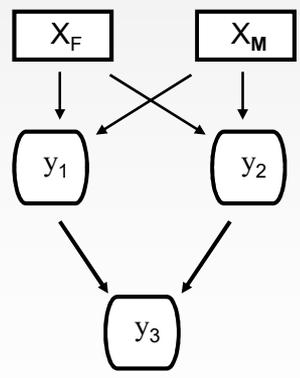# Family extension out of a bargaining process

Petra Stein, Sebastian Willen

University of Duisburg-Essen

First line of research

- Influence of socio-economic factors

  - **Traditional focus: Woman**

    Some studies take into account at least some features of the woman, mostly the level of education or information of employment status

    (e.g. Dornseif & Sackmann 2003; Huinink 2002; Kreyenfeld 2002, 2008; Kreyenfeld & Geisler 2006; Maul et al. 2010)

  - **Focus since the last decade: Man**

    Research results have shown that occupational-biographical factors influence the transition to fatherhood. Occupational uncertainties such as extended training phases, interruption of occupation and self-employment have a negative influence on the fertility behaviour of the man

    (e.g. Baron & Schulze-Oeing 2015; Schmitt 2004; Pollmann-Schult 2008, 2010; Tölke & Diewald 2003; Tölke 2004, 2005)

Extended research focus: Couples

- Influence of socio-economic factors
    - Studies, which explicitly take a dyadic perspective, are rare. Most of them only consider the influence of socio-economic characteristics of both partners on the generative behaviour

        Partners occupation and labour market participation
        (e.g. *Gebel &Giesecke 2009; Kurz 2005; Lutz et al. 2013*)
        Education and the educational constellation
        (e.g. *Bauer & Jacob 2010; Kreyenfeld 2002, 2008; Kreyenfeld & Konietzka 2008; Klein 2003; Wirth 2007*)
        Religiosity
        (e.g. *Croijn et al. 1996*)

Second line of research

- Fertility desire, intention and preference of both partners
    - Not only socio-economic characteristics are important for decision making towards having children, also the individual intentions of both partners have to be considered to analyse the fertility decision
    - Recent studies found out that both partners' expectations influence the probability of a birth
        - *in US: Thomson & Hoem, 1998;*
        - *in the Netherlands: Jansen & Lifbroer 2006;*
        - *in Austria: Testa 2012;*
        - *in Germany: Bauer & Kneip, 2013, 2014; Pavetic 2009; Stein & Pavetic 2011, 2013; Stein et al. 2014)*

Our line of research

- Actually, we do not know whether females, males and couple characteristics for family extension, measured on the individual level, have the same impact as they have on the couple's level.

- Up to now, no study combines this two aims of research
  - socio-economic factors
  - fertility intentions

Theoretical Model I

- How could this process, that generates agreement or disagreement towards the decision of family extension, be theoretically modelled?

Theoretical Model II

- In access to the Theory of Planned Behaviour *(Ajzen & Klobas 2013)*

  1. The decision to have a further child is a result of a reasoned decision

  2. The decision to have a further child gets determined by its intention

  3. The intention for a child is determined again by:

     ➢ Attitude toward having a further child

     ➢ Subjective norm for having a further child

     ➢ Perceived control over having a further child

Theoretical Model III

- The assumptions of the Theory of Planned Behaviour get extrapolated on the couple level

  - <u>Firstly</u>: Each partner has its own individual intention for a further child which gets moderated by its inividual and the partner's socioeconomic factors

  - <u>Secondly</u>: Both invidual intentions interact within a partnership and lead into the pairdecision towards having a further child.

