

15.301/310, Managerial Psychology  
Prof. Dan Ariely  
**Lecture 5: Emotions and Self-Control**

(a dash “-“ indicates student responses)

The topic today for 10 minutes is emotions. Then emotions and cognitions: What happens when we want to do something but we actually do something else.

If I ask you how many of your decisions are driven by pros and cons vs. things that you like, what do you think would drive more decisions?

-Gut

-Long term decisions are more considered, short term decisions are more gut feelings.

Even when you think you are making calculated decisions, many times you create the illusion you are taking pros and cons, but actually just end up with the gut decision.

If you don't know what you want, flip a coin. As soon as it is in the air, you will know what you want.

I have asked many students how they pick MIT. The answers they give are not usually very thoughtful. Some say it was because of their parents, the reputation, etc. But most often, students come here to visit and love it or hate it. They base their decision on a first impression.

Emotion is a big deal in decisions, not just in consumers but in everybody, and it is usually underplayed.

Emotions are located in the center of the brain

Darwin said there is a primitive system of emotion present in all mammals. It is the primary system that creates motivation for action. If an animal is in the jungle, they want to react immediately to a situation. Not, “Tiger! Should I run? Shouldn't I run? What should I do?”

Some say emotions are programs from history.

They allow us to solve complex problems in a simple, fast way.

(Slide) – Inside view of the brain. The amygdala has a big role in emotions. It relates to other systems, but it is an independent entity mostly.

Today we will look at how the emotion system interacts with the long term, considered part of the brain, how we can screw up as individuals and as leaders of states.

**What do we know about emotions from our experience?**

-Emotions have different levels, and they differ depending on experiences.

-There are different types of emotion. If you break up, you might cry for days. If you do badly on test, you are not upset as long.

How many of you have experienced an emotion in the past week? What else do you know about emotions?

- Mostly involuntary
- Hard to describe in factual terms
- Sometimes rational, sometimes not, independent of reasoning
- Repressed
- Related to sleep, other things

Not necessarily the thing that might evoke them.

Emotions: causes or outcomes?

What do you think about the idea of evolutionary psychology - Emotions as programs created to help us do things fast? They just run, and once they start, they are executed. If this is the role of emotions, what is the role of interpretation? Tiger, afraid, run? Not efficient. Tiger, run? Better. Tiger, run, afraid: Am I afraid because I run?

Emotions are automatic programs. Start it, and it runs. There is almost no way to interrupt them. You can reboot the system, but...

There is some evidence for this view. In one experiment, they got people to come to the lab. Then they said the location had changed, it would be on the 8<sup>th</sup> floor. To some, they said the elevator was broken, so they had to run up the stairs. The people who ran liked the experiment better – their hearts were pounding. They people interpreted their physical state as an emotion.

-are you trying to distinguish emotions vs. instincts?

I am not going to do this, it is very complex, very difficult.

Stimuli -> run: instinct

Emotion: our interpretation of what is done.

Qualia: subjective experience of emotions. Are emotions useful? If you were designing another species, would you give them emotions? Why do we need fear, hatred, love?

- inspiration to do greater things
- seems like emotion is a program for what we should do in life, like Marx. We all love at some point.

Plans for what to do in the future – we need to have emotions to transfer into plans – avoid tigers?

I am going to skip a couple things (slides)

This is cute. If people hold pencil in their mouths across or straight out, the people holding the pencil across are happier – they are smiling!

If you push on something, you then interpret it as bad. If you pull on it, it is better.

People interpret physical aspects with internal states.

The most interesting study – people wore headphones, and were asked to nod or shake their heads frequently in order to check the headphones. Then they were asked if they agree with the statement said through the headphones – nodders agreed more than shakers.

Is it better to use emotions or to think?

-Think: it is at a higher level on the intelligence scale

-It depends on the situation. If you need to react quickly, emotion is better.

What about when you don't have to react fast. Is thinking always better?

Emotion gives a quick answer.

You can't reason about emotions. It is not clear that the 2 systems are talking in the same language. Often, they have separate outcomes.

Sometimes thinking more helps – thinking about consequences.

