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**Gender Preferences
for Children Revisited:
New Evidence from Germany**

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Gender Preferences for Children Revisited: New Evidence from Germany

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Abstract: Empirical research investigating gender preferences for children and their implications for fertility decisions in advanced industrial societies is relatively scarce. Recent studies on this matter have presented ambiguous evidence regarding the existence as well as the direction such preferences can take. We use data from the most recent German General Social Survey (ALLBUS) to analyse determinants of the preferred sex composition of prospective offspring as well as the influence of the sex of previous children on the respondent's fertility intentions and their actual behaviour at different parities. We find that the socio-demographic determinants of gender preferences differ when childless respondents are compared with parents, and that boys are preferred as a first child. Although an ultimate sex composition that includes at least one son and one daughter is generally favoured, there is no evidence for a behaviourally relevant gender preference in Germany, when higher parities are considered.

Keywords: gender preferences, fertility, Germany

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1. Introduction

Gender preferences for children may not only lead to skewed sex ratios, they might also have implications for a couple's fertility behaviour, where parents who desire one or more children of a certain sex should tend to have larger families than would otherwise be the case (e.g., Seidl 1995).¹ The influence of the sex composition of previous children on a couple's fertility intentions and subsequent fertility behaviour is even supposed to increase with declining family size norms and a general trend towards smaller family sizes in industrialised countries, which makes factors affecting the decision to have another child more important (e.g., Sloane and Lee 1983; Wood and Bean 1977). It is therefore particularly interesting to study gender preferences and their demographic impact in the contemporary European low-fertility setting, which has so far been almost entirely neglected by demographers (see Hank and Kohler [2000] for an exception).

Recent studies covering Germany have presented ambiguous evidence regarding the existence as well as the direction that gender preferences for children take (Brockmann 2001, Hank and Kohler 2000).² Analysing the transition from the first to

¹ Sex-selection technologies, sex-selective abortions, or other means of this kind, designed to influence the sex composition of a couple's offspring, are not considered here. See Mason and Bennet (1977) for an early article on the potential effect of sex-selection technologies on the population sex ratio and Goodkind (1999) for a recent discussion of ethical questions concerning prenatal sex selection. Pebley and Westoff (1982) conclude from their research that there would be only a small overall effect on women's reproductive behaviour, if sex-selection technologies were more readily available in a low-fertility society such as the US.

² A similarly confusing situation is found for the Swedish case: While findings by Murphy (1992) suggest that parents with two daughters are *less* likely to have a third child than others, Hoem (1993), on the other hand, finds evidence that those Swedish couples who have two daughters are *most* likely to have a third child. Finally, Hank and Kohler (2000) as well as Schullstöm (1996) interpret their results as pointing towards a preference for a mixed sex composition.

the second child, using data from the German Socio-Economic Panel, Brockmann (2001) finds that West German women never developed a clear gender preference, while women born in East Germany exhibit a significant girl preference. On the other hand, findings by Hank and Kohler (2000), based on data from the Family and Fertility Surveys, show not only an eastern German girl preference, but also a preference for boys in the western part of the country. If, however, the progression from parity two to parity three is considered, Hank and Kohler find no statistically significant evidence for any gender preference at all in West Germany, but indication for a preference of a mixed sex composition in the East.

We assume that the identification of gender preferences in empirical analyses not only depends on the birth parities under consideration, but that it also reacts highly sensitive towards changes in model specifications and data that are used. The most preferable solution to this problem would of course be a better theoretical understanding of the underlying mechanisms that are responsible for gender preferences. While Brockmann (2001) argues that welfare policies mattered for the development of gender preferences in post-war Germany, Hank and Kohler (2000) consider socio-cultural factors to be important determinants. At the time present, however, neither hypothesis can be tested empirically in a satisfactory manner. Nevertheless, we believe that the collection of a richer body of empirical evidence may prove fruitful in providing a basis for future theory development and theory testing.

