

iNudgeyou – The Applied Behavioural Science Group

Sønderborg, September 20, 2018



**Nudge din arbejdsplads til bedre sundhed og trivsel**

**Palle Oulstrup Hansen,**  
 Director of iNudgeyou, Ph.D., UCL, Roskilde University,  
 Director of NSP – The Institute for Science, Society & Policy,  
 Chairman of The Danish State, University,  
 CEO of INDCENX – The Applied Behavioural Science Group

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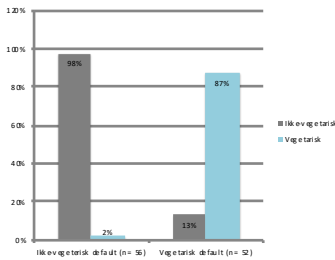
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Effekten af opt-in og opt-out for valg af buffet

iNudgeyou  
 THE APPLIED BEHAVIOURAL SCIENCE GROUP

**Gruppe 1:**  
 Til konferencen vil der blive serveret ikke-vegetarisk buffet til frokost. Angiv, hvis du ønsker at få tilberedt en vegetarisk anretning.

**Gruppe 2:**  
 Til konferencen vil der blive serveret vegetarisk buffet til frokost. Angiv, hvis du ønsker at få tilberedt en ikke-vegetarisk anretning.



Gruppe	Ikke vegetarisk	Veg etarisk
Gruppe 1 (n=55)	98%	2%
Gruppe 2 (n=52)	12%	87%

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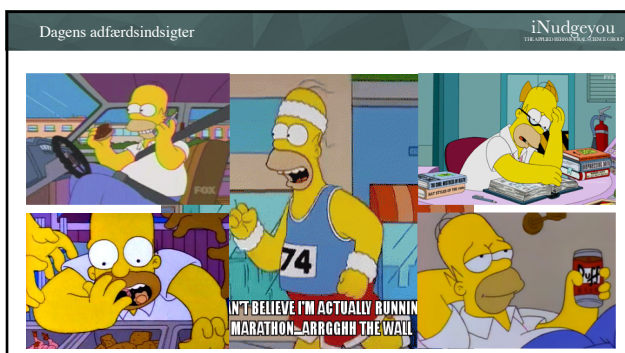
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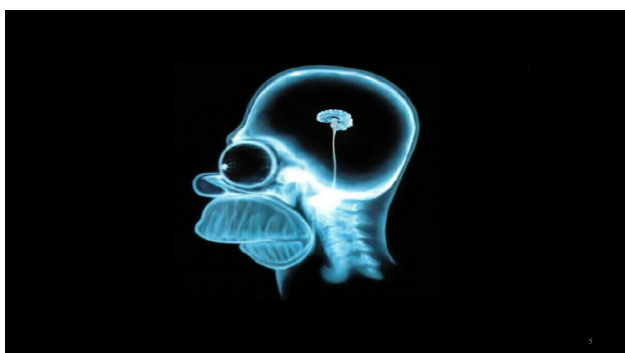
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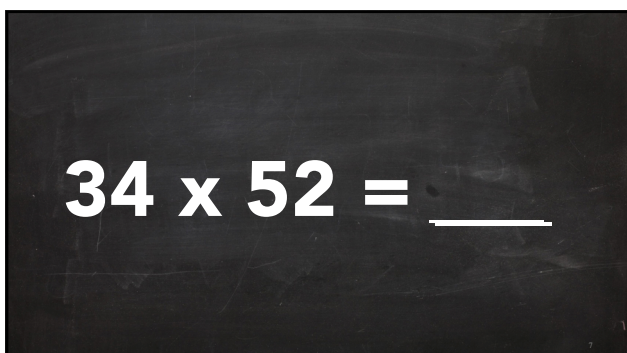
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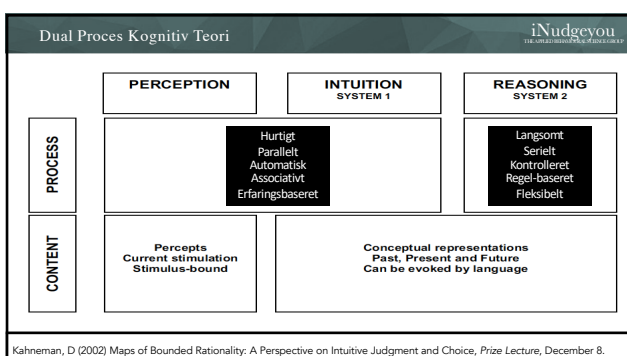
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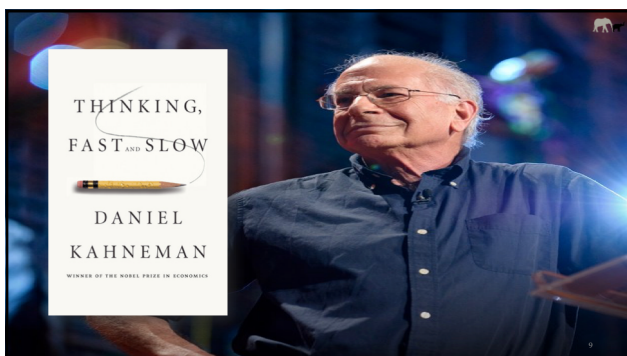
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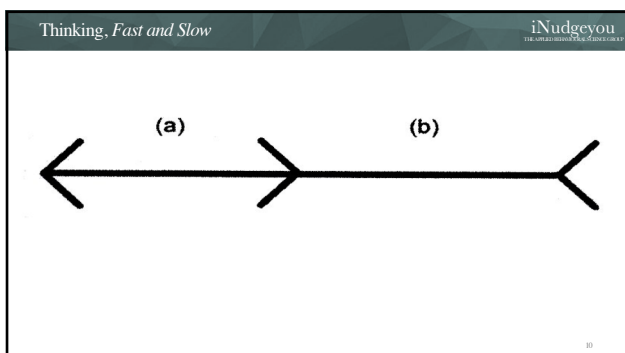
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Thinking, *Fast and Slow* iNudgeyou  
THE ORGANIZATION THAT CHANGES BEHAVIOR

Der er tale om en, at du selv skal bestemme. Forskellige mennesker foretrækker forskellige ting. Synes du at (1) Kemoterapi med 80% chance for at overleve er det mest attraktive valg så er det netop det du skal vælge. Det er ikke mig der bestemmer her. Synes du fx at (2) Strålebehandling med 20% risiko for at dø er en mere tiltagende form for behandling, så står det dig helt frit for at vælge dette. I sidste ende er det dit valg.

