

Can we have it all?

How reconcilability of career pursuits and life satisfaction differs between women and men

Philip Unger & Philipp Ständer

13 May 2016

Contents

1	Introduction	3
2	Introduction	4
3	Literature Review	6
4	Research Design	8
4.1	Data	8
4.2	Empirical strategy and methodological challenges	8
4.3	Methodological challenges	9
5	Descriptive results	10
5.1	Life-satisfaction measures in the GSS	10
5.2	Reported happiness in different survey years	11
5.3	Happiness and age	12
5.4	Respondent's income and reported happiness	12
5.5	Work, household constallations and gender	13

6	Analysis	16
6.1	Marriage constellation, income and happiness	16
6.2	Interaction effects of marriage and job-income for working men and women	17
6.3	Double-click on married respondent's: How does high-income differ between genders?	18
6.4	Effect on happiness of young children	19
6.5	Satisfaction with marriage and family constellation.	22
6.6	Cohorts and norms	24
7	Discussion	26
8	Conclusion	26
9	Software and packages used for the analysis	26
	References	26

1 Introduction

Narrative

1. The debate: “Can women have it all?”

- heated debate in the us. Should women strive for combining competitive careers and families for the sake of equality?
- Social pressure/ expectations etc. - does it actually make happy? - Bertrand paper looked into this
- Reconcilability of work and family seems more difficult for women

2. What is driving the happiness decrease?

- gender norms - women receive less rewards from work due to inconsistent/contradictory self-perception or perception by others
- simply face other schedule than male counterparts - more care/housework responsibilities, family and work responsibilities are more difficult to reconcile → Hipp research relevant here

3. What do we add?

- focus on the second factor: We seek to understand how do career men and career women differ?
- Hypotheses: observable differences in the family-work context of male and female respondents explain part of the happiness penalty of women who “have it all”.

We compare respondents with respect to - income - work status / intensity - cohort

- we look at different family constallations:
- being married
- having kids (young kids)
- and at spouse characteristics
- spouse income
- spouse work status

4. Strategy: how do we approach our research question?

- data
- empirical strategy

5. How the paper proceeds

2 Introduction

In today's society, most people expect more from their jobs than simply making a living. A job is a key determinant for social status, identity, as well as an expression of independence. *[Ung-note: the expression of independence is not as apparent as the former two. Can't we come up with something else?]* It is supposed to match your interests and educational achievements, it should be rewarding and subsequently it is an important factor for life-satisfaction. The importance of work is supported by academic studies. Allmendinger (forthcoming), for instance, found based on a German survey that employment was the factor that most respondent regarded as 'highly important', more so than any other goal or value in life.¹ One could summarise it as such: "you spend too much time on work to do something you don't like". *[Ung-note: I think we should delete the last sentence.]*

[Ung-notes: Are we spot on here? We don't look at the link between job and life satisfaction anymore. Could it be framed more directly? I still like the Allmendinger quote. We could also use quotes from the presentation.]

Empirical evidence, however, indicates that both men and women find it difficult to reconcile work and family life, especially with respect to care responsibilities. Across industrialized countries, a majority of partnerships still end up in a single-breadwinner constellation (predominantly male) with asymmetric division of wage and care work (Hipp and Leuze 2015). This observation does not only conflict with the finding that most men and women regard employment as highly important in their life but also with the societal aspiration to overcome gender inequalities on the labour market. *[Ung-note: There is an inconsistency here: we say it is true for both genders but now it relates to gender inequality? It is not untrue, but as presented it is contradictory. Can't we just say it is predominantly the case for women? Or perhaps we can use Slaughter's article to argue men more easily have family constellations that alleviates the problem, if this is the case?]* In her influential essay "Why women still can't have it all" Anne-Marie Slaughter (2012) describes the struggle to reconcile a competitive career with family responsibilities and argues that today's work culture allow neither women

¹Preliminary results were published by Rudizo et al. (2016).

nor men to reconcile both. *[Ung-note: Can't we include a quote or be more specific? Otherwise it is almost redundant].*

What is the implication of this trade-off on overall life-satisfaction? Increasing investments of women into acquiring higher education on the one hand and the persistence of the male-breadwinner model on the other hand points to a conflict of life goals at least for women (Booth and Van Ours 2008b; Hipp and Leuze 2015).

[Ung-note: This sentence seem to come out of context. Perhaps we could substantiate the argument and say the issue for women is enhances as more women than men now receive a college degree and due to the rising labour force participation of women?]

In this research paper we wish to address the question: “Are career pursuits reconcilable with a happy life?”. Our hypothesis is that under some conditions, pursuing a career makes it difficult to reconcile full-time work with a family or a social life, which could decrease overall life-satisfaction. The link could be particularly pronounced for women. First, gender norms may impose a happiness penalty, if pursuing a career clashes with gender roles in the society. Second, men are more likely to have a partner who works fewer hours, which could ease the tension between a career and family life.

To approach this question we build on existing literature that has found that women with a family report higher life-satisfaction than women with a career, regardless of whether the woman with a career has a family or not (Bertrand 2013). *[Ung-note: The previous sentence is not clear. I can't come up with a quick alternative, but we need to work on it. (Below is a bad attempt).]* Furthermore, women are found to report higher job satisfaction in part-time jobs, while men prefer to be full-time employed (Booth and Van Ours 2008b).

[To approach this question we build on existing literature that has found women can't have it all. Bertrand (2013) shows that married, college educated women with a high-income job report lower life satisfaction on average than women with similar characteristics without the career. This suggests that women struggle to reconcile family life with a high-intensity job.]

We seek to identify the drivers of these observations in three steps. First, we test how life satisfaction depends on family constellation in combination with having a high-income job for college educated men and women. Specifically, we test whether having young children lowers happiness of men and women “who have it all” as the reconciliation of work and family might be particularly hard in this care intensive time. *[Ung-note: It seems like this is all we do... Perhaps we should dedicate some sentences to explain our main findings. And instead of saying test, we could write: we find - also in the subsequent sentences.]* Second, we investigate in how far the spouse’s work status impacts happiness with marriage. We hypothesize that couples who do not

both follow a career are happier with their marriage because they find it easier to distribute wage and care responsibilities. Third, we expect that changing gender norms might have improved the reconcilability of work and family in later cohorts. Therefore, we compare average happiness of three generations of women with regard to income and family status.

[potentially a paragraph on the empirical strategy]. *[Ung-note: Do you think it is needed? We state below that we have an empirical challenges section.]*

The paper proceeds as follows: The second section reviews the relevant literature on gender-specific determinants of life satisfaction. In the third section we present our empirical strategy and discuss challenges. The fourth section engages in a descriptive comparison of life satisfaction levels among men and women. In the fifth section we discuss the findings of our empirical models. The sixth section concludes.

3 Literature Review

The following literature review focuses on the gender-specific effects of career and work hour preferences on work and overall life satisfaction but also discusses related studies on gender identity, the division of wage and care work as well as the measurement of subjective well-being. *[Ung-note: This sentence is way too long and complex. Further, we don't talk about work hour preference anymore? Maybe we should include it anyway, as I can write in the meth. section that we would like to, but can't due to data limitations.]*

[Ung-note: Can't we open in a more framework-ish way? The literature points to two/three/four main ways why women might face larger issues of reconciling work and family life. 1. Family constellations, 2. norms, 3. xxx. Let's try to guide the reader?]

