# For Whom Less is More: Individual Differences in Choice-Overload Tendencies

# Itay Sisso & Ilana Ritov

The Federman Center for the Study of Rationality, Hebrew University



### Overview

- We study the paradoxical tendency of people to derive *less satisfaction* from an option when chosen from *a larger set*, also known as the **Choice Overload (CO)** phenomenon.
- o Studies in the area reveal conflicting evidence of CO [1]. We suggest individual differences as a largely overlooked moderator.
- We show that people with high levels of **Fear of Missing Out (FoMO)** are predisposed to exhibit Choice Overload.
- We develop a general scale Forgone Alternatives Aversion (FAA), which refers to general alternatives (rather than experiences).
- We demonstrate the new scale's reliability and validity, and show that it moderates CO above and beyond other suggested traits such as FoMO, prevention focus, and maximizing tendencies. We establish it's pivotality to these traits using network analysis.
- o Finally, we show that people with high levels of FAA tend to exhibit Choice Overload because they are more sensitive to **Opportunity Cost** (what does one give up when making the choice). We rule out Regret and Decision Difficulty as possible moderated mediators.

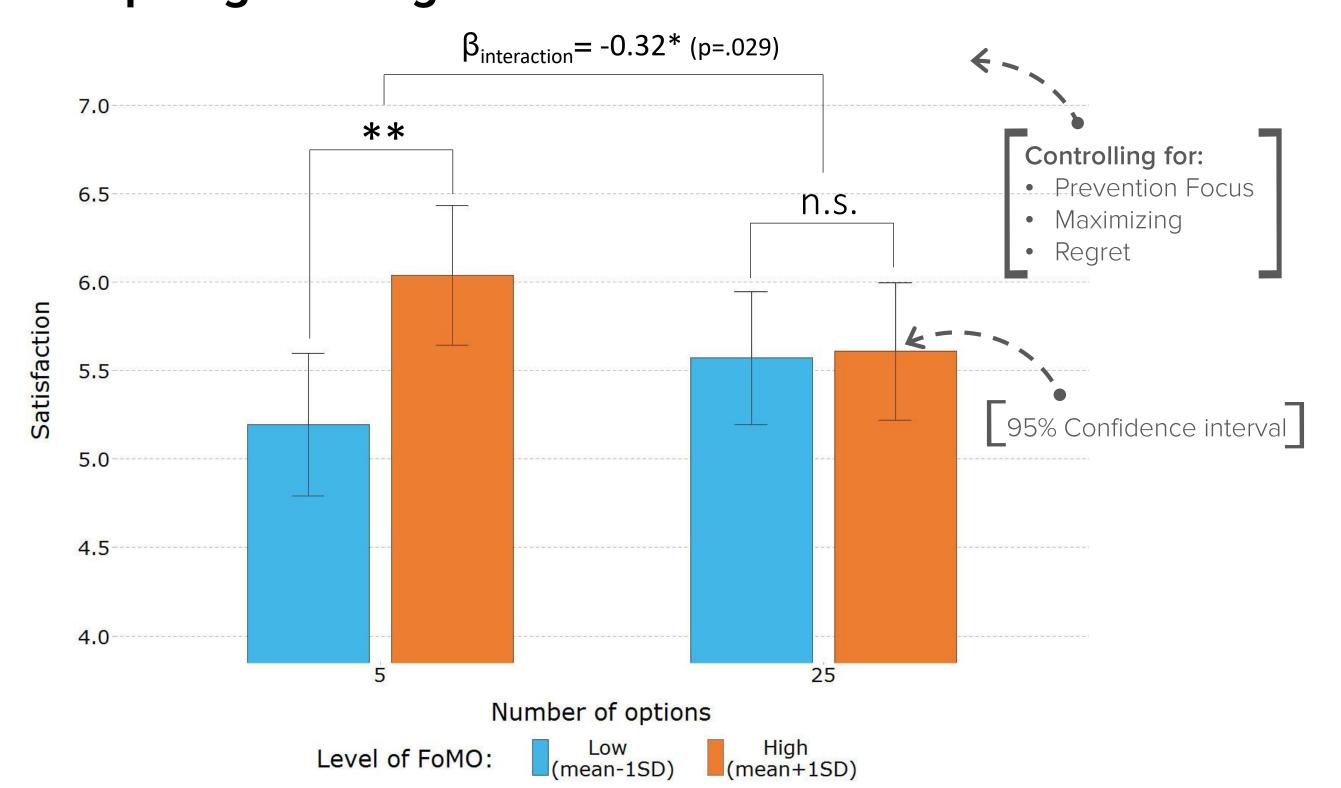