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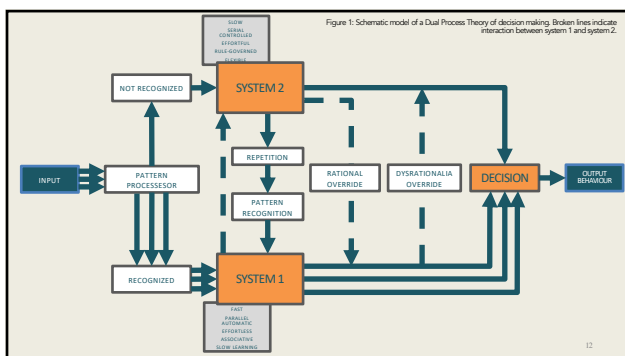
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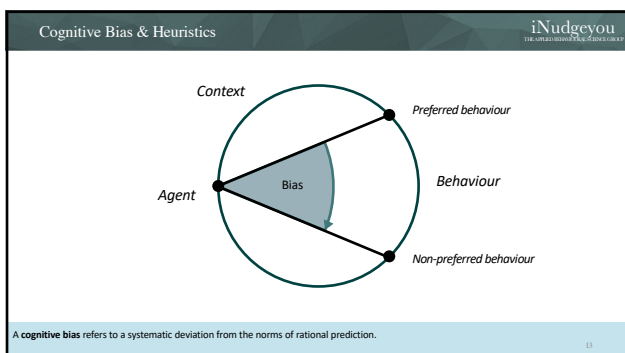
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**Decision-making and behavioral biases**

**Anchoring** – the common human tendency to rely too heavily, or "anchor," on one trait or piece of information when making decisions.

**Attentional Bias** – implicit cognitive bias defined as the tendency of emotionally dominant stimuli in one's environment to preferentially draw and hold attention.

**Backfire effect** - Evidence disconfirming our beliefs only strengthens them.

**Bandwagon effect** – the tendency to do (or believe) things because many other people do (or believe) the same. Related to [groupthink](#) and [herd behavior](#).

**Bias blind spot** – the tendency to see oneself as less biased than other people.

**Choice-supportive bias** – the tendency to remember one's choices as better than they actually were.

**Confirmation bias** – the tendency to search for or interpret information in a way that confirms one's preconceptions.

**Congruence bias** – the tendency to test hypotheses exclusively through direct testing, in contrast to tests of possible alternative hypotheses.

**Contrast effect** – the enhancement or diminishing of a weight or other measurement when compared with a recently observed contrasting object.

**Denomination effect** – the tendency to spend more money when it is denominated in small amounts (e.g. coins) rather than large amounts (e.g. bills).

**Distinction bias** – the tendency to view two options as more dissimilar when evaluating them.

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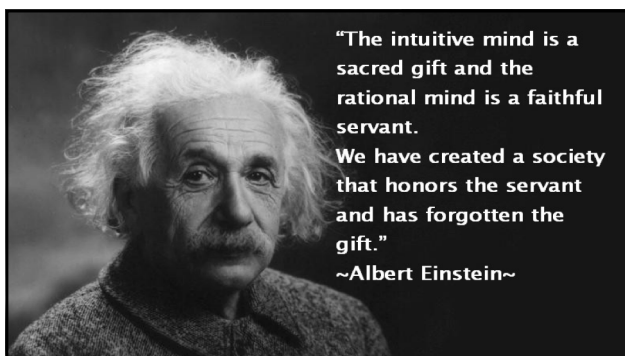
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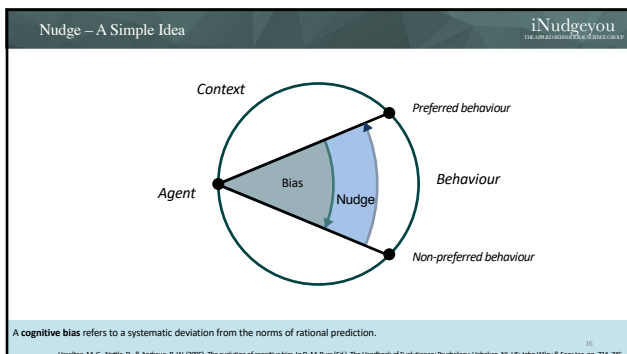
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**nudge** /nʌdʒ/

”Ethvert planlagt aspekt af en valgsituation, der ikke burde påvirke os i princippet, men gør det i praksis.”

Source: Hansen, PG (2016) The Definition of Nudge and Libertarian Paternalism: Does the hand fit the glove? The European Journal of Risk Regulation

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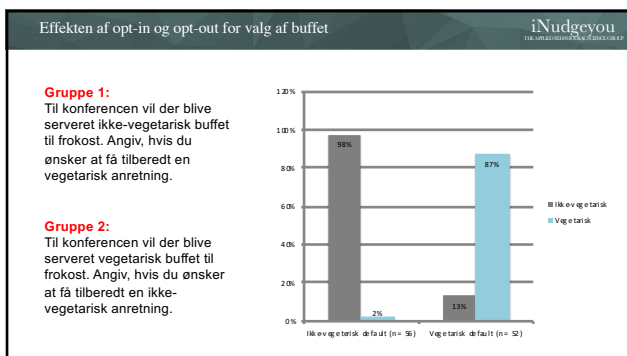
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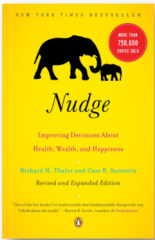


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Nudge – Improving Decisions about Health, Wealth, and Happiness iNudgeyou  
THE INSTITUTE FOR CHOICE ARCHITECTURE

**A nudge is any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives.**

- Thaler & Sunstein  
2008, 6

Thaler, R. & Sunstein, C. (2008) Nudge: Improving Decisions about Health, Wealth, and Happiness, Revised and Expanded Edition, New York: Penguin Books

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Den teoretisk præcise definition på et Nudge iNudgeyou  
THE INSTITUTE FOR CHOICE ARCHITECTURE

Et nudge er en funktion af ethvert forsøg på at påvirke menneskers vurdering, valg eller adfærd i en forudsigelig retning under (1) antagelsen af at kognitive bias, rutiner og vaner påvirker vores individuelle og sociale adfærd, og som (2) virker ved at gøre brug af disse som en integreret del af sådanne forsøg.

