**Ido Erev**

**Rare events: The example of medical insurance and safe medical behavior**

Basic studies of choice behavior reveal large differences between decisions that are made based on a description of the incentive structure, and decisions that are made based on past experience. People tend to overweight rare events when they make a single choice from description, and experience leads to the opposite bias. Following experience people behave as if they believe that "it wont happen to me." The current class reviews this experience-description gap, and its implication to insurance and the enforcement of safe medical behavior.

**Recommended reading/ Background material**

Hertwig, R., & Erev, I. (2009). The description–experience gap in risky choice.*Trends in cognitive sciences*, *13*(12), 517-523.

<http://library.mpib-berlin.mpg.de/ft/rh/RH_Description_2009.pdf>

Erev, I., Rodensky, D., Levi, M. A., Englard-Hershler, M., Admi, H., & Donchin, Y. (2010). The value of ‘gentle reminder’on safe medical behaviour. *Quality and Safety in Health Care*, qshc-2009.

<http://emotion.technion.ac.il/Home/Users/erev/Erev_Rodensky_et_al_2010.pdf>

**On the decisions to explore by patients and doctors**

The decision whether to explore new alternatives or to choose from familiar ones is implicit in many of activities. How is this decision made? When will deviation from optimal exploration be observed? The current class reviews research that examines exploration decisions, and discuss some of the implications of this research to medical practices, and mechanism design. The result reveal the co-existence of insufficient and too much exploration. Insufficient exploration is likely when the common outcome from exploration effort is disappointing, the opposite bias is likely when most exploration effort are reinforcing.

**Recommended reading/ Background material**

Teodorescu, K., & Erev, I. (2014). On the Decision to Explore New Alternatives: The Coexistence of Under‐and Over‐exploration. *Journal of Behavioral Decision Making*, *27*(2), 109-123.

(attached)

Erev, I., & Roth, A. E. (2014). Maximization, learning, and economic behavior. *Proceedings of the National Academy of Sciences*, *111*(Supplement 3), 10818-10825.

<http://iew.technion.ac.il/lad/files/Erev-Roth-Feb14-2014.pdf>