



How does language affect decision-making in social interactions and decision biases?



King King Li ¹

College of Business, Department of Economics and Finance, and CityUHK Experimental Economics Laboratory, City University of Hong Kong, Hong Kong

ARTICLE INFO

Article history:

Received 10 September 2014

Received in revised form 13 February 2017

Accepted 7 March 2017

Available online 10 March 2017

Keywords:

Language

Culture

Identity

Bilingual

Experiments

ABSTRACT

This paper investigates how communication in a particular language affects decision-making in social interactions and risk preferences. We test two competing hypotheses: the cognitive accessibility hypothesis, and the expectation-based hypothesis. The cognitive accessibility hypothesis argues that communication in a particular language will activate the underlying cultural frame and affect behavior. The expectation-based hypothesis argues that different languages will induce different expectations regarding the choices of others and affect behavior. We test these two hypotheses using an extensive range of behaviors in a set of incentivized experiments with bilingual subjects in Chinese and English. We find that the subjects are more prosocial in strategic interaction games (trust games) when the experiments are conducted in Chinese. However, no treatment effects are observed in the individual choice games on social preference. The results are more in line with the expectation-based hypothesis.

© 2017 Elsevier B.V. All rights reserved.

1. Introduction

Language is an essential part of any communication and decision-making process. In our daily life, we rely on language to efficiently communicate with people. According to Ethnologue (a database that tracks the language situation of the world), 6909 languages were spoken in the world in 2009.² Given the immense number of languages, an interesting question is how language may affect decision-making.

An increasing number of people speak at least two languages. According to Crystal (1997), two-thirds of the world's children grow up in a bilingual environment, and 235 million people are bilingual in English and one or more other languages. Understanding the effect of language is important for business and management, e.g., designing teams, product design, and formulating advertising campaigns. Studies indicate that bilingual people will exhibit different choices depending on the language that is spoken during communication, for example, in consumers' product choices (e.g., Briley, Morris, & Simonson, 2005). Language can affect important decisions at the macro level, such as saving behaviors (Chen, 2013).

¹ I thank Werner Güth, Soo Hong Chew, James Konow, John List, Li-Jun Ji, Toru Suzuki, Tao Zhu, Rami Zwick, Juan Juan Meng, Joseph Tao-yi Wang, Songfa Zhong, Fuhai Hong, Yan Chen, Chunlei Yang, participants at the Max Planck Institute of Economics research seminar 2009, Foundations and Applications of Utility, Risk and Decision Theory 2010, Xiamen University International Workshop on Experimental Economics and Finance 2012, China Meeting of the Econometric Society 2013, and especially Robert Wyer for useful comments and discussions. I gratefully acknowledge the financial support from the Max Planck Society.

E-mail address: likingking@gmail.com

² For details, see Lewis, Simons, and Fennig (2009).

The relationship between decision-making and language remains largely an unexplored field, especially regarding empirical evidence. This study contributes to the literature by experimentally testing two competing hypotheses—the cognitive accessibility hypothesis vs. the expectation-based hypothesis—regarding the effect of language on decision-making over an extensive range of behaviors in social preference, and culture specific decision bias in risky choice. To the best of my knowledge, this paper is one of the first to investigate the effect of language on social preference (individual choice vs. strategic interactions) and decision biases in risky choice. The experiment was conducted using incentivized experiments instead of hypothetical choices. We conducted 10 games to measure the language effect on social preference and decision bias in risk-taking behavior with subjects in Hong Kong who were bilingual in Chinese and English. There were two treatments: The *Chinese treatment*, where the instructions were written in Chinese, and the *English treatment*, where the instructions were written in English.

We now introduce the “cognitive accessibility” hypothesis. Research in social psychology and marketing suggests that languages are often associated with cultural frames and social norms (e.g., Bond, 1983; Briley et al., 2005; Luna, Ringberg, & Peracchio, 2008; Ross, Xun, & Wilson, 2002; Verkuyten & Pouliasi, 2002), and communicating in a particular language may increase the cognitive accessibility of norms/frames that are associated with this language. There is no existing study that tests the cognitive accessibility hypothesis using an incentivized and controlled laboratory experiment. Further, these studies have not determined whether the hypothesis can be applied to an extensive range of behaviors, for example, individual choice vs. strategic interactions.

