

Behavioral **ECONOMICS** **in 22 slides**

Behavioral Economics fuses...

psychology and economics to gain a better understanding of human behavior and decision making.

The following slides overview many

Behavioral Economic Principles

That show we are not as rational as we
would like to think...

ECONS

HUMANS



Well-defined preferences
Decisions maximize all alternatives
Makes rational actions
Pursues monetary wealth

Not sure of preferences
Often picks easiest route - satisfice
Subject to guilt, fairness, social comparison, desire for luxury

Goal Principles



Goal gradient theory – Goal motivation changes as people move closer to target. The closer you get to the target, the greater the motivation is to achieve it.



Illusionary goal progress – Goal motivation increases even when the progress towards the goal is illusionary.

Research: Buy 10 coffees – get one free!



10 coffee punch card

Average 15.6 days



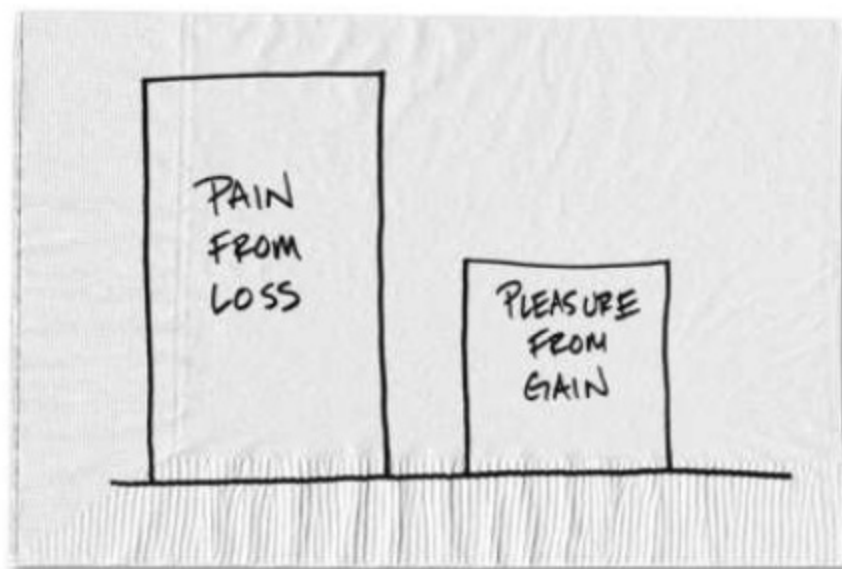
12 coffee punch card with
2 pre-punched

Average 12.7 days

Loss Principles



Loss aversion: For most people, the “pain” of a loss is greater than the “pleasure” of an equivalent gain. In other words, people tend to be more motivated to avoid losing \$100 than they are to win \$100.



Endowment Principles



Endowment effect – We ascribe more value to objects / things merely because we own them. Even when that ownership is only for a few minutes long, people tend to value items they own more than items that they do not own.



People would pay **\$4.00** for a coffee cup (before they owned it)



People would only sell the same coffee cup for **\$6.00** once they owned it

Anchoring Principles



Anchoring – People tend to use irrelevant information as a reference for evaluating or estimating an unknown value or new information. When anchoring, people base decisions or estimates on events or values known to them (or that have been primed), even though these facts may have no bearing on the actual event or value.

Research: estimate the price of a wireless keyboard after writing down the last two digits of your social security number – expressed as dollars (i.e., if your SSN ended in 74, you would write down \$74).

\$56

Top 20%

\$16

Bottom 20%

The top 20 percent bid an average of \$56 for the cordless keyboard; the bottom 20 percent bid an average of \$16.

Reference Principles



Reference Point – Tied to Anchoring is the concept of Reference Point: what do you expect to pay for something changes that value that you receive based on the price you pay. If you expect to pay a higher amount than you do, the actual pleasure you receive from the purchase goes up. The corollary is also true.

Research: How much would you pay for a beer on a hot day at the beach? Two options were presented as the only place to get beer: fancy hotel or run down convenient store.

