



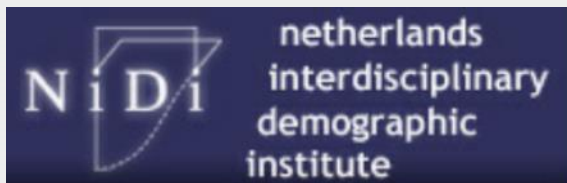
# Family Structure and Intergenerational Transmission

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Divorce Conference

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Amsterdam Centre  
for Inequality Studies

# Intergenerational transmission

- **Education** (e.g., Blossfeld & Shavit)
- **Occupation** (e.g., Blau & Duncan)
- **Church attendance** (e.g., Myers, Kelley & De Graaf)
- **Leisure behavior** (e.g., Ganzeboom, Kraaykamp)
- **Norms & values** (e.g., Silverstein, Moen)
- **Health behavior** (e.g., Brook)
- **Fertility** (e.g., Liefbroer)
- **Divorce** (e.g., Diekmann, Wagner)

# The role of social capital

[\[PDF\] Social capital in the creation of human capital](#)

[JS Coleman](#) - [American journal of sociology](#), 1988 - [JSTOR](#)

... Just as physical **capital** is **created** by changes in materials to form tools that facilitate production, **human capital** is **created** by changes in persons that bring about skills and capabilities that make ...  
Before examining empirically the value of **social capital** in the **creation** of **human** ...

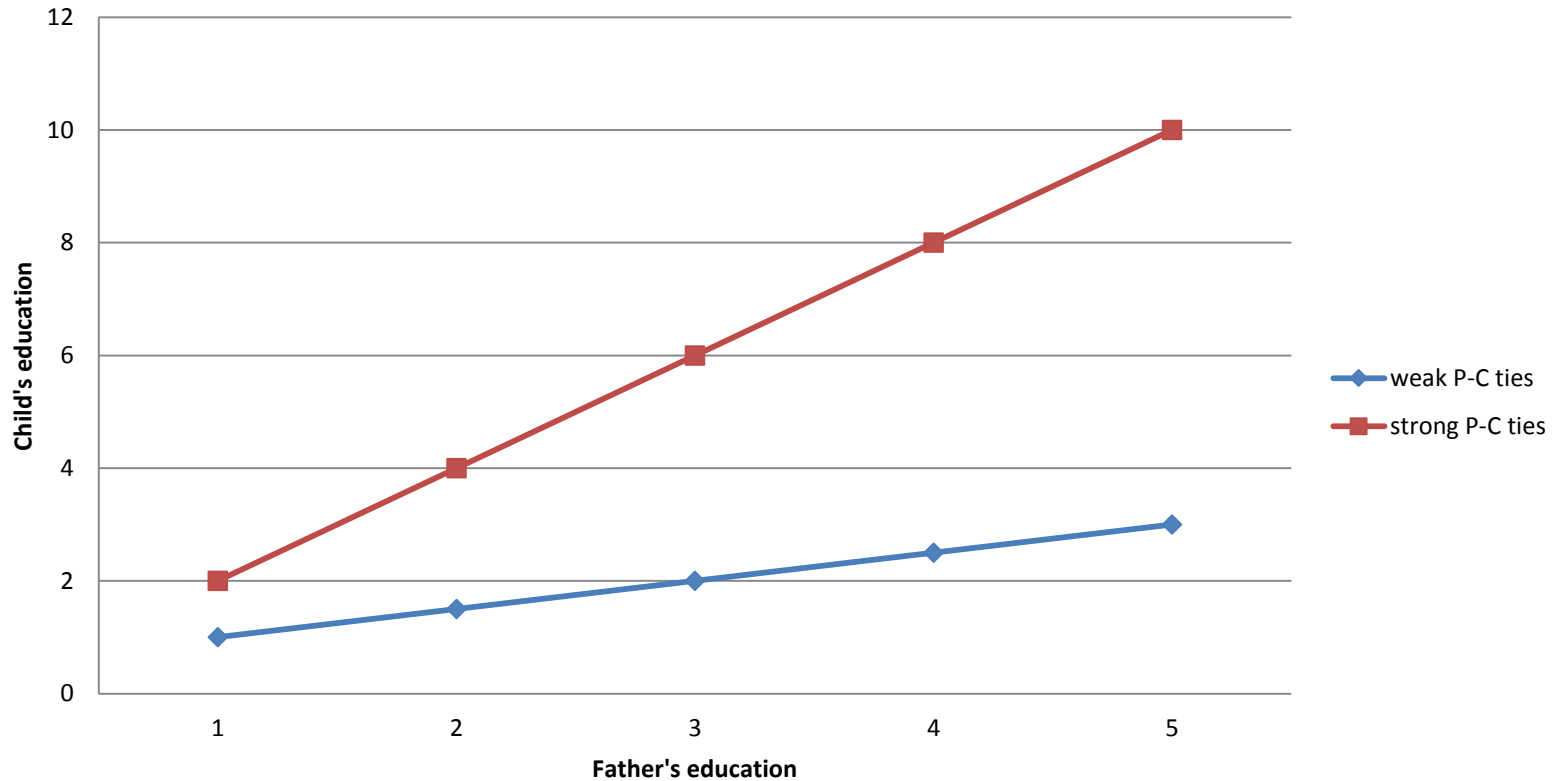
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# Family based social capital