Det betyder bl.a. at et nudge fungerer uafhængigt af

- 1) begrænsninger af valgmuligheder, eller
- 2) ændringer ved handlingsalternativernes omkostninger (herunder økonomi, tid, besvær, social sanktioner, o. lign.)
- 3) ny informationsgivning

Hansen, PG (2016) The Definition of Nudge and Libertarian Paternalism: Does the hand fit the glove? The European Journal of Risk Regulation, Vol. 7, Nr. 1, 2016, s. 155-174.

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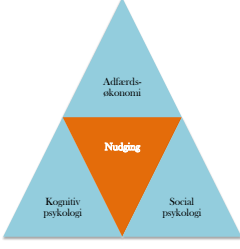
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Hvad er "Nudging"? iNudgeyou  
THE INSTITUTE FOR CHOICE ARCHITECTURE

1. Den systematiske identifikation, udvikling, anvendelse, test og implementering af evidensbaserede adfærdsindsigter
2. Baseret på Dual Proces Kognitiv Teori
3. Kombineret med brugen af eksperimentelle metoder til strategi-udvikling og effekt-evaluering



Hansen, PG (2017) What is Nudging? Handbook of Behavioural Change and Public Policy, Edward Elgar

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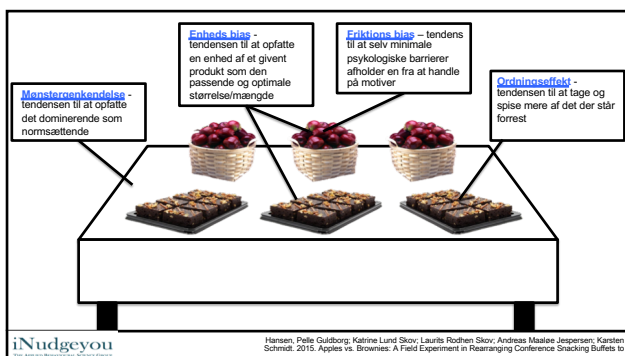
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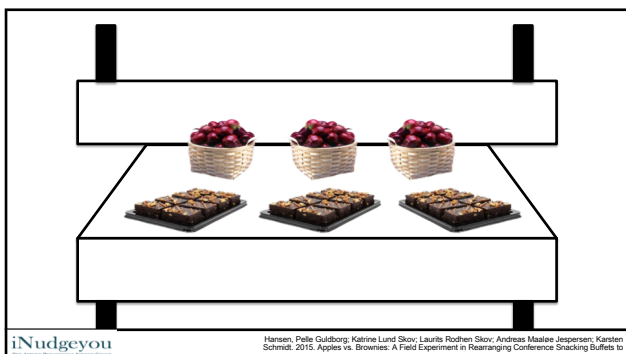
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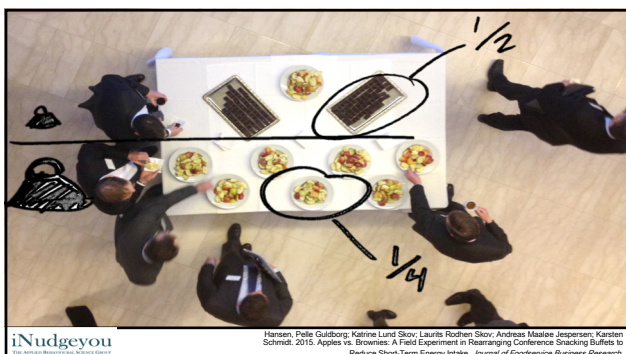
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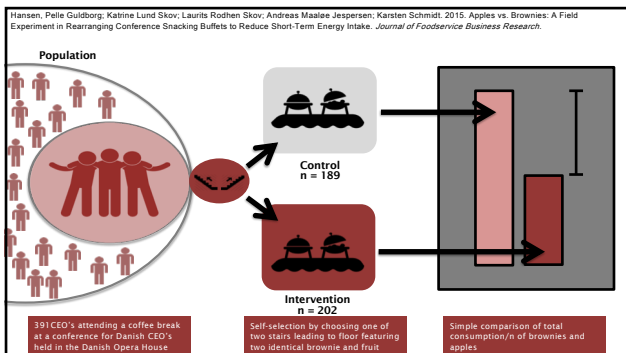
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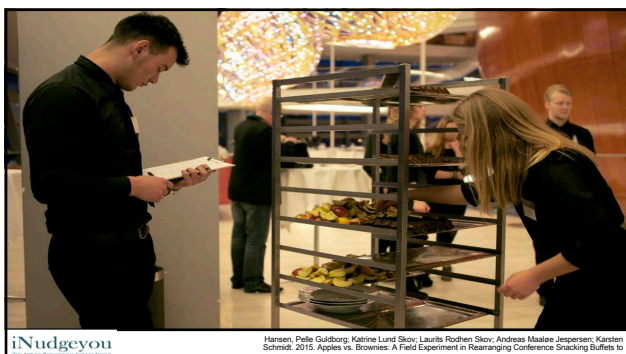
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iNudgeyou

Hansen, Pelle Guldborg, Katrine Lund Skov, Laurits Rodhen Skov, Andreas Maaloe, Jespersen, Karsten Schmidt. 2015. Apples vs. Brownies: A Field Experiment in Rearranging Conference Snacking Buffets to Reduce Short-Term Energy Intake. *Journal of Foodservice Business Research*.