\$7.25

Fancy Hotel

\$4.10

Convenient Store

Same beer, same desire, but willing to pay two different prices.

NOTE – friend was going to get beer – so no value is associated with location.

Do – Say Principles



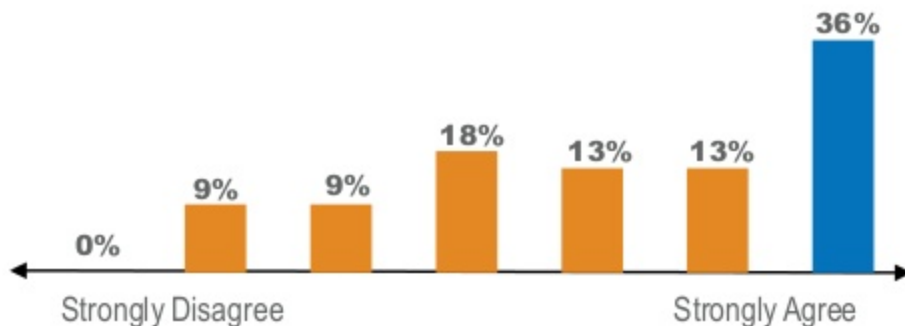
Do - Say problem – What we say motivates us and what actually motivates us are often different. When we “say” what motivates us – we rationalize and need to ensure alignment with social norms and self identity (e.g., injunctive vs descriptive norms).

“Choice and the decision to take action are separate psychological transactions.”

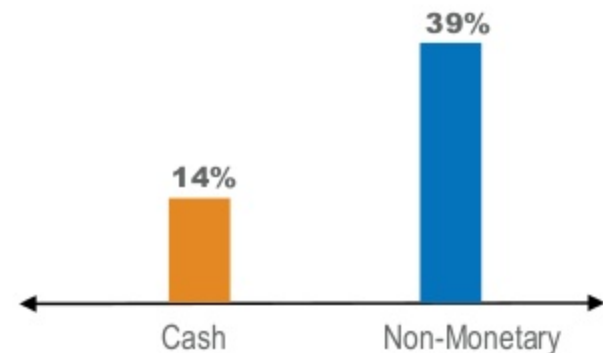
Scott Jeffrey, Ph.D.

Group Survey

“I would prefer to receive the cash value of the prize rather than the prize itself”



Actual Performance Lift



Framing Principles



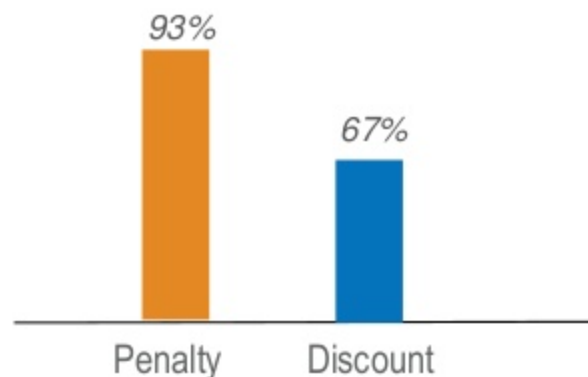
Choice Architecture – the design of different ways that choices can be made to people and the impact that has on decisions and subsequent behavior (e.g., opt-in versus default behavior).



Framing – People react differently to a particular choice or option based on how it is presented (e.g., loss or gain, certainty or uncertain, etc...).

Research: Framing of early registration discount as a penalty or discount?

93% of PhD students registered early when a **penalty fee for late registration** was emphasized, with only **67%** doing so when this was presented as a **discount for earlier registration**



Fairness Principles



Perceived Fairness – people are highly influenced by a sense of fairness (or really perceived lack of fairness).

“Fairness seems a bit like air – its absence is a lot more noticeable than its presence.”

Mathew Liebermann, PhD

Research: Ultimatum Game – 2 players split \$10. One person makes offer of split, the other decides if they will accept the offer or reject it (if they accept the money is split as offered, if rejected, no one receives anything).

