  
*Extraordinary theories of social behavior and social learning are available!*

## Desenho comportamental de políticas públicas e eficácia:

**THE BEHAVIOURAL INSIGHTS TEAM** 

[ABOUT US](#) [BLOG](#) [OUR WORK](#) [THE TEAM](#) [LOCATIONS](#) [JOBS](#) [BI VENTURES](#)


IN PARTNERSHIP WITH  Cabinet Office

### Publications

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#### MINDSPACE

The MINDSPACE report is used by the Behavioural Insights Team as a framework to aid the application of behavioural science to the policymaking process.



**MINDSPACE**



<b>Messenger</b>	we are heavily influenced by who communicates information
<b>Incentives</b>	our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
<b>Norms</b>	we are strongly influenced by what others do
<b>Defaults</b>	we 'go with the flow' of pre-set options
<b>Saliency</b>	our attention is drawn to what is novel and seems relevant to us
<b>Priming</b>	our acts are often influenced by sub-conscious cues
<b>Affect</b>	our emotional associations can powerfully shape our actions
<b>Commitments</b>	we seek to be consistent with our public promises, and reciprocate acts
<b>Ego</b>	we act in ways that make us feel better about ourselves



THE  
**BEHAVIOURAL  
INSIGHTS  
TEAM**

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mindspace



Artigos

Aproximadamente 7.850 resultados (0,15 s)

A qualquer momento

Desde 2019

Desde 2018

Desde 2015

Período específico...

Classificar por relevância

Classificar por data

Em qualquer idioma

Pesquisar páginas em  
Português

incluir patentes

incluir citações

Criar alerta

### **MINDSPACE: influencing behaviour for public policy**

[P Dolan](#), [M Hallsworth](#), [D Halpern](#), [D King](#), [I Vlaev](#) - 2010 - [eprints.lse.ac.uk](#)

New insights from science and behaviour change could lead to significantly improved outcomes, and at a lower cost, than the way many conventional policy tools are used.


**MINDSPACE** explores how behaviour change theory can help meet current policy ...

☆  Citado por 564 Artigos relacionados Todas as 2 versões 

### Influencing behaviour: The **mindspace** way

[P Dolan](#), [M Hallsworth](#), [D Halpern](#), [D King](#)... - *Journal of Economic ...*, 2012 - Elsevier

The ability to influence behaviour is central to many of the key policy challenges in areas such as health, finance and climate change. The usual route to behaviour change in economics and psychology has been to attempt to 'change minds' by influencing the way ...

☆  Citado por 404 Artigos relacionados Todas as 12 versões

### **Mind, space** and objectivity in non-human animals

[J Proust](#) - *Erkenntnis*, 1999 - Springer

There are many diverse, and sometimes conflicting motives for studying animal minds.

Ethology aims at describing and explaining animal behavior. Evolutionary biology is focussing on the functions that appear in phylogeny, such as cognitive perception, learning ...

