Specialization course in Personnel Economics – Wharton PhD course

MGMT 918 & 919

Note: This is a two-part course. You can take the first half (MGMT918) or can take both parts (MGMT 918 & 919)

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The canonical model in economics views an agent as a fully rational, atomistic individual making optimal choices under scarcity. This approach has been very powerful theoretically and empirically to explain and to predict behavior in the workplace. This model has also been enriched to accommodate other phenomena arguably affecting behavior in the workplace like the social context (e.g. peer effects, altruism, or social comparison), non-standard time preferences, loss aversion, and cognitive costs. Incorporating these ideas into the standard model can be accomplished in various ways but the real stress test for these theories is whether they predict behavior more generally (i.e. we don't just use theory to explain one choice but choices more generally) and to generate empirical predictions that can be tested using experiments.

In this specialization-course we start-off with a tour de force of the fundamental principal-agent model and the various behavioral extensions. The core of the course is, however, not theoretical but a practical course on how to design field experiments to test these ideas.

Field experiments demand a certain amount of logistics and project management in addition to what is required from, say, laboratory experiments. We will cover ethics, power calculations, the selection and measurement of outcome variables, and the design and implementation of surveys to get additional covariates. We will then also discuss the use of technological innovations that permit researchers remote data collection and new ways of communicating directly with experimental subjects in the field and what they imply for the experimental design. This will be illustrated by published and ongoing field experiments. The settings here, however, will not only come from the workplace but will also expose the students to the new and expanding field of incentives for health choices.

At least in the US more than half of companies now offer financial incentives to employees for health related choices. These can span the whole spectrum from subsidized gym sessions, insurance premium deductions when people walk more, incentives for medication adherence, all the way up to not hiring or even firing smokers. These programs go alongside an urgent public policy need to use structured programs and incentives to induce healthier choices in a population at risk of health complications stemming from poor management of chronic diseases (e.g. diabetes, high blood pressure, high cholesterol, peripheral artery disease, gingivitis). Despite strong incentives for the individual to manage these diseases with cheap and simple daily routines (e.g. walk for 20 minutes, take a pill, brush teeth), as will be shown, people fail to adhere to them even in light of full information and low costs of compliance. The rational for policy intervention is then twofold, first, due to the externality the behavior imposes on others (e.g. expensive emergency room visits due to lapses in medication adherence) and, second, because of intertemporal inconsistencies when people express regret about their inability to comply with prescribed behavior.

An important element of the course will be the group work during the workshop that will challenge students to formulate a theoretical prediction and design a field experiment to test it either in the domain of workplace incentives or for health choices. The group will then presented their project design to the other participants at the workshop.

Reading list

The papers is **bold** ought to be read prior to class. I would urge you to write a one or two page summary of the paper for yourself. Research has shown that writing things down increases retention of information and the ability to recall it later. Focus on reading and understanding the paper rather than on criticizing it. We will do the latter in class.

When you do the summary list aim for the following three aspects of the paper.

- i) what is the question and purpose of the paper;
- ii) why, from the perspective of the authors, is it a contribution to the literature.
- iii) What is the empirical approach of the paper? What data do they have, what was the change or treatment and what were the model specifications to test the key hypotheses of the paper.

In addition to these papers we will be doing some worksheets focused around principal agent models in the first couple of sessions. I will hand out those sheets in class.

As you will notice not all the papers are field experiments as I want you to know some techniques and applications using quasi-experimental observational data and laboratory data as well.