Our focus of research
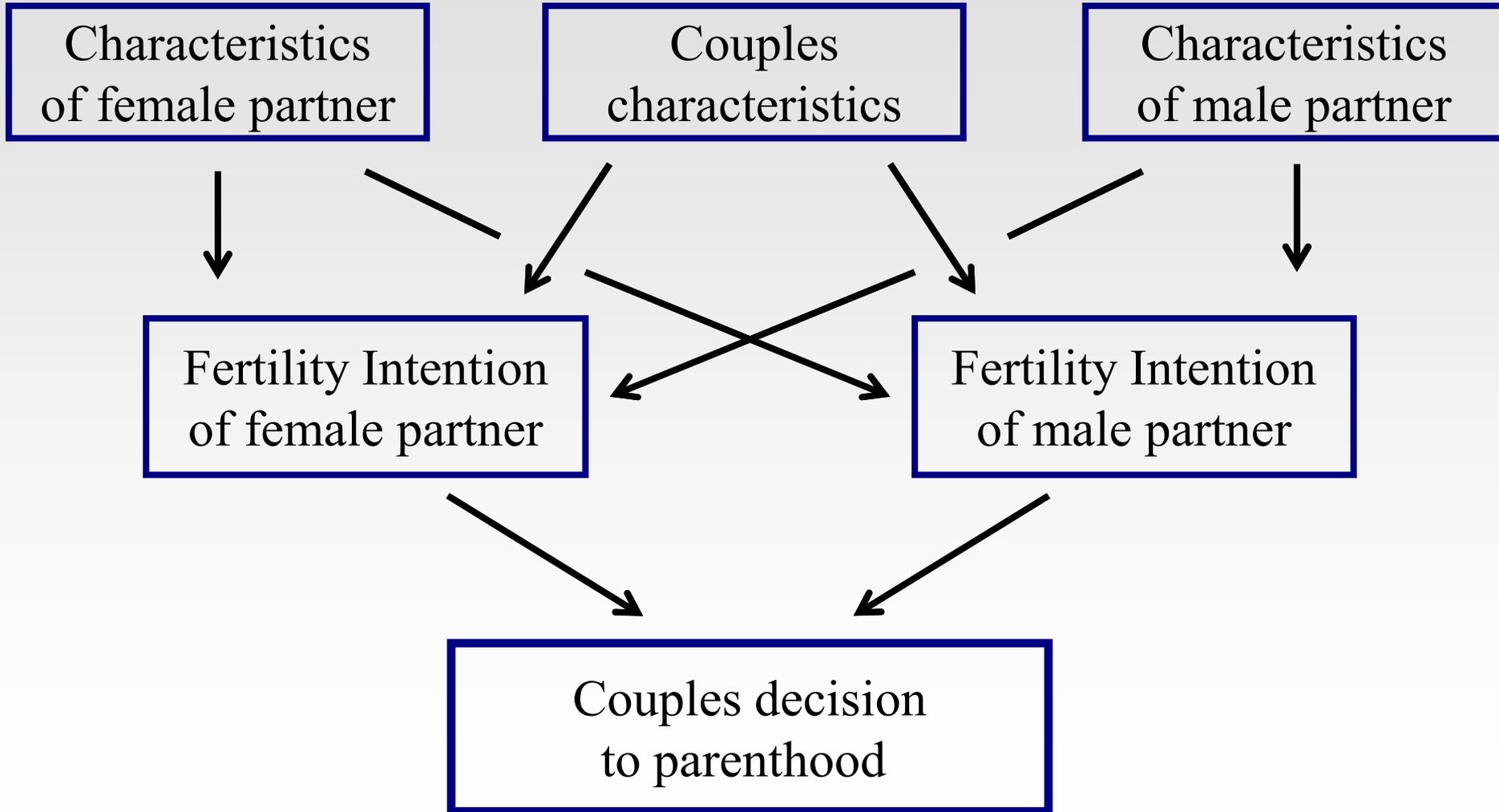
Statistical Model I

