

Parenting with Style: Altruism and Paternalism in Intergenerational Preference Transmission

Fabrizio Zilibotti (University of Zurich)
based on work with Matthias Doepke (Northwestern Univ.)

XVI International Academic Conference on Economic and Social Development
National Research University Higher School of Economics (HSE)

Moscow, April 8, 2015

Cultural factors and economic development

- "Cultural factors": *individual and collective beliefs, social norms, and attributes of individuals' preferences that are influenced by their environment*
- Traditionally, cultural heterogeneity is exogenous: motivation for error terms in regressions country or group fixed effects, etc.
- Exogeneity is problematic if cultural factors are shaped by the economic and institutional environment
- Structural models and IV strategies

Beliefs vs. Preferences

- Two distinct approaches:

- ① acquired *beliefs*

religious beliefs, gender roles, individualism vs. collectivism, trust and trustworthiness, etc.

- ② acquired *preferences*

discount factor, risk aversion, labor supply elasticity, social preferences, etc.

Endogenous preferences

- Traditionally, preferences are viewed as *deep parameters* ("de gustibus disputandum non est")
- The recent literature on endogenous preferences studies the formation and evolution of preferences in connection with changes in the socio-economic environment
- Main vehicles of cultural transmission: family, peers (Saez-Marti and Sjögren 2008)

Preferences as human capital

- Preferences are key for individual success:
see recent literature on non-cognitive skills
- **Patience** and perseverance affect
education, labor market and marriage outcomes,
see Cunha and Heckman (2008), Cunha *et al.* (2010),
Heckman *et al.* (2006) and Segal (2013)
 - also: female pregnancy, smoking, crime, etc.
- **Risk aversion**: a key attribute of entrepreneurship
(e.g., Beauchamp *et al.*, 2012; Doepke and Zilibotti 2013)
- **Work ethic**: Protestant Ethic and Spirit of Capitalism (Weber)
(see also, Doepke and Zilibotti 2008, Mokyr 2009)

Family background matters

- Beyond nature vs. nurture...
- Non-cognitive skills are more malleable than cognitive ones
- Family environment and inputs are crucial for such skills:
 - see Cunha *et al.* (2010) Dohmen *et al.* (2007), Heckman *et al.* (2006), Knowles and Postlewaite (2005)
- Parenting style matters (e.g., Aunola *et al.* 2000, Chan and Koo 2010, Dornbusch *et al.* 1987, Hart *et al.* 1998, Spera 2005, Steinberg *et al.* 1991)

Motives for cultural transmission

- Why do parents transmit certain preferences or beliefs?
 - traditionalism
 - ethical principles (categorical imperative)
 - altruism (values&skills that lead to success)

Motives for cultural transmission II

- In the economic literature of cultural transmission:
 - paternalistic view (*imperfect empathy*): parents transmit values which they regard as intrinsically good (Bisin and Verdier 2001, Hauk and Saez Marti 2002)
 - Beckerian altruism: parents transmit the best values that turn their children happier or successful (Doepke and Zilibotti 2008)
 - "radical" 1968 parents do not indoctrinate children into political radicalism

A two-way link

- Preferences & beliefs affect economic development
... and economic development affect cultural transmission
- Today's lecture focuses primarily on the effect of economic environment (exogenous) on cultural transmission
 - More specifically: parenting practices
- Based on Matthias Doepke and Fabrizio Zilibotti
"Parenting with Style: Altruism and Paternalism in Intergenerational Preference" NBER Working Paper 20214

Outline

- Parenting style over history
- Parenting style in development psychology
- An economic theory of parenting style choice
- Some empirical evidence
- Conclusion