<sup>4</sup> The complementarity of human capital and social capital in the family for a child's development suggests that the statistical analysis that examines the effects of these quantities should take a particular form. There should be an interaction term between human capital (parents' education) and social capital (some combination of measures such as two parents in the home, number of siblings, and parents' expectations for child's education). In the analysis reported, here, however, a simple additive model without interaction was used.

# Illustration

## Interaction effect



# Where is the (inter)action?

study	data	social capital (parent-child only!)	outcome (educational only!)	main effect	inter-action	inter-action	inter-action
				social capital	income	education	SES / class
Teachman 1997	NELS 1-3	parent-child discussion of school	hs dropout	ok	ok	ns	
McNeal 1999	NELS	parent-child discussion of education	dropout	ns			ok
		parent-child discussion of education	achievement test	ok			ns
		parent-child monitoring	dropout	ok			ns
		parent-child monitoring	achievement test	wrong			ok
Crosnoe 2004	ADDHEALTH (panel)	parent-child connectivity (not school related)	achievement test	ok		ns	
Domina 2005	NLSY 1979 (panel)	involvement in homework	achievement test	ok			ns
Park 2008	PISA 2000 Europe	discussion of school	reading literacy test	ok			ns / wrong
		general level of interaction	reading literacy test	ok			ns
Olsson 2009	SSLCS 2002/3 SW	relations with parents	academic self concept	ok	ns	ns	ns
		involvement in homework	grades	ns	ns		
		discussion of schooling	grades	ns	ns		
Amato 2002	NSFH	supportive relationship	grades	ok	ns	ns	
		monitoring	grades	ok	ns	ns	
Kalmijn & Kraaykamp 2000	VOCL panel NL	discuss school matters	school dropout	ok		ns	

# Changing families

- Rise in divorce
- Rise in repartnering
  
- More non-resident divorced fathers
- More stepfathers
- More (non-resident) stepmothers

# General problem

- Has increasing family complexity changed the process of intergenerational transmission?
- Shift in focus:
  - From main effects of divorce & family structure  
.... to interaction effects with parental traits



# Research question

- Does intergenerational transmission depend on who the father was?
  - Married fathers
  - Stepfathers
  - Divorced fathers

# Theoretical relevance

	Educational transmission	
	Social mechanism	Biological mechanism
Married fathers		
Divorced fathers		
Stepfathers		

# Theoretical relevance


	Educational transmission	
	Social mechanism	Biological mechanism
Married fathers	<i>Strong</i>	
Divorced fathers	<i>Weak</i>	
Stepfathers	<i>Weak</i>	

# Theoretical relevance

	Educational transmission	
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Married fathers	<i>Strong</i>	<i>Strong</i>
Divorced fathers	<i>Weak</i>	<i>Strong</i>
Stepfathers	<i>Weak</i>	<i>Weak</i>


