



## **Comparative Studies on Couples' and Family Dynamics using NKPS and pairfam**

Johannes Huinink, Eva-Maria Merz

Bremen and The Hague

May 2013



Funded as long-term project by the German Research Foundation (DFG)

*Cite as:*

Huinink, Johannes und Eva-Maria Merz (2013): Comparative Studies on Couples' and Family Dynamics using NKPS and pairfam. pairfam Technical Paper No. 08.  
<https://doi.org/10.5282/ubm/epub.91990>

## **1 Introduction**

Great progress has been made in providing the social sciences with longitudinal data in order to advance research on couples' and family dynamics. This is particularly true with regard to factors and variables which allow to model individual decision processes and the determinants of behavioural intentions. However, comparative studies in this field of research are still quite rare. International comparison of family development is dominated by highly sophisticated demographic studies that primarily deal with family-related events (marriage, childbirth) and structural attributes of the investigated populations.

In this working paper two major panel studies from the Netherlands and from Germany are introduced and their potential for comparative research on couples' and family issues is demonstrated. These two panel studies contribute considerably to the improvement of data provision regarding individual decision processes and the determinants of behavioural intentions. They are different in regard to their design but have much in common, allowing comparative research on family dynamics and intergenerational relations in the Netherlands and Germany. In the following, we show some options of combining these data sets for comparative research to encourage international scholars of family sociology and family demography to do so.

The Netherlands Kinship Panel Study (NKPS) was launched in 2002. Two additional panel waves were completed in 2006 and 2010 (Dykstra et al., 2004; Dykstra et al., 2012; Merz et al., 2012). The study is a cooperative effort of the Netherlands Interdisciplinary Demographic Institute (NIDI; Aart Liefbroer, Eva-Maria Merz), Erasmus University Rotterdam (Pearl Dykstra) Utrecht University (Aafke Komter) and the University of Groningen (Clara Mulder). NIDI is responsible for coordination, administrative and secretarial services.

The German Family Panel (pairfam) began in 2008 (Huinink et al. 2011). Its fourth annually conducted panel wave was completed in 2012. The study, a long-term project of the German Research Foundation (DFG), will be funded for up to 14 years. The principal investigators of the German Family Panel are Josef Brüderl (University of Munich), Johannes Huinink (University of Bremen), Bernhard Nauck (Chemnitz University of Technology) and Sabine Walper (University of Munich). Bernhard Nauck is responsible for the coordination of the project.

The current paper provides, first, a brief overview of the two surveys. The thematic focus and the particularities of the design are presented, and the similarities and differences of

the studies are pointed out. Secondly, the features and instruments of the two studies, which can be used in comparative research, are presented in greater detail, and problems of using the data sets for comparative reasons are discussed. Because the different age structure of the two surveys' samples is a particular challenge for combining their data, some workarounds are proposed. Finally, an exemplary analysis of fertility intentions using these two data sets is presented.

## **2 Overview of the two studies and their sample design**

The aim of this section is a brief introduction to the surveys, presenting the main contents they cover with their data. Differences in sample design that have to be tackled in comparative studies are discussed.

### **2.1 Netherlands Kinship Panel Study (NKPS)**

The NKPS is a large scale panel survey that allows the examination of family dynamics and kinship ties in the Netherlands. Special features of the NKPS are a multi-actor design and its multi-method, panel approach. A detailed description of the aim and the design of NKPS is provided by Dykstra and colleagues (2004). See also the webpage of NKPS, [www.nkps.nl](http://www.nkps.nl). The main substantive topics of NKPS are the formation and dissolution of partner relationships, relationships with the nuclear family, kin relationships in a broader sense as well as solidarity within these types of family relationships. One focal aim of the project is understanding the diversity of solidarity patterns in families and kinship and to provide data to answer the question of to what extent family bonds in the Netherlands are likely to erode, and what the determinants and potential implications of the observed changes are. In addition, relevant information related to socio-cultural factors, such as education, work, income, housing, health, religiosity, leisure activities and living environment are collected.