It is the aim of the present paper to contribute to the clarification of the so far ambiguous empirical evidence concerning gender preferences for children in Germany. For this purpose we analyse recent data from the German General Social Survey (ALLBUS), which was conducted in 2000. This data source allows us to analyse

determinants of the preferred sex composition of desired (additional) children as well as the influence of the sex of previous children on parents' intended and actual parity progression at different birth orders. Before we present our empirical results, a brief overview of previous studies on gender preferences is given, followed by some theoretical considerations, based on the value-of-children approach.

2. Overview of previous studies

The greater part of the literature on gender preferences refers to developing countries (see Basu and Das Gupta [2001] for a summary of major findings). Analyses of data from World Fertility Surveys (Cleland et al. 1983) and Demographic and Health Surveys (Arnold 1992; 1997) mainly reveal a desire for a balanced number of daughters and sons or at least one child of each sex. The studies conclude that the effect of gender preferences on reproductive behaviour and family planning in less developed societies should not be considered as very strong. Nevertheless, in a wide range of countries a sizeable preference for sons is found. This is particularly widespread in some Asian countries, such as China, Korea, Vietnam, or India (e.g., Arnold et al. 1998; Haughton and Haughton 1998; Larsen et al. 1998; Zeng et al. 1993).

There is only relatively scarce empirical research investigating gender preferences for children and their implications for fertility decisions in advanced industrial societies.³ Most such studies were conducted in the US (e.g., Coombs 1977; Pebley and

³ Research on a related demographic topic has been conducted recently by Andersson and Woldemicael (2001). The authors exploit Swedish register data to analyse the potential influence of the sex composition of children on marriage disruption and marriage formation. They find only weak to no effects of the sex composition of children on the propensity of Swedish mothers to enter into and exit from marriage. See Morgan et al. (1988) for an analysis of the association between the sex of children and parents' risk of marital disruption in the US.

Westoff 1982; Sloane and Lee 1983; see Pollard and Morgan [2002] for a recent analysis). Marleau and Maheu (1998) provide a comprehensive overview of North American studies dealing with parents' preferred sex of a sole child. In addition, Carr-Hill, Samphier and Sauve (1982) investigate gender preferences of Aberdeen families, Gray, Duckworth and Nakajima (1980) are interested in the case of Japan, Jacobsen, Møller and Engholm (1999) discuss Danish fertility rates in relation to the sexes of preceding children in the family, Schullström (1996) studies Swedish cohorts born 1946-1975, and Young (1977) analyses data from Australia.

Unfortunately, the data and measures used in these analyses cannot be compared straightforwardly, which makes it difficult to summarise and evaluate their results. While some studies do show an impact of gender preferences on reproductive behaviour (e.g., Marleau and Saucier [1996], who study Canadian couples with at least two children), others have not found such an effect (e.g., Ayala and Falk [1971], who analyse the relationship between sex of the first two children and ultimate family size in the US). If gender preferences are detected, the magnitude of the observed influences on demographic outcomes often turns out to be rather small, even if they are statistically significant (Waller 1975). In addition to a fairly consistent tendency for both men and women towards favouring a balanced sex mix, it has been shown that parity matters, when gender preferences are analysed. There is some indication for a predominance of sons over daughters when the preferred sex of the first child is considered, or in case of an unbalanced number of children (e.g., Gray 1982; Krishnan 1987). A recent review of the literature on women's preferred sex of their first-born child suggests, though, that it cannot be claimed anymore that boys are universally favoured as the first child in western societies (Marleau and Saucier 2002). A peculiar finding reported in the same

study is that in recent years first-time-pregnant women have apparently developed a preference for girls, while non-pregnant women still tend to favour boys.

