# Can we have it all?

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

*Philip Unger & Philipp Ständer*

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## Contents

# 1 Introduction

Narrative

1. The debate: "Can women have it all?"

- heated debate in the us. Should women strive for comibining comeptetive careers and families for the sake of equality?
- Social pressure/ expectations etc. - does it acutally 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 respondends 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

(Assignment 2) In today's society, most people expect more from their jobs and careers than simply making a living. A job is a key determinant for social status, identity, as well as an expression of independence. 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".

Empirical evidence, however, indicates that the instrumental importance of work for both men and women makes 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). What are the implications of these two hardly reconcilable goals in life on work and overall life-satisfaction? Specifically women seem to be haunted by inconsistent expectations and persistent gender norms on household and labour market roles, which limits their ability to pursue a career and have a family.

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 high work intensity 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 work fewer hours, which could ease the tension between a career and family life.

"Is career pursuits reconcilable with a happy life?". The question has previously been addressed in academic literature (see the literature review), and studies have particularly established a contradictory relationship between career pursuits and self-reported life-satisfaction for women, whereas the relationship do not appear to be present for men. Therefore, we initially focus our analysis on women. We consider to address the question in three parts.

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[1]Preliminary results were published by (**???**).

First, we want to build on a study by Bertrand (2013) that found women with a family to report higher life-satisfaction than women with a career, regardless of whether the woman with a career has a family or not. We speculate that the deployed definition of a career (earning the equivalent to the 25th income percentile of men in the same age cohort) is too inclusive. Thus, we wish to investigate whether the result persists when looking at women who have a higher level of success relative to the age cohort. Intuitively, we speculate that women who decide to pursue a career do so, because they expect to thrive in such an environment, and it is thus paradoxical that they consistently report low life-satisfaction.[2] Thus hypothesis 1: Women who pursue a career, and have success with respect to earnings relative to male peers, have equal life-satisfaction as women who chooses to establish a family.

Second, we acknowledge that societal norms might induce a life-satisfaction penalty on career women, as it is contrary to traditional family structures. Regardless of whether we find support for hypothesis one, we wish to investigate what drives the lower life-satisfaction observed in earlier studies.

A priori, we hypothesize the following three relationships if norms are a driving factor:

- We have access to data on both job-satisfaction and overall life-satisfaction. If norms are a driving factor, we would expect career women to report job-satisfaction equal to their male peers, while reporting lower overall life happiness (hypothesis 2).
- As societal norms are likely to have become more constructive for career women over time, we would expect career women in earlier cohorts to report lower life-satisfaction relative to later generations (hypothesis 3).

## 2  Literature Review

(Assignment 2) The following literature review will focus on the gender-specific impact of career and work hour preferences on work and overall life satisfaction but also discuss related studies on gender identity, the division of wage and care work as well as the measurement of subjective well-being.

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 (**???**; **???**). 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 (**???**) assumes that utility

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[2]An alternative is to look at women in traditional career occupations, such as managerial professions.

functions are determined by "a person's sense of self" and therefore differ according to gendered social norms and expectations.

A study by (**???**) lends support to this 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. The study poses 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 suppresses the link from work-satisfaction to overall happiness for women.

Bertrand (2013) addresses these puzzles by investigating 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 (**???**) '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.

(**???**) 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. 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 (**???**).

To analyse how career pursuits affect life-satisfaction, we rely on direct reports on subjective well-being (SWB) from the General Social Survey. Using SWB (data) presents some methodological concerns, as insights from behavioural economics have questioned individual's' ability to gauge their life-satisfaction and thus the robustness of SWB data (Kahneman and Krueger 2006; Bertrand 2013). The extent to which this constitutes a problem is widely contested. (**???**), 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. Particularly individuals of low socioeconomic

status tended to report lower well-being at the second question, signifying the importance of question ordering. This implies a caveat when using SWB data, but it is nonetheless the most readily available data-source on life-satisfaction and no consensus has been reached on a superior measure that is circumscribed from methodological concerns.

# 3    Research Design

## 3.1    Research Question and Hypotheses

## 3.2    Data

### 3.2.1    GSS

To analyse the question we are using three data-sources. The General Social Survey (GSS) from the United States, which is ongoing since 1972 and ask survey respondents about their well-being in different dimensions (overall, work, family), demographic characteristics, job-affiliation, income and more.

The General Social Survey is a representative cross-sectional survey of the adult population in the United States, which has been conducted from 1972 to 2014. The survey tracks a wide-range of socio-economic, attitudinal and behavioural questions. The most important aspects for this research is reported satisfaction in different dimensions (job-satisfaction and overall happiness), demographic factors as well as socio-economic elements such as hours worked, occupational sector and income.