The survey uses a nationwide random sample of addresses from the Netherlands. It focuses on men and women between 18 and 79 years old who live in private households nationwide. Apart from the main sample, a migrant sample that covers the four largest non-Western migrant groups in the Netherlands was included in waves 1 and 2. The main sample includes 8,161 respondents. During the first wave, computer assisted personal interviews (CAPI) were conducted between 2002 and 2004. A self-completed questionnaire, covering more sensitive questions, touching on norms and attitudes for example, supplemented the interviews.

To boost the initial response rate, a substitute sample consisting of 1,604 individuals (respondents from the original address sample who had refused to participate) was interviewed with an abridged, self-completion version of the original CAPI questionnaire. The migrant sample consists of 1.402 respondents from Turkey, Morocco, the Dutch Antilles and Suriname. In addition, a multi-actor design is implemented. The partner, a maximum of two children aged 15 and over, father and mother, and a brother/sister aged 15 and over were surveyed using self-completion questionnaires if the main respondents (anchors) consented. Because of unsatisfyingly low response rates of family members (alteri) in the first two waves, only the current partner of the respondents was asked to participate in the third wave using a self-completed questionnaire.

## **2.2 German Family Panel (pairfam)**

The German Family Panel (Panel Analysis of Intimate Relationships and Family Dynamics) is a large-scale panel survey providing data on the formation and development of intimate relationships and families in Germany. Special features are a multi-actor design, a multi-method approach and yearly conducted panel waves. A detailed description of the aim and the design of pairfam is provided by Huinink et al. (2011). For a description of the pairfam data, see Brüderl et al. (2010) and Arránz-Becker et al. (2012). See also the webpage of pairfam, [www.pairfam.de](http://www.pairfam.de). The substantive topics of pairfam are partnership dynamics and partnership dissolution, childbearing decision making and fertility, parenting and child development and intergenerational relationships. The aim of the project is to provide data for modelling individual decision processes on partnership and family issues over the life course.

Relevant information related to other life domains such as education, work, income, housing, health, religiosity, leisure activities, social network and living environment are also included. The survey uses a nationwide random sample from the population registers in Germany for three age cohorts. It focuses on 15-17, 25-27 and 35-37 year-old men and women, born in 1971-73, 1981-83 and 1991-93, respectively. For each cohort about 4,000 interviews have been conducted. The overall sample size was 12,402 interviews in the first wave. The respondents (called anchors) were interviewed by a computer assisted personal interview (CAPI). In addition, a multi-actor design is implemented. Beginning with wave 1, the partners of the anchors were interviewed by self-completed questionnaires if the anchors consented. From wave 2 onward and also dependent on anchors' consent, up to three (step-) parents are interviewed using self-completed questionnaires, and children aged 8 to 15 years are interviewed by CAPI. Pairfam has a companion study, DemoDiff, administered by the

Max Planck Institute for Demographic Research in Rostock. The survey is conducted only in East Germany and comprises men and women of the two older age groups (Kreyenfeld et al. 2011). The sample of the first wave of DemoDiff, conducted in 2009/10, included 1,489 respondents.

Below, we discuss which data from the NKPS and pairfam can be used for comparisons. We do not address the Alteri in this paper, although they also can be compared, for example by applying a dyadic model. Because the self-completion questionnaires for the Alteri are much simpler than the questionnaires for the anchors, readers will be able to explore on their own the information it yields for potential comparisons.

We also do not go into the details of the data of the DemoDiff study, because they are largely similar to the pairfam data. In studies which aim to extend the comparison by differentiating also between East and West Germany, the inclusion of the DemoDiff data can considerably improve statistical power.