In a comparative analysis of gender preferences in 17 European countries, using data from Family and Fertility Surveys collected in the 1990s, Hank and Kohler (2000) find – despite detectable cross-national heterogeneity – a strong tendency towards a preference for a mixed sex composition (if any preference is found at all). In contrast to most previous studies, however, some unexpected indication for a girl preference in the Czech Republic, Lithuania, and Portugal is found, if transitions from the second to the third child are considered. Only a few other studies report a preference for daughters, e.g. Jacobsen, Møller and Engholm (1999) for the progression from parity two to parity three in Denmark. Research conducted in the US (Peterson and Peterson 1973) and in Israel (Teichman et al. 1992) suggests a slight girl preference in wartime, presumably to avoid losing male offspring in combat.

3. Theoretical considerations

A major shortcoming of most studies investigating gender preferences in advanced industrial societies is their lacking theoretical framework. In this paper, we base our analysis on the value-of-children approach, developed first by Hoffman and Hoffman (1973); see Thomson (2001) for a recent overview.

It is argued that children of a particular sex are often desired to provide certain utilities, such as financial, social, or psychological benefits. In developing countries, for example, sons are presumed to have greater economic net utility than daughters, since male offspring is better able to provide assistance in agriculture and to serve as a primitive social security system. In patrilineal societies sons are also valued for

continuing the family name. Daughters, on the other hand, should be more reliable in providing old-age-assistance. In addition, they are frequently desired to help with household tasks or to care for younger siblings. Thus, even in countries with a prevailing preference for sons, many families consider it important to have at least one daughter (e.g., Arnold 1997; Cleland et al. 1983).

As societies develop, boy preference – if present – should decline and girls should be treated increasingly more equal. However, while Pollard and Morgan (2002) argue that changes in the societal gender system may result in parental gender indifference, Brockmann (2001) shows that modernisation does not necessarily ‘neutralise’ gender preferences. Sex-role ideologies, for example, have been found to be a strong predictor of first-child sex preferences (Markle 1974). If this holds true, the changing perception of roles for women in recent decades might even be conducive to the development of a preference for girls in some countries (e.g., Hammer and McFerran 1988). Since education and social class may well be considered as important determinants of attitudes towards women’s role in society, one might assume a greater girl preference among the more highly educated. So far, only very few studies accounted for this possible relationship, producing unclear empirical evidence (e.g., Carr-Hill, Samphier and Sauve 1982; Krishnan 1987). Moreover, a study by Coombs (1977) does not provide any indication for a positive association between female employment and a greater preference for daughters in the US. Rather the contrary is shown, namely that particularly working wives are more likely to prefer sons.

Since in industrialised societies children no longer provide economic net utility, but rather became a source of significant time and monetary costs, they are likely to be valued more for social and psychological reasons. Hoffman and Hoffman (1973) list a

set of potential values, parents may attribute to their children, e.g. expansion of the self, affiliation, stimulation, accomplishment, or social comparison. At least with regard to some of these categories, different benefits may accrue from daughters or sons for each of the partners. Morgan et al. (1988), for example, find that boys reduce the parents' divorce risk, since fathers' attachments and obligations to their children and marital cohesion are greater, if they have sons. Women, on the other hand, may consider girls as easier to raise or as more rewarding companions (e.g., Marleau and Saucier 2002). Since each partner might want to have a child of his or her own sex, couples may desire a gender mix.

The values discussed by Hoffman and Hoffman may be of different relevance, depending on which parity is considered. Results of a study analysing values and disvalues attached to children in the Philippines, Korea, and the United States suggest a multistage pattern (see Bulatao 1981). At low parities, emotional and psychological rationales for having any children at all are found to dominate. At higher parities, though, it becomes more important to balance the family. Specific gender preferences are found to be particularly prominent at the third and fourth child. Parities above five are finally characterised by potential economic benefits from children.