# Theoretical relevance

	Educational transmission	
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# A contrasting case

## **Educational attainment**

- Partly genetic
- Social: resources
- Coleman hypothesis

## **Religiosity (church visits)**

- Not genetic
- Social: value socialization
- Child development hypothesis (Grusec)

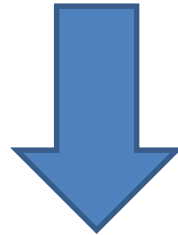
# A contrasting case

	Transmission church attendance	
	Social mechanism	Biological mechanism
Married fathers	<i>Strong</i>	<i>n.a.</i>
Divorced fathers	<i>Weak</i>	<i>n.a.</i>
Stepfathers	<i>Weak</i>	<i>n.a.</i>



# Measurement problems

- What was *your father's* education, occupation, etc. when you were 14?



- *Who was* your father when you were 14?
- *Who were* your fathers when you grew up?

# Data and method

- National Fertility Surveys in the Netherlands  
1993, 1998, 2003, 2008
- N = 34,344
- Parental education *and* church attendance

# Measurement of parents

- If no divorce/split → both natural parents
- If divorce/split → household where respondent lived most of his childhood
- Who were the parents in this household?

# Typology of families

		Father figure	Mother figure	N
(a)	Both natural parents	married biological father	married biological mother	30,545
(b)	Divorced parents (*)	divorced non-resident father	divorced resident mother	1,001
(c)	Mother and stepfather	stepfather	divorced / widowed resident mother	697
(d)	Father and stepmother	divorced / widowed resident father	stepmother	215

# Checking assumptions

- Duration of exposure

	NFS data	LISS data
Married fathers	17.8 years	17.5 years
Divorced fathers	12.9 years	9.8 years
Stepfathers	8.5 years	8.0 years

# Data analyses

- Father's trait
- Mother's trait
- Control variables
- Family type



X-vars

- + Family type x father's trait
- + Family type x mother's trait
- + Both



interactions

Y = education

	Model 1	Model 2
Birth cohort (centered)	-0.007 (0.77)	0.346* (0.00)
Woman	-0.439* (0.00)	-0.440* (0.00)
Cohort x woman	0.437* (0.00)	0.436* (0.00)
# siblings	-0.128* (0.00)	-0.125* (0.00)
Divorced family	-0.682* (0.00)	-1.226* (0.00)
Stepfather family	-0.992* (0.00)	-0.277 (0.42)
Stepmother family	-0.737* (0.00)	-1.280~ (0.05)
Father's education	0.268* (0.00)	0.264* (0.00)
x cohort		-0.033* (0.00)
x divorced NR father		0.050~ (0.06)
x stepfather		-0.066* (0.03)
x divorced R father <sup>a</sup>		0.050 (0.40)

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Y = religion

	Model 1	Model 2
Age centered	-0.025* (0.001)	0.044* (0.000)
Woman	0.142* (0.000)	0.141* (0.000)
Year of survey	-0.003* (0.034)	-0.002 (0.119)
# siblings	0.050* (0.000)	0.051* (0.000)
Divorced family	-0.167* (0.000)	0.045 (0.359)
Stepfather family	-0.068 (0.158)	0.028 (0.610)
Stepmother family	-0.069 (0.420)	-0.071 (0.521)
Father's church attendance	0.272* (0.000)	0.281* (0.000)
x age		-0.034* (0.000)
x divorced nonresident father		-0.189* (0.000)
x stepfather		-0.100* (0.002)
x divorced resident father <sup>a</sup>		0.003 (0.947)

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# How about mothers?

