

# Fertility awareness, intentions concerning childbearing, and attitudes towards parenthood among female and male academics

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**BACKGROUND:** Postponing childbirth is becoming increasingly common in Western countries, especially among groups with higher education qualifications. It is relatively unknown to what extent women and men are aware of the age-related decline in female fertility. The aim was to investigate university students' intentions and attitudes to future parenthood and their awareness regarding female fertility. **METHODS:** Postal survey of a randomly selected sample of 222 female (74% response) and 179 male (60% response) university students. **RESULTS:** Female and male university students in Sweden have largely positive attitudes towards parenthood and want to have children. Women, in comparison to men, were significantly more concerned about problems related to combining work and children. Both women and men had overly optimistic perceptions of women's chances of becoming pregnant. About half of women intended to have children after age 35 years and were not sufficiently aware of the age-related decline of female fecundity in the late 30s. **CONCLUSIONS:** University students plan to have children at ages when female fertility is decreased without being sufficiently aware of the age-related decline in fertility. This increases the risk of involuntary infertility in this group, which is alarming in view of the great importance they put on parenthood.

*Key words:* attitudes/fertility/parenting/universities

## Introduction

During the late 20th century, women in Western countries have delayed birth of the first child to a later age than in previous centuries. In Sweden, the median age of first-time mothers has increased by 4 years during the last 30 years (Statistics Sweden, 2005). In 2004 the median age at first birth was 29 for women and 31 for men, which means that many couples postpone their childbearing until ages when female fertility or reproductive capacity is decreased. There is a slight decrease in women's chances of pregnancy at ovulation in the late 20s and marked decrease of fecundity occurs between ages 35 and 39 years (Dunson *et al.*, 2002). Women aged >35 years have a 2-fold time to pregnancy compared to women aged <25 years (Hassan and Killick, 2003). In a recent study in Sweden (Statistics Sweden, 2001), 70% of 35 year old childless women stated that a difficulty in becoming pregnant was the main reason why they had not yet had children. While couples who experience difficulties achieving pregnancy can turn to assisted reproduction techniques, these compensate for only half of all births lost by postponing a first attempt to conceive from age 30 to age 35 years (Leridon, 2004). Thus, postponement of the first (and subsequent) births increases the incidence of involuntary childlessness.

There is a lack of studies concerning women's and men's awareness of fertility issues. In a database search, only two relevant studies were found. Blake *et al.* (1997) demonstrated that few women attending a fertility unit had an adequate understanding of when the fertile window occurred in their menstrual cycle. Adashi *et al.* (2000) performed a telephone survey ( $n = 7036$ ) in six European countries, the USA and Australia. Results indicate that a majority underestimate the percentage of couples seeking medical assistance for infertility problems, i.e. 15%.

In a large survey ( $n = 2057$ ) carried out in Sweden (Statistics Sweden, 2001), 95% of childless women and men aged 23–25 years stated that they wanted to have children in the future. Thus, most young people consider that becoming a parent is important. Among those who already had one child, ~80% wanted to have a second child, which indicates a strong two-child ideal. When women and men plan for a pregnancy they include a number of factors in their decision-making process (Morin *et al.*, 2003). Several studies have shown that men and women regard having completed an education, holding a job, a stable income and good housing important for their decision to become parents (Statistics Sweden, 2001; Morin *et al.*, 2003). These findings are supported by studies of women who have had an abortion (Rasch *et al.*, 2001; Larsson

*et al.*, 2002). Results indicate that women perceive the age interval 25–34 years suitable for childbearing, and that women (or couples) postpone the birth of their first child until they feel prepared socially and financially to assume the responsibilities of parenting (Rasch *et al.*, 2001). It has been shown that women with higher education embark on parenthood later in life (Heck *et al.*, 1997; Statistics Sweden, 2002; Rønsen, 2004) and have a lower number of children than do women with less education (Rønsen, 2004). The situation is the reverse for men with those who are highly educated having a larger number of children compared to men with lower education (Statistics Sweden, 2002).

The trend of postponing childbirth is becoming increasingly common in Sweden and other Western countries, especially in groups with higher education. Postponing of childbirth until an age at which female reproductive capacity is lower entails risks of involuntary childlessness. It is at present relatively unknown to what extent young women and men are aware of the probability for women to become pregnant at different ages, and whether fertility awareness is related to timing of childbirth. In addition, men's and women's attitudes towards parenthood are a relatively unexplored territory in Sweden and abroad.