### 3.2.2    Personal Consumption Expenditure index

Further, we use the Personal Consumption Expenditure chained index from the Federal Reserve Bank of St. Louis to adjust nominal income variables for inflation.

### 3.2.3    CPS

(From assignment 3) Last, we use data from the Current Population Survey on income percentiles in age and educational groups, which is collected from the replication file of Bertrand (2013).[3]

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[3]Bertrand only includes the income percentiles between 1977-2010, and at a later stage we intend to calculate the income percentiles directly from the CPS.

(From assignment 2) The Current Population Survey is a cross-sectional representative survey with about 60.000 monthly respondents. Its size makes it a good source for labour market statistics for certain age cohorts and occupational classifications.

## 3.3 Empirical strategy / Operationalization

To analyse our hypothesis, we will rely on graphical depictions as well as a relatively simple regression design. In most specifications the dependent variable will be binary, and we can thus both use a linear probability model and a logistical model. We expect to include results from both, but following "Mostly Harmless Econometrics" (**???**), we intend to use a linear probability model as the main specification.

## 3.4 Methodological challenges

(Assignment 2) In investigating the relationship between career pursuits and reported life-satisfaction, the major methodological challenge is to address the heterogeneity across individuals pursuing a career and individuals who do not. Or in other words, establish a life-satisfaction counterfactual to the individuals pursuing a career.

When comparing 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.

To minimise the issue of heterogeneity, we expect to follow Bertrand (2013) and limit our focus to college educated women, as college educated women are overrepresented among women pursuing a career and are likely to substantially differ from non-college educated women. One can further limit the sample to women with a family (defined as having a partner or having a partner and a child) to further diminish heterogeneity. The remaining identifying variation is then whether having a career significantly influences life-satisfaction relative to women who do not pursue a career, when controlling for age-groups.

Besides the general challenges of establishing a valid counterfactual we also face a challenge as the main data-source, the GSS, only has around 1.000 survey respondents per year, which will be considerably lowered when limiting the focus to specific sub-groups, such as college-educated women. Previous studies using the GSS thus often pool survey results across sample years to retrieve a sample size that allows them to draw inference (**???**; Bertrand 2013). We intend to do the same, though in some sub-analysis we might want to check whether our results are robust over time.

(Assignment 3) Based on the available data-sources there are considerable methodological challenges, of which we will elaborate on the most pronounced. First, defining the group of individuals who pursue a career is problematic. In the literature, career pursuits have been proxied by income thresholds (Goldin 2004; Bertrand 2013). However, these measures neglect that individuals can have career ambitions in low-income jobs, and that not all high earners are pursuing a career. In this paper we also deploy an income-threshold variable, but interpret it simply as indicating high-income workers. Second, when analysing sub-populations of the GSS, we face issues of small sample sizes. The GSS has surveyed around 60.000 individuals between 1972 and 2014, but when comparing individuals with specific educational attainment, labour-force participation, family status, gender etc., the sample size can be reduced to a few hundred observations. Third, there is a large literature on whether it is possible to draw inference on subjective well-being measures, see for instance Bertrand (2013) or Kahneman and Krueger (2006).

The scope of this paper is to combine data from the three above mentioned sources and present descriptive statistics and correlations that are of importance with respect to our research question. All steps are done dynamically, such that they are easily reproducible.

# 4   Descriptive results

## 4.1   Inspecting the variables of interest

Two of the central variables for our research are reported happiness and job-satisfaction, which are based on the two questions: *"Taken all together, how would you say things are these days?"* and *"On the whole, how satisfied are you with the work you do?"*. Figure 1 shows the distribution of answers to the two questions. The former is measured on a three point scale (higher is better), of which around 60 % of the sample report a middle happiness level. The latter is measured on a four point scale, and Figure 1 shows that a majority of the sample report either moderate or high job satisfaction (score 3 and 4).

### 4.1.1   Average happiness in different survey years

The GSS is conducted 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 year-specific differences. Figure 2 shows the average share of the population who reports to be very happy (score of 3) across the survey years.