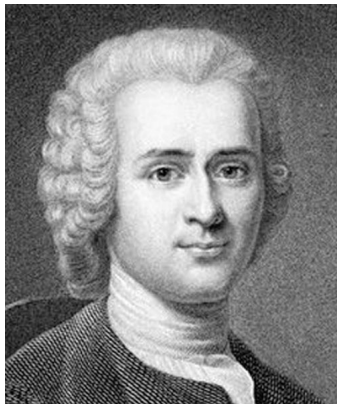
The firm-hand secular tradition



The firm-hand secular tradition

- *"He who spares the rod hates his son, but he who loves him is careful to discipline him"* (Proverbs 13:24)
- *"Folly is bound up in the heart of a child, but the rod of discipline will drive it far from him"* (Proverbs 22:15)
- *"Liberty and indulgence can do no good to children; their want of judgment makes them stand in need of restraint and discipline"* (John Locke, 1693, § 40).
- Plumb (1975):
"two hundred counsels of advice on child-rearing prior to 1770, only three failed to recommend that fathers beat their children"

The educational reformers in the XVIIIth and XIXth Century



"Children should never receive punishment merely as such; it should always come as the natural consequence of their fault" (Émile 1762)

The educational reformers in the XVIIIth and XIXth Century

- Rousseau (1762):
 - educators should not interfere with children's freedom and happiness
 - children must learn from experience at the speed and in the form that fits them
 - no punishment
- Rousseau's views influenced generations of educational reformers: Pestalozzi, Froebel, Montessori, Dewey, etc.
- Montessori: the education of young children must emphasize the development of a child's own initiative and natural abilities

Radicalism in the 1960s and 1970s



"We don't need no education, we don't need no thought control..."
(Pink Floyd, The Wall 1979)

Radicalism in the 1960s and 1970s

- A much more radical approach emerged after WWII
- Radical anti-authoritarian principles gained momentum in the 1960's and 1970's...
- Schools Council Investigation in Britain 1972:
children should be happy, cheerful and well-balanced...
should enjoy school work...
should be encouraged to develop in their own ways
- In 1979 Sweden bans corporal punishment...
Soon followed by Finland, Norway, Austria
- ... then the tide changed again

The Tiger Mother



The Tiger Mother

Amy Chua ("Why Chinese Mothers Are Superior," Wall Street Journal, January 8, 2011):

"A lot of people wonder how Chinese parents raise such stereotypically successful kids. They wonder what these parents do to produce so many math whizzes and music prodigies... Well, I can tell them, because I've done it. Here are some things my daughters, Sophia and Louisa, were never allowed to do: attend a sleepover; have a playdate; be in a school play; complain about not being in a school play; watch TV or play computer games; choose their own extracurricular activities; get any grade less than an A; not be the No. 1 student in every subject except gym and drama; play any instrument other than the piano or violin; not play the piano or violin."

Tiger Mom's popularity in China

Survey run in China in 2011:

"Among 1,795 people polled ... 94.9 percent said they know women who are strict mothers, and 55.1 percent said they see merit in Chua's parenting... (while) 18 percent said Tiger Moms deprive their children of childhood fun...

Strict parenting...[Prof. Zeng Xiaodong says] ...has merits in raising smarter children and preparing them better for harsh competition in the future. "

Grizzly Fathers

Alexander Nazaryan (New York Daily News, Jan 2011):

I had a similar experience with my "Grizzly Father," a Soviet-trained scientist. We arrived in Connecticut from Russia when I was 10, and he quickly determined that American schooling was inadequate. He thus set about torturing me with increasingly difficult mathematics from dour Soviet textbooks... If I got a problem wrong, he shouted until I worked it out, sometimes in tears.

I hated math, and I probably hated him. A 76 on a geometry quiz in the ninth grade promptly ended my nascent football career. While forfeiting any hopes of high school popularity, I did gain the ability to think through a problem, to rely on my mind instead of a machine. I suspect that I share this with the students in Shanghai.

Parenting style in development psychology

- Three basic parenting styles
(Baumrind 1967, Maccoby and Martin 1983):
 - 1 Authoritarian parenting
 - 2 Authoritative parenting
 - 3 Permissive parenting
 - 1 "liberal" parenting
 - 2 neglecting parenting (not our focus)

A positive economic theory

- Maintained assumption:
parents (by and large) know about the pros and cons of different parenting strategies; their own choice of parenting style is driven by incentives.
- Positive focus:
understand the economic incentives that drive what parents actually do.

