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Unexpected Victims: How Parents' Unemployment Affects Their Children's Life Satisfaction

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Abstract

The effects of unemployment on the subjective wellbeing (SWB) of the unemployed on the unemployed are well documented. Using data from the German SOEP for 17-25 year olds living with their parents, this paper examines the additional indirect effects of parents' unemployment on their children's subjective wellbeing in an attempt to capture the full impact of unemployment. The reason for entry (exogenous versus endogenous) into unemployment plays a major role. Fathers who enter unemployment exogenously affect their son's SWB negatively, as do mothers who enter into unemployment endogenously. Parental unemployment has no impact on daughters' SWB.

1   Introduction

In many studies, economists have focused on the effects of unemployment from an individual perspective. They found that the unemployed suffer not only the loss of income but additionally a loss of self-esteem and social identification and an increase in depression, etc.[1] Furthermore, the costs of the loss of self-esteem even outweigh the lost income.[2] Therefore many studies focused on the effects of unemployment on subjective well-being (SWB) (e.g. Kassenboehmer and Haisken-DeNew 2009; Clark 2006; Lucas et al. 2004; Clark et al. 2001; Di Tella, Haisken-DeNew and MacCulloch 2007). The effects they found were strong and negative.

This study focuses on an issue rarely dealt with yet. What are the effects of parental unemployment on the adolescent's life satisfaction? We know from the existing literature that intergenerational transmission exists for example referring to education or income. But is there an intergenerational transmission from parental unemployment to the child's life satisfaction?

In order to identify the effects of parental unemployment on the child, data from the German Socio Economic Panel (SOEP) is used. It is expected that especially at the moment when the entry into unemployment occurs, effects on the child can be detected. To gain more insight, the distinction between voluntary and involuntary unemployment (see Kassenboehmer and Haisken-DeNew 2009) will be made. Parental unemployment is treated as completely exogenous to the child.[3] Since daughters and sons differ in gender, same-gender as well as cross-gender effects will be examined.

It is expected that parental unemployment lowers life satisfaction of the child and therefore entails larger non pecuniary costs than implied by previous studies. An intergenerational impact that increases the true costs of unemployment would be an issue of policy relevance. If there is some kind of spill-over effect of unemployment within the family on to the sons and daughters in labor market entry age, unemployment would have a much larger impact than previously expected.

Indeed this study shows that the parent's specific reason for entry into unemployment plays a crucial role in assessing the negative (or positive) impact of parental unemployment on sons or daughters[4]. We show that fathers who become exogenously unemployed negatively affect their sons' subjective well-being in a significant manner. Mothers who quit their jobs by themselves also

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[1]See Darity and Goldsmith (1996) or Goldsmith et al. (1997) for further details.

[2]As an example see Winkelmann and Winkelmann (1998).

[3]It might be the case that for example unhealthy children influence the parent's decision to work, but this situation will not be regarded here.

[4]See DiTella, Haisken-DeNew and MacCulloch (2007) who use exogenous unemployment as an instrument for changes in social status and exogenous income and their impacts on life satisfaction. See also Kassenboehmer and Haisken-DeNew (2009) who examine the effect of exogenous unemployment on life satisfaction.

negatively affect their sons' subjective wellbeing. Daughters are not affected by the unemployment of their parents regardless of the reason. We interpret the difference of effects between sons and daughters (17-25 years old) in that sons traditionally have a stronger attachment to the labor market than their female counterparts, who may have more direct family planning considerations.

This study is structured as followed: Section 2 provides an overview of the relevant literature regarding life satisfaction and intergenerational transmission. Section 3 describes the data used. In section 4 the estimation methods are presented and the results of the examinations are discussed. Section 5 concludes.

2   Background

In economic literature, the use of subjective data recently gained more attention. Frey and Stutzer (2002) as well as Ng (1997) argue that subjective well-being would be a good proxy variable for individual's utility and would therefore be useful in economic science. A lot of work is done by economists using subjective data, as summarized by Di Tella and MacCulloch (2006). Like Easterlin (1974), many articles deal with the effects of shifts in income on life satisfaction (e.g. Clark and Oswald 1996; Easterlin 1995; Luttmer 2005 and Senik 2006). As Frijters et al. (2004) point out, real income and *employment status* are important predictors of life satisfaction. Using a conditional fixed-effect ordinal estimator and data from the SOEP, they detect substantial life satisfaction gains resulting from employment.

Clark (2003) examines this issue by estimating the effects of a social norm in unemployment on the relationship between unemployment and life satisfaction. The social norm arises out of a group of the "relevant-others", that contains people that live in the same region, are household members and significant others like the companion. His major finding is that the effect of personal unemployment on life satisfaction decreases as the unemployment rate of the "relevant others" increases.