In economic theory the division of wage and household work is understood as a form of economic specialization (Becker 1965; 1985) and an outcome of a bargaining process (Blood et al. 1995; Lundberg and Pollak 1996). From a purely economic perspective, the role specialization among couples is based on their relative human capital and related income prospects. However, a comparative advantage perspective can only explain a fraction of the real division of wage and care work between men and women. The gender identity hypothesis proposed by Akerlof and Kranton (2000) assumes that utility functions are determined by “a person’s sense of self” and therefore differ according to gendered social norms and expectations. *[Ung-note: This paragraph needs some sort of intro. Why does it matter for our research? I guess something along the lines of why women might have more care responsibilities? Or why there is gender differences? We need a sentence or two to explain where we are going.]*

A study by Booth and Van Ours (2008b) lends support this hypothesis [*ung-note: What hypothesis?*] by finding that British women reach highest job satisfaction and satisfaction with working-hours in part-time rather than full-time jobs, while men prefer to work full-time. Surprisingly, however, women's life satisfaction is hardly affected by the hours they work. [*Ung-note: This last sentence, is this based on our data, or booth?*] These results pose two puzzles: First, a preference for part-time employment with limited career perspectives seems counter-intuitive given the increasing investment of women into acquiring higher education. Second, the observation that women's life-satisfaction seems unaffected by changes in job-satisfaction indicates the existence of gender-specific workplace factors that suppress the link from work-satisfaction to overall happiness for women. [*Ung-note: The second point - does booth say this directly? Because we haven't established it.*]

A companion study by Booth and Van Ours (2008a) shows that Australian women report higher life satisfaction when their male partners work full-time. Men however, appear to be unaffected by their partners' working hours. The findings of both studies support the hypothesis that men and women receive a life-satisfaction bonus from fulfilling traditional role specializations. [*Ung-note: I do not agree in the interpretation. I'd rather argue something along the lines of society's structure makes it difficult to break out of classical role specifications? Do you really think that women today derive extra happiness from going at home, and not that they are to some extent forced to?*]

Bertrand (2013) investigates the relationship between career, family and well-being for college-educated women. The study finds that having a family contributes more strongly to women's happiness than having a career. Interestingly, the study also finds that reported happiness is higher for women who have a family and no career relative to women with both. Women who work, but pursue no career, however, report the lowest life satisfaction. As the study does not control for satisfaction with working time it is, however, hard to interpret the findings with regard to gender norms. One possible explanation for the low satisfaction levels of career women with family is Hochschild's (1990) 'second shift' finding. His study shows that the main responsibility for housework rests disproportionately on women regardless of whether the household has a male or female breadwinner.

Wunder and Heineck (2013) find evidence for an alternative hypothesis, that women with career aspirations are less satisfied with life because they subordinate their career aspirations once they enter a family constellation. This contradiction between work and family for life satisfaction does not appear for men, who reach highest life satisfaction when attending a full-time job regardless whether they have children or not. [*Ung-note: Is this from our data or wunder?*] Indeed, many women seem to shift from full-time to part-time employment after the first child arrived, which significantly reduces the ability to pursue a career (Paull 2008). This

is supported by Hipp and Leuze (2015) who find that differences in working time within couples are still significant across industrialized countries. Women usually work less than their partners. Working time differences become even more pronounced when couples are married and have children. However, when women work in an occupation with similar or higher status compared to their partners occupation the working time differences decrease. *[Ung-note: This aligns perfectly with the idea of societal norms and structures, which we should stress earlier. Also, of course, maybe women derive more happiness from a family life than men... I.e. it is almost genetically determined? Do you think we can find studies that suggest this?]*

4 Research Design

4.1 Data

The quantitative analyses use two primary data sources: the General Social Survey (GSS) and the Current Population Survey (CPS).

- The GSS is a representative cross-sectional survey of the adult population in the United States, which has been conducted annually or biennially between 1972 and 2014. The survey tracks a wide-range of socio-economic, attitudinal and behavioural questions. The most important aspects for this research is reported life-satisfaction in different dimensions (overall happiness, marriage happiness and job-satisfaction), which can be linked to demographic, work and family characteristics.[CPE_foot]
- The CPS is a nationwide cross-sectional representative survey with about 60.000 monthly respondents, and it is one of the primary sources of labour force statistics in the US. We use data from the CPS on income percentiles in every year for college educated men in each five-year age group (25-29, 30-34,...). The data is collected from the replication file of Bertrand (2013).²

4.2 Empirical strategy and methodological challenges

In our empirical analyses, we will rely on graphical depictions as well as a relatively simple regression design. In all regression specifications the dependent variable will be binary, and following “Mostly Harmless Econometrics” (Angrist and Pischke 2008) we use a linear regression model rather than a logistic or a probit model. The deployed regressions are thus equivalent to linear probability models. Furthermore, in

²Bertrand only includes the income percentiles between 1977-2010, and all analyses using data from the CPS are thus limited to these years.

all specifications we pool survey respondents across all survey-years to maximize the available number of observations.

4.3 Methodological challenges

In this section we will outline the major methodological caveats in our research design, which limits a causal interpretation of our results.

Subjective well-being data and statistical inference To analyse how work affiliation and family constellations affect life-satisfaction, we rely on direct reports on subjective well-being (SWB) from the GSS. Using SWB data presents some methodological concerns, as insights from behavioural economics question the robustness of SWB data (Kahneman and Krueger 2006; Bertrand 2013). Kahneman and Krueger (2006), for instance, proposes that the effect of substantial life changes on subjective well-being are temporary. One explanation is that individuals gradually adjust their well-being aspirations; even when individuals achieve life-goals, this becomes normality over time and eventually reported well-being is no higher than prior, as new aspirations are set. Another issue relates to individuals ability to gauge their well-being. Nikolova and Sanfey (2015), for instance, found that when survey participants were asked two similar life-satisfaction questions at two different points in time during the same survey, 14 per cent of the individuals reported significantly different levels of well-being. The methodological caveats relating to SWB-measures should not be overlooked, but SWB-data nonetheless present an opportunity to explore correlations between individual characteristics and life-satisfaction directly. Furthermore, there is no consensus that any other measure is superior.

Operationalisation of career-pursuits

To analyze the relationship between career pursuits and life-satisfaction, we face a challenge in operationalizing when an individual pursues a career. In related academic literature, career pursuits have been proxied by income thresholds (Goldin 2004; Bertrand 2013). Bertrand (2013), for instance, uses whether individuals earn more than the 25th income percentile of males in their age-education cohort. These measures, however, neglect that individuals can have career ambitions in low-income jobs, and that not all high earners are pursuing a career. Unfortunately, the GSS does not include variables that allow for a more nuanced operationalization of career pursuits.³ In this paper we use a similar approach to Bertrand (2013), specifically whether the survey respondent earns more than 50 percent of the income of males in their age-education cohort. Earning a high-income is likely to be a decent proxy for career pursuits, but we interpret it as merely indicating whether the survey-respondent has a high-income job or not.

³The only measure for work-intensity included in the GSS is hours worked last week, which is an imperfect proxy for the average amount of hours worked over an entire year.

Sample heterogeneity In investigating the relationship between family constellations, career pursuits and reported well-being measures, a major methodological arise in addressing unobservable heterogeneity across different groups of individuals. Or in other words, to establish a life-satisfaction counterfactual to the groups of interest. For instance, when comparing reported life-satisfaction between women pursuing a career and women who do not, we ultimately face the problem that the two groups of individuals will differ in other characteristics that affect life-satisfaction than just the career, i.e. the decision to pursue a career is not random. Furthermore, one would expect that individuals at least to some extent choose the family and work-constelations which they believe will provide them the highest life-satisfaction. Thus, even if married women who pursue a career report lower life-satisfaction on average than married women who stay at home, it would be a fallacy to argue that the career-women would be happier if they quit their job.

To minimise the issue of heterogeneity, we follow the approach of Bertrand (2013) and limit our analysis to college educated survey respondents, as people with a college education are more likely to pursue a career and are likely to substantially differ from non-college educated individuals. Furthermore, we step-wise limit our sample size to specific sub-groups, for instance married individuals, individuals who are married and have children, and individuals with a high-income job.⁴

5 Descriptive results

In this section we explore the variation in some of the main variables used in the analysis and illustrates correlations between reported happiness and survey-respondent characteristics that motivates the regression analyses.

5.1 Life-satisfaction measures in the GSS

Two of the central variables in the analysis are reported overall happiness and happiness of marriage, which are based on the two questions: *“Taken all together, how would you say things are these days?”* and *“Taking things all together, how would you describe your marriage?”*. Figure 1 shows the distribution of answers to the two questions. Both are measured on a three point scale where higher is better. Panel A shows that approximately 40 % of the sample report high overall happiness, whereas panel B shows that a majority of the sample reports high marriage happiness.

⁴Even though limiting the sample to specific groups attenuates the issue of sample heterogeneity, it introduces a problem of small sample sizes. When comparing individuals with specific educational attainment, labour-force participation, family status, gender etc., the sample size of the GSS can be reduced to a few hundred observations.