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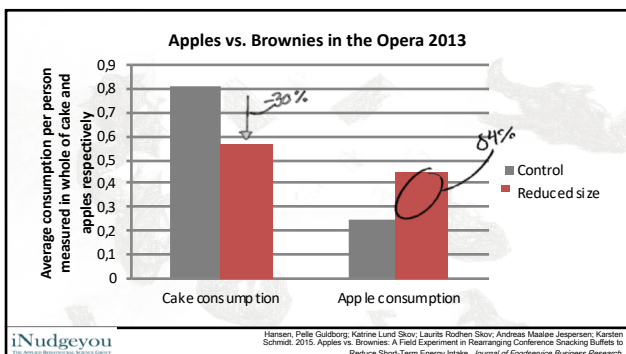
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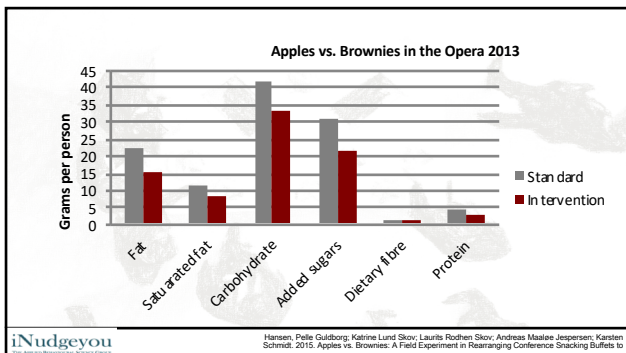
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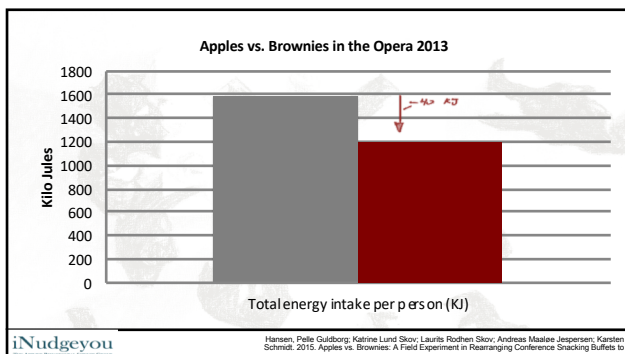
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### Table over energy use for different activities

Activity	KJ/10 minutes
Watching TV	33
Kissing	34
Doing the dishes by hand	71
Vacuuming	80
Brushing teeth	80
Playing music	85
Playing volleyball	95
Playing Frisbee	100

Source: 'Become your own food detective' - Danish Board of Product Facts

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### Hvad er "Nudging"?

- Den systematiske identifikation, udvikling, anvendelse, test og implementering af evidensbaserede adfærdsindsigter
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Hansen, P.G. (2017) What is Nudging? *Handbook of Behavioural Change and Public Policy*, Edward Elgar

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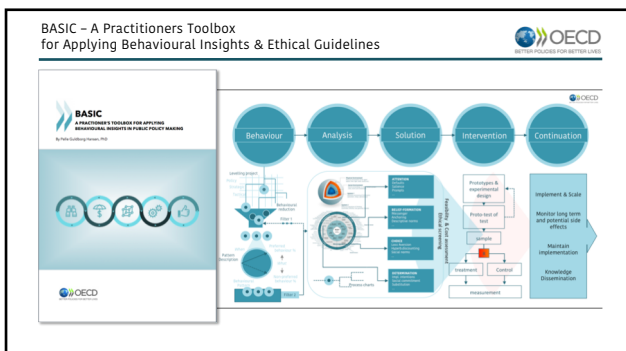
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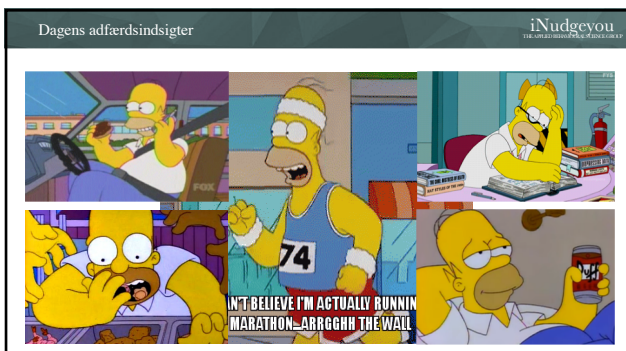
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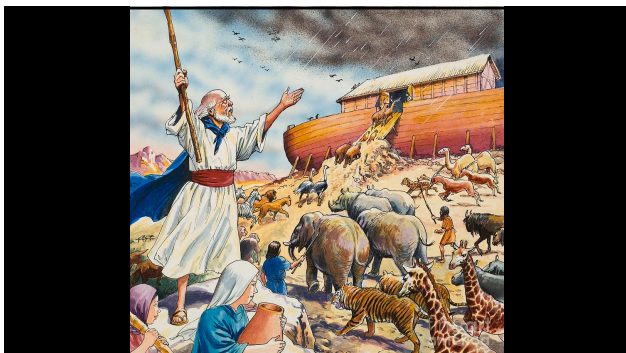
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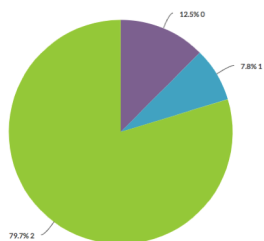
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4. Hvor mange dyr af hver art tog Moses med sig på arken?




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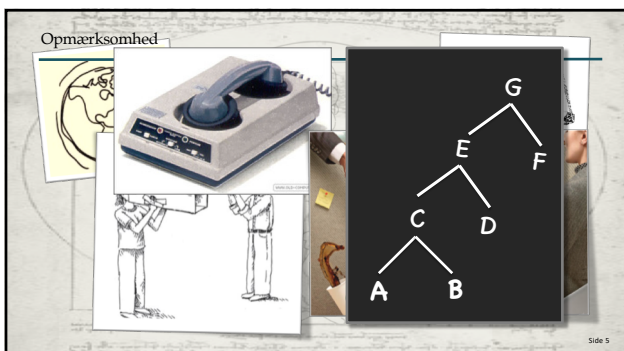
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Opmærksomhed




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Opmærksomhedens omstillingspris

iNudgeyou

**15min 2,8sek**

Gennemsnitlig tid det tager for man opnår den samme intense koncentration når man genoptager en svær opgave.

Varigheden af en forstyrrelse der skal til for at folk begår dobbelt så mange fejl på computeren.