- Resident divorced mothers are expected to be as influential as married mothers
- Stepmothers are expected to be less influential than married mothers

(No theoretical differentiation)

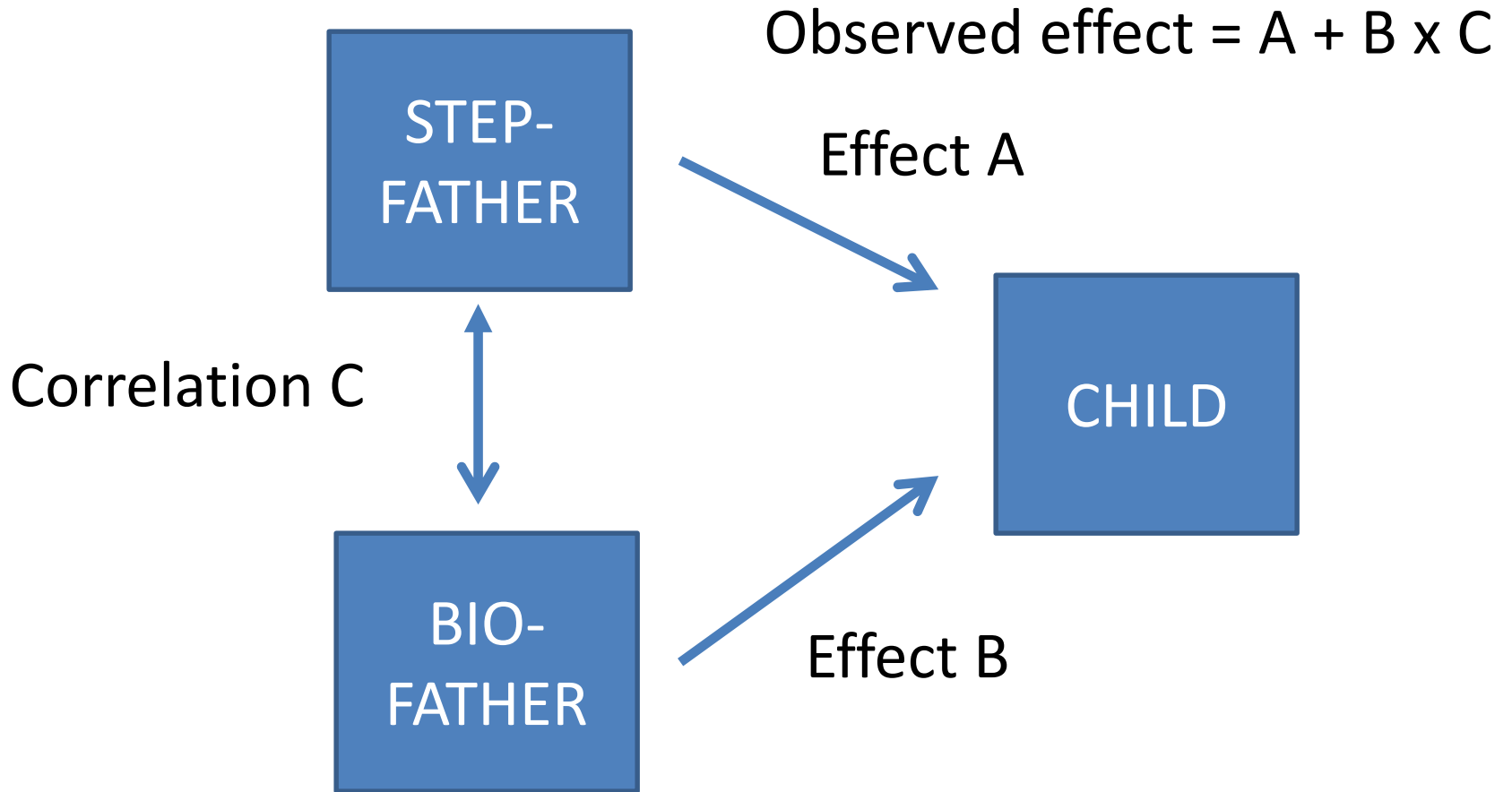


# How about mothers?

- Resident divorced mothers are expected to be as influential as married mothers
  - Divorced mothers *more* important (education)
- Stepmothers are expected to be less influential than married mothers
  - Partly confirmed (religion)

