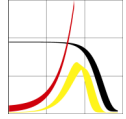


The effect of family policies and family images on fertility

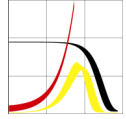
Sandra Krapf

Max Planck Institute for Demographic Research
Population and Policy Laboratory
18 Oct 2007
krapf@demogr.mpg.de



Structuring

1. Introduction
2. The Puzzle: Effects of Family Policies on Fertility
3. The Idea: Family Image and Policies
4. Theoretical Approach
5. Methodological Aspects



Introduction



Decline of fertility

average of total fertility rate in EU-15
countries in 2000: 1.5 (Eurostat)

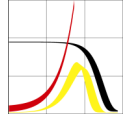


Family policies to enhance fertility

Child benefits

Childcare services

Maternity/paternity protection



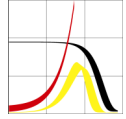
Introduction

- ➔ Family expenditure
 - ~ 39 billion € social expenditure for families in Germany in 2000 (SocX) (rank 4 after S, DK and F)
- ➔ Evaluation of policy effects:
 - Do political measures enhance fertility?

The Puzzle

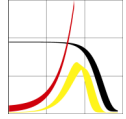
policy	effect	country	study
child benefits	+ (weak)	international	Gauthier/Hatzius (1997)
	no effect	Canada	Bélanger et al. (1998)
	++	Quebec	Milligan (2000)
child care	+	Italy	DelBoca (2002)
	no effect	Germany	Hank/Kreyenfeld (2001)
	++	Norway	Rindfuss et al. (2007)
maternity leave duration	+	Sweden	Hoem (1993)
	-	international	D'Addio/Mira D'Ercole (2005)

Source: Sleenbos (2003) and own inquiry



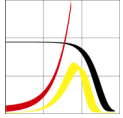
The Puzzle

- ➡ Numerous studies - inconsistent results.
- ➡ Methodological differences?
- ➡ Latent variables account for the different effects in the countries?