In the remainder of the paper we use binary variables to capture whether respondents report the highest happiness score or not on both measures. This eases interpretation, and as only a small portion of respondents report low-happiness on both measures, we do not disregard a substantial share of the variation in the variables.

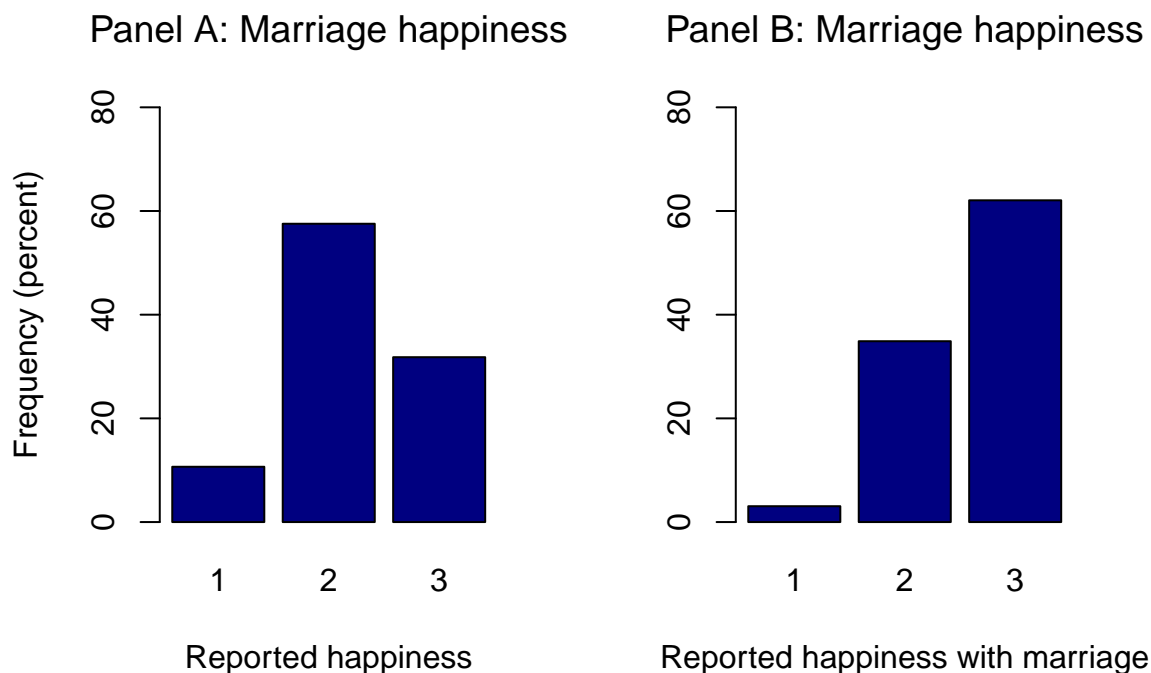


Figure 1: Distribution of reported happiness and job-satisfaction

5.2 Reported happiness in different survey years

The GSS is conducted every or every other year between 1972 and 2014. Due to year specific events, unintended differences in the implementation of the survey or trends in overall happiness, there can be non-random, year-specific differences. Figure 2 shows the average share of the sample population who reports to be very happy across the survey years.

Figure 2 shows that there is considerable variation between years. Furthermore, there appears to be a negative trend between 1972 and 1985. It is not directly possible to disentangle what can be attributed to random noise and what is caused by structural changes, however, it signifies that it is pragmatic to control for survey year in the regression models.

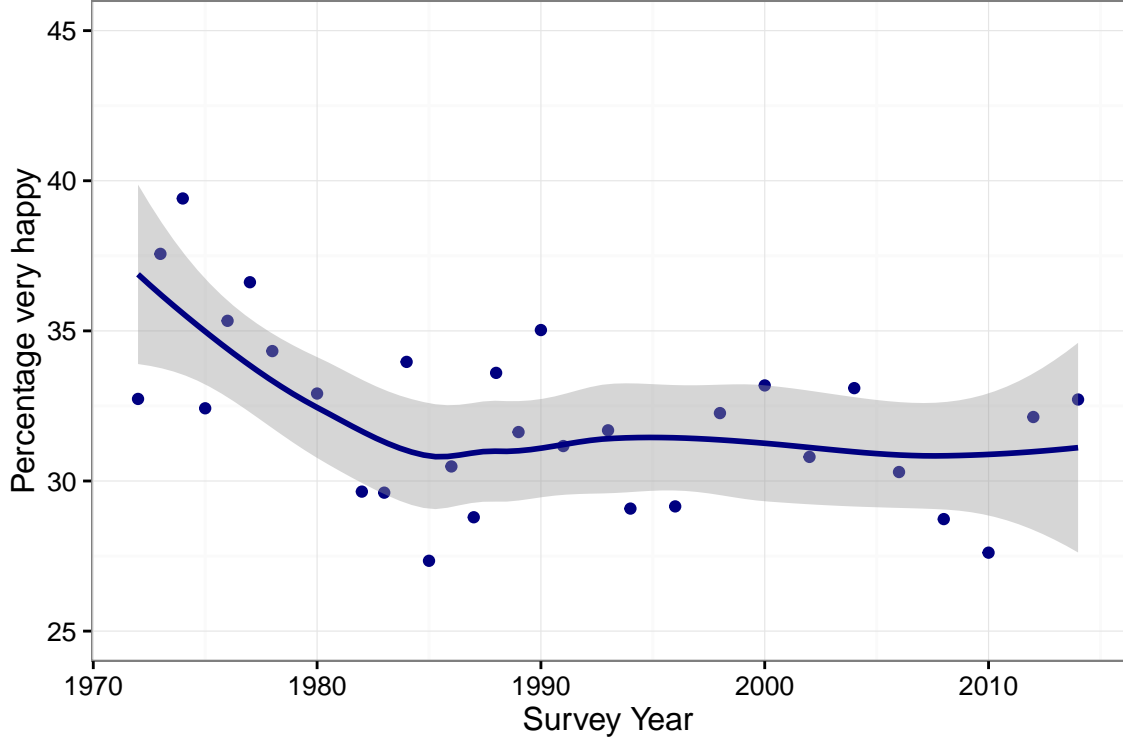


Figure 2: Average reported happiness over survey year, 1972-2014

5.3 Happiness and age

Figure 3 illustrates the relationship between reported happiness and age for college educated men and women. In the GSS there is no apparent structural relationship between the share of respondents who report being very happy and age. Furthermore, college educated women have a slightly higher average reported happiness level relative to men (38% vs. 34%).

5.4 Respondent's income and reported happiness

Figure 4 shows the distribution of respondents' annual income in 2009 USD for college educated men and women. We can deduce that more men than women report high income. Furthermore, it shows that more women than men report no income at all, either due to unemployment or because they voluntarily keep house.

Figure 5 shows the correlation between respondents income and the propensity to report high happiness for college educated women and men. For both genders there are a positive trend, which aligns with the majority of reserach on income and happiness [INSERT A REF]. A large share of women with very low or no income, however, also report high happiness. This reflects that married women who keeps house tend to report high happiness, which we will return to in the analysis.