Winkelmann and Winkelmann (1998) evaluate the non-pecuniary costs of unemployment. They argue that in addition to the loss of income (pecuniary costs), the unemployed loses a provider of social relationships, social identity and self-esteem, which leads to a decline in life satisfaction (non-pecuniary costs). Using panel data and controlling for fixed effects they find, that unemployment has a significant negative impact on life satisfaction. Furthermore they point out that the non-pecuniary costs outrun the pecuniary costs by far. Therefore the costs of unemployment are much larger than estimated without using subjective data. Another study on the non-pecuniary costs is done by Oswald (1997). He finds that the non-pecuniary distress is the worst return of getting unemployed for an individual. He concludes that "unemployment appears to be the primary economic source of unhappiness" (Oswald, 1997, p. 1828).

Kassenboehmer and Haisken-DeNew (2009) distinguish between voluntary and involuntary unemployment. Being fired is treated as partly involuntary, while company closure within the last 12 months is regarded as completely involuntary. They take involuntary unemployment as being totally exogenous. Therefore the causal impact of involuntary unemployment is not biased by quitting of the individual endogenously. Their major finding is that if the reason for becoming unemployed is company closure, the decrease in well-being is significantly larger compared to being fired. They find that company closure (exogenous entry into unemployment) decreases life satisfaction dramatically for women.

Pedersen and Madsen (2002) examine the effects of parental employment status on children's health and well-being. In their opinion children are highly sensitive to their parents' well-being. Leading to the hypothesis, that if parental unemployment affects SWB, it should impair children's well-being as well. As a result, they find that parental unemployment in the past six months decreases children's health status and well-being. Though the results of the study are questionable, children's well-being was reported by the parents. As shown before, unemployment has a significant negative effect on the individual's well-being. If the parent is already dissatisfied with life, it seems reasonable to hypothesize, that this could influence the report of the life satisfaction of others. Therefore children's well-being might be biased downward by a reduction in parental well-being due to their own employment status. It appears to be obvious that Pedersen and Madsen (2002) find a negative impact on the child's life satisfaction since a negative impact of unemployment on the individual's life satisfaction is already proved. The process they investigate is the same investigated in this study, however this study overcomes the downward bias detected in the study of Pedersen and Madsen (2002) by using only self reported SWB.

3   Data

The data used is from the German Socio-Economic Panel (SOEP). In this study the youngest individuals that are included in the sample are 17, since this is the first time individuals report their own life satisfaction. As a measure of life satisfaction, the answer to the following question asked in the SOEP is used. "How satisfied are you with your life, all things considered?" Respondents are supposed to answer on an eleven-point scale from zero to ten, where zero means "completely dissatisfied" and ten means "completely satisfied".

In this study special relevance is given to the specific reason why the job of the parent was terminated. The SOEP includes the corresponding question "How was this job terminated?" since the year 1991. Therefore the data set used in this study starts in 1991 and contains observations until 2009 summing up to 19- periods. Another restriction is made by regarding only individuals

between 17 to 25 years old. This short range of age is necessary because on the one hand, as explained above, the earliest observations that are self-reported by the children, take place at the age of 17 and on the other hand it is expected that the influence of parental characteristics weakens as the child gets older. It seems therefore reasonable to assume that after the age of 25[5], possible effects on the children's behavior diminish. It is assumed that especially at that age effects on SWB should become obvious. Furthermore only individuals are regarded who live with at least one parent. The spatial closeness to the parents is assumed to be necessary to allow for a transfer of emotions and the possibility to form an own explanation for the reason of parental unemployment.[6]

The sample used is an unbalanced panel.[7] Regarding the relevant age and assumptions it contains 9,777 valid person-year observations (1,241 people). The effects of parental unemployment are examined for males and females separately. The subsample used to assess the effects for sons contains 5,632 person-year observations (701 people). The subsample used to assess the effects for daughters consists of 4,145 person-year observations (540 people).

The independent variables used are age of the child, number of nights the child stayed at the hospital this year, education of the child, logarithm of equivalence household income, live with both parents, as well as unemployment status of the child. Health is supposed to have an impact on the child's life satisfaction as Locker et al. (2000) show for adult's. As a proxy for the individual's health status, the number of nights stayed in a hospital is used. Self-reported health status might be biased due to endogeneity with SWB and is therefore not included in the estimations. The approximated equivalence household income is measured in logs, to avoid large differences in its standard deviation. Household incomes below 200 Euro are dropped as data outliers. Two dummies are included for the type of school diploma the child achieved. While a dummy for a medium level of education (intermediate or technical school degree) and a dummy for a high level of education (upper secondary school degree) are included in the estimations, the group of individuals with a low level of education (dropouts or secondary school degree) serve as a reference group. Another dummy variable indicates if the child lives together with both parents in the same household. Furthermore the labor market status of the child is included in the model. If the child is older than 16, it seems appropriate to allow for the possibility that the child is unemployed. As argued before, unemployment itself leads to significant drops in reported life satisfaction. It is therefore reasonable to include the labor force status of the child that reflects either unemployment

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[5]Schimpl-Neimanns (2006) found that the average age of leaving the parent's household is 21 for men and 24 for women.