The main aim of the present study was to investigate perceptions of fertility issues, intentions for childbirth, as well as attitudes towards parenthood among male and female university students. We were particularly interested in students who had chosen a longer degree programme, as earlier studies have shown that students tend to postpone childbirth until they have earned their degrees (Statistics Sweden, 2001). The following specific research questions were posed: (i) Are there differences between female and male students with regard to intentions for childbirth, attitude towards parenthood, and awareness of fertility issues? (ii) Are there differences between women who intend to have their first child before versus after the age of 30 years with regard to perceptions of fertility issues?

## Materials and methods

### Participants and procedure

During spring semester 2004, 38 300 undergraduate students were registered at Uppsala University. The university offers 29 first-degree programmes of  $\geq 4$  years that lead to university degrees in, e.g., medicine, law, economics and engineering. The present study was approved by the Research Ethics Committee of the Medical Faculty at Uppsala University.

Six hundred randomly selected students (300 women and 300 men) enrolled in degree programmes of  $\geq 4$  years were invited to participate. Inclusion criteria were: (i) being enrolled at Uppsala University in 2002; and (ii) being registered as an active student in the spring 2004 semester. The number of eligible students was 1783 women and 1367 men with a mean age of 24.4 (women) and 23.8 (men) years. The total response frequency was 67%. The final sample consisted of 222 women (74%) and 179 men (60%). A questionnaire was mailed along with an information letter and a postage-paid reply envelope. Two reminders were sent out to non-respondents. A small number of questionnaires were returned due to incorrect postal address (three men and five women).

Demographic data of participants are shown in Table I. Participant age (mean = 24 years, SD 4.0) did not differ significantly from the mean age of the target population. Eleven per cent of students were

**Table 1.** Demographic characteristics of participants

	Women (n = 222)		Men (n = 179)	
Age (years), mean (SD) (range 20–41 years)	23.9	(4.1)	23.7	(3.7)
No. of semesters until degree, mean (SD) (range 1–10 semesters)	4.9	(1.6)	5.0	(1.3)
	%	n	%	n
Ethnicity				
Born in Sweden	88	195	90	161
Both parents born in Sweden	67	149	72	129
Housing				
Student dormitory	43	95	54	97
Own apartment	33	74	28	50
Sublet apartment	10	21	8	14
Lodging	9	19	6	11
Other	6	13	4	7
Stable relationship				
Yes	60	134	51	91
Reproduction				
Have children	9	19	5	9
Current pregnancy (own or partner)	0.4	1	1	2
Experience of abortion or miscarriage (own or partner)	5	12	7	12
Experience of subfertility	0.4	1	1	2

born in countries other than Sweden. About half of students were currently living in a stable relationship that had lasted between 1 month and 24 years (median 2 years). Thirty-one students had children or were currently experiencing a pregnancy (with their partner). There were no significant differences between female and male participants regarding demographic variables.

### Instrument

The questionnaire was developed on the basis of earlier research and professional experience of the team of authors (a gynaecologist, two nurse-midwives and a psychologist). Three pilot studies were carried out in order to test the instrument's validity and reliability. Ten medical students, 20 nursing students and 30 students enrolled in different degree programmes participated in pilot studies. The questionnaire was revised based on remarks and opinions of these students, as well as on test–retest results. The final questionnaire comprised 56 questions covering the following areas.

#### Demographic data (10 items)

Participants were requested to state their age, type of housing, own and parents' place of birth, personal experience of pregnancy (male responders reported pregnancy of female partner), and personal experience of problems achieving pregnancy.

#### Intention to have children (four items)

The first item was 'Do you plan to have children?' (Yes/No). An affirmative response was followed by three questions with an open response format: 'How many children do you want?', 'At what age would you like to/did you have your first child?', 'At what age would you like to have your last child?'.

#### Importance of having children (one item)

'How important is it for you to have children?' Responses were given on a visual analogue scale (VAS) scale with extreme values Unimportant (0) and Extremely important (100).

*Behavioural intention in case of infertility (three items)*

In response to the question ‘What would you do if you and your partner could not get pregnant?’ participants were requested to assess the likelihood of their undergoing IVF, adopting, or choosing not to have children. Responses were given on a VAS scale with extreme values Entirely unlikely (0) and Highly likely (100).