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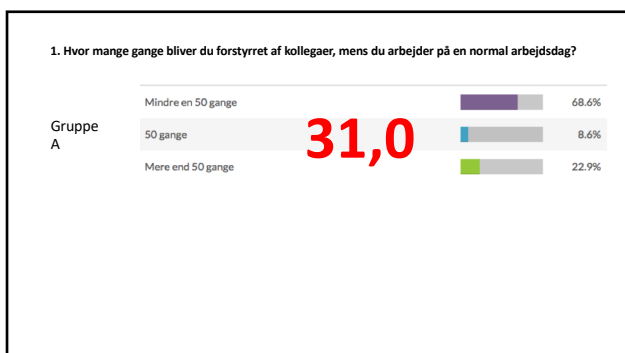
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Managing Attention at Work iNudgeyou

**Nudge: Signaler koncentration**




**Produktivitet**

**Nudge: Altid en notesbog**



**Produktivitet**

**Nudge: Designerede rum**



**Produktivitet**

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**HÅNDHYGIEJNE**  
I SAMARBEJDE MED GENTOFTE HOSPITAL

**REGION** **Gentofte Hospital**

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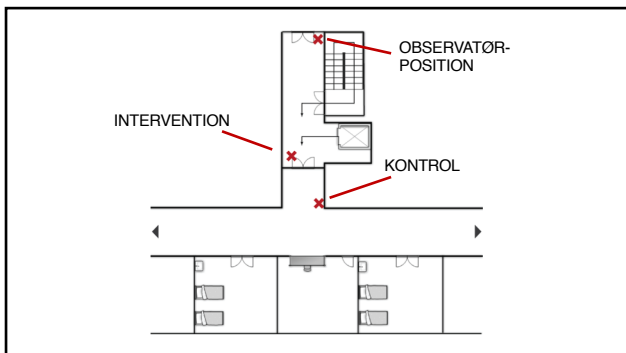
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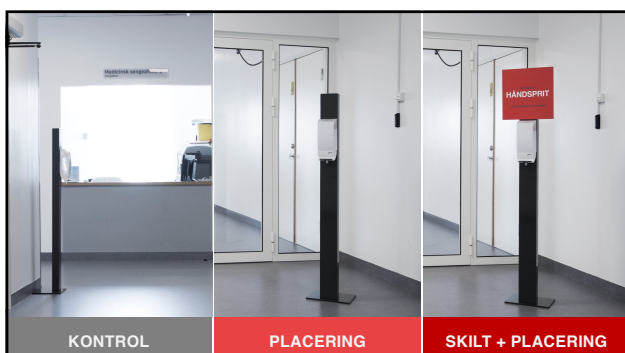
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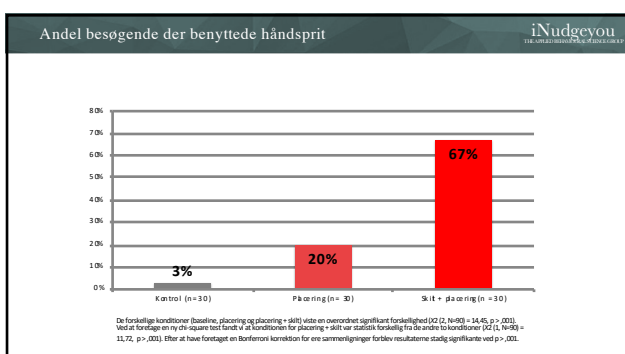
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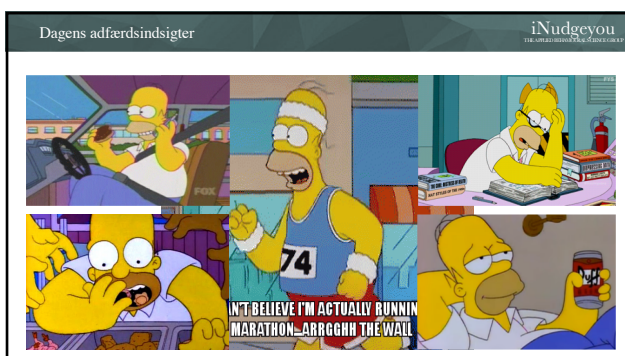
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
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> All things considered, how satisfied are you with your life as a whole these days?

> How many dates did you have last month?



Moderate positive correlation

**0,66\***



No correlation

**-0,12**

Strack, F., Martin, L.L. & Schwartz, N. (1988) Priming and communication: Social determinants of information use in judgments of life satisfaction, European Journal of Social Psychology, Vol. 18, no. 5, 429-442.

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Budbringereffekten iNudgeyou  
THE INSTITUTE FOR POLITICAL ECONOMY



**"De vesteuropæiske lande fører en ustabil økonomisk politik."**

- Donald Trump, September 1, 2018

- Helt enig
- Delvis enig
- Delvis uenig
- Uenig

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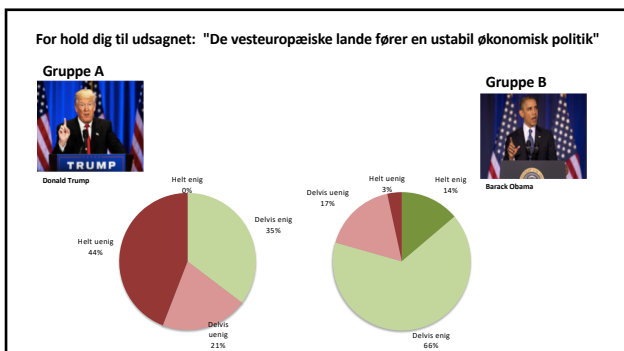
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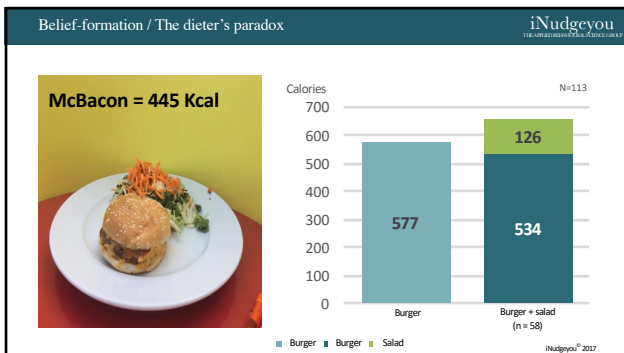
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Planlægningsfejltagelsen iNudgeyou  
THE UNIVERSITY OF AARHUS



**Estimerede antal dage (n = 37)**

Kategori	Estimerede antal dage
Estimeret	33,9
Optimistisk	27,4
Realistisk	48,6
Faktisk	55,5

Buehler, Roger; Dale Griffin; Michael Ross (1994). "Exploring the "planning fallacy": Why people underestimate their task completion times". *Journal of Personality and Social Psychology*. American Psychological Association. 67 (3): 366-381.