[6]This assumption is not crucial. If we drop this assumption, the effects can still be found. However we regard this assumption as necessary to derive a convincing story of transmission.

[7]The data used in this paper was extracted using the Add-On Package PanelWhiz for Stata. PanelWhiz (http://www.PanelWhiz.eu) was written by Dr. John P. Haisken-DeNew (john@PanelWhiz.eu). See Haisken-DeNew and Hahn (2010) for details. The PanelWhiz generated DO file to retrieve the data used here is available from me upon request. Any data or computational errors in this paper are the author's.

or not. Unemployment is assumed if the labor force status of the individual is unemployed, non-working but sometimes secondary job, non-working but worked in past seven days and non-working but regular secondary job.

In a first step, two additional dummy variables are included that reflect the situation if a parent becomes unemployed in the current period in order to measure the entry-year effect[8] on the child's life satisfaction. Table 1 delivers descriptive statistics for the variables used.

In the second step of the estimation process additional variables are included. Since it is controlled for endogenous versus exogenous unemployment comparable to Kassenboehmer and Haisken-DeNew (2009), the relevant question of the SOEP is "How was this job terminated?" Answer possibilities are "Because your place of work or office has closed", "My resignation", "Dismissal", "Mutual agreement", "A temporary job or apprenticeship had been completed", "Reaching retirement age/ pension", "Suspension" and "Purpose of your self-employment/ business". Here solely "Because your place of work or office has closed" is taken as an exogenous reason for the parent to become unemployed. The underlying assumption is that the father/mother himself/herself cannot influence the closure of the company. The other seven possible answers are treated as potentially endogenous reasons for unemployment.[9]

In a third step the specific reasons for unemployment are regarded. Therefore the variable for endogenous entry into unemployment is split up into the various reasons why the job is terminated.

4 Empirical Analysis

4.1 Estimation Methods

The subjective measure of life satisfaction is used as the dependent variable. As mentioned above, the question about the individual's life satisfaction is answered on an eleven-point scale where zero means "completely dissatisfied" and ten stands for "completely satisfied". The variable referring to the individual's life satisfaction is broken down from the eleven-point scale into binary format, taking the value one if the person is satisfied and zero if the individual is dissatisfied.

In another step it is reasonable to assume that individual's life satisfaction is influenced by factors that are unobservable or incidental and time invariant. As an example ambition or intelligence might have an impact on life satisfaction. Thus, the direction of the impact might not be clear. In order to account for such unobservables, the conditional fixed effects logit model developed by

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[8]Similar to Kassenboehmer and Haisken-DeNew (2009).

[9]We are aware that the classification into exogenous and endogenous reasons might induce discussions. However we claim that the reason for dismissal is most often endogenous to the worker. In section 4 we will mention robustness checks concerning the classification.

Chamberlain (1980) is used. It uses a maximum likelihood estimator that estimates the coefficients conditional on the number of ones the dependent variable takes and thereby eliminates the incidental parameters. The arising problem is that only cases where the dependent variable varies can be included in the regression. Therefore a lot of information is lost in a first step by collapsing the eleven-point scale into binary format and in a second step by only regarding the individuals where the reported life satisfaction changes from satisfied to dissatisfied or the other way around at least once per individual. As a solution Kassenboehmer and Haisken-DeNew (2009)[10] partly solve the problem of huge data loss by not using the mean life satisfaction of the whole sample, but by comparing individual's life satisfaction to the mean per individual. Therefore more variation in the dependent variable exists. They use the individual specific threshold as the basis for the decision if the individual is satisfied or dissatisfied in the current period. The individual specific threshold used here is the mean of the observations used in this sample from age 17 to 25. The dependent variable is then recoded as follows:

$$
y_{it} = \begin{cases} 0 \text{ if } Y_{it} \leq Y_i^* \\ 1 \text{ if } Y_{it}^* > Y_i^* \end{cases} \quad \text{where } Y_i^* = \frac{\sum_{t=1}^{T} Y_{it}}{T} \tag{1}
$$

On this dependent variable the conditional fixed effects logit model is applied that accounts for unobservable fixed effects. Additional estimations are done using the linear fixed effects transformation and an ordinary probit model.

4.2 Results

In a first step, solely the event of entrance into unemployment of the father and the mother are examined. The set of standard controls presented in section 3 is used. The results of the first step for the sons are shown in table 2.

It can be seen that unemployment of the son himself decreases his reported life satisfaction. This finding is similar to the findings presented in section 2. Unemployment decreases SWB from an individual perspective.

Of certain interest are the coefficients regarding the event that the father or the mother becomes unemployed in this period. These events display no significant effects regardless of the estimation procedure used.[11] This result is unexpected, but might imply that more information is needed.