*Conditions of importance for the decision to become a parent (13 items)*

Participants were requested to assess the importance of specific circumstances for their decision to become a mother/father (see Table IV). The response alternatives were Unimportant, Not very important, Rather important, Important, Very important, and No opinion. Alpha value 0.77 indicates internal consistency of this scale.

*Perceived life changes in connection with becoming a parent (16 items)*

Participants were requested to assess to what extent they agreed with items specifying possible (or experienced) consequences of parenthood (see Table V). The response alternatives were Disagree, Partially agree, Mainly agree, Strongly agree, Entirely agree, and No opinion. Alpha value 0.75 indicates internal consistency of this scale.

*Awareness of fertility issues (nine items)*

Participants were requested to answer questions regarding women’s fertility at different ages, couples’ chances of achieving a pregnancy, and questions regarding infertility (see Table VI for wording of the questions). In the questionnaire, it was emphasized that this was not a test of knowledge and respondents were requested to state what they believed. An open response format was used.

**Data analyses**

Comparisons of data by the female and male groups were performed with a number of statistical tests. Group comparisons of VAS data were performed with *t*-test for independent groups. The Mann–Whitney *U*-test was used to compare men and women’s attitudes towards parenthood. Continuous data regarding perception of fertility issues were categorized into age periods or level of percentage. These categorizations are based on published data (van Noord-Zaadstra et al., 1991; Zinaman et al., 1996; Dunson et al., 2002; National Board of Health and Welfare, 2004; Nyboe Andersen et al., 2005). The ‘correct answer’ and at least one additional category are presented in segments constituting 5 years or 10% (in one case 5%). The boundaries of remaining categories are based on reported responses and may entail larger segments. Responses by different groups (i.e. men/women, women with intentions for first child before/after age 30 years) were compared using the  $\chi^2$ -test. Responses on VAS scales are reported in mm (0–100).  $P < 0.05$  was regarded as statistically significant. Analyses were performed with the statistical package SPSS for Macintosh.

**Results*****Intentions concerning having children among childless participants (n = 370)***

Among participants who did not have children, most participants stated that they wanted to have children some day (see Table II). A majority (83% women, 86% men) preferred to have between two and three children. Men most often wished for two children only, while women’s responses were equally distributed between wishes for two, two to three, and three

**Table II.** Intentions of having children among women and men<sup>a</sup>

	Women		Men	
	%	<i>n</i>	%	<i>n</i>
Want to have children				
Yes	96	192	97	163
Desired number of children (total <i>n</i> )		(190)		(158)
1 or 1–2	9	17	6	9
2	29	56	44	69
2–3	30	57	26	42
3	24	45	15	24
3–4 or more	8	15	9	14
Desired age at first child (total <i>n</i> )		(187)		(159)
23–24 years	3	5	1	1
25–29 years	64	120	36	57
30–34 years	30	57	53	85
35–39 years	3	5	10	16
Desired age at last child (total <i>n</i> )		(177)		(159)
25–29 years	0	0	2	3
30–34 years	41	73	25	37
35–39 years	47	83	46	67
40–44 years	11	20	22	32
45–50 years	1	1	5	7

<sup>a</sup>Participants who had children (*n* = 28) or had an ongoing pregnancy with their partner (*n* = 3) were excluded.

**Table III.** Presumed behaviour in case of infertility<sup>a</sup>

	Women ( <i>n</i> = 212–216)	Men ( <i>n</i> = 175–178)	<i>t</i>	<i>P</i>
Undergo IVF	73 (28)	65 (28)	2.89	0.004
Adoption	65 (25)	49 (27)	6.22	< 0.0001
Abstain from children	25 (24)	34 (26)	3.54	< 0.0001

<sup>a</sup>Data from visual analogue score (0 = entirely unlikely, 100 = highly likely) were compared using independent *t*-test. Values are means. Standard deviations are shown in parentheses.

children. Women wanted to have their first child at a significantly lower age (mean = 28, SD = 2.7) compared to men (mean = 30, SD = 2.9) [ $t(369) = 5.06$ ,  $P < 0.0001$ ]. Women also wanted to be younger when they had their last child (mean = 35, SD = 3.0) in comparison to men’s preferences (mean = 36, SD = 4.0) [ $t(343) = 3.42$ ,  $P < 0.001$ ]. About half of women and men wanted to have their last child between ages 35 and 39 years, and 12% of women wanted to have their last baby in their 40s.