Figure 2 shows that there is considerable variation between years, and a weak negative trend particularly between 1972 and 1983. It is not directly possible to disentangle what can be attributed to random noise and
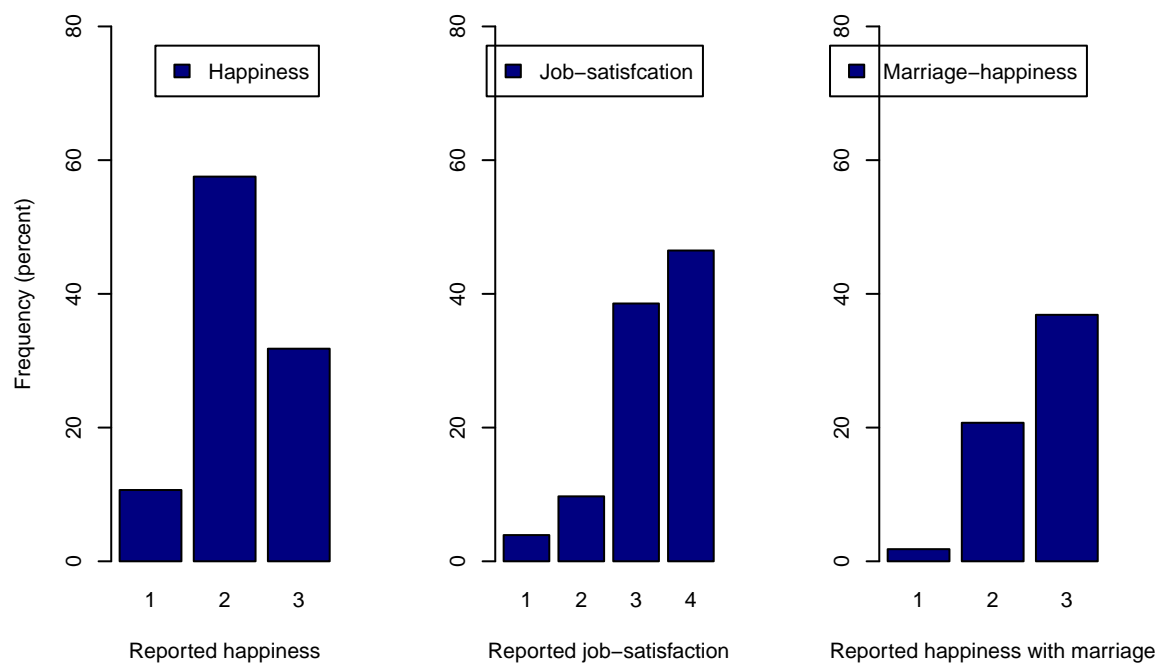
Figure 1: Distribution of reported happiness and job-satisfaction
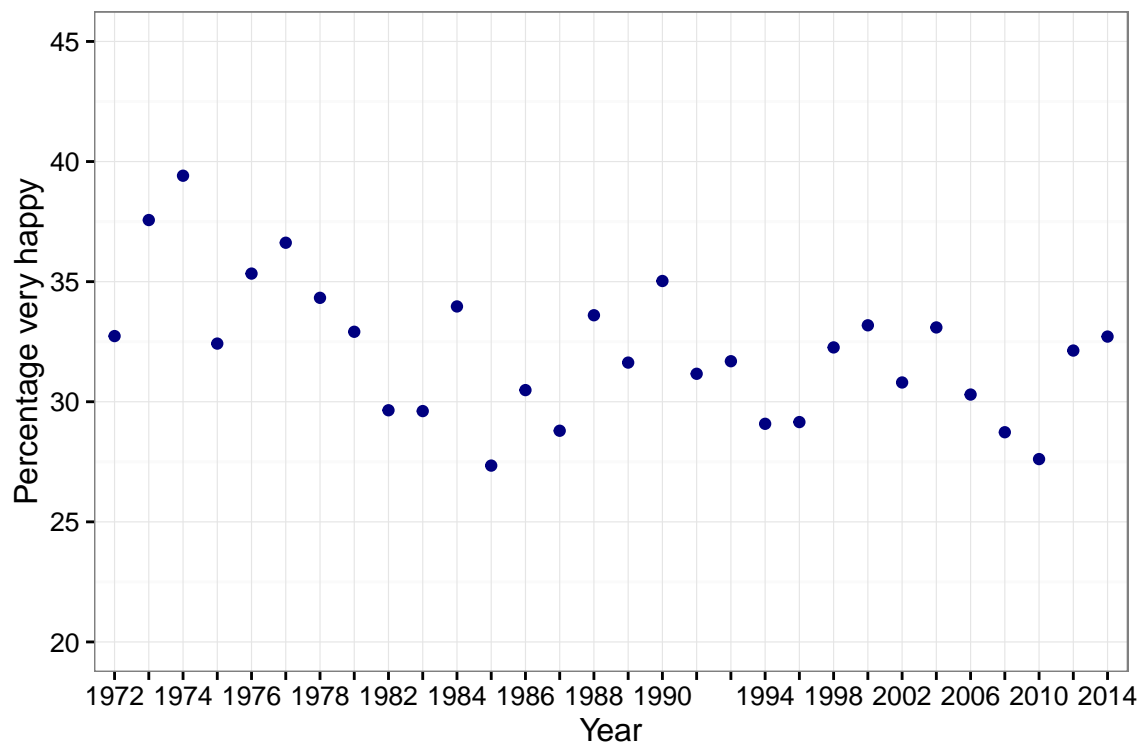


Figure 2: Average reported happiness over survey year, 1972-2014

what is caused by structural changes, however, it signifies that it is pragmatic to control for survey year in a regression design to control for survey year fixed effects.