### Background

- It is widely believed that Maximizers (as opposed to Satisficers) feel worse off after choosing from a larger set (Indeed, it was originally formulated for that purpose [2]), however, no such direct evidence exist [1].
- Regulatory Focus (RF) was also recently linked to the CO phenomenon [3], yet only using a subtle manipulation of RF, rather than measuring it as a chronic trait / disposition.
- O While most studies of CO focused on Regret, Decision Difficulty, and Cognitive Load as mediators of the effect, we focused on the largely overlooked construct of Opportunity Cost (what does one give up when making the choice).

# Experiment 1

- H1 FoMO is a positive moderator of CO (i.e. FoMO and the no. of options negatively interact with satisfaction).
- H2 The moderation is not due to the (existing) correlation between FoMO and other moderators of CO.
- H3 the moderation is not mediated by regret.
- Method:
  - N = 110 Israeli students.
  - Real high-res digital picture choice scenario.
  - IV: Small set 5 pictures, Large set 25 pictures
  - DV: Satisfaction two weeks later
  - Mediators: Regret
  - Moderators: FoMO [4], Maximizing [5], Regulatory Focus [6]

## Spotlight Analysis – satisfaction vs. FoMO and set-size



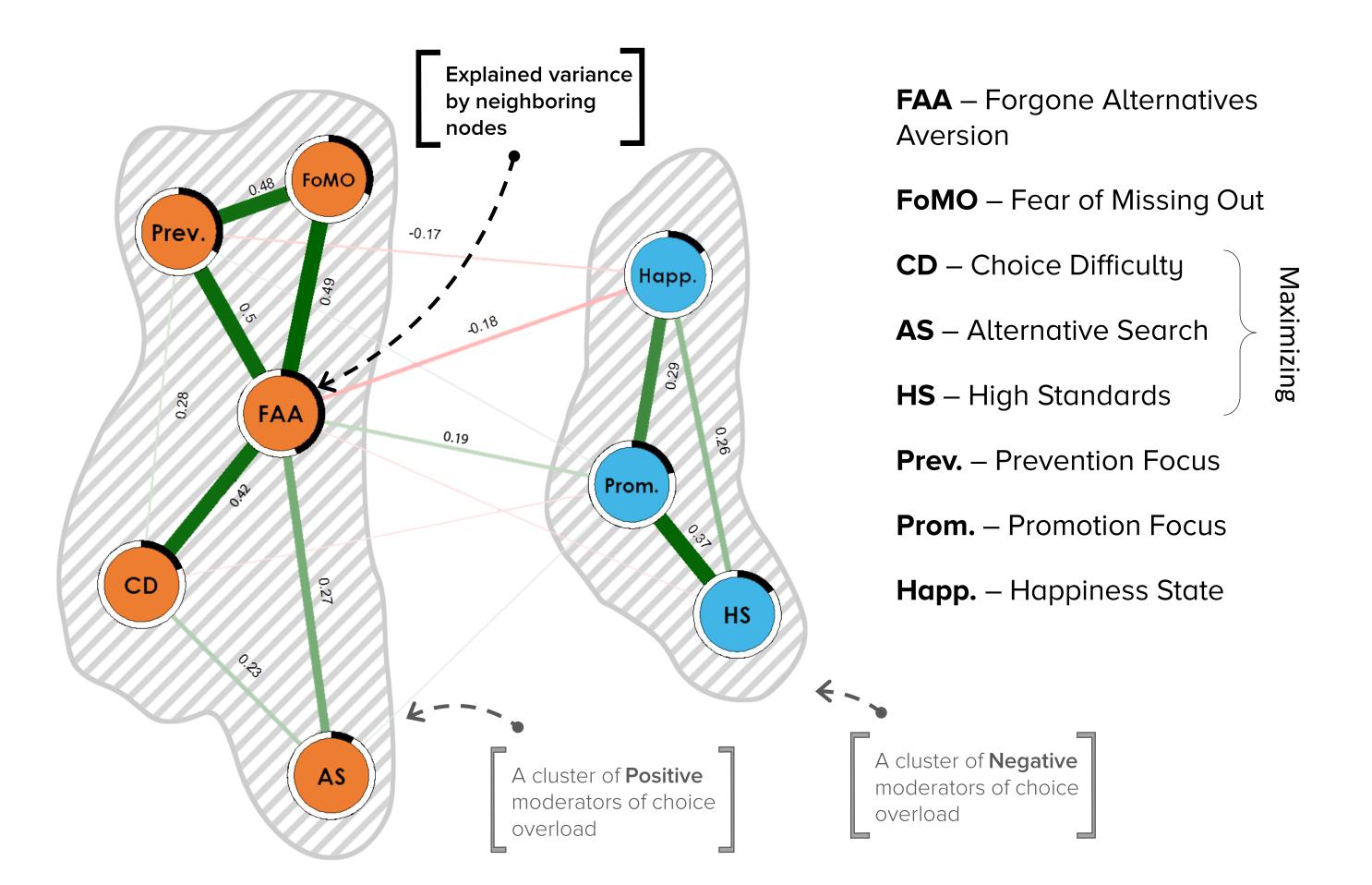
# **Experiment** (2)