Women regarded having children as being significantly more important (mean = 81, SD = 21.2) than did men (mean = 74, SD = 21.1) [ $t(392) = 3.44$ ,  $P < 0.001$ ]. In case of infertility, women were significantly more likely to pursue IVF treatment or adoption, and less likely to accept a life without children than were men (see Table III).

***Conditions of importance for the decision to become a parent***

Almost all participants regarded living in a stable relationship, sharing responsibility with a partner and feeling sufficiently mature as important circumstances for their decision to become a parent (see Table IV). Having children before one is too old was regarded an important issue by half of women and a third

**Table IV.** Important circumstances for women's and men's decision to have children<sup>a</sup>

Items	Response alternatives	Women (%)	Men (%)	P
That I live in a stable relationship	Very important	68	69	NS
	Important	25	21	
	(total)	(93)	(90)	
That I have a partner with whom I can share the responsibility	Very important	73	75	NS
	Important	19	18	
	(total)	(92)	(93)	
That I feel sufficiently mature	Very important	73	64	0.031
	Important	19	26	
	(total)	(92)	(90)	
That I/we have a good economy	Very important	33	18	< 0.0001
	Important	42	39	
	(total)	(75)	(57)	
That I have completed my studies	Very important	43	49	NS
	Important	29	21	
	(total)	(72)	(70)	
That my work can be combined with having children	Very important	32	14	0.001
	Important	39	43	
	(total)	(71)	(57)	
That I have access to childcare	Very important	25	14	< 0.0001
	Important	42	31	
	(total)	(67)	(45)	
That I/we have a home that is sufficiently large	Very important	24	17	NS
	Important	41	43	
	(total)	(65)	(60)	
That I have a permanent position	Very important	24	25	NS
	Important	39	30	
	(total)	(63)	(55)	
That I want to have children before I am 'too old'	Very important	22	8	< 0.0001
	Important	32	27	
	(total)	(54)	(35)	
That I have had time to travel and do other things that may be difficult to do with children	Very important	21	20	NS
	Important	23	26	
	(total)	(44)	(46)	
That I have advanced in my profession	Very important	15	15	NS
	Important	27	22	
	(total)	(42)	(37)	
That my friends have had children or are expecting children	Very important	1	1	NS
	Important	3	1	
	(total)	(4)	(2)	

<sup>a</sup>Comparisons with Wilcoxon *U*-test were performed on raw data ranging from 1 to 5. In order to illustrate participants' main responses, percentages for the response alternatives indicating agreement with items are presented.

of men. In addition, women put significantly more emphasis on the importance of having a good economy, access to childcare and a job that can be combined with having children. Analyses were based on data from all participants since omission of those who were pregnant or had children ( $n = 31$ ) did not alter results.

#### ***Presumed (or experienced) life changes in connection with becoming a parent***

A majority of participants stated that becoming a parent would entail personal development, giving and receiving more love and another view on what is important (see Table V). Women, to a greater degree than men, also presumed that parenthood would lead to new interests in life. Roughly a third of the women, but only 10% of the men, believed that parenthood would affect their status on the labour market negatively. In addition, women were significantly more pessimistic than men regarding the effect of parenthood on career and relationship with partner. Analyses were based on data from all participants since omission of those who already had children ( $n = 28$ ) did not alter results.

#### ***Awareness of fertility issues***

Participants had a relatively realistic perception of the most fertile period in a woman's life, but markedly overestimated women's fecundity (see Table VI). A minority of participants were aware that a slight decrease in women's fecundity starts before the age of 30 years and a marked decrease occurs in the late 30s. About a third of male participants believed that women's fecundity decreases markedly first after age 45 years. Both women and men made gross overestimations of a couple's cumulative fecundity during 1 year of unprotected intercourse. Participants had a relatively accurate perception of the frequency of infertile couples, but overestimated the chances of receiving a child through IVF. Men reported significantly more 'optimistic' perceptions regarding age-related female fecundity than did women. In comparison with male participants, women were significantly more likely to overestimate fecundity at ovulation, the percentage of infertile couples and the chance of getting a child through IVF treatment. Omission of data from participants with children or current pregnancy did not alter the pattern of results.