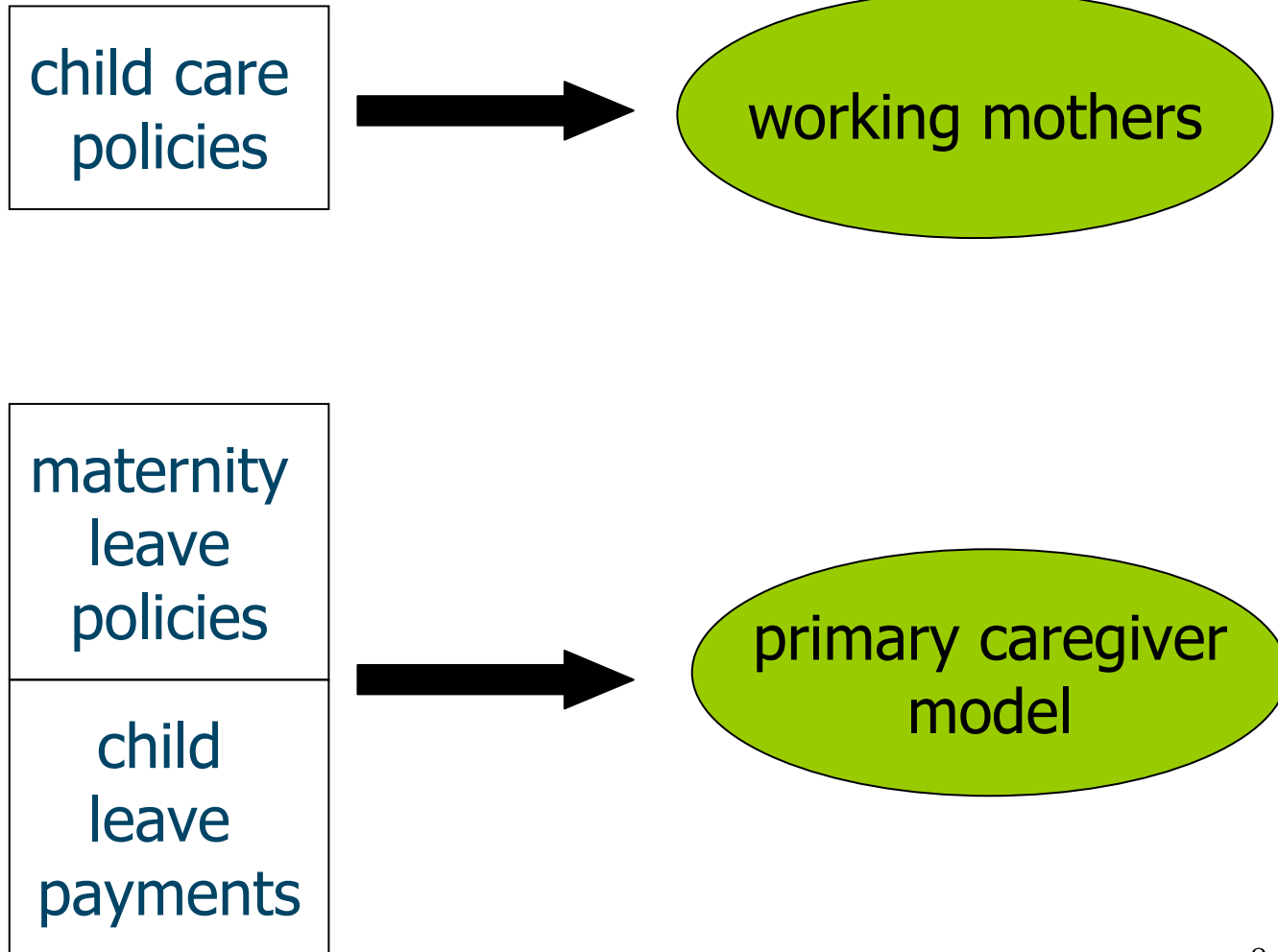


The Idea

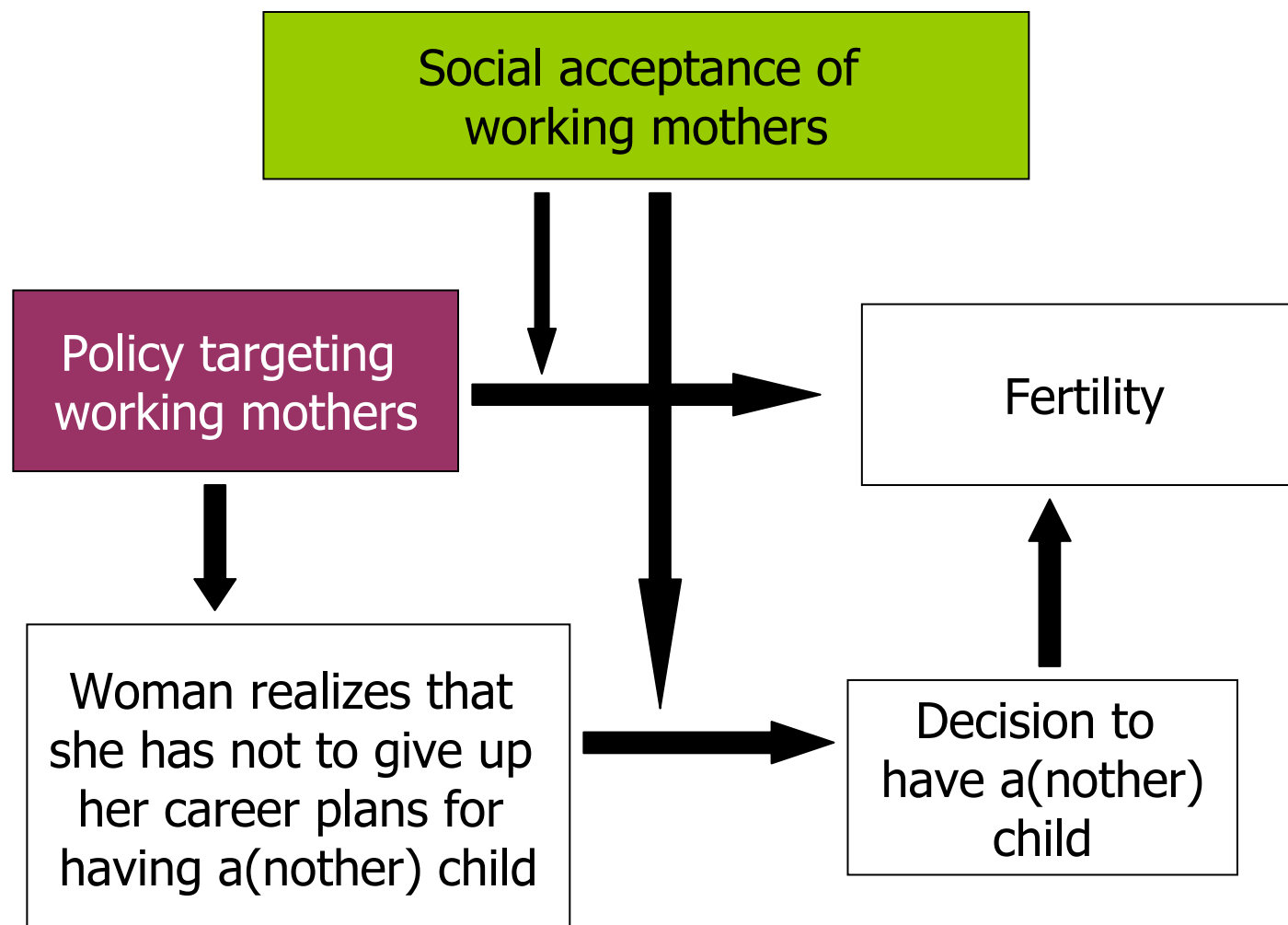
- ➔ Family policies have different effects in different countries conditionally on the **family image** in society.
- ➔ If the family image contradicts the target of a family policy it will not be successful.