Since different results are expected referring to the sex of the child, the same regression is run for females. The results for the daughters of the three regressions at the first step are shown in table 3.

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[10]With help from Ferrer-i-Carbonell and Frijters (2004).

[11]The significant effect of maternal entry into unemployment found in the Probit model is not robust.

As well as for the boys, own unemployment lowers reported life satisfaction of the daughter. This effect is always negative and significant at the one percent level. However, as in the estimation at the first stage for the son, the event of parental entrance into unemployment is not significant in any of the estimation methods used.

The estimations of the first step do not answer the question "Does parental unemployment has any impact on the adolescent's reported life satisfaction?" sufficiently. The first step provides no evidence for any significant effect. As Kassenboehmer and Haisken-DeNew (2009) show, a further breakdown into exogenous versus endogenous unemployment is of value. If exogenous unemployment and endogenous unemployment have effects with opposite signs, they might even out, rendering the coefficients insignificant in the first step estimations.

Therefore **in a second step**, further differentiation is done between exogenous and endogenous unemployment. Again different regressions are done for males and females. Table 4 shows the results for the sons. Taking a look at the effects of entrance into unemployment due to exogenous reasons by the father, it can be seen that it has the expected negative effect controlling among other things for equivalence household income. If the father becomes involuntary unemployed because of a company closure, a decrease in SWB of the son is detected. In the conditional fixed effects logit estimation the coefficient is negative and significant at the five percent level. As known from the presented literature, entry into exogenous unemployment decreases the reported SWB of the individual. Due to the estimation presented in table 4 it is now reasonable to argue that the event of exogenous unemployment does not solely affect the father but is passed on to the next generation. This finding contributes to the existing literature by detecting the intergenerational transmission of unemployment. There are at least two possible explanations for this disappointment. On the one hand, the son could be less satisfied because his same-gender role model, the father, lost his job due to exogenous reasons. So the role model lost his job due to reasons he could not affect. Demotivation of the son could play a role here. On the other hand, the son sees his destiny in being employed just as his dad was. Now his father becomes unemployed and his destiny switches from employment to unemployment.

A positive impact on the son's life satisfaction is found when the father becomes endogenously unemployed in this period. This positive effect is identified by all three estimations. The positive sign of an endogenous entry into unemployment might be due to the characteristics of the father that are observable by the son. If the father is now dismissed the son might see his chance to step up in the family hierarchy. The negative characteristics of the father might be visible to all family members. If the son is able to become employed or just sees his chance to become employed soon, he might become the family's breadwinner and therefore surpass the role model of his childhood.

According to the three estimations, exogenous unemployment of the mother has no effect on the son's SWB. However, endogenous maternal unemployment has a negative impact according to all three models. To continue the argumentation, one would argue that the son is also a good observer of the characteristics of his mother. Since the impact of maternal endogenous entrance into unemployment reflects a cross gender effect, the argument with the mother being the role model cannot be made here. If mother's temporary contract is not continued because her work is not well organized or of high quality, this might as well be the fact according to the job she does as a housewife. Maybe the son knows about his mother's characteristics and is not excited to have her at home. And even if his mother resigned this might be due to facts the son observes and interprets as weakness of his mother. His mother worked before and was different compared to many women in the population. Now she is unemployed and back to being a housewife, potentially disappointing the son. However, breaking endogenous unemployment down into its determinants, one might be able to identify the source of the decrease in the son's life satisfaction.[12]

Table 5 shows the results of the regressions on the second step for the daughters. Having a father who becomes exogenously unemployed in this period has no significant impact in either the linear fixed effects, probit or the conditional fixed effects logit estimation. No effects of endogenous unemployment of the father can be found in any of the three estimations. Focusing on maternal exogenous entrance into unemployment, no effect can be found on the daughter's life satisfaction. Also endogenous maternal unemployment has no impact referring to the estimations shown in table 5.

The interesting fact table 5 shows is, that the daughter's life satisfaction is not affected by neither paternal nor maternal labor market events. An explanation might be that daughters always see the status of a housewife as a potential outside option. Having a parent that becomes unemployed, might affect the daughters less because of a weaker labor force attachment. Maybe daughters, according to a traditional view, do not see their future on the labor market but at the side of a strong husband. However this traditional view of the daughters seems to be critical to assume. Having data from 1991 to 2009 might suggest that the traditional view does not hold.

As argued in the psychology literature, "pubertal maturation, along with chronological age, is associated with diminished closeness between girls and their parents" (Steinberg, 1987, p.455). This serves as a possible alternative explanation for the observed differences. Steinberg (1987) used a sample with adolescents aged between 10 and 15. It seems reasonable to assume this diminishing closeness to continue with chronological age. It might be the fact that daughters are

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[12]As a robustness check, we changed the top age of the sample. If you do not truncate the sample, the effect of maternal endogenous entrance into unemployment vanishes. We assume that the diminishing closeness between mother and son can be regarded as the reason for this finding.

more independent of their parents.[13]

In a third step this study controls for the exact reason why the job is terminated. Only the effects of company closure, own resignation, dismissal and an expiring temporary contract or apprenticeship occur in more or equal to 0.2 percent of the observations. Therefore only four dummy variables for the fathers and four dummy variables for the mothers are included in the model that each equals one if the specific reason for parental unemployment holds and equals zero if not.