I will also be covering a number of papers using financial incentives for health choices

Some back ground papers

Duflo, E. R. Glennerster, M. Kremer "Using Randomiaztion in Development Economics Research: A toolkit. CEPR Working paper 6059 <u>http://economics.mit.edu/files/806</u>

List, John A. "Why Economists Should Conduct Field Experiments and 14 Tips for Pulling One Off," Journal of Economic Perspectives, (2011), 25(3): pp. 3-15. https://www.aeaweb.org/articles.php?doi=10.1257/jep.25.3.3

Al-Ubaydli, Omar, and John A. List, "On the generalizability of experimental results in economics", 2012 NBER working paper. <u>http://www.nber.org/papers/w17957</u>

Papers to read. Those in **bold** should be read prior to class

Workplace and Incentives

Nagin, Daniel, James B. Rebitzer, Seth Sanders, and Lowell J. Taylor. 2002. "<u>Monitoring, Motivation,</u> <u>and Management: The Determinants of Opportunistic Behavior in a Field Experiment</u>." American Economic Review, 92(4): 850–73. Edward P. *Lazear*. Performance Pay and Productivity. The American Economic Review, Vol. 90, No. 5 (Dec., *2000*), pp. 1346-1361. <u>https://www.aeaweb.org/articles.php?doi=10.1257/aer.90.5.1346</u>

Ichniowski, Casey & Shaw, Kathryn & Prennushi, Giovanna, 1997. "The Effects of Human Resource Management Practices on Productivity: A Study of Steel Finishing Lines," American Economic Review, American Economic Association, vol. 87(3), pages 291-313, June.

Krueger, A., and A. Mas, "Strikes, Scabs and Tread Separations: Labor Strife and the Production of Defective Bridgestone/Firestone Tires," *Journal of Political Economy*, 112(2), April 2004, 253-289.

Gneezy, Uri and John A. List Putting Behavioral Economics to Work: Testing for Gift Exchange in Labor Markets Using Field Experiments Econometrica, (2006), 74(5), pp. 1365-1384. <u>http://management.ucsd.edu/faculty/directory/gneezy/docs/behavioral-economics.pdf</u>

Fehr, Ernst, Oliver Hart, and Christian Zehnder. 2011. "Contracts as Reference Points—Experimental Evidence." *American Economic Review*, 101(2): 493-525. https://www.aeaweb.org/articles.php?doi=10.1257/aer.101.2.493

Abeler, Johannes, Armin Falk, Lorenz Goette, and David Huffman. 2011. "Reference Points and Effort Provision." *American Economic Review*, 101(2): 470-92. https://www.aeaweb.org/articles.php?doi=10.1257/aer.101.2.470

Health Choices

G Lowenstein, David A. Asch, JY Friedman, LA Melichar, Kevin Volpp (2012), Can Behavioural Economics Make us Healthier?, *British Medical Journal*, 344: e3482.

SE Kimmel, AB Troxel, G Lowenstein, C Bresinger, J Jaskowiak, J Doshi, M Laskin, <u>Kevin Volpp</u> (2012), **Randomized Trial of Lottery-Based Incentives to Improve Warfarin Adherence.**, *American Heart Journal*, 164(2): 268-74.

LK John, G Loewenstein, AB Troxel, L Norton, JE Fassbender, <u>Kevin Volpp</u> (2011), <u>Financial Incentives for</u> <u>Extended Weight Loss: A Randomized, Controlled Trial</u>, *Journal of General Internal Medicine*, Note: Epub ahead of print.

Niteesh K. Choudhry, M.D., Ph.D., Jerry Avorn, M.D., Robert J. Glynn, Sc.D., Ph.D., Elliott M. Antman, M.D., Sebastian Schneeweiss, M.D., Sc.D., Michele Toscano, M.S., Lonny Reisman, M.D., Joaquim Fernandes, M.S., Claire Spettell, Ph.D., Joy L. Lee, M.S., Raisa Levin, M.S., Troyen Brennan, M.D., J.D., M.P.H., and William H. Shrank, M.D., M.S.H.S. for the Post-Myocardial Infarction **Full Coverage for Preventive Medications after Myocardial Infarction** N Engl J Med 2011; 365:2088-2097

Kevin Volpp, AB Troxel, Mark V. Pauly, Henry Glick, Andrea Puig, David A. Asch, R Galvin, J Zhu, F Wan, J DeGuzman, E Corbett, J Weiner, J Audrain-McGovern (2009), A Randomized Controlled Trial of Financial Incentives for Smoking Cessation, The New England Journal of Medicine, 360:699-709.