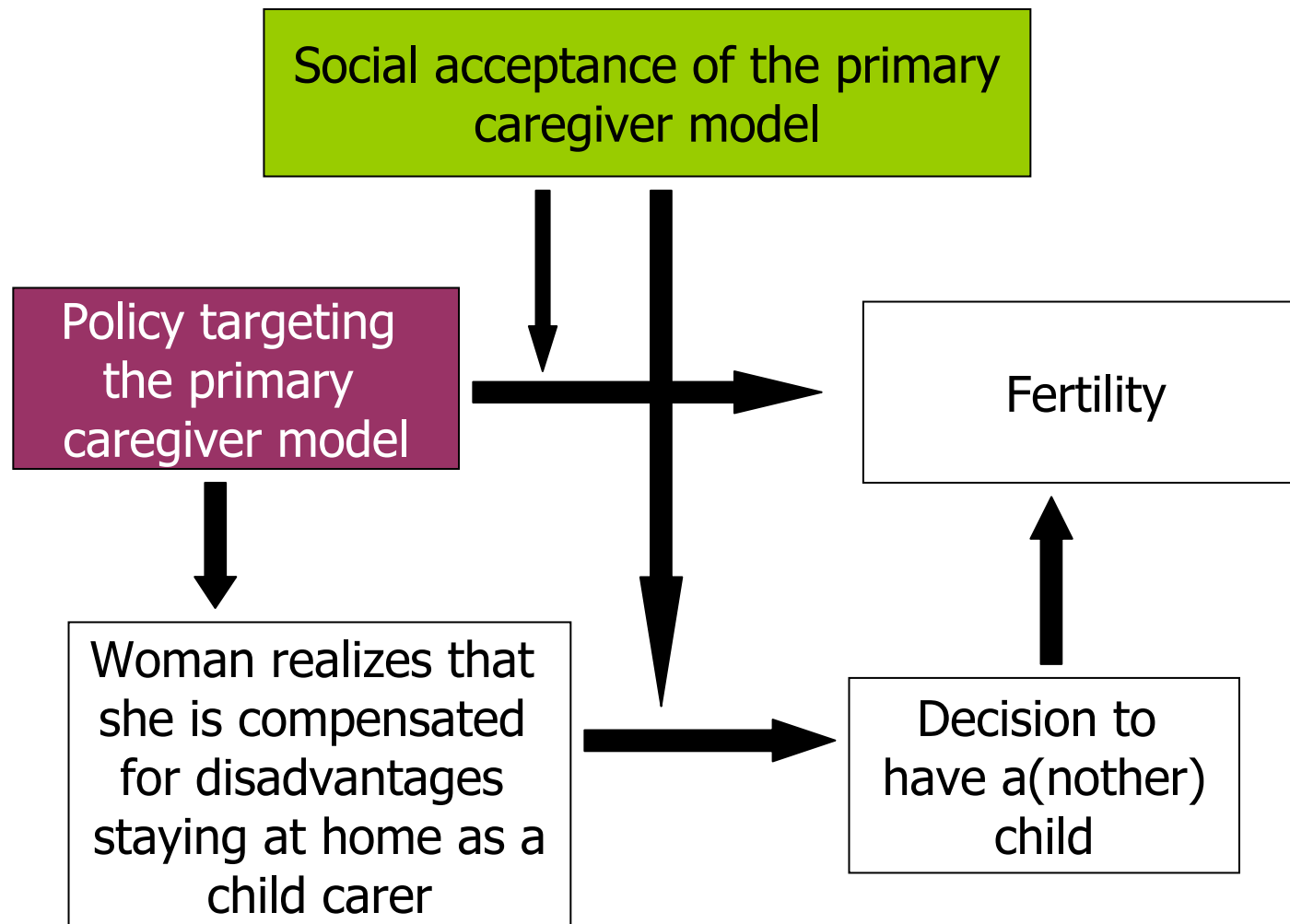
Identification of Policies' Target



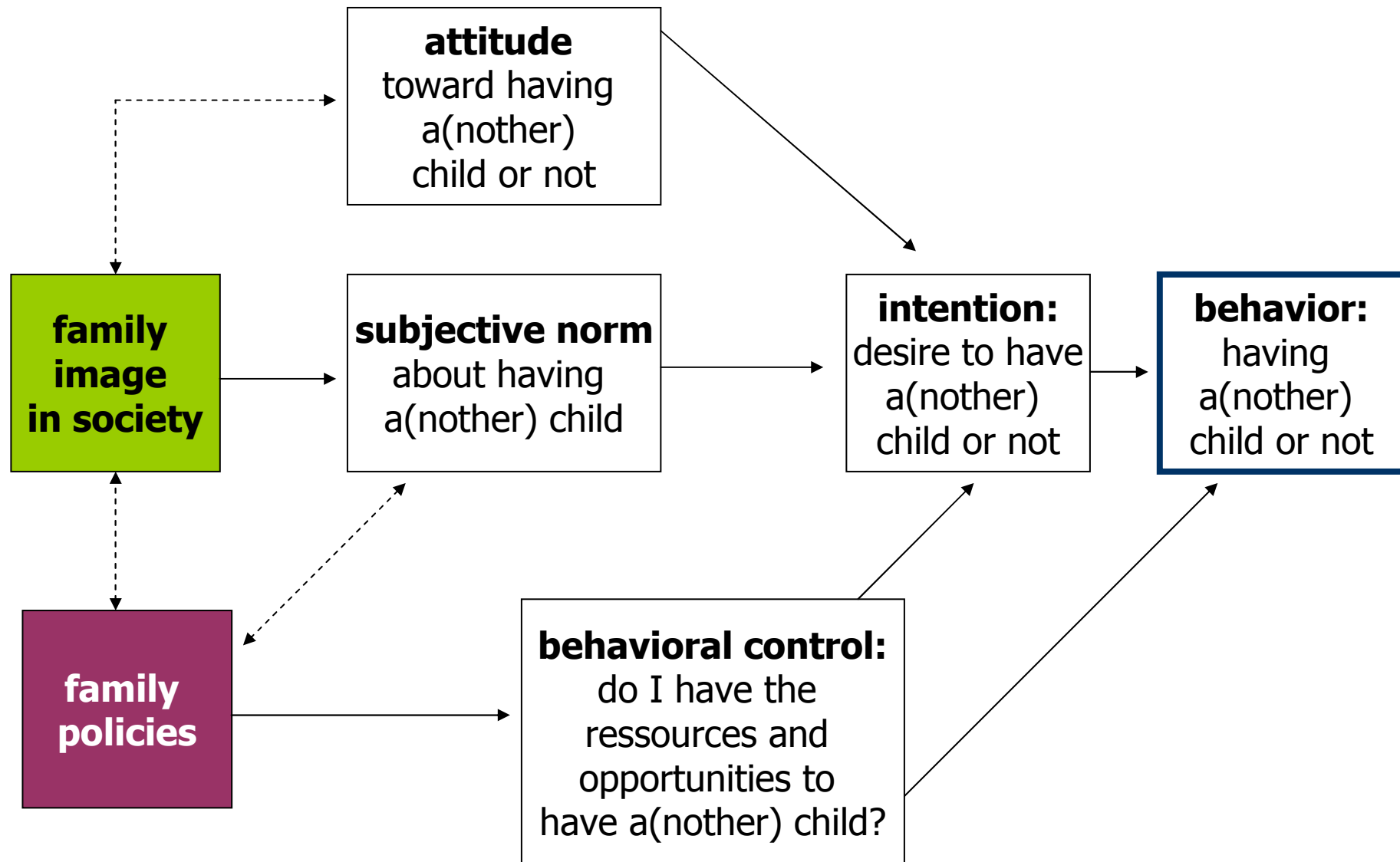
Mechanism 1



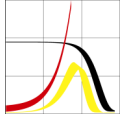
Mechanism 2



Theoretical Basis: Theory of Planned Behavior



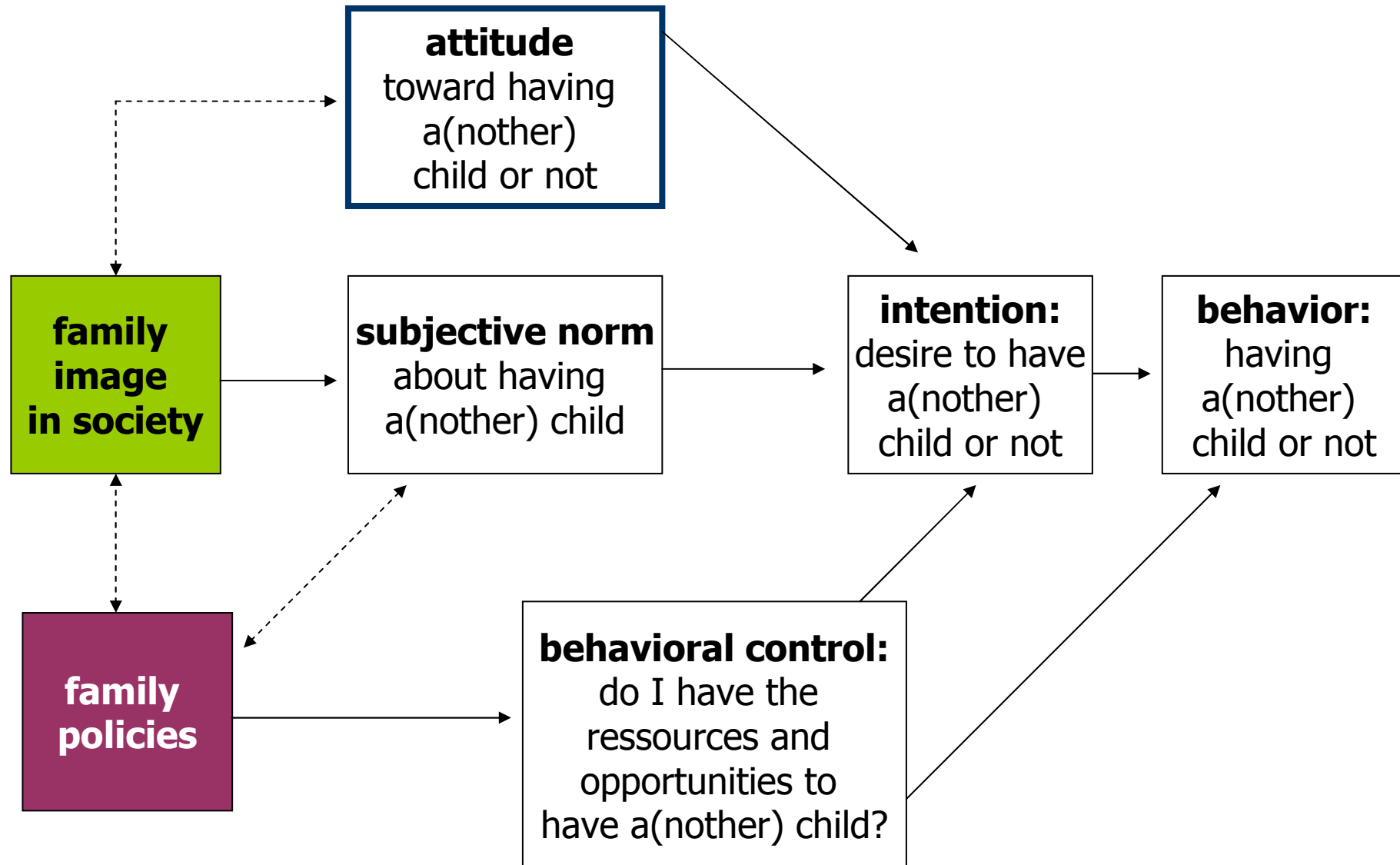