Table 6 presents the results of the three different estimation methods for sons. Unemployment of the father that is due to company closure was treated before as the only reason for becoming exogenously unemployed and obviously has the same negative effect as exogenous entry into unemployment found in the second step.

It can be seen in table 6 that if the father becomes unemployed because of own resignation, a positive effect on the son's life satisfaction can be identified by the probit model. A dismissed father increases son's satisfaction probability by 91.1 percentage-points. The effect of own resignation on the son's life satisfaction is almost twice the size of the effect of dismissal in the probit model. This is an indication that own resignation is regarded as weakness of the father by the son. The role model becomes blemished, leading to relative improvement of the son in the hierarchy of the family. It seems to be the case that paternal dismissal is the driving force of the increase in the son's life satisfaction.

Focusing on maternal unemployment, company closure (former exogenous unemployment) has no impact according to all three estimations. Distinguishing now between the specific reasons for endogenous unemployment allows detecting the driving forces of the impact on the son's life satisfaction. Entrance into unemployment due to own resignation shows a negative impact on the son's life satisfaction in both the fixed effects and the conditional fixed effects logit model. In both cases the effect is significant on the five percent level. Referring to the fixed effects transformation maternal unemployment due to resignation lowers the son's SWB by 0.858 points on the eleven-point scale. This effect is of a remarkable size. In case the mother is dismissed, a decrease in reported life satisfaction occurs according to the probit model. Similar to the results presented in table 4, the effect of exogenous unemployment is positive while the effects of endogenous unemployment, own resignation and dismissal, are negative. But the effects of the specific reasons for maternal unemployment are not robust. If the reasons for paternal unemployment are left out of the estimations, the effects described above cannot be found anymore. It is therefore questionable if these effects really exist or whether they are due to the relatively

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[13]As a robustness check, we regarded "dismissal" as an exogenous reason. The effects found above vanish. In order to understand why this is the case, one has to take into account the results found in step three.

small number of observations in the subsample.

The results for the third step for the daughters are shown in table 7. Regarding the effects of parental entrance into unemployment combined with the specific reason for termination of the job, no significant impacts can be found. The same holds for maternal entrance into unemployment due to any specific reasons according to the results presented in table 7.

As one can see now, treating dismissal as endogenous in the second step must lead to a vanishing of the effects of paternal entry into unemployment. Company closure and dismissal impact the son in two opposing directions. Therefore the signs cancel out, such that no effect can be detected. The third step clarifies the result of the robustness check, without changing the interpretation. If the father suffers from company closure(which we treat as exogenous) a negative impact on the son can be detected and if the father suffers dismissal(which we treat as endogenous), son's life satisfaction is increased.

5   Conclusions

This study contributes to the existing literature by expanding the research on intergenerational effects of unemployment. As found in the literature, many articles show that unemployment significantly affects life satisfaction negatively from an individual's perspective. While the transmission of education or status has been widely examined, the transmission of unemployment has only rarely been investigated (as in Pedersen and Madsen, 2002).

Parental entry into unemployment *per se* appears to have no effect on the children's well-being. It is therefore necessary to use data that provides more information on the specific reason for unemployment. Because the SOEP includes a question referring to the specific reason for job termination, further information can be used. We therefore differentiate, between exogenous and endogenous unemployment. It can be shown that paternal entrance into unemployment due to an exogenous reason (company closure), decreases life satisfaction of the son. This effect is explained by the role model function of the father, which diminishes by unemployment, leaving a potentially discouraged son. Parental entrance into unemployment due to endogenous reasons is found to have a positive impact on the son's life satisfaction. It appears that the son approves the father's endogenous entry into unemployment. Maternal exogenous entrance into unemployment has no impact on the son's well-being, while the mother's endogenous unemployment leads to a decrease in the son's life satisfaction.

Differentiating between the specific reasons it can be seen, that an expiring temporary contract of the father, own resignation and being dismissed increase life satisfaction significantly. According to the probit estimation the positive impact of own resignation is twice as high as the impact of the father being

dismissed.

Focusing on maternal entry into unemployment, a negative impact of endogenous unemployment of the mother could be detected on the son's SWB. It can be shown that while maternal dismissal or the expiration of a contract has no effect on the son's SWB, maternal resignation significantly decreases the son's life satisfaction. As a possible explanation holds the case that the mother is dissatisfied with her job and resigns. Her dissatisfaction is then transferred into the family and lowers the son's life satisfaction.