Parents' motivation

- Parents have both altruistic and paternalistic selves:

altruism parents care about their children's wellbeing (altruism);

paternalism parents disagree with some of the choices that their children make. Examples:

- ① desirable level of risk taking (e.g., in motor traffic or in experimenting with alcohol&recreational drugs).
- ② school effort vs. having fun with friends

- As a result, parents have an incentive to attempt to influence their children's choices in life

How do parents interfere

- How?
 - by restricting children's choice (authoritarian)
 - by "convincing" children (authoritative)
- The choice of parenting style hinges on
 - ① extent of paternalism
 - ② economic environment
- We relate the variation in the data to two key economic drivers:
 - ① value of incumbency
(or, to the opposite, of children's independence)
 - ② income inequality (especially, return to education)

General model

- Dynastic model: Every person has one child
- People live for two periods: young and old
- Children have different innate preferences from adults
- Parents are paternalistic towards young children
- Parents can restrict their children's choice set or mold their children's preferences

General model

- Let a denote a vector of preference parameters
- The value function for an old adult with preferences a is

$$v(a) = \max_{a', x, X^y} \{ U^o(x, a) + z \times w(X^y, a, a') \},$$

where:

$$w(X^y, a, a') = (1 - \lambda) \times \underbrace{U^y(x^y(a', X^y), a')}_{\text{BECKERIAN ALTRUISM}} + \lambda \times \underbrace{U^o(x^y(a', X^y), a) + \beta v(a')}_{\text{PATERNALISM}}$$

- $x^y(a', X^y) = \sup_{x^y \in X^y} \{ U^y(x^y, a') + \beta v(a') \}$
is the child's optimizing decision, given her own preferences

General model

- Note: parents can choose the child's choice set

$$X^y = \arg \max_{X^y \in \mathcal{X}^y} w(X^y, a, a') .$$

- There may be constraints or costs in restricting the child's choice
- In lack of constraints, parents could implement their bliss point by *imposing* their preferred choice on their kids
- In general, parents must choose the optimal combination of preference manipulation and restrictions of the child's choice set

Application to Patience and Occupational Choice

- Preference parameter is *patience*, $a \geq 0$
- Adult agents' felicity

$$U^o(x, a) = \frac{c^{1-\sigma}}{1-\sigma},$$

where $0 < \sigma < 1$ (positive utility)

- Children's felicity

$$U^y(x^y, a) = (\psi - a) \frac{(c^y)^{1-\sigma}}{1-\sigma},$$

where $a \in [0, \psi - 1]$ captures the *carpe diem* bias

- When $a = \psi - 1$, parents and children agree
When $a = 0$, maximum disagreement

Occupational Choice and Effort

- There are multiple occupations $i \in I$
- For a given child, the economic return to an occupation is y_L or $y_H > y_L$ with equal probability (talent)
- Talent unknown ex ante
- Incumbency advantage: The return is higher by a factor of $\mu > 1$ if the child adopts the parent's occupation
- In any occupation, the child chooses the effort e when young and get return Re when old
- Consumption profile:

$$c^y = y - e,$$

$$c^o = r + Re.$$

Choosing the Child's Choice Set

- Parent can either force child to stay at home or grant her independence
- Staying at home:
 - The child adopts the parent's occupation with expected return

$$\mu \frac{y_L + y_H}{2}$$

- The parent can control the child's effort e
- Independence:
 - Child chooses occupation based on talent, resulting in return

$$y_H$$

- Child chooses effort e

Independent Child

- The value function of an old adult is:

$$v_I(y, e) = \max_{a'} \left\{ \frac{(y + Re)^{1-\sigma}}{1-\sigma} + zw(a') \right\}, \text{ where}$$