Source: adapted from Ajzen 1991



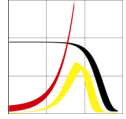
Theoretical Approach: Generative Behavior

- ➔ The generative behavior of a person refers to the realization of her child bearing decision – i.e. either having a child or not.
- ➔ Is preceded by the intention concerning the child bearing behavior.

Theoretical Basis: Theory of Planned Behavior



Source: adapted from Ajzen 1991



Theoretical Approach: Attitude

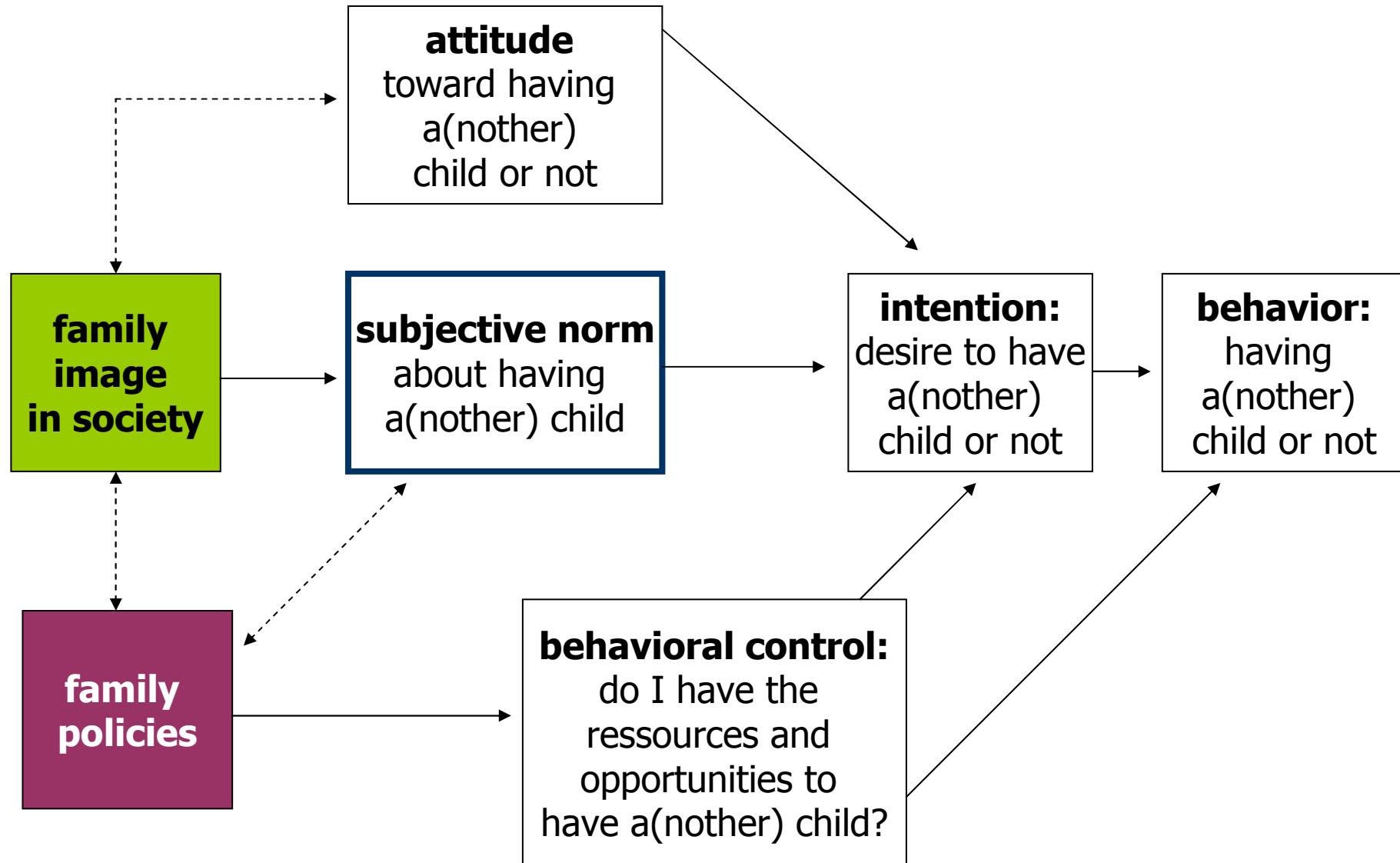
➔ Attitude toward having a child.