Investigating the intergenerational effects of parental unemployment on the daughter, no significant robust effects were found in any of the three steps. Therefore we conclude that daughters are not affected by parental entry into unemployment.

The results imply interesting policy implications, since unemployment does not only mean a loss of income and loss of satisfaction from an individual's perspective but also has intergenerational effects. It is therefore possible to speak of a *domino effect of unemployment* in a family context. If the father becomes unemployed due to reasons he is not responsible for, this has significant negative effects on the son's life satisfaction. The non pecuniary costs of unemployment are therefore even higher than thought before.

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Table 1: Descriptive Statistics

	Mean	Std.Dev.	Min.	Max.
Dependent Variables:				
Life satisfaction (eleven-point-scale)	7.248	1.626	0	10
Life satisfaction (binary format)	0.465	0.499	0	1
Standard Controls:				
Age	20.941	2.250	17	25
Male	0.576	0.494	0	1
Number of nights in hospital	0.559	4.106	0	150
Level education low	0.273	0.445	0	1
Level education middle	0.468	0.499	0	1
Level education high	0.259	0.438	0	1
Live together with both parents	0.955	0.208	0	1
Log equivalence household income	7.280	0.436	4.8	9.9
Unemployed (child)	0.167	0.373	0	1
Unemployed (father)	0.069	0.254	0	1
Unemployed (mother)	0.083	0.276	0	1
First Step:				
Becomes unemployed this period (father)	0.020	0.140	0	1
Becomes unemployed this period (mother)	0.017	0.131	0	1
Second Step:				
Becomes exogenously unemployed(father)	0.006	0.075	0	1
Becomes endogenously unemployed(father)	0.014	0.118	0	1
Becomes exogenously unemployed(mother)	0.006	0.077	0	1
Becomes endogenously unemployed(mother)	0.011	0.106	0	1
Third Step:				
Becomes exogenously unemployed(father)	0.006	0.075	0	1
Father unemployed (own resignation)	0.002	0.047	0	1
Father unemployed (dismissal)	0.006	0.079	0	1
Father unemployed (temporary contract)	0.002	0.048	0	1
Becomes exogenously unemployed(mother)	0.006	0.077	0	1
Mother unemployed (own resignation)	0.003	0.056	0	1
Mother unemployed (dismissal)	0.004	0.061	0	1
Mother unemployed (temporary contract)	0.003	0.056	0	1
N	9777			

Table 2: Sons' Life Satisfaction: Parent's Entry into Unemployment

	FEP	Probit ME	CFEL
Age	-0.658***	-0.023	-0.765***
	(0.169)	(0.143)	(0.293)
Age^2	0.013***	-0.000	0.015**
	(0.004)	(0.003)	(0.007)
Number of nights in hospital	-0.029***	-0.005	-0.024**
	(0.005)	(0.004)	(0.010)
Level education middle	0.011	-0.073*	-0.455
	(0.163)	(0.039)	(0.323)
Level education high	-0.283	-0.031	-0.708*
	(0.211)	(0.051)	(0.383)
Live together with both parents	-0.128	0.107	-0.013
	(0.267)	(0.085)	(0.387)
Log equivalence household income	0.222**	-0.059	0.062
	(0.095)	(0.043)	(0.153)
Unemployed (child)	-0.452***	-0.214***	-0.542***
	(0.058)	(0.046)	(0.101)
Becomes unemployed this period (father)	0.171	0.097	0.108
	(0.147)	(0.116)	(0.224)
Becomes unemployed this period (mother)	-0.156	-0.285**	-0.305
	(0.173)	(0.137)	(0.280)
Constant	13.805***	0.993	—
	(1.857)	(1.505)	
N	5632	5632	4285
R^2	0.050	—	—
PseudoR^2	—	0.009	0.031

Note: * p<.10, ** p<.05, *** p<.01. Robust standard errors in parantheses.

Dependent Variable: Sons' Life Satisfaction on a scale 0-10 in FEP; 0/1 in Probit and CFEL

FEP: Fixed Effects Linear Panel; Probit ME: Marginal Effects; CFEL: Conditional Fixed Effects Logit

Table 3: Daughters' Life Satisfaction: Parent's Entry into Unemployment

	FEP	Probit ME	CFEL
Age	-0.390*	0.039	-0.447
	(0.209)	(0.171)	(0.366)
Age^2	0.008	-0.002	0.008
	(0.005)	(0.004)	(0.009)
Number of nights in hospital	-0.020***	0.001	-0.011
	(0.007)	(0.005)	(0.010)
Level education middle	-0.024	0.001	-0.004
	(0.178)	(0.051)	(0.301)
Level education high	0.185	0.023	0.147
	(0.211)	(0.064)	(0.362)
Live together with both parents	-0.493	0.065	0.192
	(0.370)	(0.104)	(0.516)
Log equivalence household income	0.135	-0.058	0.173
	(0.123)	(0.051)	(0.213)
Unemployed (child)	-0.311***	-0.145**	-0.281**
	(0.077)	(0.057)	(0.132)
Becomes unemployed this period (father)	0.071	0.165	0.370
	(0.187)	(0.143)	(0.344)
Becomes unemployed this period (mother)	0.171	0.087	0.151
	(0.201)	(0.146)	(0.362)
Constant	11.507***	0.113	—
	(2.302)	(1.792)	
N	4145	4145	2935
R^2	0.019	—	—
PseudoR^2	—	0.003	0.012

Note: * p<.10, ** p<.05, *** p<.01. Robust standard errors in parantheses.