- Background: we developed FAA as a more suitable trait for CO
- H1 FAA is a positive moderator of CO
- H2 people with high levels of FAA, who also care about the choice, will show actual CO effect.
- O Method:
  - N = 233 mTurk workers.
  - Hypothetical bedroom design choice scenario.
  - IV: Small set 8 designs, Large set 40 designs
  - DV: Satisfaction
  - Mediators: Regret and Choice Difficulty
  - Moderators: FAA, FoMO, Maximizing, Regulatory Focus, Happiness (current state)

# Johnson-Neyman ("floodlight") Analysis Controlling for: Promotion Focus Maximizing Happiness Difficulty choosing Regret Filtering only those who are interested in home design ( > "moderately") FAA (1-5)

### Partial Correlation Network Model

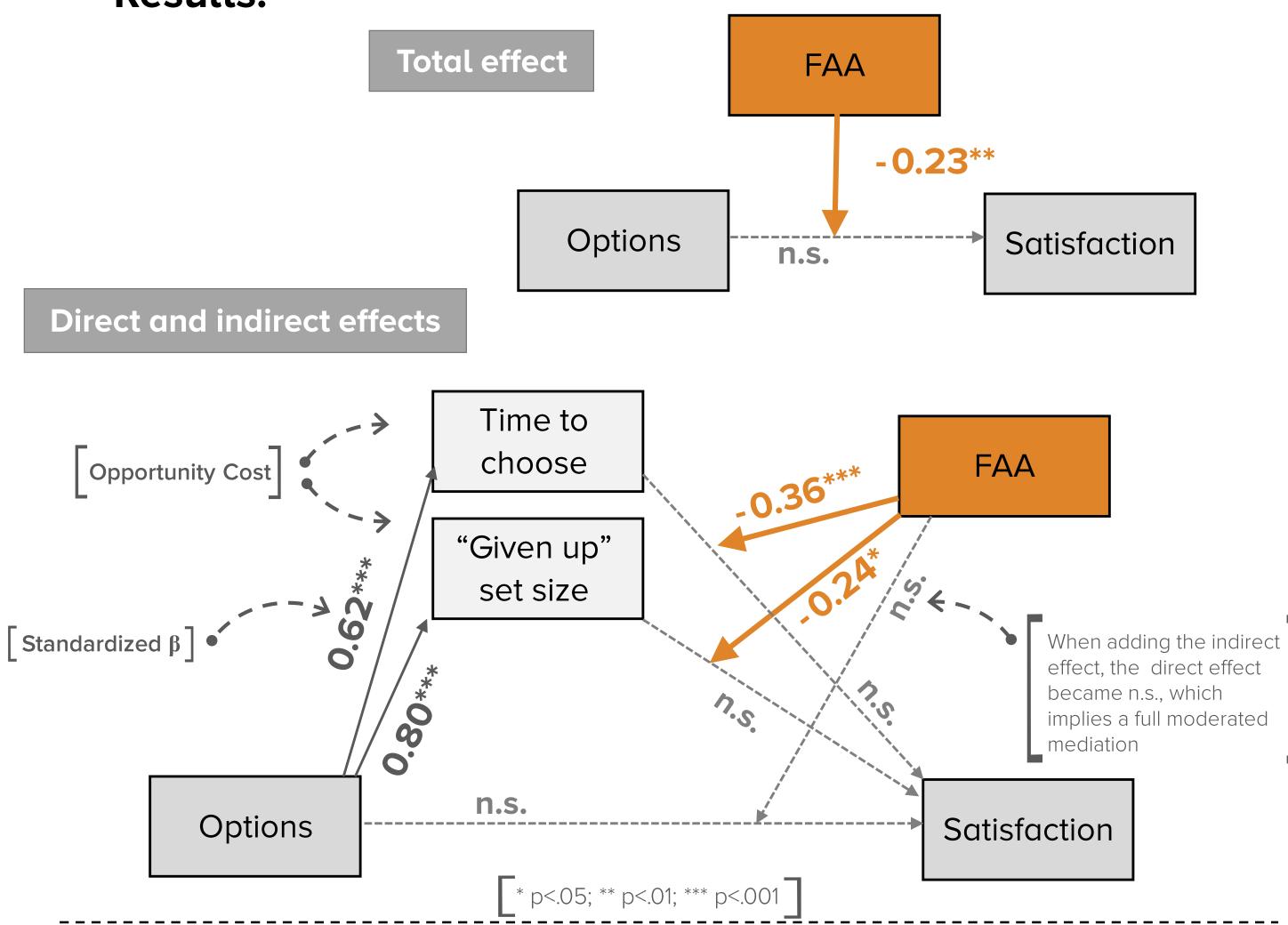
(of all known and suspected trait / state moderators of Choice Overload)



### Experiment (3)

- **Background:** we wanted to measure Opportunity Cost, and test it as a mediator for the CO effect in people with high levels of FAA.
- Method:
  - N = 269 mTurk workers.
  - Hypothetical ice cream choice scenario.
  - IV: Small set 6 flavors, Large set 90 flavors
  - DV: Satisfaction
  - Mediators:
    - "Given up" set size after each participant chose a flavor, we asked him/her "if you could choose not one but as many flavors as you want, which additional ones would you have chosen?". This way we find out how many flavors each one is actually giving up when choosing one, which serves as a proxy for the Opportunity Cost.
