

# Lecture 13 Motivation

## \* Maslow's Hierarchy of Needs

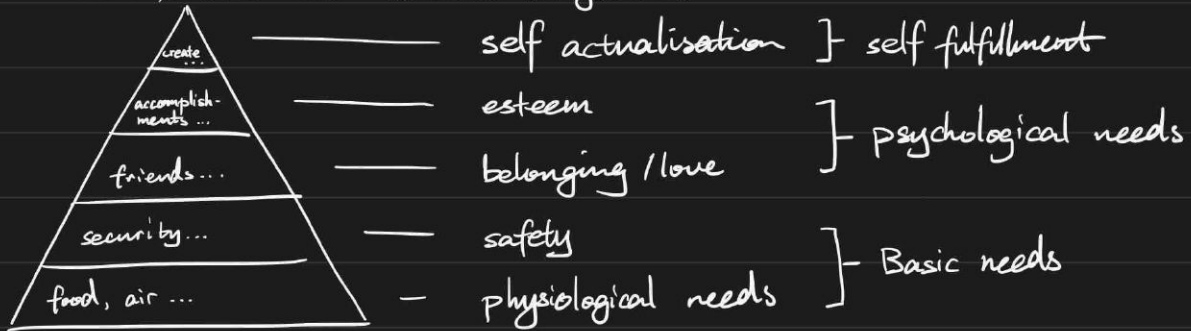
— the popular one, but not true

— well, but not terrible in general

→ Gandhi hunger strike to call for justice

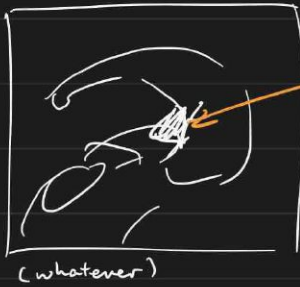
→ Religious hermits

→ Rich joining military after 9/11 to fight for country



## #1 Biology — the bio basis for motivation

Somewhere in brain



Hypothalamus  
↑  
Motivation happens here

Maintains homeostasis!

e.g. temperature, hunger...

→ Lesion it in mouse:

mouse think itself cold

↳ jump into hot bath

↳ dies.

Wanting

Anticipating pleasure  
(dopamine)

vs -

Liking

Enjoying current pleasure  
(opiate)

→ The case of hunger — mitigating obese / make ppl eat less

1. Physical signal i.e. put sth (balloon) in stomach



2. Chemical signal

- Glucose in blood → signals no need to eat
- PYY — secreted by intestine when food inside → signals glucose on the way so no need eat.
- Leptin — secreted by fat cells → signals we have storage  
→ Disable leptin synthesis and you get super fat rat.

3. Environmental

→ Smell of food

→ Endless soup make ppl drink 75% more

→ Smaller plate make ppl eat less



## #2 Goals

- Concrete goal "20 push ups"
- Do best goal "as many push ups as possible"

} Turns out which better depends on which pushes you more. Realistic concrete goal slightly above ability tends to help.

→ In lab. Experimenters:

• "Do 10 puzzles in 1h" → most ppl did

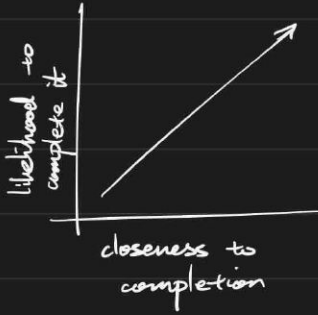
• "Do 10 puzzles in 1h. None succeeded before. Good luck" → few did

↳ cuz people no longer think this realistic

- Performance goal "get 90 on exam"

- Mastery goal "really learn this"

## \* Goal gradient hypothesis



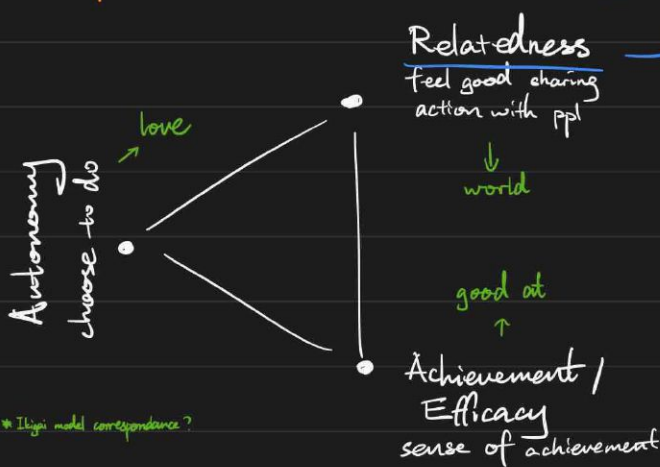
→ More likely finish =      
 Less likely finish =

→ Video games: always a bit left to level up etc.

## \* Self Handicap. - Maintaining ego rather than pursuing real goal

→ Person studying for midterm not studying (fearing not do well after studying)  
 ↳ If done well: "I'm so smart"  
 else: "oh I just didn't study" } Either case they maintain ego.

## \* Self Determination Theory - replaces $\Delta$ thing



\* Ilyin model correspondence?

Social Exclusion

→ Ex. socially exclude someone in sports  
 ↳ Same part in brain for physical pain lights up (can't draw too much conclusion though)

Creating Social Motivation (effective!)

- Public committing
- Exercise with friend
- Good old Game all days

### #3 Extrinsic / Intrinsic Motivation

\* **Intrinsic**: "bag of M&Ms" ← cuz it's good

\* **Extrinsic**: "bag of M&Ms to run a mile" ← extrinsic reward

\* Extrinsic sometimes undermines intrinsic!

→ delayed reward & immediate reward

→ Study: ppl think extrinsic more motivating, but opposite is true

- ppl: eat organic carrot because healthier

- ppl: - - - - - tastier ← these ppl eat more.

### #4 Economic vs Psychological

alternative



#### Economic Model

\* ppl like freeriding so they don't do thing when don't have to

\* rely on extrinsic motivators  
i.e. money / rate, etc.



So pay to get things done! (?)

→ Blood donation shortage

Economist: pay people for donation!

↳ Then ppl no longer motivated

↳ changes meaning of donation

↳ think others will donate

↳ offended, maybe

↳ More shortage

#### Relational Model

→ Family members care about each other  
↑ intrinsic motivation to help out

So create org belonging, trust, identity

→ Prof helps students on own time without being payed because cares about students

if CUM "I now pay you \$20 to help this student". That's offensive!

→ Do well in midterm to make prof proud