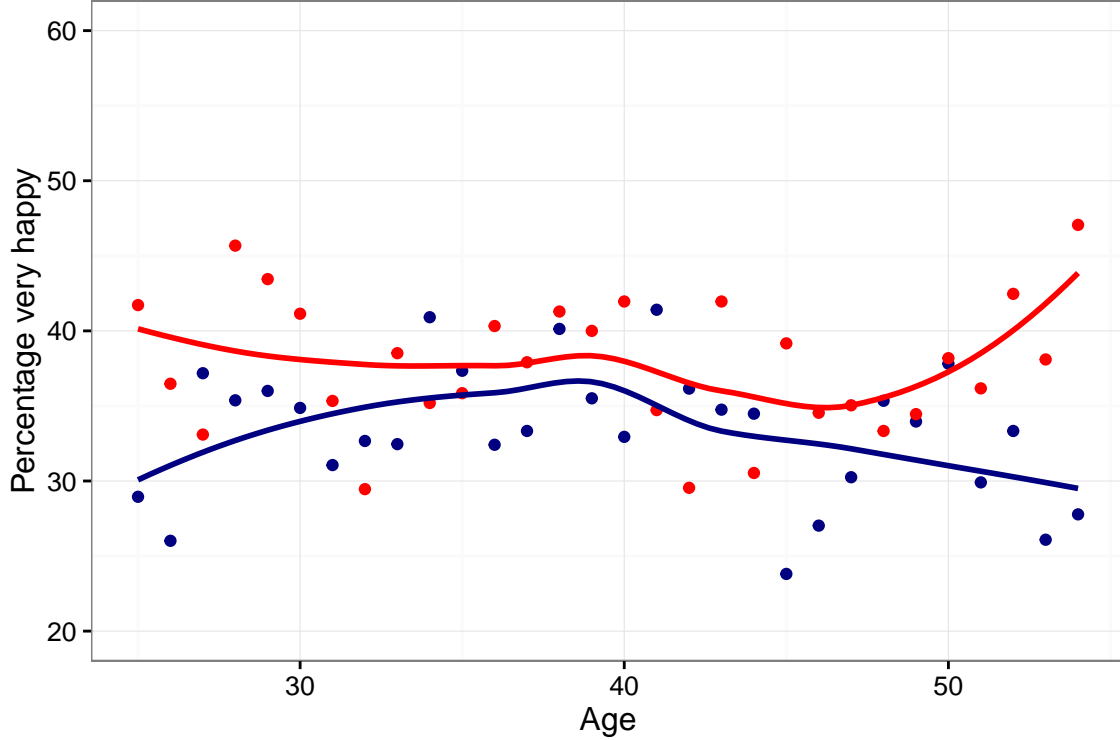


Figure 3: Happiness and age (college educated men and women)

5.5 Work, household constallations and gender

In this section we explore how reported happiness depend on labour market affiliation and family constellation for women and men, and discern gender differences. All figures are restricted to college educated women and men.

Figure 6 shows how reported happiness depends on labour-market affiliation for men (blue) and women (red) with a college degree. It shows that men are substantially more likely to report being very happy when in full-time employment relative to part-time employment, which is not the case for women. Furthermore, both men and women report high happiness levels when keeping house. Note, however, that there are only 35 college educated men in the full sample who keep house, whereas there are 650 women. When looking at all men, the average share who reports being very happy while keeping house is only 24 %.

A key variable in the research design is whether the respondents earn a high income or not. To define high-income we use whether respondents earn more than the 50th income percentile of males in their education-age cohort. Figure 7 indicates that women have the same propensity to be very happy regardless of whether they are high earners or not, whereas the difference is substantial for men. [Footnote: The same is true if high-income is defined as the 25th income percentile for college educated men and women]. [Footnote: We

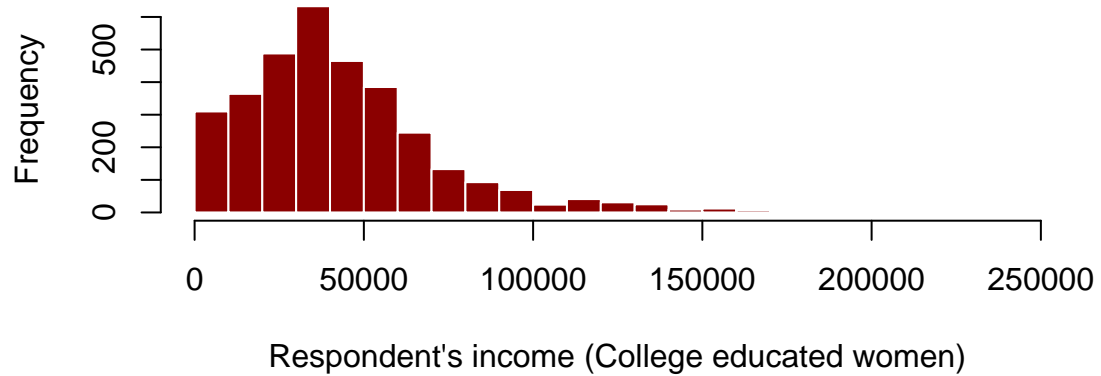
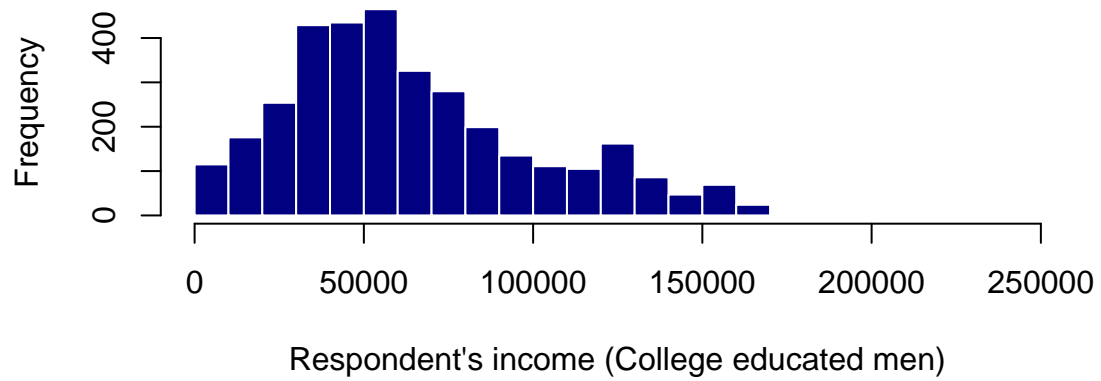


Figure 4: Distribution of income

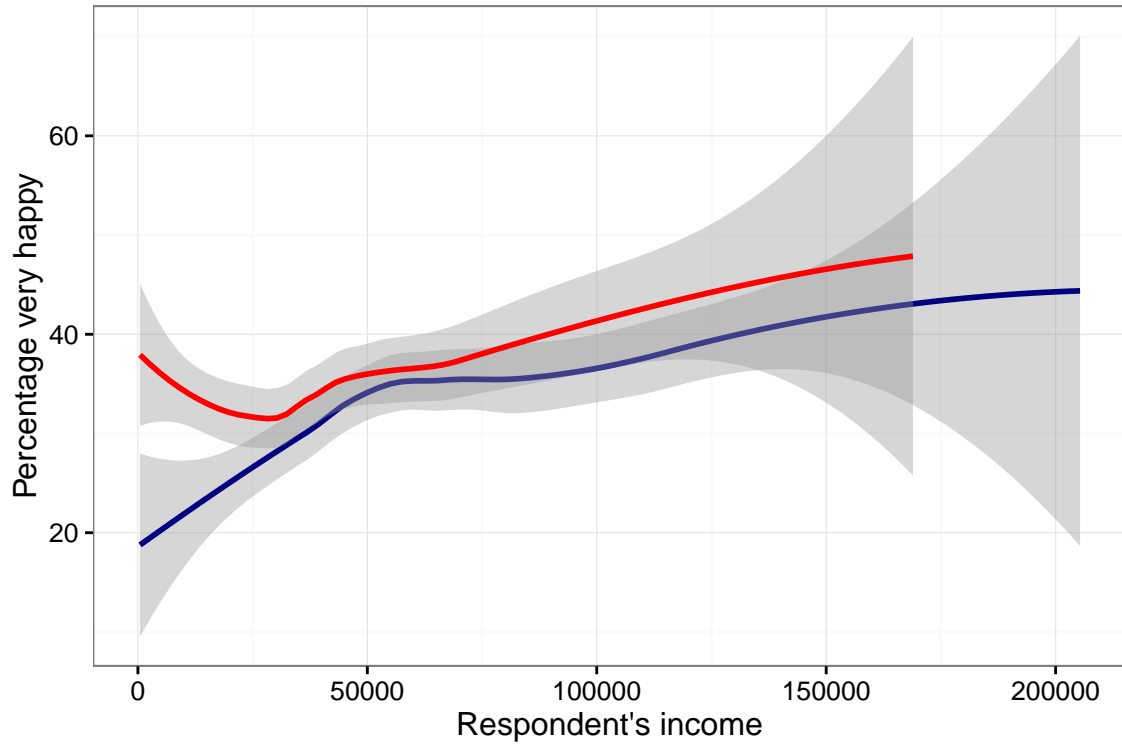


Figure 5: Happiness and respondent's income (college educated men and women)