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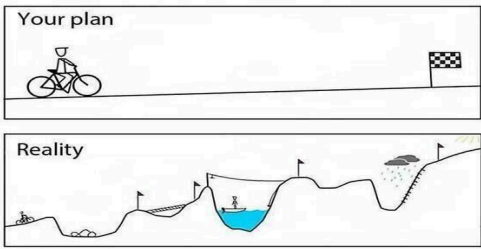
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Hvordan kan man håndtere planlægningsfejltagelsen iNudgeyou  
THE UNIVERSITY OF AARHUS

**A SPØRG EN KOLLEGA**  
 Eksperimenter har gentagne gange vist at kollegaer er systematisk bedre end en selv til at vurdere tiden som en opgave tager at færdiggøre.

**B BRUG EN X-FAKTOR**  
 Hos Microsoft tilføjer projektledere 30% til en software udviklers egen-vurdering af tiden det tager at færdiggøre en opgave – 50% hvis opgaven involverer et nyt operativt system.

**C SKAB OG BENYT REFERENCE KLASSE**  
 Track tid og brug rapporter til at kategorisere og skabe erfaringsbaserede vurderinger for nye opgaver.



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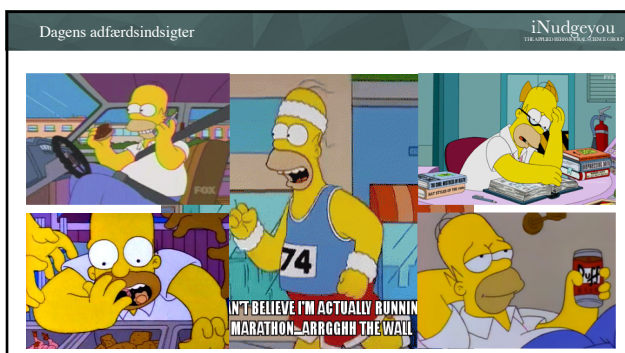
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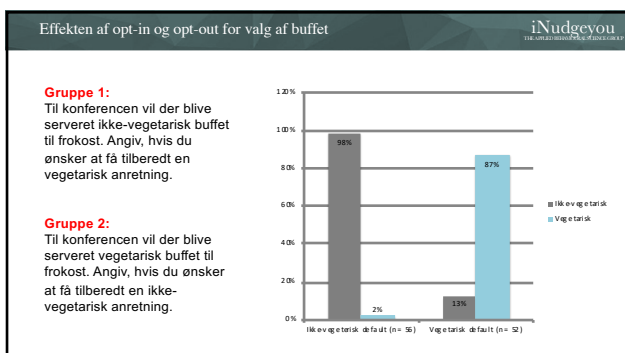
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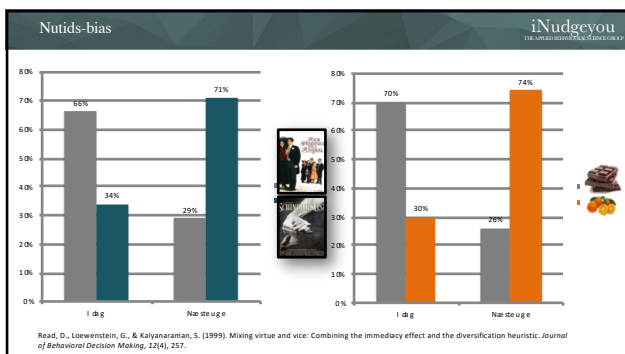
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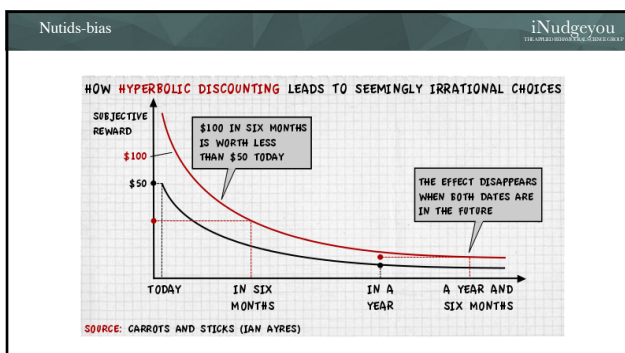
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Choice: The compromise effect iNudgeyou  
THE ORGANIZATION FOR NUDGE DESIGN

Which one do you prefer?



€ 2,50



€ 3,50

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Valgadfærd / Perspektiv / Tenk med paren iNudgeyou  
THE ORGANIZATION FOR NUDGE DESIGN

**INCANDESCENT VS. LED LIGHT BULBS**

Lifespan	: 750-1,200 hours		Lifespan	: 50,000+ hours
Yearly cost	: \$11 per year		Yearly cost	: \$1.10 per year
Watts	: 60 watts		Watts	: 8 watts
GHG emissions	: 150 pounds CO2/year		GHG emissions	: 15 pounds CO2/year

Machinetics.com

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15. Investment. People find it very difficult to invest in the future as they live in the present. Hyperbolic discounting results in current costs being overvalued relative to future costs.

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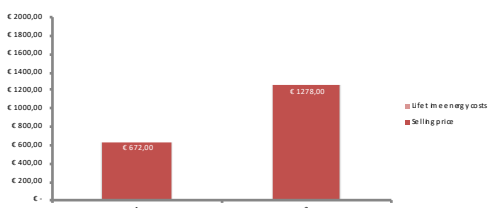
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When buying white appliances **life time costs** is out of focus, difficult to calculate and only to be paid in the future



Kallbekken, S., Selen, H., & Hermansen, EAT (2012) Bridging the Energy Efficiency Gap: A Field Experiment on Lifetime Energy Costs and Household Appliances. *Journal of Consumer Policy*

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You should consider that the electricity cost of this tumble drier will be

**4522 kr\***

A++ A+ A B C

\*Electricity cost is calculated using the average electricity price through 2010, set to 95 øre per kWh (taxes and grid tariffs included), a fridge freezer lifespan estimated to 15 years, and according to EU guidelines for calculation of electricity consumption.