$$w(a') = (1-\lambda) \times \underbrace{(\psi - a') \frac{(y_H - e(a'))^{1-\sigma}}{1-\sigma}}_{\text{BECKERIAN ALTRUISM}} \\ + \lambda \times \underbrace{\frac{(y_H - e(a'))^{1-\sigma}}{1-\sigma}}_{\text{PATERNALISM}} + \beta v(y_H, e(a')),$$

$$e(a') = \arg \max_e \left\{ (\psi - a') \frac{(y_H - e)^{1-\sigma}}{1-\sigma} + \beta \frac{(y_H + Re)^{1-\sigma}}{1-\sigma} \right\}$$

Authoritative versus Permissive Parenting

- The optimal parent's choice of a' satisfies:

$$0 \geq -\lambda \times \underbrace{(\psi - a' - 1) c_{a'}^y(a')}_{\text{MB of increasing } a'} - (1 - \lambda) \times \underbrace{\frac{c^y(a')}{1 - \sigma}}_{\text{MC of increasing } a'}$$

- The MB captures increase in effort $e(a')$
- The MC captures the utility loss (*guilt*) suffered by the child

Authoritative versus Permissive Parenting

- If $\lambda = 0$, the optimal parent's choice of a' satisfies:

$$0 > - \underbrace{\frac{c^y(a')}{1 - \sigma}}_{\text{MC of increasing } a'}$$

- For a Beckerian parent, the marginal benefit of distorting choice is zero \Rightarrow Set $a' = 0$ (permissive)

Authoritative versus Permissive Parenting

- If $\lambda = 1$, the optimal parent's choice of a' satisfies:

$$0 = -\lambda \times \underbrace{(\psi - a' - 1) c_{a'}^y(a')}_{\text{MB of increasing } a'}$$

- For a paternalistic parent, the marginal cost is zero \Rightarrow Set $a' = \psi - 1$ (authoritative)

Authoritative versus Permissive Parenting

- The optimal parent's choice of a' satisfies:

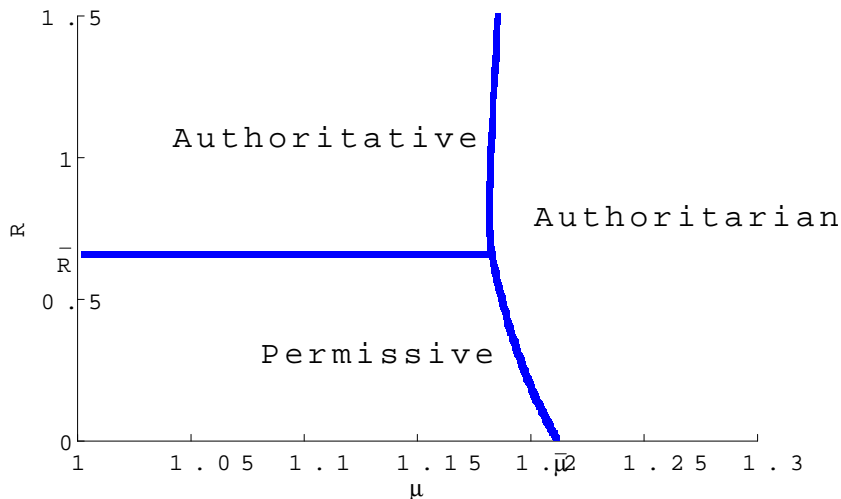
$$0 \geq -\lambda \times \underbrace{(\psi - a' - 1) c_{a'}^y(a')}_{\text{MB of increasing } a'} - (1 - \lambda) \times \underbrace{\frac{c^y(a')}{1 - \sigma}}_{\text{MC of increasing } a'}$$

- If $0 < \lambda < 1$, parenting style depends on R
- More likely to adopt authoritative parenting if R is large