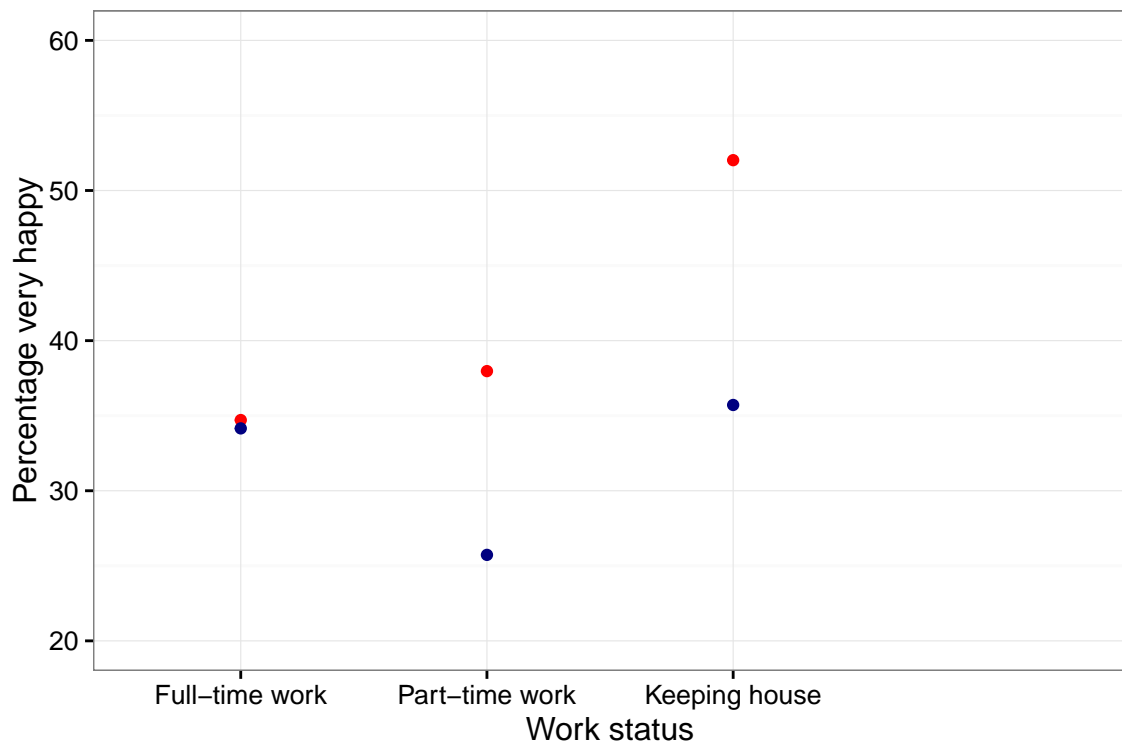


Figure 6: Happiness and labour-market affiliation (college educated men and women)

only have data on cohort income from 1977 to 2010, and the sample is therefore restricted to these years].

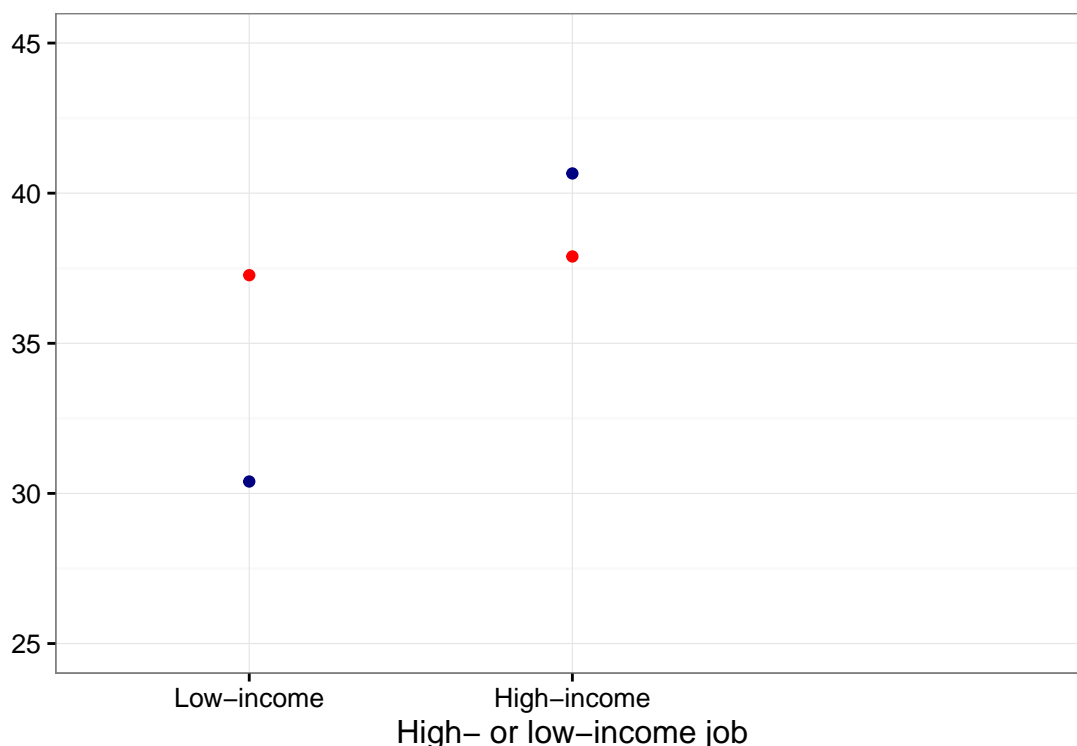


Figure 7: Happiness and income level, college educated men and women

6 Analysis

-

6.1 Marriage constellation, income and happiness

Figure 8 illustrates how reported happiness depend on respondent's income and family affiliation. Specifically, we differentiate between the four combinations of marriage and having a high-income job or not. On average, both college educated men and women are more likely to report being very happy when they are married relative to not being married. Furthermore, when not married, both genders report higher happiness when having a high-income job. For married respondents, however, there are considerable gender differences. When married, men continue to report higher happiness when having high-income, whereas the opposite is true for women. This provides preliminary evidence on the thesis that women face difficulties in reconciling having a high-income job and marriage [Comment: maybe already state family, most married women also have children].

Figure: Happiness and marriage/income constellation.

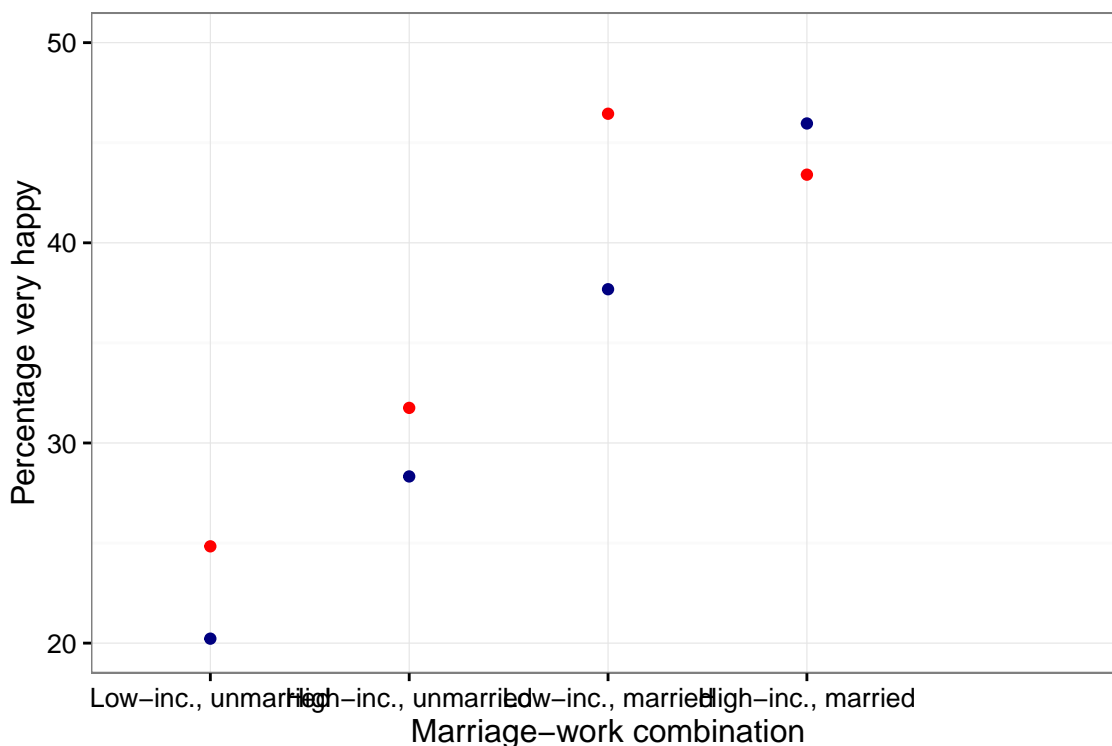


Figure 8: Happiness and marriage constellation (college educated subsample)