To which degree does a woman have a favorable or unfavorable evaluation of having a baby?

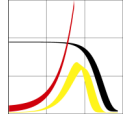
➔ Is influenced by

- socialisation processes
- traditions
- career aspirations of a woman
- personal life course (age, education, partnership status etc.)

Theoretical Basis: Theory of Planned Behavior



Source: adapted from Ajzen 1991



Theoretical Approach: Subjective Norms



Social pressure a person perceives.

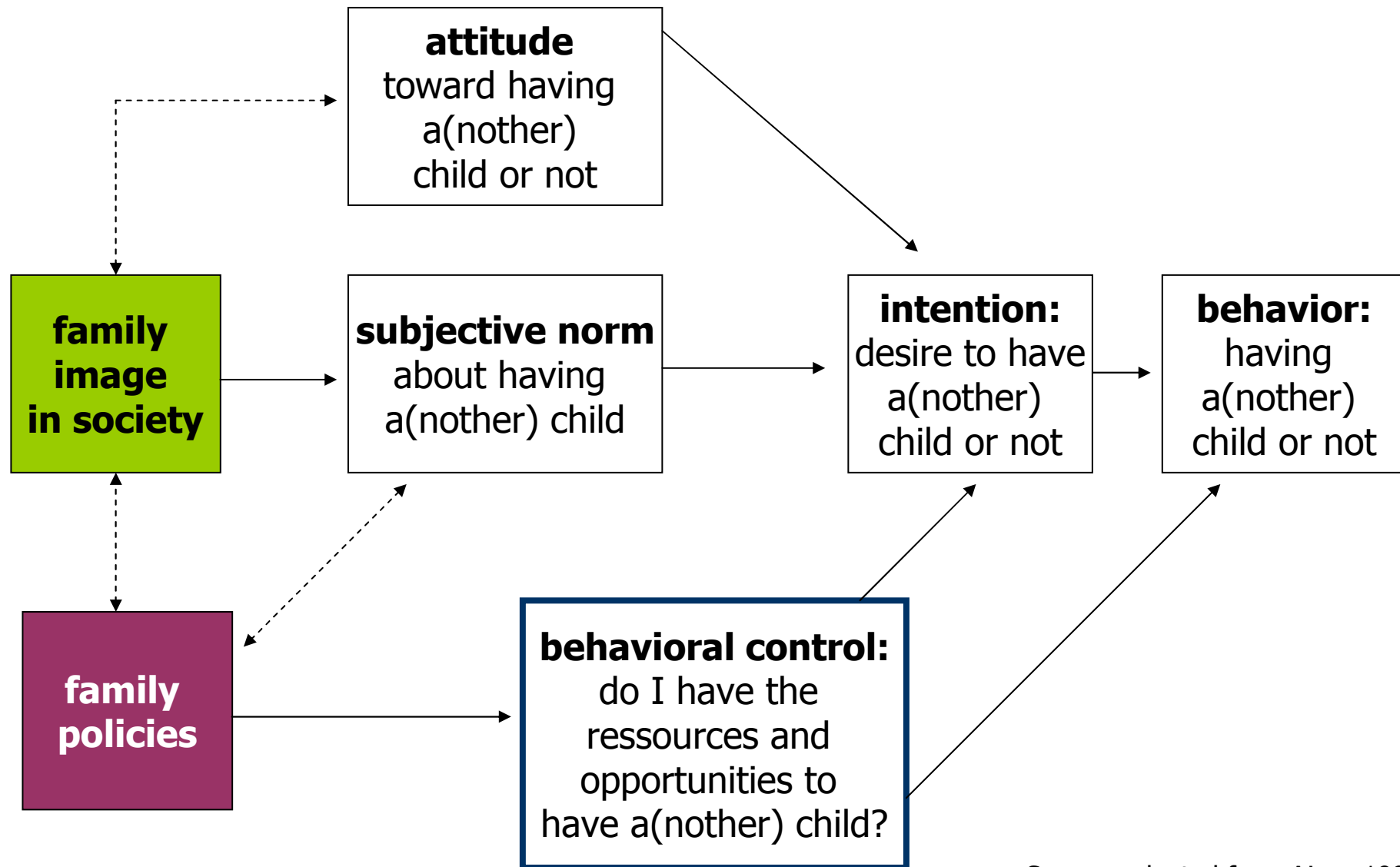
What do important referent individuals think about a person having or not having a child?