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Combining reframing of labelling and training of sales staff lead consumers to buy appliances that were **4,9 % more energy effective**

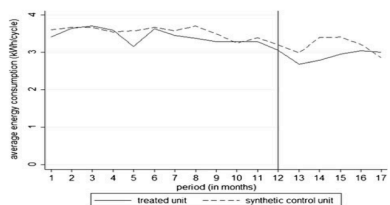


Fig. 4 Synthetic control experiment for combined labelling and training of sales staff for tumble driers. The vertical line marks the start of the experiment

Kallbekken, S., Sævi, H., & Hermansen, EAT (2012) Bridging the Energy Efficiency Gap: A Field Experiment on Lifetime Energy Costs and Household Appliances. *Journal of Consumer Policy*.

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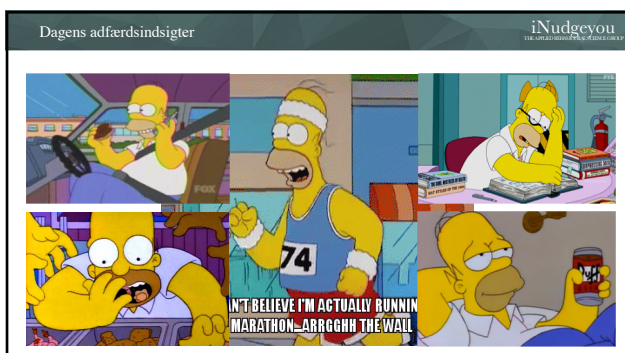
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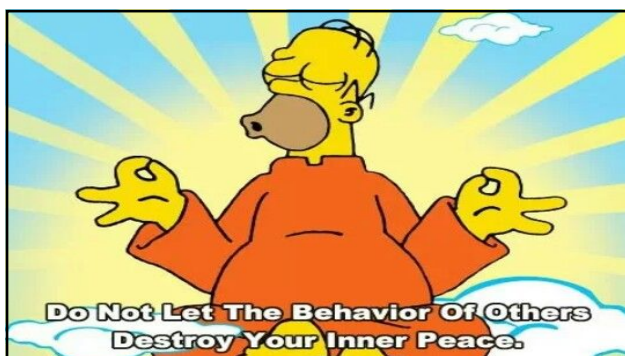
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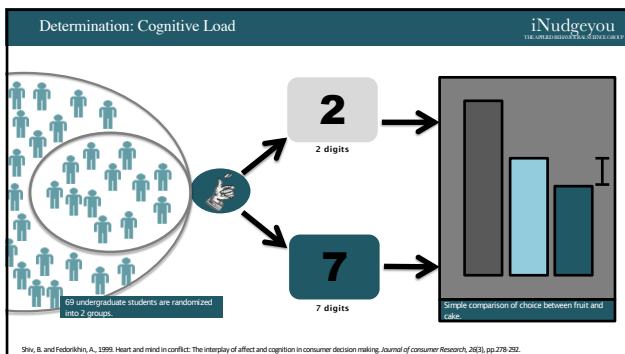
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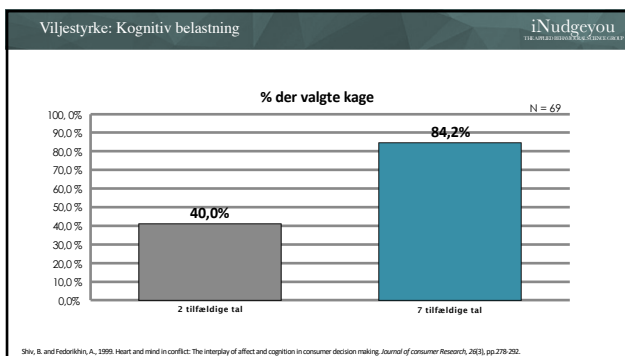
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Determination: Implementation intentions

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Combining motivational and volitional interventions to promote exercise participation: Protection motivation theory and implementation intentions

S. Mire, S. O'Neil, P. Sheeran (2012)

Abstract

Objective: To test whether combining a motivational intervention (MI) with an implementation intention (II) intervention would increase exercise participation more than either intervention alone.

Design: A 2-week experimental design with three groups: Control (no intervention), MI, and II. Participants were asked to exercise for 30 minutes, 3 times per week.

Results: The II group showed significantly higher exercise participation than the Control group. The MI group showed significantly higher exercise participation than the Control group. The combination of MI and II showed the highest exercise participation, significantly higher than both the MI and II groups alone.

Conclusion: Combining a motivational intervention with an implementation intention intervention can increase exercise participation more than either intervention alone.

S. Mire, S. O'Neil, P. Sheeran (2012). Combining motivational and volitional interventions to promote exercise participation: Protection motivation theory and implementation intentions. *British Journal of Health Psychology* 2012, 7, pp. 163-184

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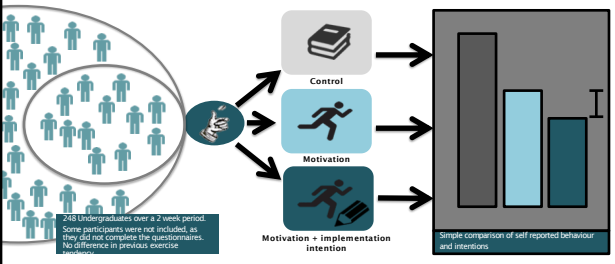
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Determination: Implementation intentions

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248 Undergraduates over a 2 week period. Some participants were not included, as they did not complete the questionnaires. No differences in previous exercise.