- How can this complex process of descision making be statistically modelled?
  1. the significance of both partners' characteristics
  2. the mutual influence of the partners' intentions
  3. the consideration of the intentions time instability *(Buhr & Kuhnt 2013)*
  4. the relative influence of both partners on the common decision
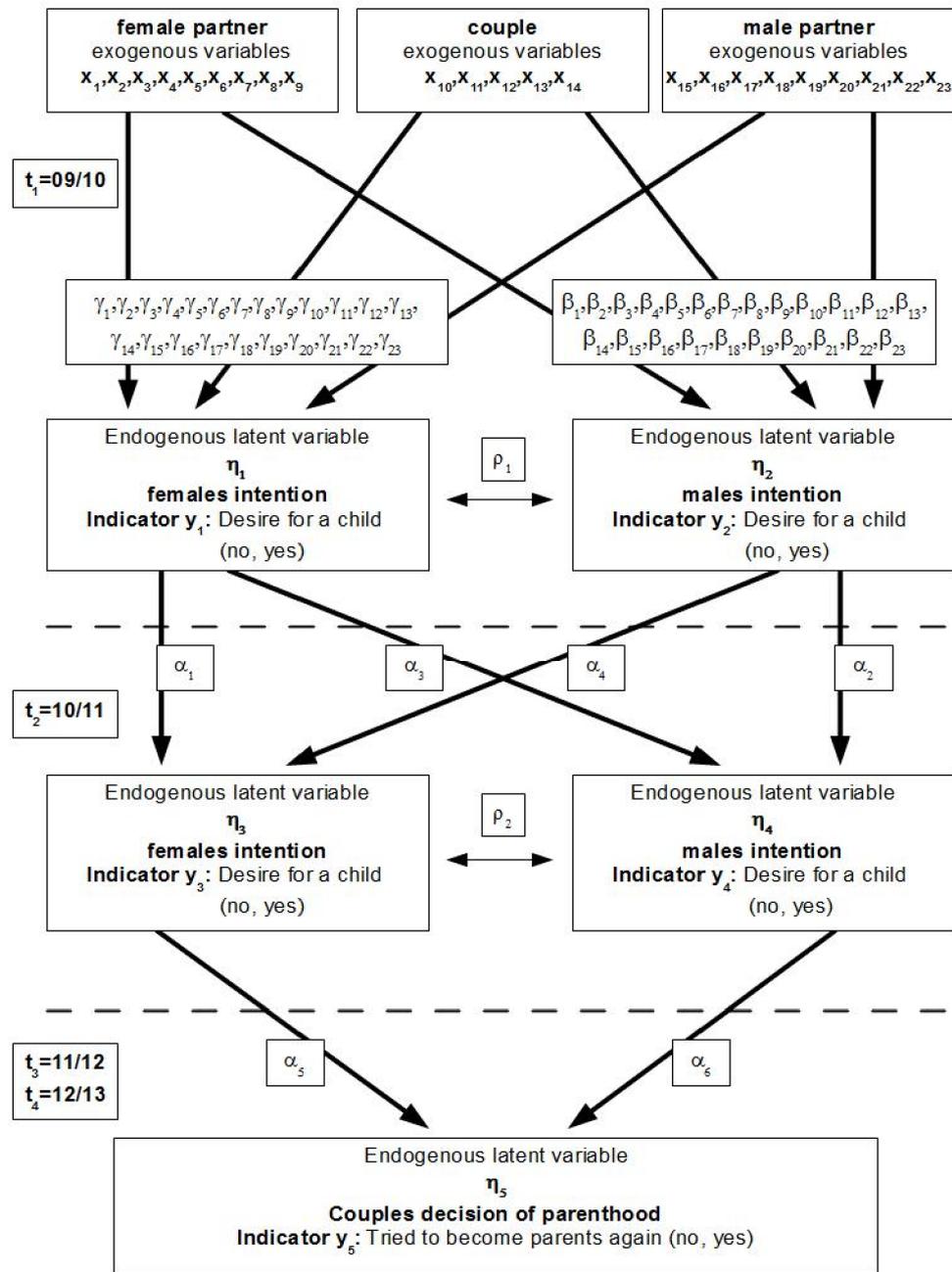
Main Hypothesis

- Cause of differences in motivation between the couple members, there are disparities among the individual and partner effects

- Due to higher costs for family extension the woman is leading the process of decision finding

- But → The final common decision to have a further child is agreed in parity

Data base

- Panel Analysis of Intimate Relationships and Family Dynamics (pairfam)
- Wave 2 thru 5 of the actor and partner data sets

Endogenous latent variables

Females intention to get a child (η_1; η_3)

- By: „Become a mother in the next two years (again)?"

  (0 = no, 1 = yes ; Wave II 09/10 resp. Wave III 10/11)

Males intention to get a child (η_2; η_4)

- By: „Become a father in the next two years (again)?"

  (0 = no, 1 = yes ; Wave II 09/10 resp. Wave III 10/11)

Couples decision to get a child (η_5)

- By: „Tried to sire a child / become pregnant within the last twelve months (again)?"