### 4.1.2 Happiness and age

Figure 3 investigates 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. Further, college educated women have a slightly higher average reported happiness level relative to men (38% vs. 34%).
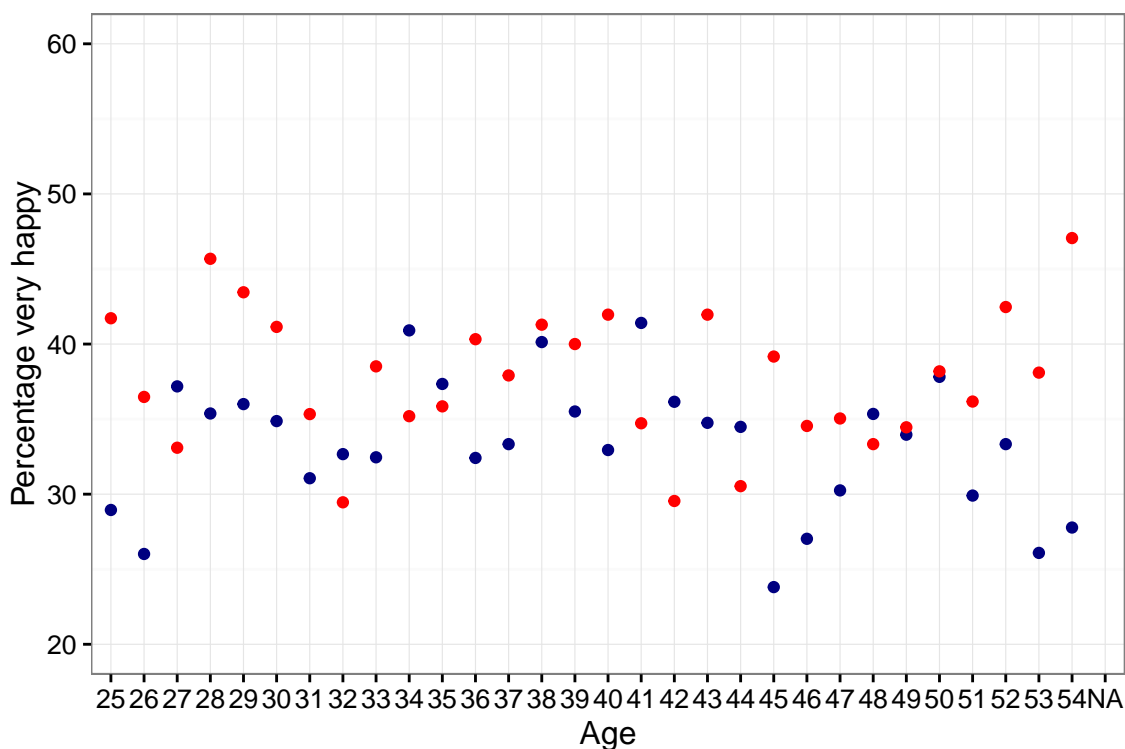


Figure 3: Happiness and age (college educated men and women)