### **3 Common features and comparable data in the surveys**

The two surveys cover not only similar topics but also have many features and instruments in common. For each of eight major thematic fields of information we now report in more detail what kind of data both surveys provide. The eight thematic fields are

- Basic information
- Intimate relationships and couples' dynamics
- Fertility and family dynamics
- Parenting
- Intergenerational relationships
- Social structure, economic situation and living conditions
- Cultural factors
- Personality traits and well-being

In this paper, we consider data from the first two waves of the NKPS and from the first three waves of pairfam. Please note that the presented instruments are only a selection of instruments in the questionnaires of the two studies. We restrict the selection to those features which are part of both questionnaires and are – at least in our view – sufficiently similar to serve as a basis for comparative research.

### 3.1 Comparable features and instruments

We outline comparable features of the NKPS and pairfam anchor questionnaires as follows. In *Italics*, common features are displayed and – if needed – study-specific comments are made in the next row. This information provides only a general hint regarding the particularities that one should keep in mind. We kept it short because we did not want to make the table too complex.

As one can see from Table 1, there is a considerable amount of comparable information in the two surveys. This is particularly true for (1) the life histories including partner-, birth- and employment histories. This is also true for (2) information on several socio-structural and economic variables. It is partly true for (3) information on the quality of social relationships between partners as well as parents and children of different ages. It is less true for (4) information on life-plan issues, attitudes and personal traits.

**Table 1: Comparable features and instruments in NKPS and pairfam**

|   | NKPS  | pairfam   |
|---|---|---|
| <b>Basic information</b>  |   |   |
| <i>Sex, month and year of birth, country of birth, citizenship</i>  |   |   |
| <b>Household structure</b>  |   |   |
| <i>Household type, household members (sex, age, relationship to person)</i>   |   |   |
| <i>Year of leaving home</i>   |   |   |
| <b>Siblings</b>   |   |   |
| <i>Number of biological and half-/stepsiblings</i>  |   |   |
|   | Detailed information on siblings available  | Detailed information on siblings to come (wave 5)   |
| <b>Childhood</b>  |   |   |
| <i>Family structure after birth, age at change in the structure over time</i>   |   |   |
| <b>Intimate relationships</b>   |   |   |
| <i>Relationship history (cohabitation, marriage, separation/divorce)</i>  |   |   |
|   | Retrospective partnership episodes before wave 1 and tracking partnership episodes since wave 1 | Retrospective partnership episodes since age 15 in wave 1 and tracking changes in wave 2 and 3. See extra data file ‘biopart’ |
| If no partner: <i>Preferred sex of the partner, wish to have a partner</i>  |   |   |
| If not cohabiting: <i>wish to live with the partner</i> ; if not married: <i>wish to get married, wish to have children</i> |   |   |
|   | To start cohabiting/marry in the future   | To start cohabiting/marry during next year  |
| <i>Living arrangement, marital status, civil union</i>  |   |   |
| <b>Characteristics of current partner</b>   |   |   |
| <i>Sex, year of birth, country of birth, citizenship, place of residence, nights sleeping elsewhere</i>                     |   |   |
| <i>Highest level of education (ISCED), activity status, income or income approximation</i>                                  |   |   |