Sometimes thinking too much can make us choose the wrong action.

Wilson and Schooler:

Jams or poster choice for students – choose between posters, or choose between types of jam.

Some were just asked to make a choice. Others were asked to write pros and cons first, then choose.

Later the experimenters saw if jam was left, or if the chosen poster was hanging. They showed that people who thought more about the decision were less happy. Do you consume a poster? No – you have an emotional reaction. Jam is the same. For those things, it is better to make an emotional decision. It is best to have as similar a situation as possible to the consumption conditions when you are making the choice.

This was a short introduction to emotions. Now we are going to make you happy. How? Any idea? We are going to give you Amazon gift certificates. We have \$50 Amazon gift certificates. Some of you will get them, we are going to have a quick auction.

Here is what will happen:

(passes out papers)

Flip them over, we will start when we finish passing them out.

Bid on the Amazon certificates according to the directions.

First, hot and cold states. (slide). Comic: 2 guys with tattoos (one is peach cobbler), “never get a tattoo when you are drunk and hungry.”

Have you ever gone to a restaurant when you were hungry and ordered too much food?

-Dinner in a restaurant: When you are hungry, you are in a different state than when you are rational and thinking.

Here is an experiment. We went to a gym and asked exercisers to tell us information about people hiking (see slide). The people were asked in 2 conditions – before exercising and after exercising. What is the difference? Afterwards, they are thirsty. In every possible way, people appreciated water more after exercising.

I predict that these people would give more money to water related causes – drilling wells, etc.

You know those banquets for getting people to donate money? They should give them the food later....

## **Systems: Men**

Let's look at a simple system: men

Can we predict how we would feel in the other, emotional state?

When we are: hungry, thirsty, angry, curious, aroused?

We picked arousal – it easy to pass by the committee: it is no problem to make people aroused.

Procedure: each person got a laptop to take home. Either they answered questions cold or they answered after they were aroused. (they were given material on the computer to look at first)

In a cold state, they predicted that they would enjoy activities less than they predicted in a hot state.

In a cold state, many said they would always use condoms, but in a hot state, people said they would use condoms less.

Sex education happens in a very cold state. Diagrams of the human body, old people teaching. In a cold state you can say sure, I will always use condom. In a hot state, your view changes.

Maybe if classes were taught in hot state, it would be a better education?

This is a self control problem.

The cold self is not perfectly aware of the hot self.

But the thing about sexual arousal is that we experience it often, we are familiar with it.

How can we not understand ourselves, predict our behavior?

But it's true.

### **Related topic – Hyperbolic curve**

I have said something about emotions so far and about hot and cold states.

(Slide) – Decisions and the future.

Thinking about the future.

Inter-temporal choice

Would you choose \$100 today or \$150 in 4 wks?

Would you choose \$100 in 50 weeks or \$150 in 54 weeks?

You realize that you are placed in exactly the same situation, but 50 weeks from now?

The same with a half or a full box of chocolate: half today or full in 4 weeks? Half in 50 weeks or full in 54 weeks?

If I have to measure how patient you are, people don't seem patient in the first question. But if I ask the second question, everyone seems patient.

Why is there a difference?

-It is like if you buy something in a store vs. online. I buy something in a store because I get it now.

-4 weeks is a huge percentage vs. now, but very small vs. 50 weeks.

-If I get it today, I have an emotion right now. In the second situation, I have to wait anyhow.

Chocolate creates an emotion projection.

If I made chocolate chip cookies, people would be interested in them now.

If an event is far off, we can think about it in a calculated way.

Now is much more emotional than later. We can almost feel the emotion if we can get it right now.

(Graph on slide) Now is more important than later.  
Another “view” (slide)

The steepness changes first for the sooner experience. Just before an experience, people prefer less of the experience sooner to more of the experience later.

Hyperbolic discounting

Can you think of real life activities like this graph?

- Lottery
- Keep up with reading in class vs. doing it all right before the exam.

In advance you think about high road, but every night other things seem important. The next day, you regret it.  
The same with dieting, exercising.

Distance to the goal changes preferences.

