

# PS11

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## 1 Introduction

Introduction Future orientation is a dimension of interpersonal, and intercultural psychology with strong ties to health and economics metrics. Predict growth and savings rates on a macro level and economic / health behaviors on a personal scale

Health: Research has been shown that the time orientation of people are related to health behaviors. People who are more future orientated are shown to be more likely to engage in health positive behaviors. Such as moderation of ones diet, use of mind altering substances, seat belt use, etc. While people who are more present orientated are shown to be more likely to engage in health negative behaviors such as excessive consumption of alcohol, drugs and risky sex. (Henson et al 2006), (Daugherty, Brase 2010).

Personal Savings: Among other factors such as financial literacy, financial risk preference and future orientation has an effect on personal savings. The more future orientated people are the more likely they are to save. While the reverse is true for present orientation. Orientation is measured from a questionnaire filled out by participants that scores participants on a range of financial topics. (Jacobs-Lawson Hershey, 2005).

Country Savings Growth: Time orientation also has an effect on savings even at a macro level. (Hofstede Bond, 1988). Using the Chinese as a case study researchers found Asian cultural norms lean towards the avoidance of uncertainty. This leads to an increase in personal savings as to hedge against the future. (Hofstede et al, 2010). Read, cited by Hofstede, found that LTO relates to MPS. (1993).

The use of twitter for social science research has grown in recent years. Most similar in spirit is the work on using sentiment analysis to predict happiness and HIV rates. Research has already been done on the Geography of happiness using Twitter data. Mitchell connected Tweets with the specific vocabulary to determine the "Happiness Level" of each state. (Mitchell et al, 2013). Twitter

data has also been used in the analysis of public health. With the popularity of social media and the increased propensity in the sharing of personal information social media opens up a new avenue for data gathering. Social science has always suffered from the barriers of data gathering and small sample sizes. With the ready access to web scraping researchers are able to gather more information than ever. Ireland used Twitter data to predict the prevalence of HIV in cities. This new low cost real time approach to test and analyze new and old theories alike. (Ireland et al, 2015).

As well as crime (Gerber, 2014), elections (Tumasjan, 2011) ,and of course the stock market (Bollen et al, 2011). Other have created future orientation indexes from google search terms (Preis et al, 2012).

No one has yet pursued any research on seeing if an index of future orientation can be constructed from geolocated tweets And if that index has any ability to predict factors related to future orientation on a state level. In the vein of Chen's work on how language itself changes inter temporal choice, finding that "languages that grammatically associate the future and the present foster future-oriented behavior" (2013), we hypothesize that areas with relatively future oriented tweets will have higher savings rates.

A shortcoming of previous metrics of future orientation are an inability to capture changes in culture, primarily by the assumption of relative cultural in-variance (Tang Kobeos, 2008). Benefits to this method are that opens the avenue to the possibility of creating a dynamic understanding of cultural change through language, and an ability to measure that relationship with macroeconomic indicators.

Literature Review

Methodology

Results

Conclusion

Discussion

Future study:

Longer period, see how this index, relates to macroeconomic shocks. Compare across other English speaking countries.