  (0 = no, 1 = yes ; Wave III 11/12 and Wave VI 12/13)

Individual exogenous variables I

behavioural beliefs for having a further child

–   (each index composted by 5 Items: 1 = not at all to 5 = very strongly)

x_{1f}: Females positiv VOC

x_{2f}: Females negativ VOC

x_{1m}: Males positiv VOC

x_{2m}: Males negativ VOC

Individual exogenous variables II

normative beliefs for having a further child

– (each index composted by 2 Items: 1 = disagree completely to 5 = agree completely)

x_{3f}: Females discerned social pressure

x_{3m}: Males discerned social pressure

Individual exogenous variables III

control beliefs for having a further child

x_{4f}: Females working-time

x_{4m}: Males working-time

x_{5f}: Females willingness to cut back career

x_{5m}: Males willingness to cut back career

x_{6f}: Female: Another child compatible with employment situation

x_{6m}: Male: Another child compatible with employment situation

Individual exogenous variables III

control beliefs for having a further child (continuation)

x_{7f}: Female partner's education (CASMIN Classification)

x_{7m}: Male partner's education (CASMIN Classification)

x_{8f}: Female is vulnerable employed

x_{8m}: Male is vulnerable employed

Individual exogenous variables VI

additionally:

x_{9f}: Females perception: Satisfaction with relationship

x_{9m}: Males perception: Satisfaction with relationship

x_{10f}: Age of female partner

x_{10m}: Age of male partner

Couple exogenous variables

x_{11}: Living currently in West Germany

x_{12}: Flexible childcare options

x_{13}: Couples marital status

x_{14}: Duration of relationship

x_{15}: One common child at present

x_{16}: Age of youngest child

Model estimation

- Multivariate non-linear probit model

- Solving identification problems by adding non-linear parameter restriction *(Pavetic 2009; Stein & Pavetic 2011,2013)*

- Robust weightet least square estimator (WLSMV)

- Calculation by Mplus 7

Parameter label	Estimation female	Standard error	Estimation male	Standard error
Individual effects on intention				
VOC positiv	0.123	0.134	0.011	0.147
VOC negativ	0.035	0.113	-0.343*	0.144
Social pressure	0.250**	0.080	0.362***	0.094
Working-time	0.015+	0.007	0.001	0.007
Willingness to cut back career	0.312***	0.078	-0.192*	0.084
Compatibility	0.052	0.227	0.055	0.084
Vulnerable employment	-0.339	0.274	0.510	0.391
Level of education	0.048	0.048	0.026	0.048
Satisfaction with relationship	0.009	0.145	0.074	0.157
Age	-0.095*	0.034	-0.007	0.026
Partner effects on intention				
VOC positiv	-0.335*	0.125	0.215	0.147
VOC negativ	-0.283+	0.144	-0.138	0.128
Social pressure	0.210*	0.091	0.074	0.086
Working-time	-0.014	0.009	0.006	0.008
Willingness to cut back career	-0.139	0.089	0.199*	0.087
Compatibility	0.019	0.236	-0.081	0.239
Vulnerable employment	-0.614	0.489	-0.001	0.306
Level of education	0.068	0.040	0.035	0.054
Satisfaction with relationship	-0.027	0.166	-0.001	0.158
Age	-0.005	0.030	-0.066+	0.032

N = 626; RMSEA ~0.000;
CFI ~1.000
*** $p < 0.001$;
** $p < 0.01$;
* $p < 0.05$;
+ $p < 0.1$
$\lambda = 1.131$

Parameter label	Estimation female	Standard error	Estimation male	Standard error
Individual effects on intention				
VOC positiv	0.123	0.134	0.011	0.147
VOC negativ	0.035	0.113	-0.343*	0.144
Social pressure	0.250**	0.080	0.362***	0.094
Working-time	0.015+	0.007	0.001	0.007
Willingness to cut back career	0.312***	0.078	-0.192*	0.084
Compatibility	0.052	0.227	0.055	0.084
Vulnerable employment	-0.339	0.274	0.510	0.391
Level of education	0.048	0.048	0.026	0.048
Satisfaction with relationship	0.009	0.145	0.074	0.157
Age	-0.095*	0.034	-0.007	0.026
Partner effects on intention				
VOC positiv	-0.335*	0.125	0.215	0.147
VOC negativ	-0.283+	0.144	-0.138	0.128
Social pressure	0.210*	0.091	0.074	0.086
Working-time	-0.014	0.009	0.006	0.008
Willingness to cut back career	-0.139	0.089	0.199*	0.087
Compatibility	0.019	0.236	-0.081	0.239
Vulnerable employment	-0.614	0.489	-0.001	0.306
Level of education	0.068	0.040	0.035	0.054
Satisfaction with relationship	-0.027	0.166	-0.001	0.158
Age	-0.005	0.030	-0.066+	0.032