6.2 Interaction effects of marriage and job-income for working men and women

To investigate the gender differences illustrated in figure 8, we deploy different regression models to investigate the correlations further. Table x shows the effect of marriage, high-income and the interaction between the two on the binary variable of being very happy. Specification (3)-(4) include no control variables, and the reported coefficient are thus equivalent to results illustrated in figure 8. The regression design, however, allows us to deduce that the effect of marriage and having a high-income are significant for both genders at a 10 percent level or lower. Most interestingly, women report significantly lower happiness when both having high-income and are married, which is not the case for men. Women thus appear to face a substantial life-happiness penalty when “having it all”.

As explained in the research design section, a major methodological challenge is to create a valid counterfactual. Individuals in the different marriage-work constellations are likely to differ from each other in multiple dimensions that correlate with reported happiness. In specification (1) and (2) we control for potential confounding factors that are observable: age, age-squared, survey year, race and cohort (decade of birth). It is apparent that the results are robust to their inclusion.

Table 1: Happiness, marriage and high-income

Table 1: Happiness, marriage and income for college educated men and women				
	<i>Dependent variable:</i>			
	Women	Men	Very happy Women	Men
	(1)	(2)	(3)	(4)
High-income	8.00** (3.61)	7.79** (3.17)	6.92* (3.53)	8.10*** (3.11)
Married	21.00*** (1.84)	18.98*** (2.09)	21.61*** (1.79)	17.46*** (2.03)
High-income*Married	-9.94** (4.84)	0.02 (3.84)	-9.96** (4.83)	0.18 (3.81)
Constant	105.73*** (25.99)	21.55 (26.01)	24.84*** (1.36)	20.22*** (1.55)
Age	Yes	Yes	No	No
Age-squared	Yes	Yes	No	No
Year	Yes	Yes	No	No
Race	Yes	Yes	No	No
Cohort	Yes	Yes	No	No
Observations	3,309	3,119	3,309	3,119
Adjusted R ²	0.05	0.05	0.04	0.04
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01 Models are restricted to college educated men and women				

6.3 Double-click on married respondent's: How does high-income differ between genders?

A considerable source of sample heterogeneity is that married and non-married individuals could differ in characteristics that are not observable and which affects reported happiness. To address this we circumscribe the sample to married individuals in table Y. Furthermore, we distinguish between three types of individuals: respondent's with high-income, respondents who "keep house", and the residual of low-income working respondents. The category of individuals who keep house only includes few college educated, married men (xx% of the sample), but a substantial amount of college educated, married women (xx%).

Column (1)-(2) further includes for the survey respondent's partner's income, as this is likely to affect material well-being and thus reported happiness as well as the respondent's labour market affiliation, as well as the controls used in table X. [footnote: Partner's income is controlled for with dummy variables for \$10,000

income brackets].

From specification (2) we observe that married, college educated men report significantly higher happiness when earning high-income relative to low-income, and that men who keep house on average reports the lowest happiness, though it is not significantly different from zero. Women, on the other hand, do not report significantly higher happiness when being both married and having a high-income job, and though the coefficient is positive, it is of relatively small magnitude. Women who keep house, however, report significantly higher happiness than women with low-income at the 10 percent level. One explanation for this could be that some women who work part-time would prefer to keep-house, but are not able to for financial reasons. This should be mitigated by controlling for the spouses income, but this does not include a measure of family wealth.

Table Y thus paints a similar picture to table X, which is that men are the happiest when they are both married and have a high-income job, whereas it is not the case for women. While there is no direct penalty for having a high-income relative to a low-income job, reported happiness is the highest when keeping house.

Table 2: Double-click on married individuals

6.4 Effect on happiness of young children

Table 3: Happiness and young children

In the third model we seek to investigate whether having young children (children below the age of 4) can explain part of the observed differences in preferences for keeping-house or having a high income. The underlying assumption is that young children demand more intensive care which could makes a reconciliation of a high-income job with having family more difficult. Model three further restricts the sample to people who have a family, which we define as being married and having kids. The specifications 1 to 4 are comparable to the previous model with the difference that all observed individuals have children. Specification 1 and 2 without controls show again that women are significantly happier when keeping house while having a high income makes men significantly more happy. When adding control variables (specification 3 and 4), the effect of high-income equals out, although it reaches only weak significance for men. The effect is positive and of some magnitude, indicating that in a family men and women are happier when they have a high income. The effect of keeping house is still opposite although of no significance.

The specifications 5 and 6 add interaction terms of both independent variables with having a young child. Women with a high income but without a young child tend to report higher life satisfaction. The coefficient of having a high-income but no young child is only weakly significant but of high magnitude. The second

Table 2: Happiness and work-status for married, college educated women and men

	<i>Dependent variable:</i>			
	Women	Men	Very happy Women	Men
	(1)	(2)	(3)	(4)
High-income	2.19 (3.86)	8.37*** (2.79)	−0.55 (3.51)	8.34*** (2.34)
Keeping house	7.27* (3.75)	−1.91 (14.65)	14.46*** (2.91)	−4.52 (14.20)
Child	−2.16 (3.01)	−2.41 (3.04)	−5.40* (2.76)	−4.65* (2.76)
Constant	171.03*** (37.68)	47.75 (37.45)	47.32*** (2.47)	41.34*** (2.56)
Partner's income	Yes	Yes	No	No
Age	Yes	Yes	No	No
Age-squared	Yes	Yes	No	No
Year	Yes	Yes	No	No
Race	Yes	Yes	No	No
Cohort	Yes	Yes	No	No
Observations	1,881	1,928	1,881	1,928
Adjusted R ²	0.03	0.02	0.01	0.01

Note:

*p<0.1; **p<0.05; ***p<0.01
Models include married, college educated men and women

Table 3: Happiness and young children, college educated women and men with a family

	<i>Dependent variable:</i>					
			Very happy			
	Women	Men	Women	Men	Women	Men
	(1)	(2)	(3)	(4)	(5)	(6)
High-income	1.39 (4.18)	7.11*** (2.60)	6.33 (4.64)	6.04* (3.15)	9.40* (5.35)	5.69 (3.58)
Keeping house	14.40*** (3.06)	-3.80 (16.36)	6.61 (4.12)	-3.07 (16.62)	5.29 (4.86)	
Young child					4.82 (4.44)	1.90 (3.82)
Keeping House*Young child					1.89 (6.49)	
High-income*Young child					-11.13 (9.63)	1.51 (5.95)
Constant	41.72*** (1.62)	37.14*** (1.57)	119.85** (46.79)	34.88 (46.47)	99.94** (49.15)	27.75 (47.55)
Partner's income	No	No	No	No	No	No
Age	No	No	No	No	No	No
Age-squared	No	No	No	No	No	No
Year	No	No	No	No	No	No
Race	No	No	No	No	No	No
Cohort	No	No	No	No	No	No
Observations	1,448	1,529	1,448	1,529	1,448	1,529
Adjusted R ²	0.01	0.004	0.02	0.02	0.02	0.02

Note:

*p<0.1; **p<0.05; ***p<0.01

Models are restricted to married + child, college educated men and women

Table 4: Gender, income (p50) and spouse work status (row percentages)

		Full-time	Part-time	Keeping house	n
Female	High-income	92.45	4.15	3.4	265
	Low-income	95.62	0.99	3.39	1713
Male	High-income	42.28	33.56	24.16	745
	Low-income	54.86	25.06	20.08	1285

interaction term indicates a large decrease of life satisfaction for women who have a high income and a young child, although the coefficient remains insignificant. A potential reason for the low significance is the low number of observations for women who have both, a high income job and a young child (less than 50). The observation for women is nonetheless interesting as it indicates that women who have children that are four years and older are happier when they have a high income career while this seems not to be the case for women with young children. Men’s life satisfaction on the other hand is neither impacted by high income when not having a child nor by having both. In contrast to women the interaction term is positive and of low magnitude [story for men is confusing].