Dependent Variable: Daugthers' Life Satisfaction on a scale 0-10 in FEP; 0/1 in Probit and CFEL

FEP: Fixed Effects Linear Panel; Probit ME: Marginal Effects; CFEL: Conditional Fixed Effects Logit

Table 4: Sons' Life Satisfaction: Reason for Parental Unemployment

	FEP	Probit ME	CFEL
Age	-0.666***	-0.027	-0.785***
	(0.169)	(0.139)	(0.294)
Age^2	0.013***	-0.000	0.016**
	(0.004)	(0.003)	(0.007)
Number of nights in hospital	-0.029***	-0.005	-0.024**
	(0.005)	(0.004)	(0.010)
Level education middle	0.015	-0.074*	-0.449
	(0.163)	(0.039)	(0.322)
Level education high	-0.275	-0.027	-0.691*
	(0.211)	(0.050)	(0.383)
Live together with both parents	-0.172	0.098	-0.111
	(0.267)	(0.078)	(0.362)
Log equivalence household income	0.218**	-0.061	0.054
	(0.095)	(0.042)	(0.153)
Unemployed (child)	-0.451***	-0.215***	-0.543***
	(0.058)	(0.045)	(0.102)
Father:			
Becomes *exogenously* unemployed	-0.327	-0.478**	-0.979**
	(0.268)	(0.228)	(0.450)
Becomes *endogenousy* unemployed	0.371**	0.331**	0.515*
	(0.176)	(0.143)	(0.280)
Mother:			
Becomes *exogenously* unemployed	0.359	-0.107	0.422
	(0.294)	(0.236)	(0.488)
Becomes *endogenously* unemployed	-0.395*	-0.348**	-0.613*
	(0.213)	(0.168)	(0.332)
Constant	13.944***	1.066	–
	(1.856)	(1.466)	
N	5632	5632	4285
R^2	0.052	–	–
PseudoR^2	–	0.011	0.034

Note: * p<.10, ** p<.05, *** p<.01. Robust standard errors in parantheses.

Dependent Variable: Sons' Life Satisfaction on a scale 0-10 in FEP; 0/1 in Probit and CFEL

FEP: Fixed Effects Linear Panel; Probit ME: Marginal Effects; CFEL: Conditional Fixed Effects Logit

Table 5: Daugthers' Life Satisfaction: Reason for Parental Unemployment

	FEP	Probit ME	CFEL
Age	-0.389*	0.044	-0.445
	(0.209)	(0.164)	(0.366)
Age^2	0.008	-0.002	0.008
	(0.005)	(0.004)	(0.009)
Number of nights in hospital	-0.020***	0.001	-0.011
	(0.007)	(0.005)	(0.010)
Level education middle	-0.023	0.003	0.006
	(0.179)	(0.051)	(0.302)
Level education high	0.186	0.023	0.153
	(0.211)	(0.061)	(0.363)
Live together with both parents	-0.497	0.064	0.174
	(0.372)	(0.101)	(0.519)
Log equivalence household income	0.134	-0.059	0.171
	(0.123)	(0.047)	(0.213)
Unemployed (child)	-0.311***	-0.145***	-0.280**
	(0.077)	(0.055)	(0.132)
Father:			
Becomes *exogenously* unemployed	0.115	0.296	0.355
	(0.369)	(0.273)	(0.595)
Becomes *endogenously* unemployed	0.057	0.119	0.376
	(0.218)	(0.165)	(0.419)
Mother:			
Becomes *exogenously* unemployed	0.131	-0.033	-0.072
	(0.348)	(0.240)	(0.627)
Becomes *endogenously* unemployed	0.190	0.149	0.270
	(0.244)	(0.178)	(0.444)
Constant	11.508***	0.078	–
	(2.303)	(1.718)	
N	4145	4145	2935
R^2	0.019	–	–
PseudoR^2	–	0.003	0.013

Note: * p<.10, ** p<.05, *** p<.01. Robust standard errors in parantheses.

