

Rethinking Health Behavior Change with Behavioral Economics

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Agenda

- Principles of Behavioral Economics
- Extrinsic Incentives vs Intrinsic Motivation
- Identity Economics and Social Networks
- Choice Architects and Libertarian Paternalism

Learning Objectives

- Identify the main principles of behavioral economics
- Contrast and compare extrinsic incentives and intrinsic motivation
- Describe how identity economics and social networks affect behavior
- Discuss the meaning and importance of choice architecture
- Describe how libertarian paternalism applies knowledge of human irrationality to marketing and interventions

Behavioral Economics

- Behavioral Economics is a branch of microeconomics concerned with motivational factors that underlie human behavior.
- Classical economics believes that people are rational actors capable of making optimal choices.
- Behavioral economics recognizes that people act irrationally at times and frequently make less than optimal choices.

PRINCIPLES OF BEHAVIORAL ECONOMICS

1. Attribution bias

Tendency to imbue attributes to a person or thing based on its initial perceived value.

2. Diagnosis Bias

Denial of all evidence that that contradicts our initial perception of a person or thing.

3. Commitment Bias

Tendency to commit to a position or belief once resources have been invested. “good money after bad”

4. Loss aversion

Tendency to go to great lengths to avoid negative outcomes

5. Endowment Effects

Tendency to demand much more to give up something than they would to acquire it.

6. Anchoring Effects

Initial impressions limit the consideration of other choices.

7. Framing Effects

Defining a problem from a biased perspective that limits the choices on which decisions are made

Intrinsic Motivation

- Motivation that comes from the task itself or the sense of satisfaction from completing or working on the task.
- Purpose, Autonomy, Mastery
- “When love and skill work together, expect a masterpiece”-John Ruskin

Extrinsic Incentives

- Introduced by Frederick Taylor. (1911). "*The Principles of Scientific Management*". (Grant, 2012)
- Designed to motivate behavior by providing a financial or other reward unrelated to the outcome.
- Works well for assembly line, 'piece work' activities.
- Not well suited to long term behavioral change.

Identity Economics

- Self Image-Altruism, volunteerism, criminality
- Group Identity-Homophily vs Exclusion
- Social Categories, Norms, Ideals
 - Promoting an ideal as the norm
 - Marlboro cigarettes – ideal cowboy identity
 - Waianae diet – healthy diet of traditional Hawai'ians
- Reinforce habits, attitudes, beliefs

Applied Identity Economics

- Social Network Analysis
 - Relationships rather than attributes
 - Six degrees of Kevin Bacon
 - Internet and Social Media
 - Diffusion of Innovation/Memes/Contagion
 - Centrality/Proximity/Connectivity
 - Complexity/Segmentation/Isolates

Applied Identity Economics

- Social network analysis (continued)
 - Core/Periphery
 - Social context and resilience
 - Network analytics provides a quantitative framework for studying the importance of social context on human behavior.

Applied Behavioral Economics

- Libertarian Paternalism
 - Applying knowledge of human irrationality to marketing and interventions.
 - Providing choice with structure
 - Can be good or bad

Applied Behavioral Economics

- Choice Architects
 - Default choices
 - Structured vs random choice
 - Incorporating irrational behavior
 - Smoking cessation program in Philippines. (loss aversion)
 - Setting default choices for health plan selection
 - Placing fruits and vegetables in easy reach and deserts out of the way on cafeteria lines.

Conclusion

- People are irrational, plan for it.
- Be careful when using rewards to improve participation. It may provide short term results at the expense of long term outcomes.
- “One size does not fit all.” Everyone is different and will respond differently to interventions for different reasons. Understanding and acting on the ‘why’, results in better programs and policies.
- Choice architectures exist, whether planned or not. Architect the choices to improve outcomes. It can even be a ‘no cost’ improvement.

Further Reading

- Behavioral Economics
 - Ariely D, (2009). Predictably Irrational.
 - Levitt S, Dubner S. (2005). Freakonomics.
 - Brafman O, Brafman R. (2008). Sway.
- Intrinsic Motivation/Extrinsic Incentives
 - Pink D. (2011). Drive.
 - Grant R. (2012). Strings Attached.
 - Kreps D. “Intrinsic Motivation and Extrinsic Incentives”. *Am Econ Rev.*, Vol. 87, No. 2, Papers and Proceedings of the Hundred and Fourth Annual Meeting of the American Economic Association (May, 1997), pp. 359-364.
- Identity Economics/Social Network Analysis
 - Akerlof G, Kranton R. (2010). Identity Economics.
 - Valente T. (2010). Social Networks and Health.
- Choice Architectures and Libertarian Paternalism
 - Thaler R, Sunstein C. (2008). Nudge.
 - Thaler R, Sunstein C. “Libertarian Paternalism”. *Am Econ Rev.*, Vol. 93, No. 2, Papers and Proceedings of the One Hundred Fifteenth Annual Meeting of the American Economic Association, Washington, DC, January 3-5, 2003 (May, 2003), pp. 175-179.

EVALUATION

(Please take a few minutes to
participate)

1. The objectives of the lecture were
clearly stated

a. Strongly Disagree

b. Disagree

c. Neutral

d. Agree

e. Strongly Agree

2. The instructor fulfilled the objectives of the lecture.

- a. Strongly Disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly Agree

3. The instructor demonstrated knowledge of lecture content.

a. Strongly Disagree

b. Disagree

c. Neutral

d. Agree

e. Strongly Agree

4. The instructor communicated effectively.

- a. Strongly Disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly Agree

5. Global appraisal: Considering everything how would you rate this lecture?

- a. Poor
- b. Fair
- c. Average
- d. Good
- e. Excellent

6. About you: What is your affiliation?

- a. UH – JABSOM
- b. UH Manoa
- c. UHH – College of Pharmacy
- d. Community
- e. Other

7. What is your current status?

- a. Master's level student
- b. Doctoral student
- c. Post-doctoral
- d. Faculty
- e. Other

8. Any suggestions for future lectures?

Please type in the text box and we will gather the information from there

MAHALO FOR YOUR PARTICIPATION

Slides and Recordings will be Posted

- Center for Native and Pacific Health Disparities Research

<http://www3.jabsom.hawaii.edu/native/>