N = 626; RMSEA ~0.000;
CFI ~1.000
*** p < 0.001;
** p < 0.01;
* p < 0.05;
+ p < 0.1
λ = 1.131

Parameter label	Estimation female	Standard error	Estimation male	Standard error
Individual effects on intention				
VOC positiv	0.123	0.134	0.011	0.147
VOC negativ	0.035	0.113	-0.343*	0.144
Social pressure	0.250**	0.080	0.362***	0.094
Working-time	0.015+	0.007	0.001	0.007
Willingness to cut back career	0.312***	0.078	-0.192*	0.084
Compatibility	0.052	0.227	0.055	0.084
Vulnerable employment	-0.339	0.274	0.510	0.391
Level of education	0.048	0.048	0.026	0.048
Satisfaction with relationship	0.009	0.145	0.074	0.157
Age	-0.095*	0.034	-0.007	0.026
Partner effects on intention				
VOC positiv	-0.335*	0.125	0.215	0.147
VOC negativ	-0.283+	0.144	-0.138	0.128
Social pressure	0.210*	0.091	0.074	0.086
Working-time	-0.014	0.009	0.006	0.008
Willingness to cut back career	-0.139	0.089	0.199*	0.087
Compatibility	0.019	0.236	-0.081	0.239
Vulnerable employment	-0.614	0.489	-0.001	0.306
Level of education	0.068	0.040	0.035	0.054
Satisfaction with relationship	-0.027	0.166	-0.001	0.158
Age	-0.005	0.030	-0.066+	0.032

N = 626; RMSEA ~0.000;
CFI ~1.000
*** $p < 0.001$;
** $p < 0.01$;
* $p < 0.05$;
+ $p < 0.1$
$\lambda = 1.131$

Parameter label	Estimation female	Standard error	Estimation male	Standard error
Individual effects on intention				
VOC positiv	0.123	0.134	0.011	0.147
VOC negativ	0.035	0.113	-0.343*	0.144
Social pressure	0.250**	0.080	0.362***	0.094
Working-time	0.015+	0.007	0.001	0.007
Willingness to cut back career	0.312***	0.078	-0.192*	0.084
Compatibility	0.052	0.227	0.055	0.084
Vulnerable employment	-0.339	0.274	0.510	0.391
Level of education	0.048	0.048	0.026	0.048
Satisfaction with relationship	0.009	0.145	0.074	0.157
Age	-0.095*	0.034	-0.007	0.026
Partner effects on intention				
VOC positiv	-0.335*	0.125	0.215	0.147
VOC negativ	-0.283+	0.144	-0.138	0.128
Social pressure	0.210*	0.091	0.074	0.086
Working-time	-0.014	0.009	0.006	0.008
Willingness to cut back career	-0.139	0.089	0.199*	0.087
Compatibility	0.019	0.236	-0.081	0.239
Vulnerable employment	-0.614	0.489	-0.001	0.306
Level of education	0.068	0.040	0.035	0.054
Satisfaction with relationship	-0.027	0.166	-0.001	0.158
Age	-0.005	0.030	-0.066+	0.032

N = 626; RMSEA ~0.000;
CFI ~1.000
*** $p < 0.001$;
 ** $p < 0.01$;
  * $p < 0.05$;
  + $p < 0.1$
$\lambda = 1.131$