It has been argued that the sex composition of previous children may not only affect birth stopping, but also the timing and spacing of childbirths (e.g., Teachman and Schollaert 1989; Yamaguchi and Ferguson 1995). The empirical evidence mainly suggests, though, that sex composition is relevant only for birth stopping. Parents who fail to achieve the desired sex balance (or sex ratio) among their children by the time they reach the number of children they originally intended to have, might even revise their family size goals upward. Thus we hypothesise that the desire for additional

children is likely to be curtailed, once the actual sex composition of the couple's children reflects their gender preferences (see also Wood and Bean 1977).

4. Data and methods

The methodological approaches used in studies of gender preferences reach from direct questions regarding the respondent's preferences on the one hand (e.g., Hammer and McFerran 1988; Krishnan 1987), to various indirect statistical measures on the other hand (see Haughton and Haughton [1998]; McClelland [1979] for critical reviews of such methods). The ALLBUS 2000 data allow us to employ both of these general approaches to investigate various aspects of gender preferences for children in Germany (see http://www.gesis.org/en/social_monitoring/allbus/e_service_guide.htm for details).

In the *first part* of our analysis we exploit questions on the preferred sex composition of prospective offspring, which were asked to all respondents in reproductive ages who report the desire to have a(nother) child. We use this information to investigate the socio-demographic determinants of gender preferences, limiting our sample to men and women aged 18 to 45 at the time of the survey. The dependent variable in our multinomial logistic model is coded 0 if the respondent does not report any preference, 1 if a balanced gender mix is preferred, 2 if (more) girls, and 3 if (more) boys are wanted. Regressions are run separately for respondents with children (n=117) and without children (n=406). In both cases we control for a set of demographic (age, sex, marital status), cultural (ethnicity, sex-role attitudes), and educational (schooling, vocational training) background variables, plus for the sex of the first child (see *Table 1* for descriptive statistics). Although such a direct approach is informative with regard to the existence and possible structure of gender preferences, it does not allow to

investigate whether there is an impact on demographic behaviour. Respondents might moreover tend to state their preferences in accord with the actual sex of children that are already born (e.g., Pebley and Westoff 1982). However, on the basis of direct questions it is possible to identify gender preferences which might not have materialised yet.

[Table 1 about here]

Manifested gender preferences can be approached indirectly as differential parity progression probabilities in case of a specific sex composition of previous children. This is done in the *second part* of the empirical analysis, where we analyse the progression to the second child (n=861) and the third child (n=547), respectively. Biological and step children are not distinguished. We do not only account for parity progressions which have already occurred, but we also consider the respondent's fertility intentions (see also Hank and Kohler 2000). This results in an ordered dependent variable that equals 0 if the respondent has one child (two children) only, 1 if s/he has one child (two children) and reports to want more, and 2 if s/he has more than one child (two children, respectively). The latter category includes current pregnancies. Of course we are aware of the fact that intentions do not guarantee that the respondent's fertility behaviour will actually change. However, fertility intentions are frequently found to be strong and persistent predictors of actual fertility behaviour (e.g., Schoen et al. 1999) and are also likely to be influenced by the sex of previous children (e.g., Sloane and Lee 1983). In the ordered probit models estimated here, we control again for demographic, cultural, and educational characteristics, plus for the sex of children already born (see *Table 2* for descriptive statistics).

[Table 2 about here]

5. Empirical results

5.1 Determinants of the preferred sex composition of desired (additional) children

The descriptive results shown in *Table 1* indicate a clear tendency of *childless* respondents to have no gender preference at all (35%) or to favour a balanced sex mix (47%). An equal number of respondents exhibits a preference for girls or boys, respectively (9%). More than half of the respondents who are already *parents* are indifferent towards the sex of future offspring (54%), but as many as 16% prefer to have (more) boys and even 20% would like to have (more) girls. However, this relatively high preference for a specific sex is likely to reflect in part the desire to have at least one child of each sex, since parents will account for the sex of previous children when being asked about the favoured sex composition of prospective children.

