Title of Project

The Effect of Language on Economic Behavior: Surveys, Experiments, and Econometric Analysis

Professor

Keith Chen, Associate Professor of Economics, Yale School of Management

Brief description of research project, including findings

The project is to study the relationship between linguistic structure and economic decision making, specifically in the area of intertemporal choice. It involves helping design and collect experimental data that investigates questions using randomized linguistic primes. In particular, the project focuses on using people’s search behavior via Google to explain their perceptions of time and hopefully to further decipher the myth behind their economic behavior, reflected on various economic indices, such as the savings rate. Given the explaining power of such data from people’s search behavior, we are yet to investigate the correlation and prediction power of such data on domestic and international financial indices such as the S&P 500 index and ETF prices, through a natural expansion of the current data set for the United States.

Activities student was responsible for

I was responsible for collecting data, cleaning and synthesizing the collected data, and applying models to explain the data. Several Java and MATLAB programs were written to automate the data collection process. The programs were robust for more than seventy languages with the integration of the Google Translate API. MATLAB was employed to synthesizing data into desired .csv formatted files. After learning various intertemporal time preference models through literature review, I applied these models to the data collected to test our hypotheses on people’s perception on time varying across their native languages.

What the student learned

Besides all the technicalities of programming and mathematical models, I gained a true sense of how to unveil the economic underpinnings of human behavior though empirical data. I appreciated most the meetings with Professor Chen, where we discussed and walked through ideas together. It was an enlightening experience seeing and learning from how economists like Professor Chen approached problems encountered in the study. It is Professor Chen’s economic intuition and ability to constantly adjusting the direction of this project to surpass technical difficulties that makes this research experience engaging and fun – this is also the most valuable lesson I learned about serious economics research.

Opinion of SRO experience

To prospective students: you may be able to gain the technicalities of economics through reading economics textbooks, however, the essence of the SRO program, in my opinion, lies in
the interactions with your advisor – understanding the theoretical framework is important but far from enough. I highly recommend this program to those of you who want to get a glimpse of what economic research really is like and how economists approach problems.

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