Existing research in social psychology suggests that Chinese culture is collectivistically oriented (Hong, Chiu, & Kung, 1997; Miller, 1984; Morris & Peng, 1994), whereas Western culture is individualistically oriented. According to Hong et al. (1997), individuals in collectivistic cultures are primarily identified as members of groups, whereas individuals in individualistic cultures are primarily identified as separate units. There is ample evidence reported in the literature that collectivism leads to prosocial behavior. For example, Moorman and Blakely (1995) collected data to investigate the relationship between individualism–collectivism and organizational citizenship behaviors. They found that individuals who hold collectivistic values are more likely to perform citizenship behaviors, such as helping people without the expectation of a reward for the assistance. In another study, Hui (1988) found that collectivists are more likely to share the burdens and troubles of people.

The intuition of the hypothesis is as follows. When Chinese is used, the collectivistic frame is more likely to be activated because the Chinese language makes the Chinese identity salient, which promotes prosocial behavior. If the hypothesis is valid, we will observe more trusting, trustworthy, and altruistic behaviors from the Chinese treatment in *both* individual choice and strategic interaction games on social preference.³

The cognitive accessibility hypothesis is as follows:

Subjects in the Chinese treatment are more prosocial in both individual choice games and strategic interaction games on social preference.

A competing hypothesis (we refer to this hypothesis as the expectation-based hypothesis) is that people will be more prosocial in strategic interaction games when a familiar language is used.⁴ This hypothesis is based on the idea that individuals in strategic interaction games need to form expectations about others' behaviors and that their expectations are affected by the language used. In this case, language may serve as a proxy for the uncertainty in the choices of others, and subjects may perceive that a context in which the familiar language is used produces less uncertainty. There is ample evidence that individuals are generally ambiguity averse, e.g., the Ellsberg paradox (Ellsberg, 1961). Hence, it seems plausible that subjects facing an unfamiliar language are less likely to trust other players because they are less certain (if the less familiar language induces this expectation, as we subsequently explain) whether the other player is trustworthy.

Different languages may induce different expectations about the choices of others, and the more familiar language serves as a better “expectation device” than a relatively less familiar foreign language. In our experiment, Chinese is the more familiar language for the subjects. According to the hypothesis, subjects in the Chinese treatment may be more certain about what to expect and how to behave. On the other hand, when English is used, the subjects are presented with a less familiar language. As a result, they may be less certain about what to expect and how to behave (i.e., larger uncertainty). We hypothesize that subjects will expect others to be more trusting and more trustworthy when Chinese is used.

Based on expectation-based hypothesis, we expect to observe treatment differences in strategic interaction games, but not in individual choice games. The reason is that, in the latter games, subjects do not need to form expectations about the behaviors of other players, whereas this consideration exists in strategic interaction games. Note that the main difference

³ Our investigation is related to the theory of identity on individuals' behavior by Akerlof and Kranton (2000). In our context, one may consider that individuals have multiple identities/multiple selves (Fudenberg & Levine, 2006), and the identity that is activated will be dependent on the language that is selected.

⁴ Some studies explore how communication affects decisions in games. For example, Dawes, McTavish, and Shaklee (1977) show that communication between players can enhance cooperation. Xiao and Houser (2005) find that constraints on emotion expression can increase the use of costly punishment. In another study, Xiao and Houser (2009) demonstrate that players make fewer selfish decisions when receivers can react to offers with ex-post-written messages, which suggests that the preference for avoiding written expression of disapproval promotes fair decision-making. We can interpret experimental instructions as to how the experimenter communicates with the participants; thus, our study is connected to this literature. We thank one referee for highlighting this perspective.

Download English Version:

<https://daneshyari.com/en/article/5034760>

Download Persian Version:

<https://daneshyari.com/article/5034760>

[Daneshyari.com](https://daneshyari.com)