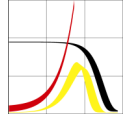
Social pressure changes the fertility decision:

- emotional bonds to family members
- pressure to conform to peer group behavior
- „global pressure“ e.g. through mass media

Theoretical Basis: Theory of Planned Behavior



Source: adapted from Ajzen 1991



Theoretical Approach: Behavioral Control



The control a person thinks she has on the child bearing decision.

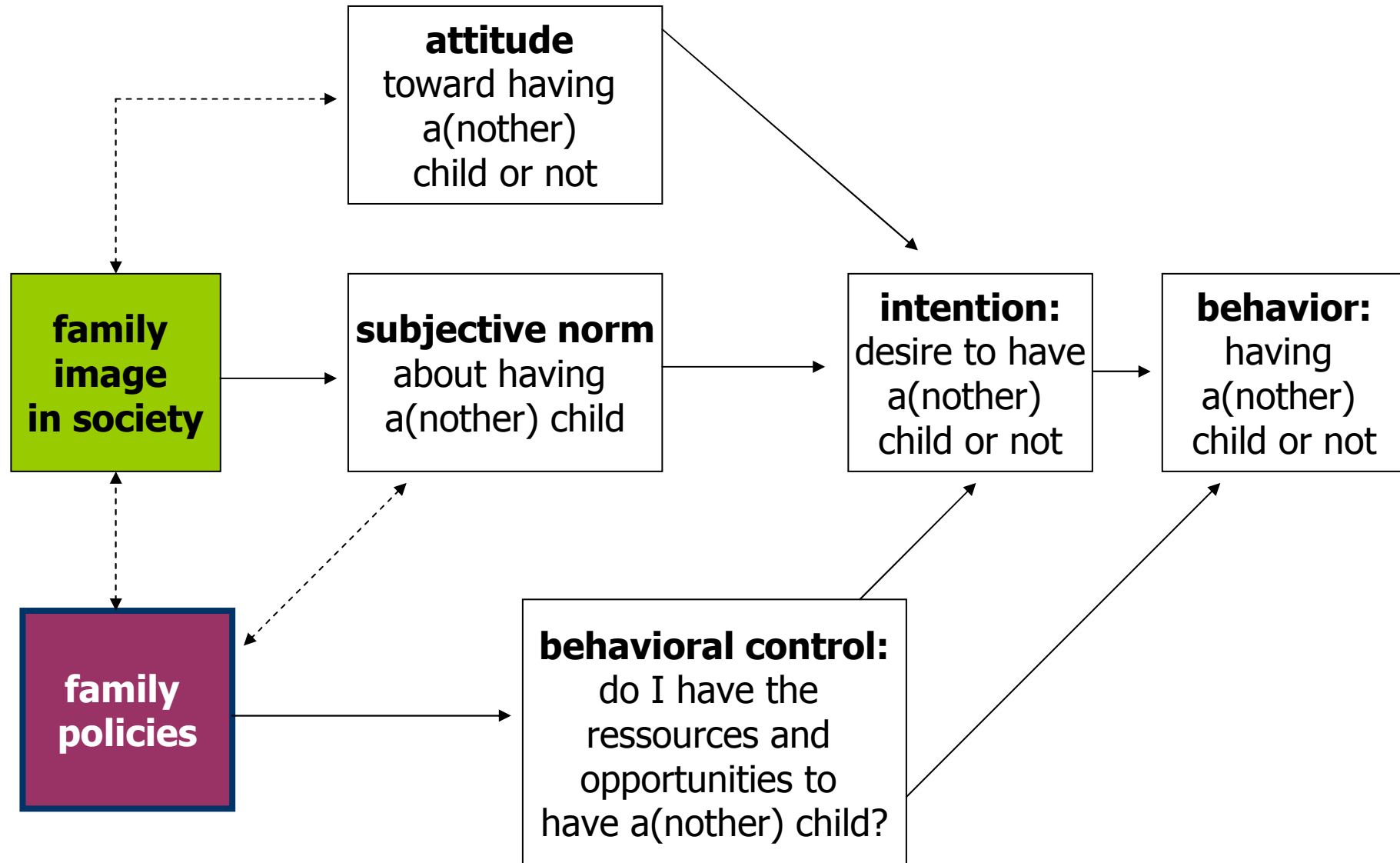
Does a person have the resources and opportunities to have a child or not?