This can arise in part by the hot-cold empathy gap. Cold state vs. hot state

### **Finally, the 3<sup>rd</sup> topic, Self Control**

This is a particularly worrying aspect  
Something we want to do but have a hard time doing.

- Studying
- Going to the gym
- Trying to give up an addiction
- Sending an email, when you keep putting it off
- Saving money

Self control – think about it in 2 ways:  
Self control problems and behaviors aimed at self control.

The non-emotional self can do something to force the emotional self to do something that will be good in the long term.

In Hebrew, there is no word for procrastination. I think it is because it is not needed in Hebrew☺

How many of you were involved in car accidents as teenagers?

-lots

Why do so many kids die in car accidents?

One reason – kids do not know how to drive.

They also go all at once, in groups.

I would like to claim one problem with kids is like social arousal.

They promise their parents and themselves that they will be a good kid, a good driver.

Then the friends get in, excitement builds up, they don't think about the risk as much.

They start taking curves too fast, going through almost red lights...

It could be like the hot-cold empathy gap

The good thing is that if I am right, we can come up with mechanisms to solve this problem.

How can we fight self control problems?

-How is curiosity a behavior, not an emotion?

Too long to answer now, we'll talk about it later.

-Limit yourself, not have the options around to indulge.

-Distract yourself, do something else instead.

-Increase the award of positive behavior.

-Talk yourself through it.

Creating a rule, not considering the options. Following a rule.

-Remind yourself of the positives.

-Create routines.

People who have trouble getting up in the morning, what do you do?

-Alarm proximity to bed

If you think about the marketplace – there are tremendous opportunities in creating mechanisms

-I try to define a margin. Create a contrast for myself

(Slide) Smoking.

Use price and difficulty to find as a control for behavior. Can you think of other things like this?

Can you imagine situations in which you pay premiums to limit yourself?

-Diet groups, personal chef, diet pills

The example I had in mind – There are tiny packets of chips, 50 cents each. The big bag is cheaper

People think, I will buy the little one and it will be over. If I buy the big one, I'll keep eating.

This creates crazy behaviors, but people use price, quantity, and difficulty to find to control other behaviors.

Create mechanisms to exercise self control

Those of you who have taken economics know the U.S. has the lowest amount of saving.

### **Mechanisms**

Rules of behavior (I don't do X)

Pre-commitment (Agreeing to deadlines)

Rationing (limiting consumption)

Physical distance (alarm clock across room)

Mental budgeting (“entertainment budget”)

How much are people overpaying gyms on the plans vs. if they pay every time they go?

They overpay \$800.

They think guilt will make them go. It does, but then the guilt goes away.

People do better by using mechanisms, but not as well as if we impose outside deadlines.

How do we create better mechanisms?

Impulsive shopping (lists)

Drug usage (pre-commitment)

Unsafe sex (advertising, planning ahead)

.... (slide)

This is used at clinics: write a letter to friends or family in a cold state. It will be sent if one day I test you and find you positive for drugs. If the letter is incriminating, it will overcome your state of emotion, and you will be able to resist.

Set conditions. Create punishments that automatically happen.

What if your car can sense things about your driving and you can preset consequences?

Will fear of the car automatically turning classical music on is so high, you will not speed? ☺

Freezing credit cards: Wrap your cards in a bag, or better yet put it in bucket of water, and freeze it. If you need it long term, you can get it. If you want it immediately, it takes long enough for emotions to pass.



What can you do in the cold state to force yourself to do something? A medical exam?  
Pay in advance. If you don't show up, you lose the money.

Self control in animals.

Give pigeons or rats 1 food pellet immediately or 10 in the future, they always choose 1 now.

Give them 3 buttons: 1 pellet immediately (green button) or red button where nothing happens, or a blue button where there will be 10 pellets in 10 seconds. They push the red button while waiting for the 10 pellets. It decreases the temptation to push the green button and just get the 1 pellet. If they do not have a red button, they push the blue for 10 pellets, then push the green for one pellet before the 10 seconds are up, losing the 10 pellets.

Cognitive – cold, conscious, deliberate

Emotion – hot, fast, instinctive.

Last thing today – divide into pairs for the survey exercise. Tell your TA who the partners are.