

The Effects of Targeted Early Childhood Interventions

Focus on the Effects on Mothers



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Targeted Early Childhood Interventions



Targeted programs for disadvantaged families are very popular in the U.S. Recently, more and more popular in Europe, too.

Two types are common:

1. Center based, e.g.:

- Perry Preschool
- Head Start

2. Based on home visits, e.g.:

- Nurse Family Partnership Program (NFP)
- Healthy Families America

Targeted Early Childhood Interventions



- Perry Preschool
 - Focus mainly on children.
 - Large short-term and long-term effects on children (e.g. Heckman et al. 2013).
 - However, little research on parents.

- Nurse Family Partnership Program (NFP)
 - Focus on mothers.
 - Large effects on children short-term and mid-term (e.g. Olds et al. 2004).
 - Large effects on parents (e.g. Olds et al. 2007).

Effects of Nurse Family Partnership Program (NFP)



- Nurses conduct home visits from pregnancy until 2nd birthday in households of disadvantaged families.

- NFP was evaluated in three randomized controlled trials:
 - Elmira, NY, 1980
 - Memphis, TN, 1990
 - Denver, CO, 1995

- In all three trials positive short-term effects on child health and development.

- Some long-term effects on child criminal activity and school success.

Effects of Nurse Family Partnership Program (NFP) on Mothers



Effects on mothers:

- More employment, less welfare use and less subsequent second births.
 - Explained by more stable partnerships and higher level of mastery.

Because of the effects on the mothers already short-term benefit-cost-ratio greater 1.

Elmira: After 4 years, savings of \$3,498 (Olds et al., 1993).

 After 15 years, savings of \$41,419 (Karoly, 2005).

Memphis: After 12 years, savings of \$12,300 (Olds et al., 2010).

Are the results from the U.S. are transferable to Germany?

The German *Pro Kind* Program



- German adaptation of the “Nurse Family Partnership (NFP)”-Program.
- Scheduled home visits by midwives, nurses or social pedagogues.
- Home visits start during pregnancy up to 2nd birthday.
- Frequency: Weekly, bi-weekly and monthly.
- Overall 52 home visits are scheduled.
- Quasi-fixed curriculum.

The German *Pro Kind* Program



The German *Pro Kind* Program - Affiliation Criteria



- First time mothers
- Affiliation from the 12th until the 28th week of pregnancy
- Economic criteria (at least one), e.g.:
 - Household receives social welfare or unemployment benefits
 - Low Income
 - Overindebtedness

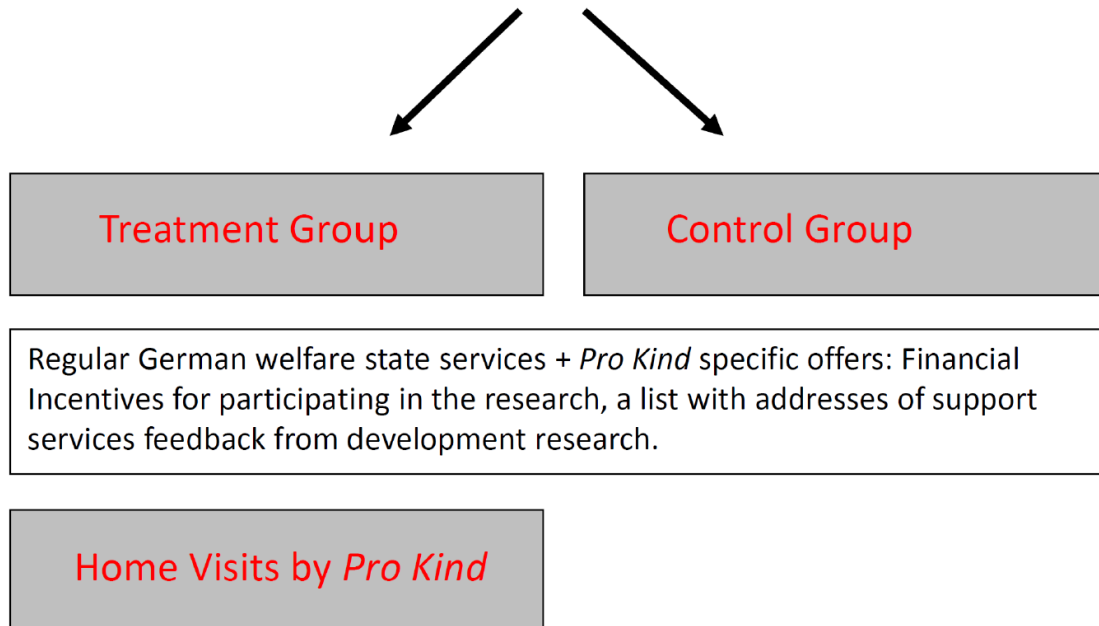
The German *Pro Kind* Program - Participating Municipalities