How much do you usually have to offer for the 2nd person to accept?

$\geq \$3$

Responder usually rejects offer unless it is over \$3 - throwing away money just because they feel slighted and not a fair distribution of funds.

Hedonic Principles



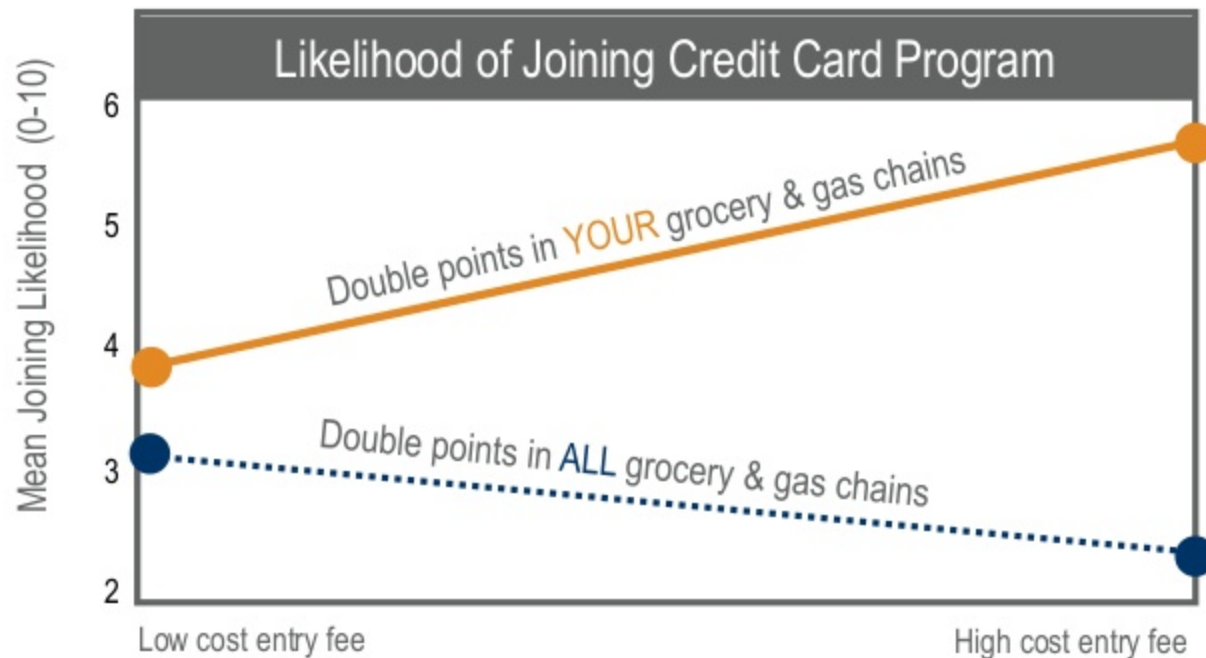
Hedonic motivation – hedonic (luxurious) awards are more motivating than equivalent cash or other rewards. These types of awards do not result in “indulgence guilt”, fulfill our desire for pleasure, and are perceived as more valuable than their economic cost.



Unique Fit Principles



Idiosyncratic fit – When we feel *we have a unique advantage* in a program or that a *program is tailored specifically to us* we are more motivated. This sense of unique fit to us fuels our desire to perform – even if the requirements to achieve success are more difficult.



Regret Principles



Regret Lottery – You feel more pain of loss if you believe you were close to avoiding loss (or had an easy alternative to avoid loss).

“...happiness frequently depends not on where we are at the moment, but how easily we perceive we might be elsewhere, or in another, better situation.”