Parameter label	Estimation female	Standard error	Estimation male	Standard error
Individual effects on intention				
VOC positiv	0.123	0.134	0.011	0.147
VOC negativ	0.035	0.113	-0.343*	0.144
Social pressure	0.250**	0.080	0.362***	0.094
Working-time	0.015+	0.007	0.001	0.007
Willingness to cut back career	0.312***	0.078	-0.192*	0.084
Compatibility	0.052	0.227	0.055	0.084
Vulnerable employment	-0.339	0.274	0.510	0.391
Level of education	0.048	0.048	0.026	0.048
Satisfaction with relationship	0.009	0.145	0.074	0.157
Age	-0.095*	0.034	-0.007	0.026
Partner effects on intention				
VOC positiv	-0.335*	0.125	0.215	0.147
VOC negativ	-0.283+	0.144	-0.138	0.128
Social pressure	0.210*	0.091	0.074	0.086
Working-time	-0.014	0.009	0.006	0.008
Willingness to cut back career	-0.139	0.089	0.199*	0.087
Compatibility	0.019	0.236	-0.081	0.239
Vulnerable employment	-0.614	0.489	-0.001	0.306
Level of education	0.068	0.040	0.035	0.054
Satisfaction with relationship	-0.027	0.166	-0.001	0.158
Age	-0.005	0.030	-0.066+	0.032

N = 626; RMSEA ~0.000;
CFI ~1.000
*** $p < 0.001$;
** $p < 0.01$;
* $p < 0.05$;
+ $p < 0.1$
$\lambda = 1.131$

Parameter label	Estimation female	Standard error	Estimation male	Standard error
Couple effects on intention				
West Germany	0.104	0.255	0.059	0.231
Marital	0.184	0.247	-0.048	0.230
Duration of relationship	-0.003	0.025	0.016	0.024
Flexible childcare	0.233	0.233	-0.072	0.213
One child so far	0.962***	0.238	1.003***	0.209
Youngest child	-0.149***	0.049	-0.178***	0.042
Individual effects on intention				
Intention (t_1)	1.582***	0.472	1.086***	0.229
partner effects on intention				
Intention (t_2)	0.130	0.272	0.383+	0.198
Individual effects of intention on decision				
Intention ($t_{3,4)}$)	0.541+	0.242	0.573+	0.277
Intention correlation 1 (t_1)	0.763***		0.058	
Intention correlation 2 (t_2)	0.972***		0.137	

N = 626; RMSEA ~0.000;
CFI ~1.000
*** $p < 0.001$;
** $p < 0.01$;
* $p < 0.05$;
+ $p < 0.1$
$\lambda = 1.131$

Parameter label	Estimation female	Standard error	Estimation male	Standard error
Couple effects on intention				
West Germany	0.104	0.255	0.059	0.231
Marital	0.184	0.247	-0.048	0.230
Duration of relationship	-0.003	0.025	0.016	0.024
Flexible childcare	0.233	0.233	-0.072	0.213
One child so far	0.962***	0.238	1.003***	0.209
Youngest child	-0.149***	0.049	-0.178***	0.042
Individual effects on intention				
Intention (t_1)	1.582***	0.472	1.086***	0.229
partner effects on intention				
Intention (t_2)	0.130	0.272	0.383+	0.198
Individual effects of intention on decision				
Intention ($t_{3,4)}$)	0.541+	0.242	0.573+	0.277
Intention correlation 1 (t_1)	0.763***		0.058	
Intention correlation 2 (t_2)	0.972***		0.137	

N = 626; RMSEA ~0.000;
CFI ~1.000
*** $p < 0.001$;
** $p < 0.01$;
* $p < 0.05$;
+ $p < 0.1$
$\lambda = 1.131$

Summary I

- Strong effects on male's and female's intention, if female partner is willing to cut back her career

- The effects of attitudes and subjected norms are highly considerable

- No specialisation effect due to the employment status

Summary II

- High effect on the intention to get a second child

- The older the youngest child, the less the intention for a further child

- No higher frequency for institutionalised couples and those living in Western Germany

Summary III

- Female's intention is more stable over time

- Female's intention is the leading part in the forefront of the final couple`s decision

- Parity effect of male's and female's intention on the final pair decision to get a further child

Thank you for your attention

Petra Stein

University of Duisburg-Essen
Faculty of Social Science
Institute of Sociology
47048 Duisburg

GERMANY

E-Mail: petra_stein@uni-due.de

Sebastian Willen

University of Duisburg-Essen
Faculty of Social Science
Institute of Sociology
47048 Duisburg

GERMANY

E-Mail: sebastian-willen@uni-due.de