The German *Pro Kind* Program - Study Design



755 disadvantaged pregnant women



Baseline characteristics are balanced between groups

The *Pro Kind* Program – Research Results



Brandt and Jungmann (2012, 2014).

Outcome: Implementation fidelity

Results: Well implemented and high compliance to the program. Younger women received less home visits.

Sierau et al. (2015)

Outcome: Maternal competencies

Results: Small effects on maternal self-efficacy, stress, knowledge on child rearing, and feelings of attachment.

Sandner and Jungmann (2016)

Outcome: Child development

Results: Effect of cognitive development and maternal investments for girls.

I will now present effects on maternal outcomes.

Data Sources



Administrative data from the Federal Employment Agency (BA) via **record linkage**. Data includes:

- Monthly benefit and employment history.
- Monthly household composition.

Telephone interviews until the third birthday Data includes:

- Detailed monthly information about pregnancies, subjective well-being, relationship stability, childcare, school attend

The *Pro Kind* Program – Effects on mothers



The *Pro Kind* Program – Effects on mothers (Pregnancies and Abortions)



Panel A: Second Pregnancy Occurred		
	Control Mean	Diff. TG/ CG
Pregnancy after First Birth	0.261	0.055
	[0.440]	(0.037)
<i>Obs.</i>	283	602

Panel B: Second Pregnancy Outcome		
	Control Mean	Treatment Mean
Life Birth	0.53	0.63
Abortion	0.24	0.15
Misscarriage	0.14	0.09
Unobserved	0.10	0.13
<i>Pregnancies</i>	74	101

Notes: Standard errors in parentheses; Standard deviations in square brackets. All mothers with at least one interview after birth are included. In Panel B all pregnancies from Panel A. Panel C is a multinomial logit estimation with Life Birth as baseline category. TG = Treatment Group; CG = Control Group;
 * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

The Pro Kind Program – Effects on mothers (Who became a second child?)



	(1)	(2)	(3)	(4)	(5)	(6)
	Control		Treatment		SOEP	
	n	Mean	n	Mean	n	Mean
<i>After Birth of sec. Child</i>						
Unplanned Preg.	35	0.57	62	0.61	799	0.19
Father Does not Live In HH	35	0.29	60	0.40	803	0.06
No Other Care Apart From Mother	35	0.31	62	0.48	804	0.08
Mother has no Partner	33	0.06	58	0.17	803	0.01

Notes: The presented data contains all second children for who data is available. C=Control Group; T=Treatment Group.

The *Pro Kind* Program – Effects on Mothers (Life Satisfaction)



	(1) Index of Well-Being	(2) Index of Life Satisfaction in Different Areas	(3) Satisfaction with Life in General
Home Visiting	0.167 (0.043)***	0.106 (0.051)*	0.147 (0.062)**
Household Controls	Yes	Yes	Yes
Community Fixed Effects	Yes	Yes	Yes
<i>N</i>	429	425	427
<i>R</i> ²	0.18	0.26	0.18

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Conclusion



- Concerning the mothers *Pro Kind* has the opposite effects than in the U.S.
- Probably it is a good outcome because mothers are happier and decide to stay longer with their child and therefore they also decide for a second birth more often.
- Linkage important. Otherwise no possibility to find effects.

Thank You for Your Attention

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