Can differential gender preferences be explained by socio-demographic characteristics of individuals? The multinomial logistic regression for *childless* respondents (see *Table 3a*) shows that women are significantly more likely to exhibit a gender preference for children than men. Namely, childless women tend to opt for a balanced sex mix and – even stronger – for having a girl (or more girls than boys). Age, on the other hand, does not have a sizeable impact on the respondents' gender preferences, although there seems to be a weakly significant propensity among the younger ones (aged 18 to 26) to take a negative view of daughters. Finally, the degree of

occupational training turns out to be relevant, as childless respondents with no vocational degree are clearly more likely to have a son preference. None of the cultural background variables, though, contributes to the explanation of the observed gender preferences in our sample.

[Table 3 about here]

Turning to *parents* (see *Table 3b*), we do not find significant male-female-differences in gender preferences anymore. Consistent with the negative propensity of young childless respondents to favour girls, we find indication for a son preference (along with a preference for a balanced gender mix) in the youngest age group of parents. This association between age and preferred sex shows up somewhat stronger for parents than for respondents without children. Also in line with the evidence from the sample of childless, there is a weakly significant positive effect of having a university degree on the probability of parents to exhibit a desire for having girls rather than boys. This points to possible educational differences in gender preferences which are not related to the existence of specific sex-role attitudes, for which we control but which turn out to be insignificant. The sex of the first child clearly is the most important predictor of parents' preferences concerning the sex of desired additional children. The highly significant coefficients of the respective variable suggest an interpretation that parents do indeed favour an ultimate sex composition that includes at least one son and one daughter.

5.2 The effect of the sex of previous children on intended and actual parity progression

The demographic, cultural, and educational control variables in the ordered probit models come out as expected, both for respondents with at least one child as well as for those with at least two children (*Table 4*). A lower age at first birth and a shorter interval between the birth of children increases the respondent's probability to have or to desire another child. The negative coefficient of the dummy variable for East Germans at the transition from parity one to parity two is consistent with research suggesting that the East German fertility decline after unification is particularly due to forgone second births (e.g., Kreyenfeld 2001). Traditional sex role attitudes are positively correlated with the respondent's propensity to progress to higher birth orders. The educational background turns out to be insignificant, which we explain by the selectivity of our sample, where all respondents already have at least one child.

The sex of the first child has a statistically significant effect on parents' propensity to have a second child. If the first born is a son, respondents in our sample are less likely to have another child than in case of a daughter as the first child. This suggests a boy preference at parity one. Turning to respondents with at least two children, however, we do not find an effect of the sex of the first two children on actual or intended subsequent fertility anymore. The probability to progress beyond the second child is therefore independent of the gender composition of previous offspring. When estimating separate models for East and West Germany (not shown here), we do not find any significant differences in gender preferences between the two parts of the country. The coefficient indicating a preference for a son as a first born in East Germany is – probably due to the limited sample size – not statistically significant, though.

[Table 4 about here]

6. Summary and conclusions

Gender preferences for children and their demographic impact have rarely been studied in the contemporary European low-fertility setting. Recent studies on Germany have presented ambiguous evidence, though, regarding the existence as well as the direction that such preferences take (see Brockmann 2001, Hank and Kohler 2000). In this paper, latest data from the German General Social Survey (ALLBUS) are used to analyse determinants of the preferred sex composition of desired (additional) children as well as the influence of the sex of previous children on parents' intended and actual parity progression at different birth orders. We hypothesise that parents stop childbearing, once the sex composition of their children matches their gender preferences.

We find that childless women tend to have stronger gender preferences (particularly in favour of girls) than their male counterparts and that the sex of the first child is the most influential predictor of parents' preferences for the sex composition of prospective offspring. Regarding the ultimate sex composition of their children, parents state a clear preference for having at least one child of each sex. There is no clear evidence in support of a 'modernisation hypothesis' of changing gender preferences, though. While the more highly educated seem to have a higher propensity to favour daughters (and vice versa), younger respondents exhibit a greater preference for having (more) sons. We interpret this lack of coherent and clearly identifiable socio-demographic determinants as an indicator for the existence of unobserved cultural origins of gender preferences for children in Germany (see also Coombs 1977).