☆  Citado por 36 Artigos relacionados Todas as 18 versões



## *Wicked Problems* (Brown, Deletic & Wong, 2015):

### Problemas “danados”:

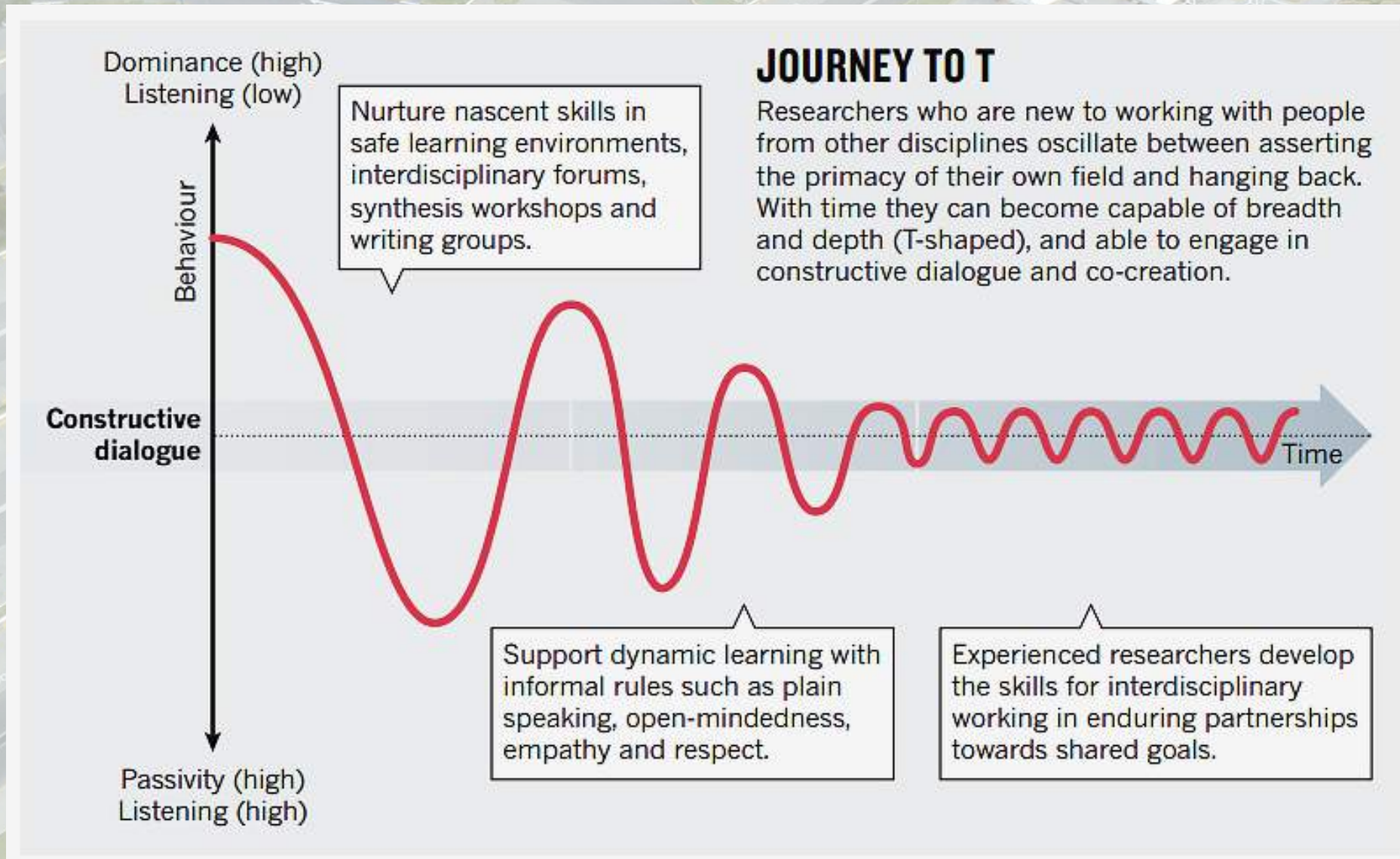
- ✓ São difíceis de serem definidos, objetivamente;  
*Wicked problems are difficult to clearly define;*
- ✓ Eles têm muitas interdependências e múltiplas causas;  
*Wicked problems have many interdependencies and are often multi-causal;*
- ✓ Tentativas de solução têm consequências imprevisíveis;  
*Attempts to address wicked problems often lead to unforeseen consequences;*
- ✓ Eles quase nunca são de responsabilidade restrita  
*They hardly ever sit conveniently within the responsibility of any one organization.*

## *Addressing Wicked Problems (Brown, Deletic & Wong, 2015):*

### Tratando os Problemas “danados”:

1. Construa uma missão comum! *Forge a shared mission!*
2. Desenvolva pesquisadores-T; *Develop T-shaped researchers*
3. Promova o diálogo construtivo *Nurture constructive dialogue;*
4. Promova apoio institucional e patrocínio;  
*Provide institutional support and sponsorship;*
5. Articule Pesquisadores, Formuladores de Políticas e Praticantes;  
*Bridge Research, Policy and Practica*







# Teoria Social Cognitiva

## TEORIA DA APRENDIZAGEM SOCIAL



## Albert Bandura

Psicólogo

Albert Bandura é um psicólogo canadense, professor de psicologia social da Universidade de Stanford. Fez contribuições no campo da psicologia social, cognitiva, psicoterapia e pedagogia. Em 1968, aos 43 anos, foi o presidente mais jovem eleito para a Associação Americana de Psicologia. [Wikipédia](#)