Economic environment

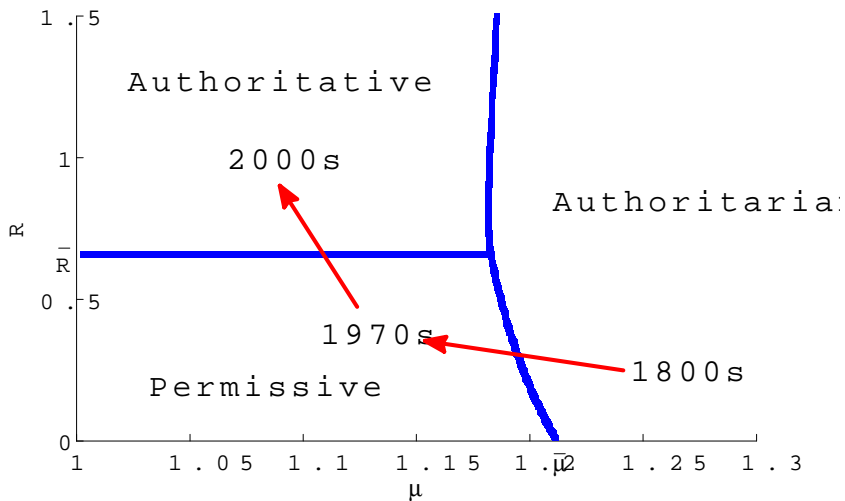
- Suppose the distribution of λ in the population is time- or country-invarying
- However, there is variation in parameters that capture features of the environment, and in particular:
 - 1 μ (return to incumbency, school vs. family education)
 - 2 R (return to education)

Choice of Parenting Style



History of Parenting in the West

- Until nineteenth century:
Authoritarian parenting
- Twentieth century until 1970s:
Increasingly permissive parenting
- Since 1980:
Increasingly intensive parenting
("helicopter parenting," "Tiger Moms")



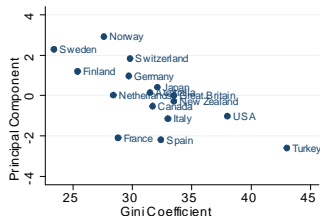
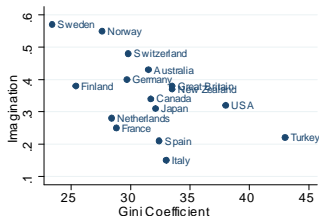
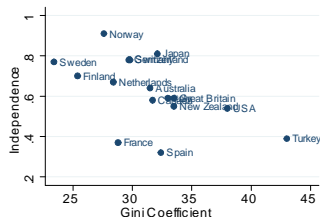
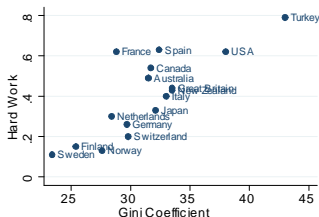
Parenting Across Countries

- "Intensive" parenting styles (authoritarian and authoritative) are associated with high stakes
- World Value Survey question:
"Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important?"
- Examine correlation of answers with GDP pc and inequality

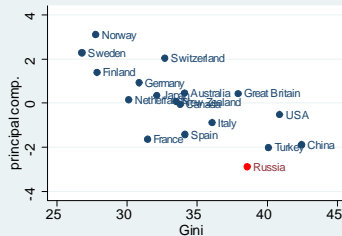
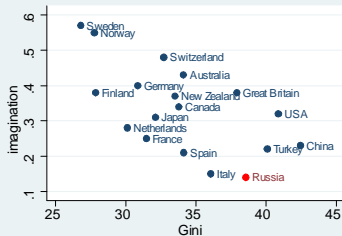
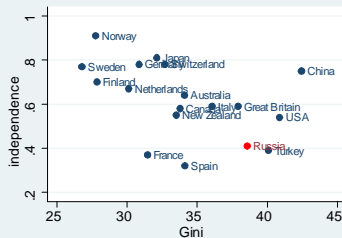
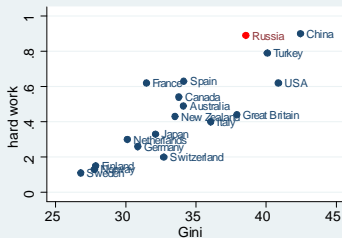
Incumbency and Parenting Values