|   |   |  |
|---|---|--|
|   |   | Income only in partner's questionnaire   |
| <b>Organisation of the relationship and partnership quality</b>   |   |  |
| <i>Division of labour in partnership</i>  |   |  |
|   | Items are only partly congruent   |  |
| <i>Quality of partnership, mutual support and reciprocity, conflicts (frequency and issues), conflict behaviour, assessment of (in-)stability</i> |   |  |
|   | Items are only partly congruent   |  |
| <b>Ex-partners</b>  |   |  |
| <i>Common children, contact with children, received or paid alimonies, custody</i>  |   |  |
|   | Information on all ex-partners  | Detailed information only for the last ex-partner being separated from after wave 1  |
| <b>Fertility and family dynamics</b>  |   |  |
| <i>Sex, year of birth/death, cohabitation status of own/adopted children</i>  |   |  |
| <b>Fertility plans</b>  |   |  |
| <i>Children related values</i>  |   |  |
|   | Beliefs about having children   | Positive and negative values of children   |
| <i>Intention to become mother/father in the future, intended number of children, years until (next) child</i>                                     |   |  |
|   | Expectation to have another child and expected age at birth of (next) child | Expectation to have another child and expected age at birth of (next) child: Plan to have a (next) child during the next two years |
| <b>Parenting</b>  |   |  |
| <i>Health of children, child care, help with child care</i>   |   |  |
|   |   | Child care in wave 2 and 3   |
| <b>Intergenerational relationships</b>  |   |  |
| <i>Date of birth/death, country of birth, citizenship of (step-)parents</i>   |   |  |
| <i>Living arrangement, marital status, highest level of education of biological parents and parent in law</i>                                     |   |  |
|   |   | Education of biological parents in wave 3 only   |
| <b>Relationship issues</b>  |   |  |
| <i>Frequency of contact, emotional closeness, travel-time distance</i>  |   |  |
| <i>Mutual support: Support received and given: financial (amount), gifts, interest, advice, practical matters</i>                                 |   |  |
|   |   | Complementary information from Network of Relationship Inventory   |
| <i>Conflicts</i>  |   |  |
|   | Detailed information with issues addressed                                  | Information from Network of Relationship Inventory   |
| <b>Social structure, economic situation, and living conditions</b>  |   |  |
| <b>Housing situation</b>  |   |  |
| <i>Type of housing/ownership, number of rooms, nights present/absent</i>  |   |  |
| <b>Education and employment</b>   |   |  |

|  |   |  |
|--|---|--|
| <i>Schooling and employment history</i>  |   |  |
|  | Retrospective information on activity episodes (wave 2) and tracking changes between waves              | Retrospective information on activity episodes since age 15 (wave 3) and tracking changes between waves      |
| <i>Highest level of education, activity status, occupation, occupational status</i>        |   |  |
|  | Occupation: CBS, ISEI; in Wave 2 and 3: also ISCO<br>Occupational status: combining different questions | Occupation: ISCO, ISEI<br>Occupational status: one scale   |
| <i>Work schedule, working at home, working with family members</i>                         |   |  |
|  | Items are only partly congruent   |  |
| <i>Commuting time</i>  |   |  |
|  | Indirectly from information on workplace (xy coordinates)   |  |
| <b>Leisure activities</b>  |   |  |
| <i>Leisure activities alone and with partner</i>   |   |  |
|  | Items are only partly congruent   |  |
| <b>Economic situation</b>  |   |  |
| <i>Net personal Income, partner's income, social benefits, kind and amount of benefits</i> |   |  |
|  |   | Amount of benefits only wave 1<br>Partner's income only in partner questionnaire                             |
| <b>Spatial mobility and migration</b>  |   |  |
| <i>Retrospective migration history</i>   |   |  |
|  | Retrospective information on activity episodes (wave 2) and tracking changes between waves              | Retrospective information on activity episodes since age 15 (wave 3) and tracking changes between waves      |
| <b>Cultural factors</b>  |   |  |
| <i>Partnership, gender, and family values</i>  |   |  |
|  | Items are only partly congruent   |  |
| <i>Religious denomination, church attendance</i>   |   |  |
| <b>Personality traits and well-being</b>   |   |  |
| <b>Personality</b>   |   |  |
| <i>Extraversion, loneliness, depressiveness, nervousness, stress</i>                       |   |  |
|  | Loneliness: scale   | Extraversion in wave 2 (Big Five)<br>Loneliness only one item (wave 1)<br>Depression: STDS-T-scale in wave 2 |
|  | Items are only partly congruent   |  |
| <b>Satisfaction and preferences</b>  |   |  |
| <i>Life satisfaction</i>   |   |  |
| <b>Health</b>  |   |  |
| <i>Subjective health assessment, handicaps</i>   |   |  |

### 3.2 The different age structure of the samples



A major obstacle of an extensive comparative use of the two data bodies is the incongruent age structure of the samples. While in the NKPS the respondents range in age from 18 to 79, the pairfam panel started with three cohorts, namely men and women who are born in the years 1971-73, 1981-83 and 1991-93. The youngest pairfam cohort is outside the age range of the NKPS respondents, and year by year it grows into the age range of the NKPS. In the fourth wave, the pairfam-cohort of the 1991-93 born are 18-21 years old and cover the lower ages of the NKPS sample.