Control

Motivation

Motivation + implementation intention

Simple comparison of self reported behaviour and intentions

S. Mire, S. O'Neil, P. Sheeran (2012). Combining motivational and volitional interventions to promote exercise participation: Protection motivation theory and implementation intentions. *British Journal of Health Psychology* 2012, 7, pp. 163-184

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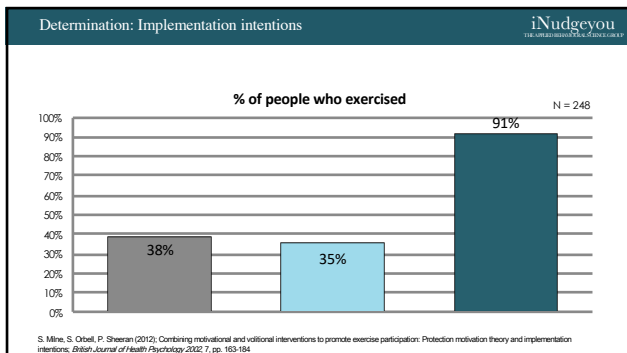
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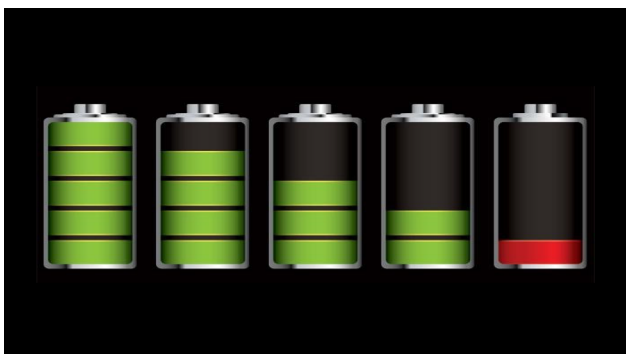
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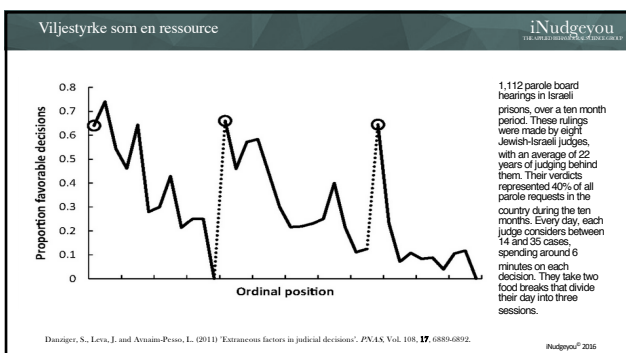
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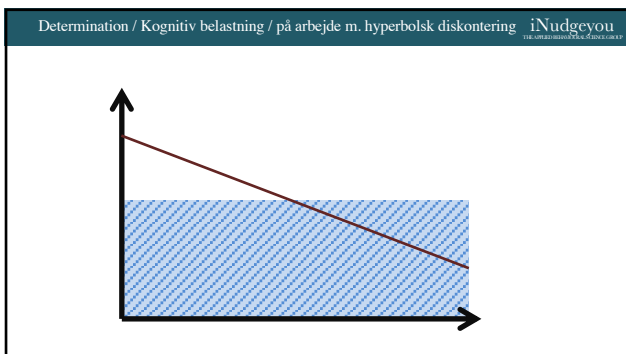
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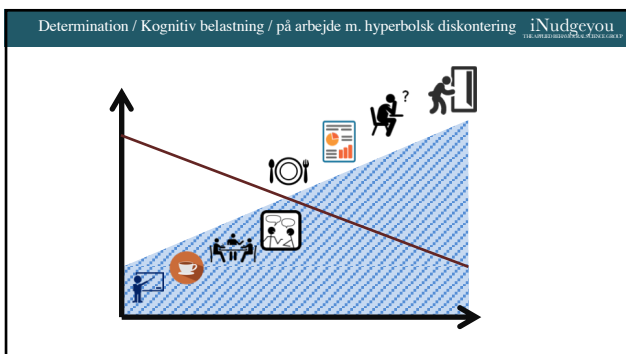
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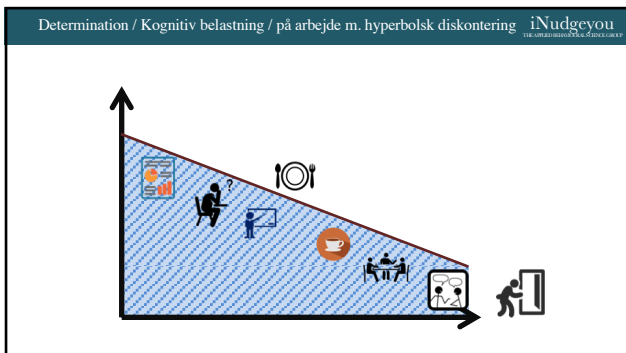
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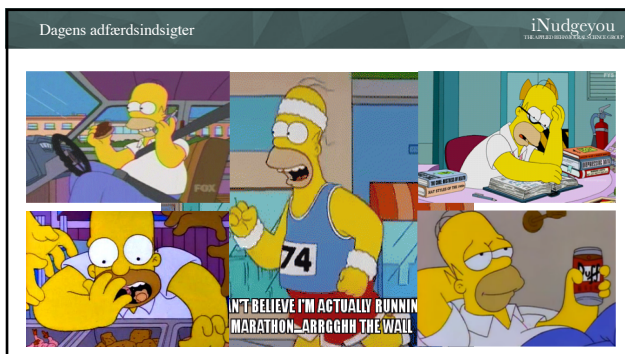
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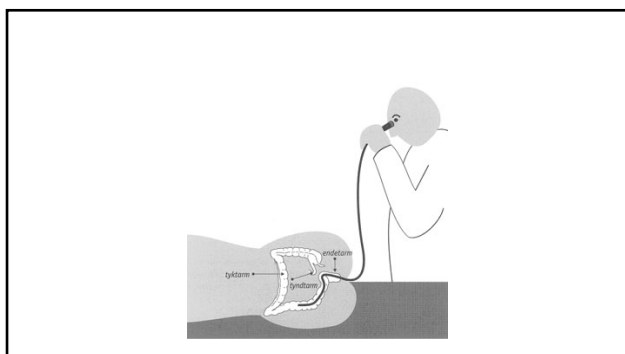
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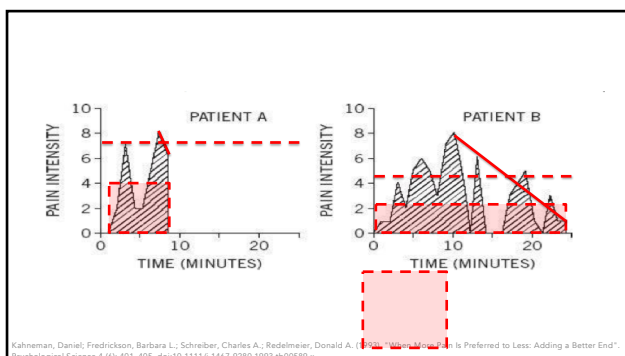
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