**Nascimento:** 4 de dezembro de 1925 (idade 93 anos), Mundare, Canadá

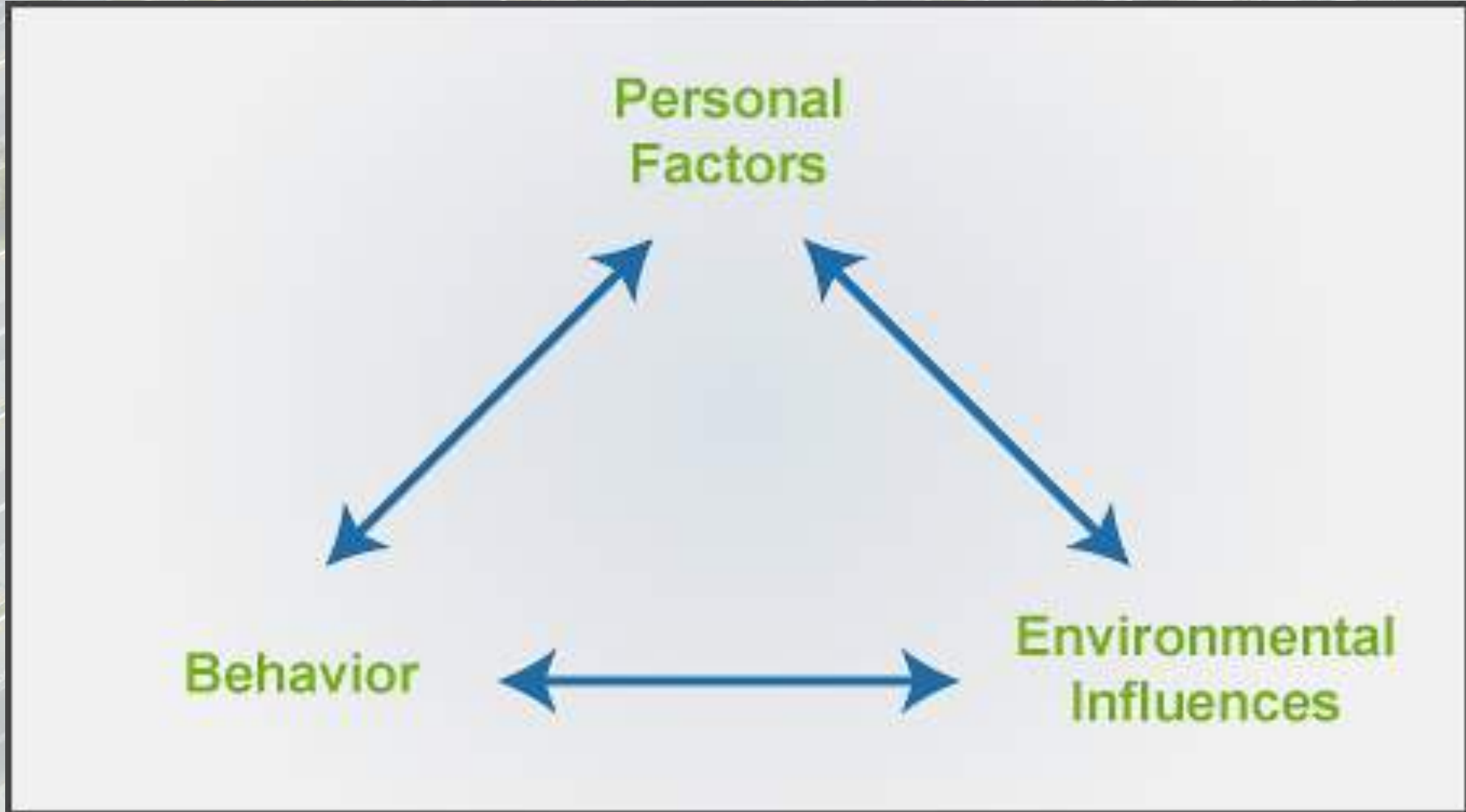
**Formação:** Universidade de Iowa (1952), Universidade de Iowa (1951), Universidade da Colúmbia Britânica (1946–1949)

**Prêmios:** Medalha Nacional de Ciências - Ciência do Comportamento e Social, MAIS

**Conhecida por:** Aprendizagem social, Autoeficácia, MAIS



**TSC:**





# TSC:

**Table 9.1** Major Constructs for Social Cognitive Theory

**Cognitive influences on behavior:** personal abilities for processing information, applying knowledge, and changing preferences.