[F-test is missing]

6.5 Satisfaction with marriage and family constellation.

In the next step we investigate the impact of the spouse’s work status on marriage happiness. We choose marriage happiness as dependent variable in this model because we assume that the spouse’s work intensity affects the quality of family life and relationship more strongly than the respondents overall happiness which is also affected by other individual factors.

Table X shows that the spouse’s work status differs significantly between married, college-educated male and female respondents. Regardless of the income, more than 90 percent of married female respondents have a partner who works full-time. For male respondents the picture differs slightly depending on the income group. 54 percent of low-income married males have a spouse who works full-time, while this share drops to 42 percent for high-income males. The share of spouses who work part-time increase by 8 percent for high-income males and the share of spouses who keep home increase by 4 percent.

Table X shows regression results for marriage happiness and the spouse’s work status. We apply the same model specifications for two different sample restrictions. Specification 1 and 2 limit the sample to married, college-educated individuals. Specification 3 and 4 further limit the sample to the individuals of the former group who have a high income. The work status coefficients in specification 1 and 2 point in the expected directions. Women report higher happiness with marriage when their men work full-time rather than part-time

(base category), while men report the opposite although at a very low magnitude. Men report however higher happiness when their spouse stays at home compared to working part-time⁵. Having children has a strong and significant negative effect on marriage happiness of women.

When limiting the sample only to high income individuals, the coefficient magnitude of the spouse's work status increases. Women report much higher happiness with marriage when their spouses work full-time. The significant drop in sample size between model 1 and 3 probably explains why the effect remains insignificant. Men's marriage happiness decreases when their spouses work full-time. This effect is of strong magnitude and reaches weak significance. Also the happiness increase when the spouse stays at home increased for men but stays insignificant. Having children is now found to be insignificant for both genders.

Table 4: Marriage happiness and spouse employment status

Table 5: Marriage happiness and spouse's work-status

	<i>Dependent variable:</i>			
	Very happy (marriage)			
	Women	Men	Women	Men
	(1)	(2)	(3)	(4)
Spouse FT	6.44 (5.26)	-0.97 (2.89)	14.03 (11.93)	-8.42* (4.85)
Spouse Home		2.17 (3.16)		4.03 (4.95)
Children	-8.09*** (2.93)	-1.67 (3.09)	3.31 (7.97)	-3.21 (5.46)
Constant	150.03*** (38.23)	154.04*** (37.79)	145.45 (133.90)	231.51** (93.70)
Family income	Yes	Yes	Yes	Yes
Age	Yes	Yes	Yes	Yes
Age-squared	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Race	Yes	Yes	Yes	Yes
Cohort	Yes	Yes	Yes	Yes
Restricted to high-income	No	No	Yes	Yes
Observations	1,746	1,830	222	646
Adjusted R ²	0.03	0.02	0.04	0.04

Note:

*p<0.1; **p<0.05; ***p<0.01

Models are restricted to married, college educated men and women

⁵We omit the coefficient for women's spouses who stay at home due to too few observations.

6.6 Cohorts and norms

In a final step we investigate graphically whether the happiness penalty for women who combine a high-income job with a family persists over generations. Our hypothesis is that younger generations who grew up with more progressive gender norms might find it easier to reconcile family and work. Figure X shows differences in average reported life satisfaction for three generations, depending on their marriage-income or family-income constellation. The oldest cohort is born between 1944 and 1957 (blue), the second cohort is born between 1958 and 1973 (red) and the youngest cohort is born between 1974 and 1991 (purple), which includes the youngest individuals in the survey.

Figure X shows that there are several important differences between generations. The upper plot shows four constellations of being married and having a high-income job. All generations are considerably happier when being married. Happiness of unmarried women only increases slightly when having a high-income job compared to a low-income job. Among married women differences between the generations become apparent. The youngest generation is most happy in both income constellations. While happiness decreases for the two older generations when they have a high-income job, happiness slightly increases for the youngest generation. The oldest generation experiences the largest happiness penalty from combining marriage and high-income and is almost pushed back to the level of unmarried women. The penalty for the second generation is already around 5 percent smaller.

We observe similar cohort differences in reported happiness when comparing four constellations of having a family and high-income (lower plot). Thus, the findings are robust, regardless whether we look at married women or women with a family.

The graphical analysis suggests, that “having it all” is easier reconcilable with a happy life for women from younger cohorts than for their peers from earlier generations. This hints to changes that either reflect more progressive gender norms, a more supportive environment such as the availability of high quality care or a combination of both.

Figure: Cohortian differences

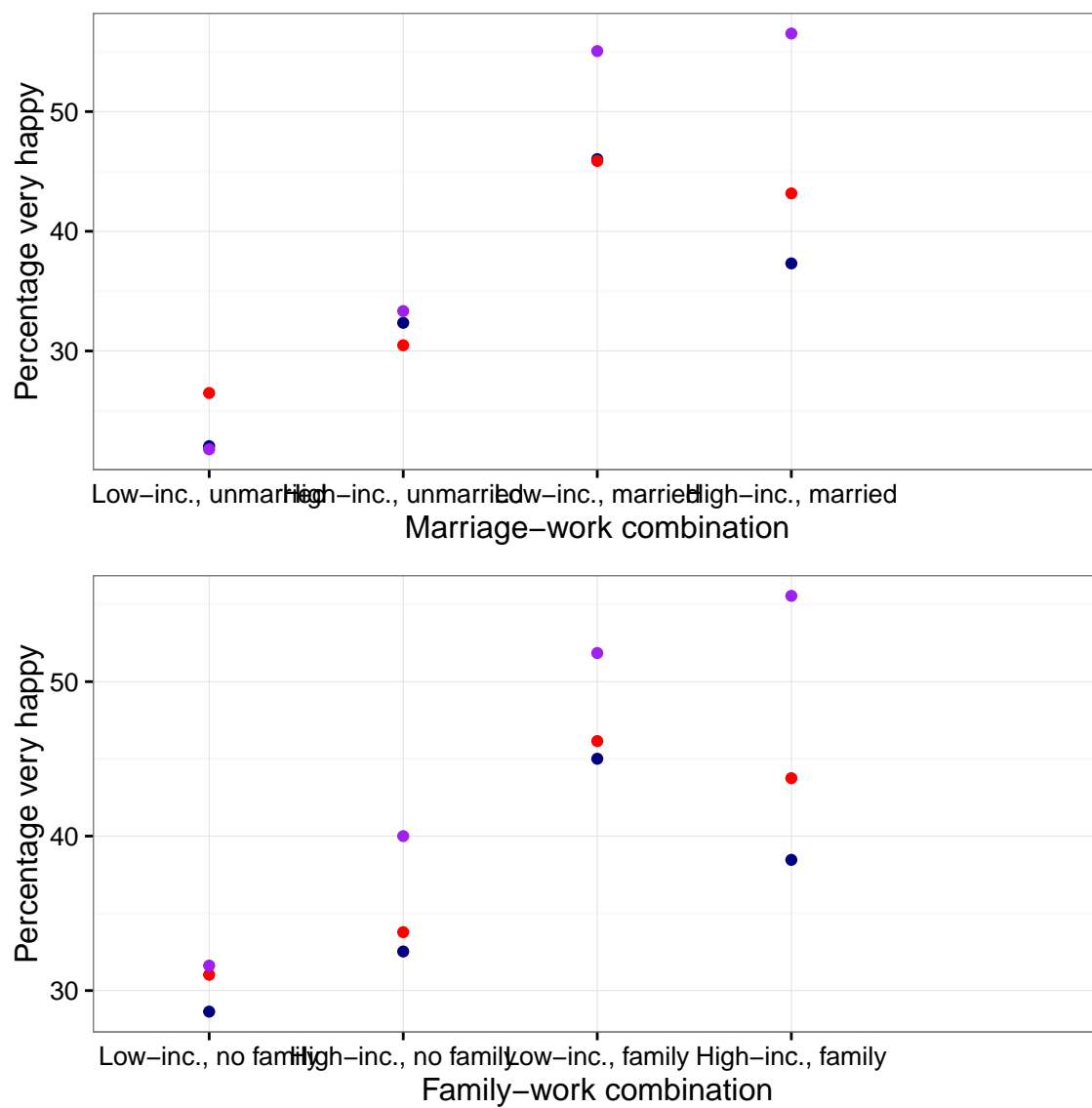


Figure 9: Happiness and family constellation (college educated women)