  - <u>Time to choose</u> we measured the actual time it took each participant to choose as a secondary proxy for the Opportunity Cost (if one is giving up a lot of good options, we could expect a longer deliberation time before choosing)
  - Moderators: FAA

#### Results:



### Summary

- A new personality trait (FAA) was developed, which seems pivotal to the other suggested traits that moderate CO.
- FAA could serve as a possible explanation to the mixed results in the CO literature.
- To the best of our knowledge, this is the first study to:
  - establish a personality trait as a moderator to CO (in terms of reduced satisfaction).
  - establish Opportunity Cost as a mediator to CO.

### References

[1] Scheibehenne et al. Can there ever be too many options? A meta-analytic review of choice overload. JCR 2010

[2] Schwartz et al. Maximizing versus satisficing: happiness is a matter of choice. JPSP 2002

[3] Polman. Effects of self—other decision making on regulatory focus and choice overload. JPSP 2012

[4] Przybylski et al. Motivational, emotional, and behavioral correlates of fear of missing out. Computers in Human Behavior 2013.

[5] Nenkov et al. A short form of the Maximization Scale: Factor structure, reliability and validity studies. 2008

[5] Nerikov et al. A short form of the maximization scale. Factor structure, reliability and validity studies. 2008

[6] Lockwood et al. Motivation by positive or negative role models: regulatory focus determines who will best inspire us. JPSP 2002.