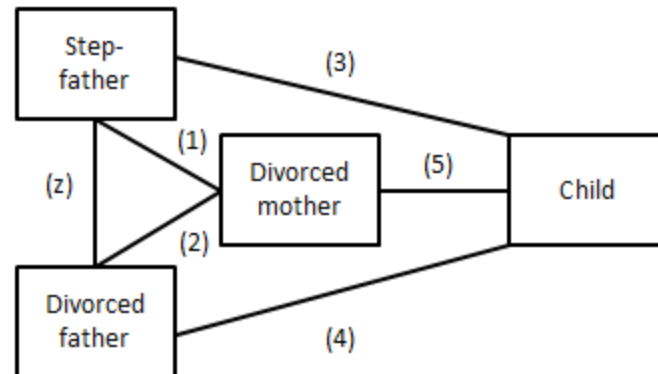
(No theoretical differentiation)

# The missing parent



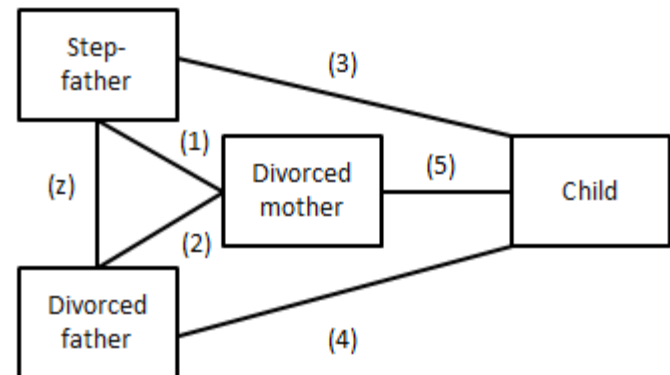
# Resemblance stepfathers – bio fathers

- Correlation due to the mother, i.e.,  $r(1) \times r(2)$
- Partial correlation due to correlated assortative mating, i.e.,  $r(z)$



# Solution

- Take  $r(2)$  and  $r(4)$  from divorced sample
- Make assumptions about  $r(z)$
- $r(z) = 0$  to  $r(z) = 50\%$  of the implied  $r(1) \times r(2)$



# Results education

	Model 1	Model 2 $\varphi = 1$	Model 3 $\varphi = 1.25$	Model 4 $\varphi = 1.50$
Woman	-0.038 (0.28)	-0.025 (0.47)	-0.025 (0.48)	-0.024 (0.48)
Cohort	0.013 (0.75)	0.002 (0.95)	0.007 (0.87)	0.010 (0.79)
# siblings	-0.124 (0.00)	-0.120 (0.00)	-0.121 (0.00)	-0.123 (0.00)
Mother's education	0.201 (0.00)	0.055 (0.25)	0.073 (0.12)	0.088 (0.06)
Stepfather's education	0.143 (0.00)	0.144 (0.00)	0.118 (0.00)	0.093 (0.03)
Divorced father's education		0.276 (0.00)	0.264 (0.00)	0.257 (0.00)

# Results religion

	Model 1	Model 2 $\varphi = 1$	Model 3 $\varphi = 1.25$	Model 4 $\varphi = 1.50$
Woman	0.089 (0.01)	0.091 (0.01)	0.090 (0.01)	0.088 (0.01)
Year	0.031 (0.43)	0.029 (0.46)	0.030 (0.44)	0.032 (0.41)
Age	0.081 (0.04)	0.085 (0.03)	0.083 (0.04)	0.080 (0.05)
# siblings	0.063 (0.09)	0.056 (0.15)	0.061 (0.11)	0.067 (0.08)
Mother's attendance	0.099 (0.03)	0.066 (0.23)	0.091 (0.08)	0.110 (0.03)
Stepfather's attendance	0.217 (0.00)	0.218 (0.00)	0.215 (0.00)	0.225 (0.00)
Divorced father's attendance		0.053 (0.27)	0.016 (0.75)	-0.026 (0.61)

# Conclusions – Education

- Divorced fathers not less important than married fathers
  - Refutes social capital hypothesis (Coleman)
- Stepfathers less important than divorced fathers
  - Favors genetic arguments
- Against social transmission of resources

# Conclusions – Religion

- Divorced and stepfathers less important than married fathers
  - Favors socialization hypothesis
- Stepfathers more important than divorced fathers
  - Suggests timing arguments
- In line with value socialization theory



# Further work

- More and better data on complete parent set
- Complete duration information
- Interactions with duration and timing itself
- Replication for other traits