Dan Ariely



Miss flight due to
connection by 45 minutes

Misery index - high



Miss flight due to
connection by 1 minute

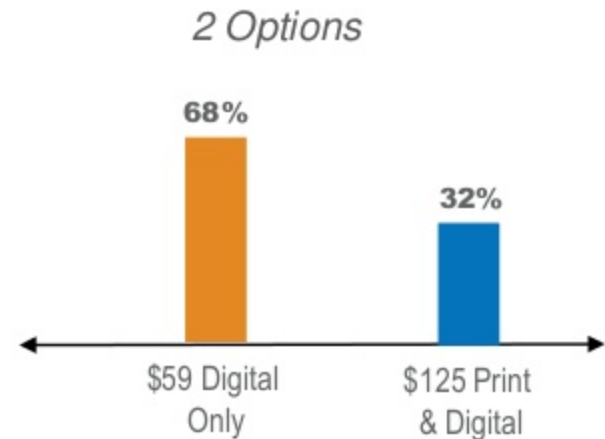
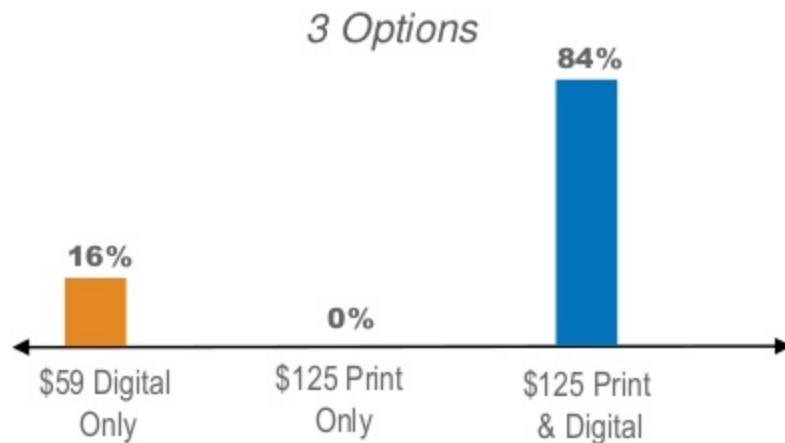
Misery index – VERY HIGH

Decoy Principles



Decoy effect – Preferences for items change when a third option that is asymmetrically dominated (closer to one option than the other) is presented.

Research: Economist magazine subscription costs?



Dan Ariely

Subscription choices for the Economist **changed when they added in a third option** (\$125 print only) compared to when there were only two options. Significantly more people chose the more expensive option – that was closer to the decoy.

Uncertainty Principles



Motivating uncertainty effect – Research shows that in many instances, we are more motivated to reach a goal with an uncertain reward than one with a fixed reward. Existing research suggests that we prefer certainty over uncertainty when deciding if we should opt-in for a goal. However, uncertainty is more powerful in boosting motivation en-route to a goal.

Research: Drink a large amount of water in two minutes. Some people were told they'd receive two dollars, guaranteed, if they completed the challenge. Others were told they'd receive either one or two dollars, with outcome dictated by a coin toss.

\$2

43%
Completed



\$2 or \$1

70%
Completed



Self Delusion Principles



Positive illusion – People tend to think more positively about themselves than they actually are. We tend to think we are more honest, cooperative, rational, better drivers, and more intelligent than others.

Research: When people are asked how good a driver they thought they were, they rate themselves in the **85% percentile (top 15% of all drivers)**.



Only **10%** thought that they were below average..

Time Principles



Time discounting / Hyperbolic discounting – the idea that present rewards are more desirable than future ones; for example, people often prefer to receive \$100 now over \$110 in a month's time.

Discounting is non-linear, and its rate is not constant over time – we discount the value of the later reward, by a factor that increases with the length of the delay..

Research: would you want to receive \$50 today or \$100 next year? How about \$50 in three years or \$100 in four years?



Size Principles



Category size bias – We feel that outcomes are more likely to occur if they are classified with a large category as opposed to a smaller category. We mistakenly believe that items in larger categories have a higher probability of being picked than those in smaller categories. We are also more likely to take action if we think an action is associated with a larger category.

Research: What is the likelihood of picking a grey #8 ball?