### 4.1.3 Distribution of work-hours for full-time workers

Work intensity is another variable of interest for the final research design. "Hours worked last week" is available across the full survey from 1972-2014. This is an imperfect proxy for respondents average working hours over a full year, which unfortunately is not available. Figure 4 shows the frequency of hours worked last week for full-time workers. It is apparent that most respondents have worked around 40 hours a week, but also that there is considerable variance.
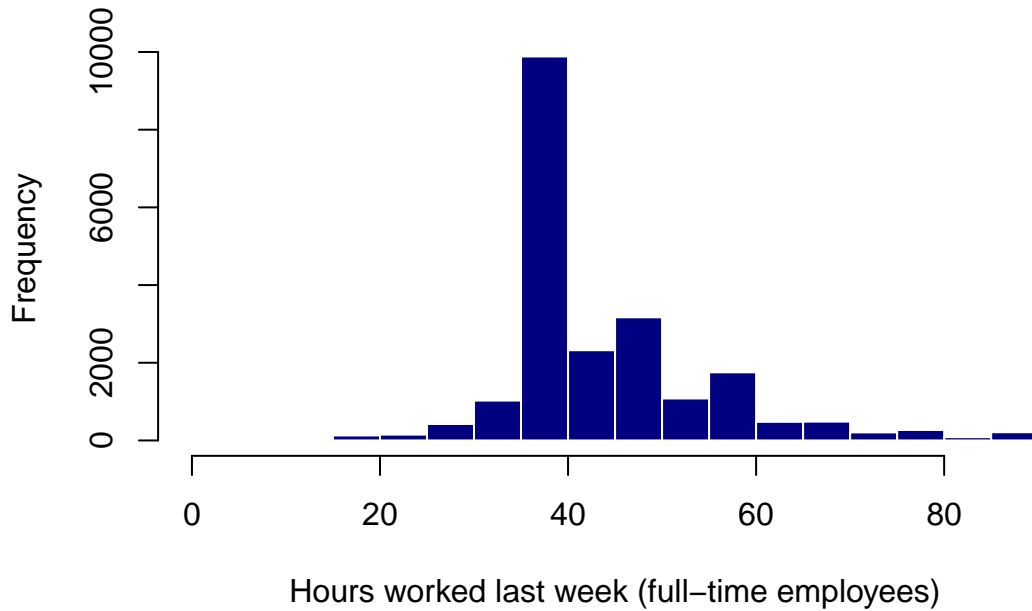
Figure 4: Histogram of hours worked last week for full-time workers

## 4.2 Work, household constallations & gender

In today's society the strive for gender equality often clashes with labour market realities and the persistence of traditional gender norms. Previous studies found that the reconcilability of having a family and pursuing a career is still difficult to achieve for women, while it is rather the norm for men (Hipp and Leuze 2015). Thus, women who clash with traditional customs might face a "life happiness penalty".

Figure 5 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. Further, both men and women report high happiness levels when keeping house. Note, in the full sample only 35 college educated men are keeping house (there are 650 women) and when looking at all men, the average share who reports being very happy while keeping house is only 24 %.

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      Full-time Keeping house Part-time
```

Female 2313 34 82 Male 1221 785 515

```
      Full-time Keeping house  Part-time
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Female 0.95224372 0.01399753 0.03375875 Male 0.48433161 0.31138437 0.20428401

Table 1: Gender and Spouse Work Status

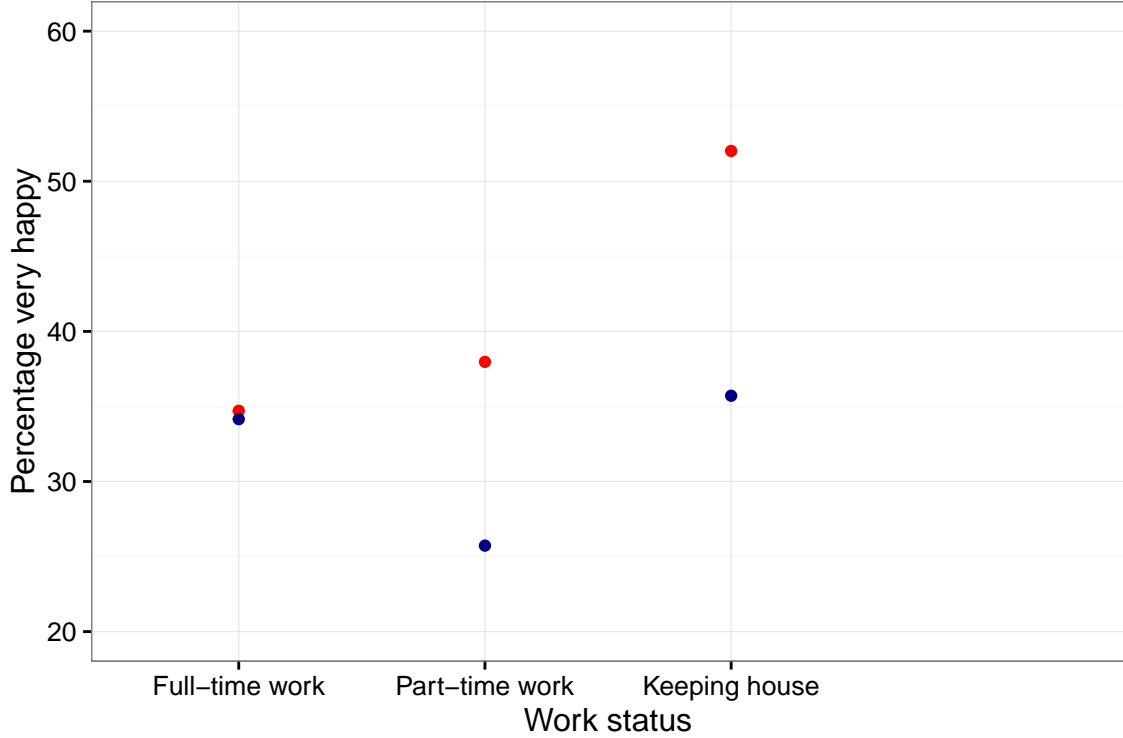|        | Full-time | Keeping house | Part-time |
|--------|-----------|---------------|-----------|
| Female | 0.9522437 | 0.0139975     | 0.0337587 |
| Male   | 0.4843316 | 0.3113844     | 0.2042840 |



