Written Exam at the Department of Economics winter 2016-17

Science of Behavior Change

Final Exam

December 16, 2016

(2-hour closed book exam)

This exam question consists of 3 pages in total

NB: If you fall ill during the actual examination at Peter Bangsvej, you must contact an invigilator in order to be registered as having fallen ill. Then you submit a blank exam paper and leave the examination. When you arrive home, you must contact your GP and submit a medical report to the Faculty of Social Sciences no later than seven (7) days from the date of the exam.

Question 1:

- a) Please define "dynamic inconsistency"?
- b) What gives rise to this pattern of behavior? [Hint: discount function]
- c) What empirical evidence is there to support the notion of dynamically inconsistent behavior?
- d) What types of interventions might help reduce dynamically inconsistent behavior?

Question 2:

During the second part of the course (lecture 15) we have seen and discussed the paper "*What Motivates Effort? Evidence and Expert Forecasts*" written by Stefano DellaVigna and Devin Pope. The following figure shows the main result of this paper.



- a) Please summarize the experiment.
- b) Explain the three main results summarized by the figure above.
- c) Do you remember if the beliefs of academic experts about the effectiveness of the treatments were correct?

Question 3:

Design an intervention to increase medication adherence (patients should take their medications as prescribed, e.g. twice daily) of patients with chronic conditions.

Remember to use the scheme we have used in class:

- a) Brief description of context
- b) Behavior change desired
- c) Decision mapping (bottlenecks)
- d) Relevant phenomena, principles and concepts you use
- e) Description of the intervention
- f) Design, plan for data analysis and predictions