Dependent Variable: Daughters' Life Satisfaction on a scale 0-10 in FEP; 0/1 in Probit and CFEL

FEP: Fixed Effects Linear Panel; Probit ME: Marginal Effects; CFEL: Conditional Fixed Effects Logit

Table 6: Sons' Well-Being: Specific Reason for Parental Unemployment

	FEP	Probit ME	CFEL
Age	-0.679***	-0.031	-0.808***
	(0.169)	(0.143)	(0.295)
Age^2	0.014***	-0.000	0.016**
	(0.004)	(0.003)	(0.007)
Number of nights in hospital	-0.029***	-0.005	-0.024**
	(0.005)	(0.004)	(0.010)
Level education middle	0.016	-0.075*	-0.444
	(0.163)	(0.039)	(0.322)
Level education high	-0.277	-0.030	-0.693*
	(0.211)	(0.051)	(0.382)
Live together with both parents	-0.171	0.099	-0.111
	(0.267)	(0.085)	(0.363)
Log equivalence household income	0.215**	-0.059	0.058
	(0.095)	(0.043)	(0.154)
Unemployed (child)	-0.450***	-0.217***	-0.546***
	(0.058)	(0.046)	(0.102)
Father:			
Becomes *exogenously* unemployed	-0.336	-0.480**	-1.013**
	(0.268)	(0.228)	(0.451)
Becomes unemployed (*own resignation*)	0.701	0.911**	0.925
	(0.470)	(0.463)	(1.014)
Becomes unemployed (*dismissal*)	0.561**	0.573***	0.875**
	(0.255)	(0.216)	(0.440)
Becomes unemployed (*temporary contract*)	0.559	0.159	0.163
	(0.422)	(0.342)	(0.606)
Mother:			
Becomes *exogenously* unemployed	0.374	-0.105	0.454
	(0.294)	(0.238)	(0.493)
Becomes unemployed (*own resignation*)	-0.858**	-0.317	-1.306**
	(0.416)	(0.348)	(0.610)
Becomes unemployed (*dismissal*)	-0.301	-0.546*	-0.801
	(0.366)	(0.312)	(0.629)
Becomes unemployed (*temporary contract*)	-0.034	-0.183	0.276
	(0.396)	(0.305)	(0.648)
Constant	14.108***	1.102	–
	(1.857)	(1.508)	
N	5632	5632	4285
R^2	0.054	–	–
PseudoR^2	–	0.012	0.036

Note: * p<.10, ** p<.05, *** p<.01. Robust standard errors in parantheses.

Dependent Variable: Sons' Life Satisfaction on a scale 0-10 in FEP; 0/1 in Probit and CFEL

FEP: Fixed Effects Linear Panel; Probit ME: Marginal Effects; CFEL: Conditional Fixed Effects Logit

Table 7: Daughters' Well-Being: Specific Reason for Parental Unemployment

	FEP	Probit ME	CFEL
Age	-0.390*	0.040	-0.444
	(0.209)	(0.171)	(0.366)
Age^2	0.008	-0.002	0.008
	(0.005)	(0.004)	(0.009)
Number of nights in hospital	-0.020***	0.001	-0.011
	(0.007)	(0.005)	(0.010)
Level education middle	-0.023	0.005	0.008
	(0.179)	(0.051)	(0.303)
Level education high	0.191	0.026	0.155
	(0.212)	(0.064)	(0.365)
Live together with both parents	-0.523	0.062	0.145
	(0.373)	(0.104)	(0.523)
Log equivalence household income	0.130	-0.061	0.164
	(0.123)	(0.051)	(0.214)
Unemployed (child)	-0.311***	-0.146**	-0.280**
	(0.077)	(0.057)	(0.132)
Father:			
Becomes *exogenously* unemployed	0.106	0.305	0.333
	(0.369)	(0.273)	(0.590)
Becomes unemployed (*own resignation*)	-0.081	0.505	0.486
	(0.472)	(0.393)	(0.951)
Becomes unemployed (*dismissal*)	0.076	0.167	0.249
	(0.328)	(0.262)	(0.699)
Becomes unemployed (*temporary contract*)	0.300	-0.416	0.184
	(0.545)	(0.416)	(1.015)
Mother:			
Becomes *exogenously* unemployed	0.137	-0.036	-0.072
	(0.348)	(0.251)	(0.623)
Becomes unemployed (*own resignation*)	0.430	0.429	0.692
	(0.398)	(0.316)	(0.746)
Becomes unemployed (*dismissal*)	0.269	-0.092	-0.055
	(0.454)	(0.295)	(0.797)
Becomes unemployed (*temporary contract*)	-0.050	0.093	0.385
	(0.504)	(0.390)	(1.382)
Constant	11.571***	0.129	–
	(2.306)	(1.795)	
N	4145	4145	2935
R^2	0.019	–	–
PseudoR^2	–	0.004	0.013

Note: * p<.10, ** p<.05, *** p<.01. Robust standard errors in parantheses.

Dependent Variable: Daughters' Life Satisfaction on a scale 0-10 in FEP; 0/1 in Probit and CFEL

FEP: Fixed Effects Linear Panel; Probit ME: Marginal Effects; CFEL: Conditional Fixed Effects Logit