7 Discussion

8 Conclusion

The preliminary analyses indicate that some variation in reported happiness is associated with job-affiliation and gender. Further, our descriptive results suggest that determinants for happiness, such as having a family or high job-income, differ in magnitude and direction between genders. This supports our initial assumption of differences in reconcilability of a career pursuit and a happy life. However, it remains a challenge to construct models which can attenuate problems of confounding factors. For the final project we intend to investigate in more detail how the intensity of work influences happiness and whether there is a trade-off between job satisfaction and overall happiness.

9 Software and packages used for the analysis

The analysis is done in R (R Core Team 2015b) with the use of the following packages: “ggplot2” (Wickham and Chang 2015), “repmis” (Gandrud 2016), “plyr” (Wickham 2015), “dplyr” (Wickham and Francois 2015), “MASS” (Ripley 2015), “Hmisc” (Harrell 2016), “interplot” (Solt and Hu 2016), “gridExtra” (Auguie 2016), “car” (Fox and Weisberg 2016), “foreign” (R Core Team 2015a), “gmodels” (Warnes et al. 2015), “quantmod” (Ryan 2015) and “reshape” (Wickham 2014).

References

- Akerlof, George A, and Rachel E Kranton. 2000. “Economics and Identity.” *Quarterly Journal of Economics*. JSTOR, 715–53.
- Angrist, Joshua D, and Jorn-Steffen Pischke. 2008. *Mostly Harmless Econometrics: An Empiricist’s Companion*. Princeton university press.
- Auguie, Baptiste. 2016. *GridExtra: Miscellaneous Functions for “Grid” Graphics*. <https://CRAN.R-project.org/package=gridExtra>.
- Becker, Gary S. 1965. “A Theory of the Allocation of Time.” *The Economic Journal* 75 (299). JSTOR: 493–517.
- . 1985. “Human Capital, Effort, and the Sexual Division of Labor.” *Journal of Labor Economics*.

JSTOR, S33–S58.

Bertrand, Marianne. 2013. “Career, Family, and the Well-Being of College-Educated Women.” *The American Economic Review* 103 (3). American Economic Association: 244–50.

Blood, RO, DM Wolfe, C Oppong, M Seroussi, LA Lillard, and LJ Waite. 1995. “Husbands and Wives: The Dynamics of Married Living.” *AMERICAN JOURNAL OF SOCIOLOGY* 100 (5). New York Free Press 1960.: 165–78.

Booth, Alison L, and Jan C Van Ours. 2008a. “Hours of Work and Gender Identity: Does Part-Time Work Make the Family Happier?” *Economica* 76 (301). Wiley Online Library: 176–96.

———. 2008b. “Job Satisfaction and Family Happiness: The Part-Time Work Puzzle*.” *The Economic Journal* 118 (526). Wiley Online Library: F77–F99.

Fox, John, and Sanford Weisberg. 2016. *Car: Companion to Applied Regression*. <https://CRAN.R-project.org/package=car>.

Gandrud, Christopher. 2016. *Repmis: Miscellaneous Tools for Reproducible Research*. <https://CRAN.R-project.org/package=repmis>.

Goldin, Claudia. 2004. “The Long Road to the Fast Track: Career and Family.” *The Annals of the American Academy of Political and Social Science* 596 (1): 20–35.

Harrell, Frank E, Jr. 2016. *Hmisc: Harrell Miscellaneous*. <https://CRAN.R-project.org/package=Hmisc>.

Hipp, Lena, and Kathrin Leuze. 2015. “Institutionelle Determinanten Einer Partnerschaftlichen Aufteilung von Erwerbsarbeit in Europa Und Den USA.” *KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie* 67 (4). Springer: 659–84.

Hochschild, Arlie. 1990. *The Second Shift*. California, Avon Books.

Kahneman, Daniel, and Alan B Krueger. 2006. “Developments in the Measurement of Subjective Well-Being.” *The Journal of Economic Perspectives* 20 (1). American Economic Association: 3–24.

Lundberg, Shelly, and Robert A Pollak. 1996. “Bargaining and Distribution in Marriage.” *The Journal of Economic Perspectives* 10 (4). JSTOR: 139–58.

Nikolova, Elena, and Peter Sanfey. 2015. “How Much Should We Trust Life Satisfaction Data? Evidence from the Life in Transition Survey.” *Journal of Comparative Economics*. Elsevier.

Paull, Gillian. 2008. “Children and Women’s Hours of Work*.” *The Economic Journal* 118 (526). Wiley

Online Library: F8–F27.

R Core Team. 2015a. *Foreign: Read Data Stored by Minitab, S, SAS, SPSS, Stata, Systat, Weka, DBase, .* <https://CRAN.R-project.org/package=foreign>.

———. 2015b. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.

Ripley, Brian. 2015. *MASS: Support Functions and Datasets for Venables and Ripley’s MASS*. <https://CRAN.R-project.org/package=MASS>.

Rudizo, Kolja, Sascha Venohr, Paul Blicke, and Julian Stahnke. 2016. “Schwimmen Sie Vorne Mit?.” *Die Zeit*, 25 February 2016. Available: <http://www.zeit.de/wirtschaft/2016-02/arbeit-mindestlohn-erfolg-deutschland-studie-vermaechtnis> [Last accessed: 21 March 2016].

Ryan, Jeffrey A. 2015. *Quantmod: Quantitative Financial Modelling Framework*. <https://CRAN.R-project.org/package=quantmod>.

Slaughter, Anne-Marie. 2012. “Why Women Still Can’t Have It All.” *The Atlantic*, July/August 2012. Available: <http://www.theatlantic.com/magazine/archive/2012/07/why-women-still-cant-have-it-all/309020/> [Last accessed: 9 May 2016].

Solt, Frederick, and Yue Hu. 2016. *Interplot: Plot the Effects of Variables in Interaction Terms*. <https://CRAN.R-project.org/package=interplot>.

Warnes, Gregory R., Ben Bolker, Thomas Lumley, Randall C Johnson. Contributions from Randall C. Johnson are Copyright SAIC-Frederick, Inc. Funded by the Intramural Research Program, of the NIH, National Cancer Institute, and Center for Cancer Research under NCI Contract NO1-CO-12400. 2015. *Gmodels: Various R Programming Tools for Model Fitting*. <https://CRAN.R-project.org/package=gmodels>.

Wickham, Hadley. 2014. *Reshape: Flexibly Reshape Data*. <https://CRAN.R-project.org/package=reshape>.

———. 2015. *Plyr: Tools for Splitting, Applying and Combining Data*. <https://CRAN.R-project.org/package=plyr>.

Wickham, Hadley, and Winston Chang. 2015. *Ggplot2: An Implementation of the Grammar of Graphics*. <https://CRAN.R-project.org/package=ggplot2>.

Wickham, Hadley, and Romain Francois. 2015. *Dplyr: A Grammar of Data Manipulation*. <https://CRAN.R-project.org/package=dplyr>.

Wunder, Christoph, and Guido Heineck. 2013. “Working Time Preferences, Hours Mismatch and Well-Being

of Couples: Are There Spillovers?" *Labour Economics* 24. Elsevier: 244–52.