Figure 5: Happiness and labour-market affiliation (college educated men and women)

Figure 6 shows the share of college educated men and women who report being very happy depending on whether they earn more than the 25th (panel A) or 50th (panel B) income percentile of college educated men in their age cohort. The graph suggests that women have the same propensity to be very happe regardless of whether they are high earners or not, whereas the difference is substantial for men. The difference for men is even more pronounced when the threshold is set at the 50th percentile.

Figure 7 differentiates between the four possible combinations of having a family (married and children) and having a high- or low-income job (defined as earning more than the 25th income percentile of college educated men in the respondent's cohort). Both college educated men and women report substantially higher happiness levels when having a family. When not having a family, higher income improves life satisfaction for both genders although the increase is larger for men. Gender differences become more pronounced when

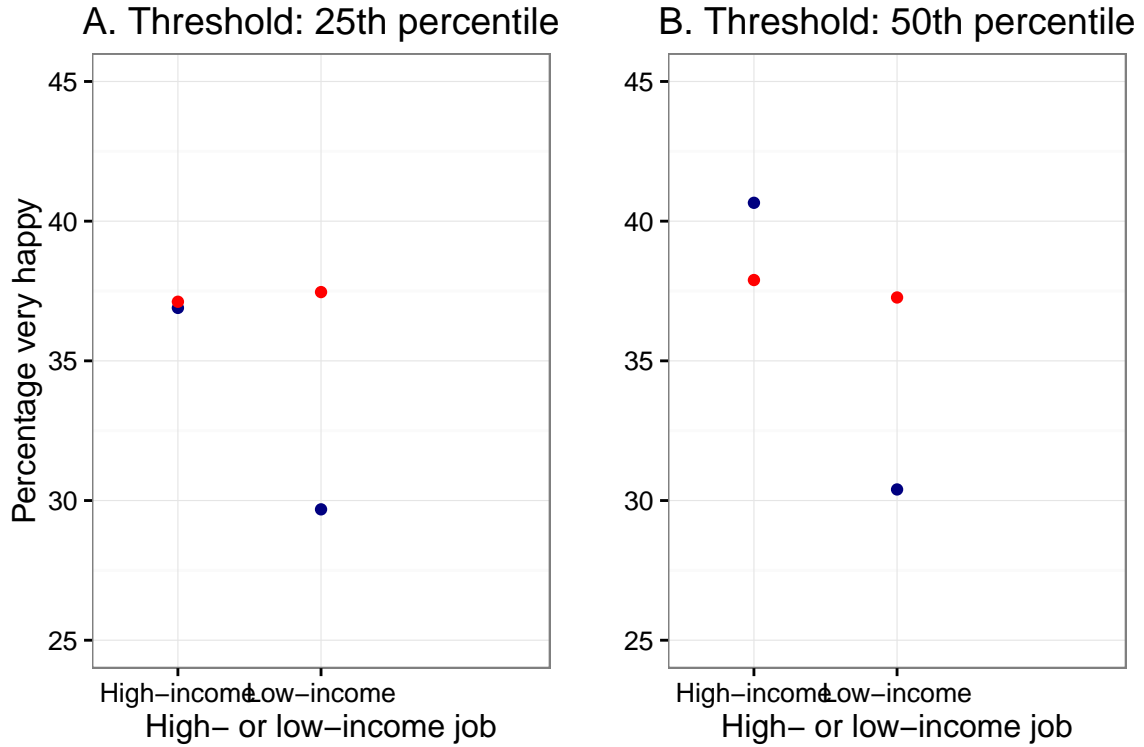A. Threshold: 25th percentile    B. Threshold: 50th percentile

Figure 6: Happiness and income level

people have a family. With a family, women are happier when they are not in a high-income job, whereas the opposite is true for men.

These descriptive results suggest that on average married couples with kids are best-off when following a male bread-winner model, which conflicts with more progressive gender norms. Note, however, that the results could be driven by omitted factors such as assymetric total family income or age across the family constellations which also could affect subjective well-being. In our final analysis we seek to identify the factors that are driving these results.