Putting the first four waves of the pairfam-panel together provides data from men and women of 25 to 31 and 35 to 41 years of age. This means that a considerable portion of the sample covers young and middle adulthood. After three other waves, this coverage will be total. Men and women older than 41 are not yet part of the pairfam-sample but exist in the NKPS sample. However, if we include the information from the parents of the pairfam-anchors, this gap can be closed at least for intergenerational relationships.

Table 2 displays how respondents from the NKPS and pairfam are distributed by age groups and the number of cases at each age assuming data from various waves are pooled. One can see that the overlap is considerable.

For non-longitudinal designs, we see that for 10 specific years of age an overlap of more than 100 cases is given. Because this is achieved by pooling the data of the three waves in pairfam and NKPS, one has to be aware of the fact that the assumption of independent units of analysis is violated. However, this is not a real problem because one can account for the particular correlation structure of the cases. On the contrary, in many analyses, panel data can be used to estimate fixed effects models.

**Table 2: Number of respondents in pairfam and NKPS by age group**

| Age          | Pairfam<br>1. wave | Pairfam<br>2. wave | Pairfam<br>3. wave | DemoDiff<br>1. wave | Pooled<br>pairfam | NKPS<br>1. wave | NKPS<br>2. wave | NKPS<br>3. wave | Subs.<br>sample | Pooled<br>NKPS |
|--------------|--------------------|--------------------|--------------------|---------------------|-------------------|-----------------|-----------------|-----------------|-----------------|----------------|
| <b>15-17</b> | 4.184              | 2.323              | 1.059              |                     | <b>7.566</b>      |                 |                 |                 |                 | <b>0</b>       |
| <b>18</b>    | 79                 | 1.158              | 1.012              |                     | <b>2.249</b>      | 54              |                 |                 | 4               | <b>58</b>      |
| <b>19</b>    |                    | 74                 | 983                |                     | <b>1.057</b>      | 56              |                 |                 | 5               | <b>61</b>      |
| <b>20</b>    |                    |                    | 78                 |                     | <b>78</b>         | 71              |                 |                 | 8               | <b>79</b>      |
| <b>21</b>    |                    |                    |                    |                     | <b>0</b>          | 70              | 16              |                 | 9               | <b>95</b>      |
| <b>22</b>    |                    |                    |                    |                     | <b>0</b>          | 78              | 41              |                 | 12              | <b>131</b>     |
| <b>23</b>    |                    |                    |                    |                     | <b>0</b>          | 65              | 37              |                 | 13              | <b>115</b>     |
| <b>24</b>    | 36                 |                    |                    |                     | <b>36</b>         | 87              | 44              |                 | 14              | <b>145</b>     |
| <b>25</b>    | 1.167              | 14                 |                    | 267                 | <b>1.448</b>      | 113             | 40              | 11              | 15              | <b>179</b>     |
| <b>26</b>    | 1.370              | 745                | 8                  | 255                 | <b>2.378</b>      | 125             | 50              | 26              | 20              | <b>221</b>     |
| <b>27</b>    | 1.279              | 893                | 656                | 229                 | <b>3.057</b>      | 133             | 43              | 20              | 18              | <b>214</b>     |
| <b>28</b>    | 158                | 865                | 777                |                     | <b>1.800</b>      | 145             | 55              | 24              | 26              | <b>250</b>     |
| <b>29</b>    |                    | 104                | 770                |                     | <b>874</b>        | 156             | 83              | 33              | 26              | <b>298</b>     |
| <b>30</b>    |                    |                    | 79                 |                     | <b>79</b>         | 157             | 76              | 35              | 35              | <b>303</b>     |
| <b>31</b>    |                    |                    |                    |                     | <b>0</b>          | 167             | 98              | 32              | 31              | <b>328</b>     |
| <b>32</b>    |                    |                    |                    |                     | <b>0</b>          | 185             | 107             | 40              | 44              | <b>376</b>     |
| <b>33</b>    |                    |                    |                    |                     | <b>0</b>          | 204             | 110             | 64              | 29              | <b>407</b>     |
| <b>34</b>    | 38                 |                    |                    |                     | <b>38</b>         | 191             | 133             | 57              | 35              | <b>416</b>     |
| <b>35</b>    | 1.040              | 15                 |                    | 222                 | <b>1.277</b>      | 187             | 126             | 74              | 39              | <b>426</b>     |
| <b>36</b>    | 1.312              | 726                | 7                  | 238                 | <b>2.283</b>      | 191             | 139             | 71              | 46              | <b>447</b>     |
| <b>37</b>    | 1.480              | 935                | 628                | 278                 | <b>3.321</b>      | 188             | 155             | 78              | 34              | <b>455</b>     |
| <b>38</b>    | 184                | 1.100              | 810                |                     | <b>2.094</b>      | 199             | 154             | 100             | 25              | <b>478</b>     |
| <b>39</b>    |                    | 117                | 935                |                     | <b>1.052</b>      | 220             | 135             | 102             | 39              | <b>496</b>     |
| <b>40</b>    |                    |                    | 99                 |                     | <b>99</b>         | 192             | 137             | 96              | 32              | <b>457</b>     |
| <b>41+</b>   |                    |                    |                    |                     | <b>0</b>          | 4.927           | 4.312           | 3.527           | 1.022           | <b>13.788</b>  |
| <b>18-40</b> | <b>8.143</b>       | <b>6.746</b>       | <b>6.842</b>       | <b>1.489</b>        | <b>23.220</b>     | <b>3.234</b>    | <b>1.779</b>    | <b>863</b>      | <b>559</b>      | <b>6.435</b>   |