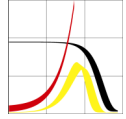
The control over having a baby consists of a person's

- time and money
- support e.g. by parents
- physical dispositions to conceive and bear a child
- access to contraceptives

Theoretical Basis: Theory of Planned Behavior



Source: adapted from Ajzen 1991



Theoretical Approach: Family Policies

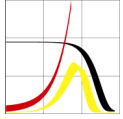


Family policies usually aim at reducing direct or indirect costs of having children.

→ Starting point: *behavioral control*.



Politicians do not consider the **conditional effect** of cost reducing policies depending on attitudes and norms.

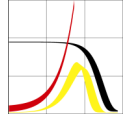


Empirical Approach



Two analytical steps:

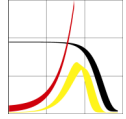
- Multi level comparison by using event history analysis (data: GGS).
Not part of this presentation!
- Macro analysis using aggregate data.



Empirical Approach

- ➔ Macro level comparison of EU-15 countries
 - panel data
 - period: 1985 - 2005
 - fixed effects model or GMM

- ➔ Model specification
 - interaction effect between *policy* and *social acceptance*
 - dynamic model with lag-variable

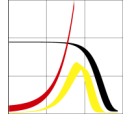


Empirical Approach



Dependent variable "fertility"

- Kohler/Ortega (2002) Index.
- Aggregated measure of a synthetic cohort based on tempo-adjusted childbearing intensities.
- Has to be estimated. Problem: data on hazard population not easily available.

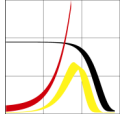


Empirical Approach



Independent variable “family policies”

- Expenditure for specific policy targets.
- SocX data of OECD.
- Problem: difficult to account for indirect policies, e.g. gender equality in the labor market.



Empirical Approach



Independent variable “social acceptance”

Data: different survey; inverted measurement

(1) primary caregiver model

“Having a job is the best way for a woman to be an independent person.”

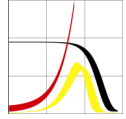
(2) working mother model

“A pre-school child is likely to suffer if his/her mother works.”

Family Images

(share of respondents who agree or strongly agree; ISSP 2002); TFR in parentheses	"Having a job is the best way for a woman to be an independent person." → primary caregiver model	"A pre-school child is likely to suffer if his/her mother works." → working mother model
W.Germany (1.34)	77.7 %	55.6 %
Spain (1.31)	80.4 %	52.2 %
Sweden (1.71)	62.5 %	23.7 %
France (1.89)	80.7 %	42.4 %
UK (1.71)	55.3 %	38.4 %

Source: ISSP 2002 Family and Changing Gender Roles III



Empirical Approach



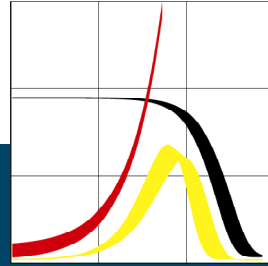
Control variables

GDP per capita
unemployment
female labor force participation

age of mother at first birth
financial independence of young people

Regression Equation

$$\begin{aligned} \ln(\text{fertility})_{it} = & a_i + b_1(Z \ln(\text{fertility}_{it-1})) \\ & + b_2(\text{POLcarer}_{it-1}) + b_3(\text{POLwork}_{it-1}) \\ & + b_4(\text{ACCcarer}_{it-1}) + b_5(\text{ACCwork}_{it-1}) \\ & + b_6(\text{POLcarer}_{it-1} * \text{ACCcarer}_{it-1}) \\ & + b_7(\text{POLwork}_{it-1} * \text{ACCwork}_{it-1}) \\ & + b_{8-k}(\text{control variables}_{it-1}) + e_{it-1} \end{aligned}$$



Thank you for your attention!

Literature

- Ajzen, Icek.** 1991. "The Theory of Planned Behavior." *Organizational Behavior and Human Decision Processes* 50:179-211.
- Ajzen, Icek, and Martin Fishbein.** 1980. *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, New Jersey: Prentice Hall.
- d'Addio, Anna Christina, and Marco Mira d'Ercole.** 2005. "Policies, Institutions and Fertility Rates: A Panel Analysis in OECD Countries." *OECD Working Paper*.
- DiPrete, Thomas, S. Philip Morgan, Henriette Engelhardt, and Hanna Pacalova.** 2003. "Do cross-national differences in the costs of children generate cross-national differences in fertility rates?" *Population Research and Policy Review* 22:439-77.
- Gauthier, Anne H el ene, and Jan Hatzius.** 1997. "Family benefits and fertility: An econometric analysis." *Population Studies* 51:295-306.
- Hank, Karsten, and Michaela Kreyenfeld.** 2001. "Childcare and Fertility in (Western) Germany." *MPIDR Working Paper* WP 2001-019.
- Kohler, Hans-Peter, and Jos e Antonio Ortega.** 2002. "Tempo-Adjusted Period Parity Progression Measures: Assessing the Implications of Delayed Childbearing for Cohort Fertility in Sweden, the Netherlands and Spain." *Demographic Research* 6:145-90.
- Sleebos, Jo elle.** 2003. "Low Fertility in OECD Countries: Facts and Policy Responses." In *OECD Social, Employment and Migration Working Paper*.