Turning to the behavioural relevance of gender preferences, we find that parents whose first born is a son are significantly less likely to have (or intend to have) a second child than those who have a daughter first. There is no such manifested gender preference when the progression from the second to the third child is considered. Both results corroborate the findings for (West) Germany reported in Hank and Kohler (2000). The general preference for an ultimate sex mix – which parents exhibit when being asked about their favoured sex composition – is obviously not sufficiently strong to induce an actual revision of family size goals and higher fertility, even if all previous children are of the same sex (either boys or girls). Future research should investigate whether this ‘behavioural indifference’ persists, when the impact of gender preferences on other outcomes of social or demographic interest (e.g., divorce; see Andersson and Woldemicael [2001]) is considered.

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Tables

Table 1: Descriptive statistics – Respondents with desire for a(nother) child

	Respondents without children (n=406)	Respondents with children (n=117)
<i>Sex composition of desired (additional) children^{a)}</i>		
No gender preference	35 %	54 %
Balanced gender mix	47 %	10 %
(More) girls	9 %	20 %
(More) boys	9 %	16 %
<i>Demographic variables</i>		
Age group 18 to 26	63 %	16 %
Age group 27 to 35	27 %	64 %
Age group 36 to 45	10 %	20 %
Female	40 %	55 %
Married	13 %	76 %
<i>'Cultural' variables</i>		
West German	58 %	59 %
East German	34 %	26 %
Foreigner	8 %	15 %
Traditional sex-role attitudes ^{b)}	27 %	35 %
<i>Educational variables</i>		
High school-leaving degree	39 %	32 %
In education	28 %	3 %
No vocational degree	11 %	11 %
Vocational degree	50 %	68 %
University degree	11 %	18 %
Note:		
^{a)} The average number of desired children reported by the childless is 2.0. The average number of <i>previous</i> children reported by parents is 1.3, and the average number of desired <i>additional</i> children is 1.3, too.		
^{b)} This binary variable equals 1, if the respondent agrees on the statement that women should stay home and take care of the household and children, while men should focus on their professional career.		

Source: ALLBUS 2000, authors' calculations

Table 2: Descriptive statistics – Respondents with one or more child(ren)

	Respondents with at least one child (n=861)	Respondents with at least two children (n=547)
<i>Ordered dependent variable^{a)}</i>		
Respondent has one child / two children only	26 %	65 %
Respondent has one child / two children and wants more	9 %	4 %
Respondent has more than one child / two children	65 %	31 %
<i>Demographic variables</i>		
Age group 18 to 26	4 %	1 %
Age group 27 to 35	32 %	27 %
Age group 36 to 45	64 %	71 %
Age at first birth	25.1	24.2
Interval between first and second child (in years)	-	3.7
Female	56 %	56 %
Married	80 %	84 %
<i>'Cultural' variables</i>		
West German	53 %	55 %
East German	38 %	35 %
Foreigner	9 %	10 %
Traditional sex-role attitudes ^{b)}	36 %	40 %
<i>Educational variables^{c)}</i>		
High school-leaving degree	23 %	22 %
No vocational degree	8 %	8 %
Vocational degree	76 %	76 %
University degree	15 %	16 %
<i>Sex composition of previous child(ren)</i>		
First child – Boy	51 %	-
One girl, one boy	-	50 %
Two girls	-	25 %
Two boys	-	25 %
Note:		
^{a)} The distribution of respondents across the categories of the ordered dependent variable is very similar to the distribution reported in Hank and Kohler (2000: Table 1).		
^{b)} This binary variable equals 1, if the respondent agrees on the statement that women should stay home and take care of the household and children, while men should focus on their professional career.		
^{c)} The share of respondents who are in education still is less than one per cent. The respective variable is therefore omitted.		