**Table V.** Women's and men's opinion on the impact of parenthood<sup>a</sup>

Items	Response alternatives	Women (%)	Men (%)	<i>P</i>
I will develop as a person	Entirely agree	51	51	NS
	Strongly agree	34	36	
	(total)	(85)	(87)	
I will give and receive more love	Entirely agree	49	49	NS
	Strongly agree	30	27	
	(total)	(79)	(76)	
Another view on what is important	Entirely agree	26	25	NS
	Strongly agree	41	43	
	(total)	(67)	(68)	
Less time to devote to work and a career	Entirely agree	23	15	0.011
	Strongly agree	37	32	
	(total)	(60)	(47)	
New interests in life	Entirely agree	21	14	0.037
	Strongly agree	36	30	
	(total)	(57)	(47)	
Less time for my own interests	Entirely agree	19	20	NS
	Strongly agree	33	29	
	(total)	(52)	(49)	
Less freedom	Entirely agree	19	20	NS
	Strongly agree	30	30	
	(total)	(49)	(50)	
A stronger relationship with my partner	Entirely agree	18	28	NS
	Strongly agree	31	41	
	(total)	(47)	(69)	
Poorer economy	Entirely agree	21	17	NS
	Strongly agree	24	20	
	(total)	(45)	(37)	
A poorer status on the labour market	Entirely agree	11	3	< 0.0001
	Strongly agree	27	7	
	(total)	(38)	(10)	
More contact with my close family	Entirely agree	7	6	NS
	Strongly agree	28	27	
	(total)	(35)	(33)	
That I do the thing that is the meaning of life	Entirely agree	12	14	NS
	Strongly agree	21	13	
	(total)	(33)	(27)	
Strains on my relationship with my partner	Entirely agree	11	5	0.038
	Strongly agree	20	20	
	(total)	(31)	(25)	
That we become a 'real family'	Entirely agree	15	10	NS
	Strongly agree	15	27	
	(total)	(30)	(37)	
Every day life will be more enjoyable	Entirely agree	7	13	NS
	Strongly agree	19	25	
	(total)	(26)	(38)	
That I feel 'complete' as a woman/man	Entirely agree	8	11	NS
	Strongly agree	15	11	
	(total)	(23)	(22)	

<sup>a</sup>Comparisons with Wilcoxon *U*-test were performed on raw data ranging from 1 to 5. In order to illustrate participants' main responses, percentages for the response alternatives indicating agreement with items are presented.

### ***Fertility awareness in women who plan to have their first child before versus after the age of 30 years***

Participating childless/non-pregnant women were categorized according to whether they wanted to have their first child before the age of 30 years ( $n = 127$ ) or later ( $n = 66$ ). There were no significant differences between these groups with regard to fertility awareness (data not shown). Omission of five women aged >30 years (who could not choose to have children before the age of 30 years) did not alter results.

### **Discussion**

Almost all participants stated that they wanted to have children some day, and many preferred two children, which confirms the notion of the two-child ideal in Sweden (Statistics Sweden,

2001). Women's and men's preferred mean ages for becoming a parent are in line with the mean ages of first-time parents in Sweden in 2004 (Statistics Sweden, 2005). More than half of the women wanted to have their last child between ages 35 and 44 years, an age period during which female fecundity decreases markedly. Despite women and men's similar personal intentions for childbirth, women regarded having children as being significantly more important than did men. The fact that women also were more likely to pursue IVF treatment or adoption in the case of infertility indicates that women regarded parenthood a more essential part of life than did men.

Participants regarded living in a stable relationship, sharing responsibility with a partner and feeling sufficiently mature as the most important circumstances for their decision to become a parent. These results confirm earlier results from Sweden