Construct	Definition	Explanation
Self-efficacy	A person's confidence in his or her ability to perform a behavior that leads to an outcome.	Self-efficacy is a core SCT construct. Confidence is enhanced through mastery experiences, social modeling, verbal persuasion, and practice under stress-free conditions.
Collective efficacy	Belief in the ability of a group of individuals to perform concerted actions to achieve an outcome.	Because people operate individually and collectively, self-efficacy can be both a personal and a social construct. Group efficacy is enhanced by shared goals, communication, teamwork, and prior success.
Outcome expectations	Outcomes arise from actions. Outcome expectations are judgments about the likely consequences of actions.	Outcome expectations, either positive or negative, are a core SCT construct. Expected consequences can be divided into <i>physical</i> (e.g., use of condoms protects against STDs), <i>social</i> (reactions from others: such as interest, approval, recognition, status), and <i>self-evaluative</i> (reactions to one's own behavior based on internal personal standards).
Knowledge	Knowledge is an understanding of the health risks and benefits of different health practices and the information necessary to perform a behavior.	Knowledge of risks and benefits is a precondition for change. Information is also needed to perform certain behaviors; e.g., to cook a healthy meal one needs to know a recipe, where to purchase healthy ingredients, and methods of preparation.

Source: Glanz, Rimer & Viwanath's Health Behavior.



# TSC:

**Table 9.1** (Continued)

Construct	Definition	Explanation
Barriers and opportunities	Attributes of the social or physical environment that make behaviors harder or easier to perform.	Interventions seek to facilitate behavior change by increasing opportunities to safely engage in and master the behavior, or by removing impediments to developing the behavior.
Observational learning	A type of learning in which a person learns new information and behaviors by observing the behaviors of others and the consequences of others' behaviors.	Accomplished by observing an influential role model or peer-leader performing a behavior and achieving an outcome. Methods include observation made in the context of peer-led education, mass media, behavioral journalism, and dramatic performances.
Normative beliefs	Cultural norms and beliefs about the social acceptability and perceived prevalence of a behavior.	Interventions seek to correct normative beliefs (such as adolescents' common misperceptions about how many of their peers smoke cigarettes) through discussions of perceptions versus actual data.
Social support	The perception of encouragement and support a person receives from his or her social network.	Interventions seek to provide informational, instrumental, or emotional support (through, e.g., program flyers, offers to babysit, or a sympathetic conversation) for behavior changes.

(continued)



## TSC:

**Supporting behavioral factors:** actions taken by individuals that can be classified as either *health-enhancing* (leading to improved health) or *health-compromising* (leading to poorer health).

Construct	Definition	Explanation
Behavioral skills	The abilities needed to successfully perform a behavior.	Many behaviors require developing a repertoire of specific skills to be successfully enacted. Examples include avoiding high-risk situations, playing a sport, or preparing a healthy meal. Knowledge and skills together comprise what is called <i>behavioral capability</i> .
Intentions	The goals of adding new behaviors or modifying existing behaviors, both proximal and distal.	Intentions serve as self-incentives and guides to health behaviors. Attaining specific behaviors is often accomplished by writing or verbalizing goals, setting target dates and activities for skill mastery, and monitoring progress.
Reinforcement and punishment	Behavior can be increased or attenuated through provision or removal of rewards or punishments.	Rewards and punishments can be either tangible (e.g., money, goods, physical ailments, weight gain) or social (e.g., praise, approval, attention, exclusion, or ridicule).



## Em nosso Programa de Mestrado Profissional em Saúde Única (PMPSU/UFRPE):

(1) Selecionamos ingressantes que atuam diretamente nos órgãos estaduais e municipais de saúde de Pernambuco, ou em organizações diretamente interessadas;

*Our students are one-health practitioners; we, professors, learn a lot!*

(2) Iniciamos o curso com a disciplina Políticas Públicas e Comportamento;

*Our first discipline deals with behavioral policies and social learning;*

(3) Desenhamos ações para enfrentar problemas que vão desde a hanseníase em moradores de rua, passando pelos desafios da leishmaniose humana e das arboviroses, à promoção da adesão de empresas locais ao SISBI-POA;

*Our students's projects are really relevant!*

(4) Queremos, cada vez mais, o diálogo e a articulação com os extraordinários profissionais e órgãos aqui representados.

*Let's talk... even more!*



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REALIZAÇÃO:



APOIO:



*Muito obrigado!*

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# Saúde única sob a Ótica Econômico-Comportamental

One Health from a Behavioral Economics Perspective



Curitiba, Outubro de 2019