Source: ALLBUS 2000, authors' calculations

Table 3: Determinants of the sex composition of desired (additional) children – Results of multinomial logistic regressions (reference category: no preference)

	(a) Respondents without children (n=406) and desire for ...									(b) Respondents with children (n=117) and desire for ...								
	... balanced gender mix			... girl(s)			... boy(s)			... balanced gender mix			... girl(s)			... boy(s)		
	β	s.e.	Sig.	β	s.e.	Sig.	β	s.e.	Sig.	β	s.e.	Sig.	β	s.e.	Sig.	β	s.e.	Sig.
Age group 18 to 26	-.06	.30		-.91	.51	*	-.75	.52		2.36	.88	***	-1.42	1.35		2.07	.81	***
Age group 36 to 45	-.68	.45		.16	.61		.04	.68		.78	1.03		.25	.69		-.92	1.20	
Female	.53	.24	**	1.23	.40	***	.11	.42		1.31	.86		.21	.65		.55	.67	
Married	.21	.37		-.22	.56		-.54	.70		-.41	.83		-.44	.70		-.56	.77	
East German	-.20	.24		.00	.42		.13	.38		-.36	.88		.45	.63		-1.35	.85	
Foreigner	-.04	.45		.72	.63		.50	.67		-1.15	1.26		-.25	.90		.24	.98	
Sex-role attitudes	-.21	.27		.51	.41		-.20	.45		.24	.85		.78	.72		-.92	.82	
High school-leaving degree	-.35	.29		-.72	.53		-.56	.46		.18	.96		-.84	1.20		-.18	.84	
In education	-.05	.32		.28	.58		.64	.55		-	-		-	-		-	-	
No vocational degree	.56	.44		.95	.73		1.64	.63	***	-.82	1.29		1.41	1.15		-.59	.97	
University degree	.13	.44		.73	.71		-1.02	1.13		.21	1.18		2.52	1.38	*	.10	1.07	
First child – Boy	-	-		-	-		-	-		-.64	.78		3.14	.92	***	-2.66	.97	***
Constant	.36	.28		-1.62	.48	***	-1.06	.45	**	-2.47	1.17	**	-3.83	1.19	***	-.15	.94	
Pseudo-R ²							.04									.25		

Note:
Significance: * <0.10 ; ** <0.05 ; *** <0.01

Source: ALLBUS 2000, authors' calculations

Table 4: Intended and actual parity progression in dependence of the sex of previous children – Results of ordered probit regressions

	(a) Respondents with at least one child (n=861)			(b) Respondents with at least two children (n=547)		
	β	s.e.	Sig.	β	s.e.	Sig.
Age group 18 to 26	-.64	.22	***	-.78	.51	
Age group 36 to 45	.22	.10	**	.22	.13	*
Age at 1 st birth	-.09	.01	***	-.05	.02	***
Birth interval	-	-		-.07	.02	***
Female	-.10	.09		.07	.12	
Married	.37	.11	***	-.23	.15	
East German	-.47	.10	***	-.18	.13	
Foreigner	.08	.17		.11	.19	
Sex-role attitudes	.22	.10	**	.22	.12	*
High school-leaving degree	.06	.14		.32	.19	*
No vocational degree	-.15	.18		.28	.21	
University degree	.15	.17		-.09	.22	
First child - Boy	-.18	.09	**	-	-	
Two girls	-	-		.08	.14	
Two boys	-	-		.02	.14	
Cut point (1)	-2.69	.33	-	-1.01	.50	-
Cut point (2)	-2.41	.33	-	-.89	.50	-
Pseudo-R ²		.08			.04	
Note: Significance: *<0.10; **<0.05; ***<0.01						

Source: ALLBUS 2000, authors' calculations