**Table VI.** Women's and men's awareness of fertility issues

Items	Categories	Women (n = 217–222) (%)	Men (n = 173–179) (%)	P
At what age are women the most fertile?	15–19 years	15	18	0.001
	20–24 years <sup>a</sup>	63	46	
	25–29 years	20	28	
	30–44 years	2	8	
At what age is there a <i>slight</i> decrease in women's ability to become pregnant?	15–24 years	4	5	0.023
	25–29 years <sup>a</sup>	33	23	
	30–34 years	38	34	
	35–59 years	25	38	
At what age is there a <i>marked</i> decrease in women's ability to become pregnant?	25–34 years	18	13	< 0.0001
	35–39 years <sup>a</sup>	36	24	
	40–44 years	34	33	
	45–59 years	12	30	
A young woman (<25 years) and a man have unprotected intercourse at the time of ovulation—how large is the chance that she will then become pregnant?	0–29%	15	30	0.01
	30–39% <sup>a</sup>	7	5	
	40–49%	5	3	
	50–100%	73	62	
A woman and a man who regularly have unprotected intercourse during a period of 1 year: How large is the chance that she will become pregnant if she is 25–30 years old?	0–69%	26	29	NS
	70–79% <sup>a</sup>	17	13	
	80–89%	33	27	
	90–100%	24	31	
How large is the chance that she will become pregnant if she is 35–40 years old?	0–49%	46	41	NS
	50–59% <sup>a</sup>	20	19	
	60–69%	16	16	
	70–100%	18	24	
How many couples in Sweden are involuntarily childless?	0–4%	6	7	0.038
	5–9%	22	28	
	10–19% <sup>a</sup>	41	48	
	20–90%	30	17	
Couples that undergo treatment with IVF—what is their chance, on average, of getting a child?	0–19%	19	24	0.021
	20–29% <sup>a</sup>	18	23	
	30–39%	24	12	
	40–100%	39	41	

<sup>a</sup>The category that contains the correct answer according to published data.

(Statistics Sweden, 2001) and Denmark (Rasch *et al.*, 2001). The finding that half of women regarded 'having children before one is too old' an important issue indicates that women are aware of the 'biological clock'. However, the fact that a third of men gave importance to this issue suggests that age is an issue regarding parenthood in more respects than biological. The finding that women put more emphasis on the importance of having access to childcare and a job that can be combined with having children, indicates that women are more concerned about the practical issues concerned with combining work and parenthood. While a majority of participants associated becoming a parent with positive consequences, women were more pessimistic than men regarding the effect of parenthood on their status in the labour market and on the amount of time available for work and career. The latter results confirm findings from a recent survey of female academics in Germany (Kemkes-Grottenthaler, 2003), stating that many women viewed motherhood as an obstacle to career advancement. A majority of childless women in that study reported postponing motherhood due to both personal and job-related issues.

Participants overall markedly overestimated female fertility and were not sufficiently aware of the age-related decline in fecundity. Women had a more accurate perception of female age-related fecundity than did men, but they were more likely

to overestimate chance of pregnancy at ovulation and chance of receiving a child through IVF.

The present results do not indicate a direct association between women's intended timing of childbirth and their conceptions about fecundity. However, they do illustrate that women who choose to postpone their childbearing after the age of 30 years have overly optimistic perceptions of the chances to become pregnant during that age period. This suggests that women may base their decision regarding the timing of parenthood on misconceptions concerning women's fecundity. In the study by Kemkes-Grottenthaler (2003), only a few female academics had actively made the decision to forgo children, while a majority merely were postponing motherhood. A majority of the latter group hoped to have their first child by age 38 years (with a maximum age of 48 years). While few female participants of the present study preferred to have their first child in their late 30s, many wanted to have their last child during this age period, and another 12% planned to have their last child in their 40s. However, the natural decline in fertility often encountered at this age period may hinder women from having their desired number of children.

The present study has some methodological limitations. Limited resources restricted the size of the study sample, but

the random selection of individuals adds to the external validity of the study. While there were no available background data for non-participants, comparison with the target population did not indicate response bias based on age. Also, the percentage of participants born outside Sweden corresponds well with the national percentage of immigrants in Sweden in 2004 (12%) (Statistics Sweden, 2005). However, the relatively low response rate among men limits the conclusions that can be drawn from the results for the male sample. Due to the lack of standardized instruments of relevance for the focus of the present study, a questionnaire was developed and underwent pilot testing among groups of students from the target population. The results from pilot tests and obtained alpha values indicate satisfactory reliability and validity of the instruments.

In conclusion, the present results indicate that female and male university students in Sweden have largely positive attitudes towards parenthood, although women expressed more concerns about problems related to combining work and children. Women and men want to have children but they overestimate the chances of achieving a pregnancy and are not sufficiently aware of the natural age-related decline of female fertility. Many female academics intend to have children during age periods when women's fecundity is markedly decreased and may subsequently end up involuntarily childless or suffer secondary infertility. This is particularly alarming in view of the great importance these women put on parenthood. These findings indicate that female academics could benefit from information regarding fertility in order to make informed decisions regarding family planning.

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