- Suppose incumbency advantage decreases with economic development
- Then, higher GDPpc should be accompanied by a lower emphasis on obedience and more on independence
- The correlation between the fraction of parents emphasizing obedience and GDP per capita is -0.52, and for independence the correlation is 0.42

Inequality and Parenting Values (OECD)



Inequality and Parenting (with China and Russia)



Principal component

Principal Component	1	2	3	4
Loading on Independence	0.55	-0.19	0.79	-0.17
Loading on Imagination	0.58	0.24	-0.18	0.75
Loading on Hard Work	-0.58	-0.15	0.51	0.62
Loading on Thrift	-0.13	0.94	0.28	-0.13
Percent of Variance Explained	0.64	0.26	0.07	0.03
Correlation with Gini Coefficient	-0.69	-0.07	0.17	0.52

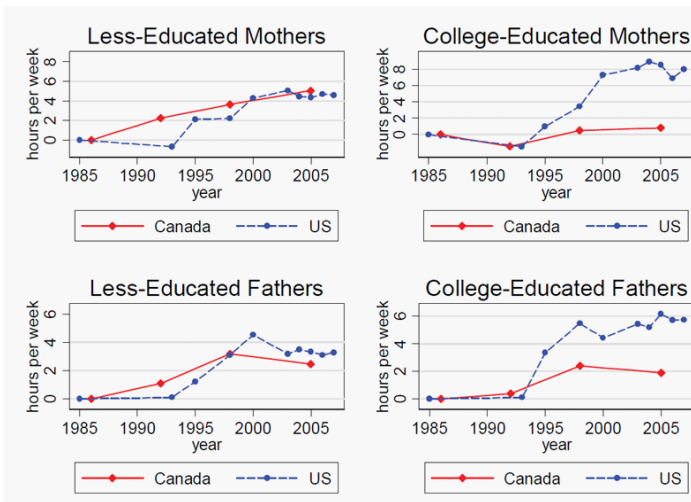
Robustness

- The correlations above are robust to
 - excluding Turkey, a poorer country than the rest of the OECD
 - controlling for GDP per capita
 - including the countries of recent accession to the OECD

Middle-class intensive parenting

- Suppose low-skill parents have only access to an inferior technology to influence their children's preferences
 - can only choose $a \in [0, \tilde{a}]$, where $\tilde{a} < \psi - 1$
- The combination of low skills with high paternalism leads to authoritarian parenting (Weinberg 2001)
- Less of a response to changing incentives

Middle-class intensive parenting



Other applications

- Risk aversion (fundamental trait of entrepreneurship)
 - juvenile risk vs. exogenous risk
 - propensity to grab risky opportunities
- Preference for leisure
- Social preferences

Summary

- A theory of endogenous preference transmission with altruistic and paternalistic motives.
- Parents may also restrict their children's choice set.
- Parenting styles and preference transmission depend on
 - ① the economic environment, such as exposure to endogenous risk
 - ② the economic return to different preference traits
- Parenting style affect economic outcomes
- Vicious circles linking inequality and parenting style

This report was presented at the 5th LCSR International Workshop “Social and Cultural Changes in Cross-National Perspective: Subjective Well-being, Trust, Social capital and Values”, which will be held within the XVI April International Academic Conference on Economic and Social Development.

April 8 - 10, 2015 – Higher School of Economics, Moscow.

www.lcsr.hse.ru/en/seminar2015

Настоящий доклад был представлен на V международном рабочем семинаре ЛССИ «Социальные и культурные изменения в сравнительной перспективе: ценности и модернизация», прошедшего в рамках XVI Апрельской международной научной конференции НИУ ВШЭ «Модернизация экономики и общества».

8-10 апреля 2015 года – НИУ ВШЭ, Москва.

www.lcsr.hse.ru/seminar2015