

# Worldviews and Tough Love

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## Abstract

This paper presents empirical evidence concerning worldviews and intergenerational altruism from unique U.S. and Japanese survey data. These data sets have been collected by Osaka University, and contain questions concerning worldviews and religions, hypothetical questions about parental behavior, and questions about socioeconomic variables. Our empirical evidence indicates that people who are confident about issues related to worldviews tend to show tough love attitudes toward their children. Our evidence also suggests that worldviews and religions affect tough love and spoiling love attitudes.

Key Words: Intergenerational Altruism, Tough Love, Worldviews, Religion

JEL Codes: D03, D64

## 1. Introduction

This paper presents empirical evidence concerning worldviews, religion, and intergenerational altruism from unique U.S. and Japanese survey data collected by the Osaka University Center of Excellence (COE) program. These data contain questions concerning worldviews and religions and hypothetical questions about parental behavior as well as socioeconomic variables.

How different generations are connected is an important economic issue with implications for individual economic behavior like savings, investment in human and physical capital and bequests which in turn affect aggregate savings and growth. It also has nontrivial policy implications as in Barro (1974), who has found that there will be no net wealth effect of a change in government debt in the standard altruism model. Infinite horizon dynamic macro models are typically based on the standard altruism model proposed by Barro (1974) and Becker (1974) in which the current generation derives utility from its own consumption and the utility level attainable by its descendant.

Barro and Becker's standard altruism model does not predict parents' discipline

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behavior in situations in which we expect parents in our real lives to discipline their children. For example, a striking implication of the standard altruism model is that when the child becomes impatient, transfers from the parent to the child do not change when the child is borrowing constrained as Bhatt and Ogaki (2008, section III) showed. This implication of the model is not consistent with recent empirical evidence on pecuniary and non-pecuniary parental punishments (see Weinberg (2001), Hao, Hotz, and Jin (2008), and Bhatt (2008) for empirical evidence). For example, imagine that a child befriends a group of impatient children and suddenly becomes impatient because of their influence. As a result the child starts to spend more time playing with the new friends and less time studying. In worse cases, the child starts to smoke, drink, or consume illegal drugs (see Ida and Goto (2009) for empirical evidence that shows association of low discount factor and smoking). At least some parents are likely to respond by pecuniary punishments such as lowering allowances or non-pecuniary punishments such as grounding.

Bhatt and Ogaki modified the standard model to develop the tough love model of intergenerational altruism, so that it implies that the parent lowers transfers to the child when the child exogenously becomes impatient under a wide range of reasonable parameters. They modeled parental tough love by combining the two ideas that have been studied in the literature in various contexts. First, the child's discount factor is endogenously determined, so that low consumption at young age leads to a higher discount factor later in her life. This was based on the endogenous discount factor models of Uzawa (1968) except that the change in the discount factor is immediate in Uzawa's formulation whereas a spoiled child with high consumption progressively grows to become impatient in our formulation. Recent theoretical models that adopt the Uzawa-type formulation include Schmitt-Grohe and Uribe (2003) and Choi, Mark, and Sul (2008). Second, the parent evaluates the child's lifetime utility function with a constant discount factor that is higher than that of the child. Since the parent is the social planner in our simple model, this feature is related to recent models (see Caplin and Leahy (2004); Sleet and Yeltekin (2005), (2007); Phelan (2006), and Farhi and Werning (2007)) in which the discount factor of the social planner is higher than that of the agents.

Akabayashi's (2006) model is similar to the tough love model in the sense that the child has an endogenous discounting and the parent evaluates his life time utility with a discount factor that is different from the child's. The main difference is that it employs Becker and Mulligan's (1997) endogenous discounting model in which accumulating human capital makes the child more patient and there exists an asymmetric information between the parent and the child. In this model, it is possible that the parent abuses the child in the sense that the parent keeps on punishing the child for his bad performance even though the child is simply not talented enough to perform better. Just as in Bhatt and Ogaki's model, Akabayashi's model

predicts that the parent's discount factor that is used to evaluate the child's life time utility affects the parent's discipline behavior.

In a companion paper, Horioka, Kamesaka, Kubota, Ogaki, and Ohtake (2010), we sought to examine whether or not parents' discount factors affect their attitude toward their children as predicted by these models. In that paper, we used the Osaka University Global COE survey data for Japan and the United States, which continued the survey data we use in the present paper. The main question we asked in the companion paper was how parents' tendencies for tough love behavior depend on various measures of time discounting for parents' own lending and borrowing over different time horizons. We found evidence that is consistent with the tough love model. We also found that parents with debt aversion tend to show tough love. One empirical puzzle we found was that proportionately more U.S. parents show tough love to young children before the school age was higher than Japanese parents even after controlling for time discounting, debt aversion, and other economic and demographic factors. However, the variables relating to religions and worldviews were not included in our analyses in the companion paper.

One possible explanation for this puzzle is differences in religions and worldviews in the two countries. There are many Buddhists in Japan while there are many Christians in the United States. Buddhism emphasizes deliverance from suffering. This emphasis is consistent with a worldview that suffering does not have a positive meaning such as personal development. This is very different from the Christian worldview in which all knowing, almighty God allowed His only Son to suffer on the cross for the purpose of saving the world. Christians often conclude that their own suffering and other people's suffering were allowed by God for a purpose such as personal development. When a parent feels that it is better in the long run to discipline a child, he is often tempted not to do that because he does not want to see her suffer now. A person with the Christian worldview may find it easier to fight against such temptation than a person with the Buddhist worldview.

In the present paper, we seek to examine whether or not and how religions and worldviews of parents affect their attitude toward their children. We use the Osaka University COE survey data for Japan and the United States, which include two hypothetical questions concerning tough love behavior. In the companion paper, we used answers to both of these questions as dependent variables in our regressions. In this paper, we are using one of these questions for which we found more important international differences in the companion paper. The main question we ask is how parents' tendencies for tough love behavior depend on various measures of worldview beliefs, religious affiliations, and religiosity.

## **2. Empirical Results**

For the dependent variable of our Probit regression, we use the following question:

“Imagine that you have a 5-year old child that has a high fever and is in pain. The child's doctor tells you that both the fever and pain are harmless. He can give you a medicine that cures the sickness but slightly weakens the child's immune system when the child becomes 50 years old. What would you do?

- 1 Y I would **give** the medicine to the child if the sickness is known to last for **one day**.
- 2 Y I would **give** the medicine to the child if the sickness is known to last for **two days**.
- 3 Y I would **give** the medicine to the child if the sickness is known to last for **one week**.
- 4 Y I would **give** the medicine to the child if the sickness is known to last for **one month**.
- 5 Y I would **not give** the medicine to the child.

The independent variables are religious and worldview variables, patience proxy variables, and socioeconomic variables.

In the regressions for which the answer choice of 5 is taken as the tough love attitude, we find that a proxy variable for confidence in worldview beliefs is statistically significant. If a parent is confident, then the parent tends to show the tough love attitude. Another variable that is statistically significant is the dummy variable for people who are deeply religious in Buddhism. They tend to show the spoiling love attitude.

### 3. Concluding Remarks

Our empirical evidence indicates that people who are confident about issues related to worldviews tend to show tough love attitudes toward their children. Our evidence also suggests that people who are deeply religious in Buddhism tend to show spoiling love attitudes.