### 4.2.1 Cohort

## 5 Regression Analysis

### 5.1 Interaction effects of marriage and job income for working men and women

The correlations shown in Figure 5-8 are influenced by omitted factors. To control for some of the confounding factors that are observable, we replicate a linear probability model by Bertrand (2013) and estimate the effect of marriage and the interaction effect of marriage and having a high-paid job (career) on the binary variable
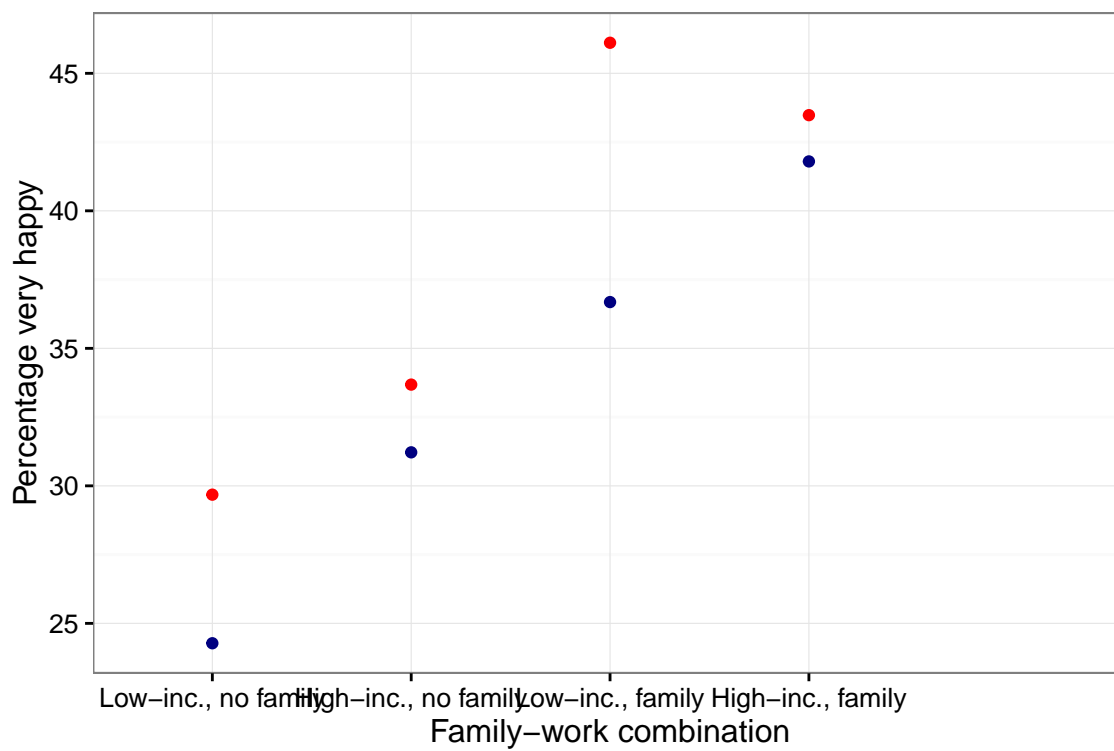
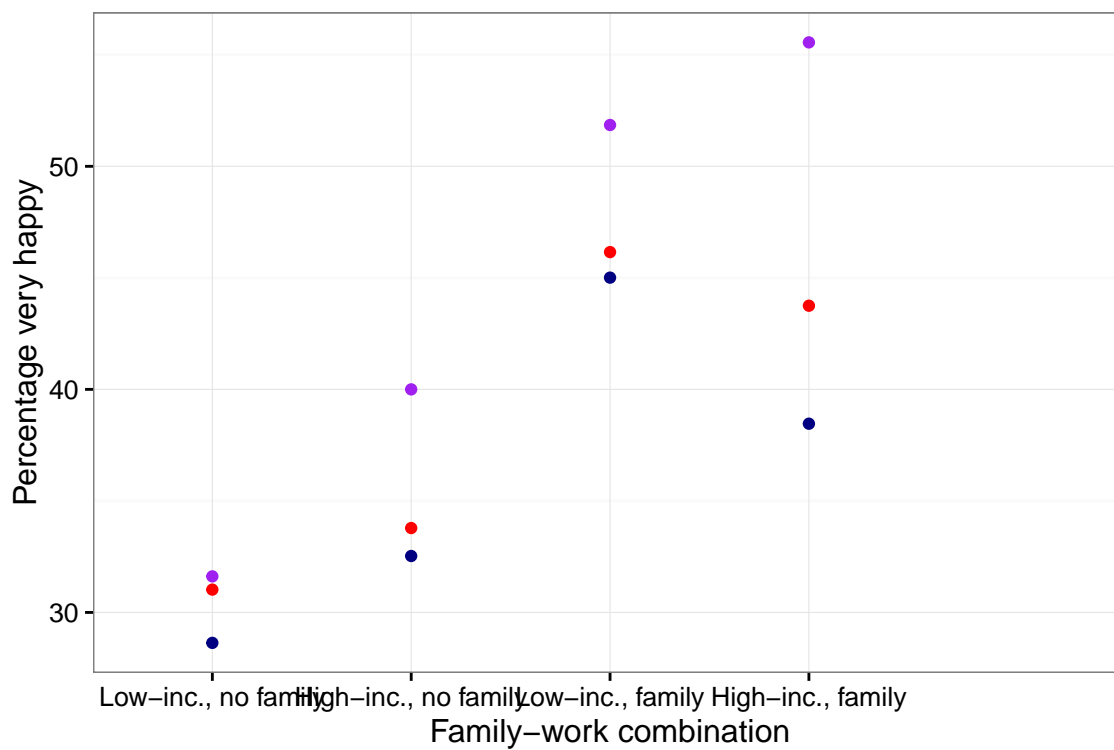Figure 7: Happiness and family constellation (college educated subsample)



Figure 8: Happiness and family constellation (college educated women)

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of being very happy. While Bertrand (2013) limits her analysis to college-educated women who are working, we also compare these findings to college educated men. The model controls for age, age-squared, the survey year, race and decade of birth.

Figure 9 shows the effect of marriage on the probability of being very happy for college educated men and women depending on job income. First, the effect of marriage is positive and significantly different from zero regardless of respondents' income level. The left panel shows that the effect of marriage on reported happiness is stronger for women who do not have a high-income job compared to women who do, as the interaction term between marriage and high job income is -0.07. Although this difference only is significant at the 10% level, job income seem to be much more important for the happiness of women compared to men, where having a high-paying job or not hardly influences the effect of marriage on happiness.
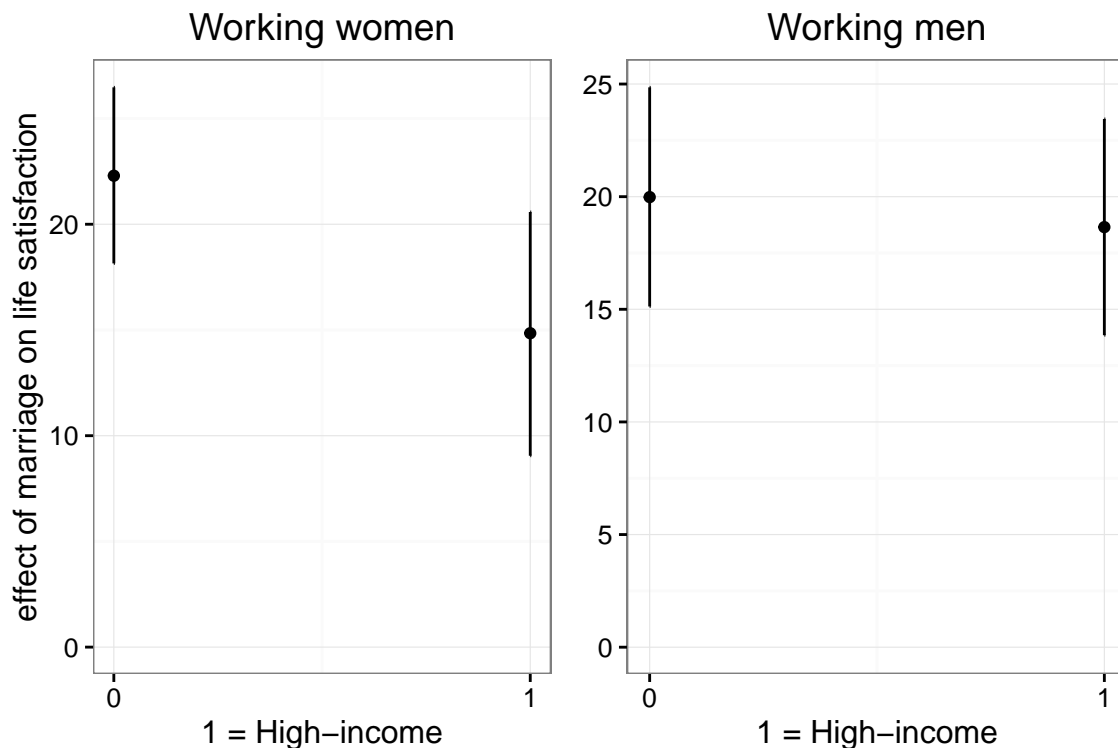


Figure 9: Interaction effects of marriage and job income on life satisfaction

# 6  Discussion

# 7  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 hapiness.

# 8  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 2016), "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).

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