Moreover, if one does not analyse single age groups, as is usually the case, the number of cases on the NKPS side can be increased by enlarging the age spans beyond the pairfam age intervals. For example, if one wants to study family formation at age 25 and older, one could consider the pairfam cases of the two older age groups, which cover the age span of 25 to 40 except ages 31, 32 and 33. Then one could well include all age years of the NKPS sample belonging to this age span. This means that 19,800 pooled cases in pairfam and 5,751 cases in NKPS would be available.

If we do not work with a pooled sample, the number of cases is considerably smaller. For example, the number of first wave respondents of the two older age groups in the pairfam sample is 8,028. The number of first-wave respondents of the respective ages in the NKPS sample is 1,831 including the cases of the subsample and ages 24, 28, 34 and 38. Extending the age interval for NKPS cases by one year at the beginning and at the end of the age interval results in 2,483 cases. One gets reasonable numbers for analyses with considerable statistical power.

#### **4 An example of analysis**

To demonstrate how a comparison between the Netherlands and Germany regarding a family-related topic using data from the NKPS and pairfam could look like, we present a little empirical analysis. It has been conducted for illustration purposes, not as an elaborated study.

The general research question is: which factors affect the probability that the intention of having a(nother) child will be realised in fact. Specifically, we ask whether characteristics of the relationship with one's parents and the parents' relationship with each other affect the probability that respondents who intend to have a child during the next two years actually go on to realise this goal. The assumption is that close contact to the mother and the fact that the biological parents still live together are positively related to the likelihood of having the intended child.

In a logit regression model we estimate effects of contact frequency with the mother and whether the parents still live together or not on the probability that respondents who intend to have a child during the next two years actually realise this stated goal. Additionally, we account for a number of controls. In Table 3 the attributes and indicators we use in our analysis are listed (in bold), and the names of the respective variables in the two data files are reported. Many more variables are included in table 3 which could be considered in the model, among them time-dependent information. We do not use them in this simple example but plan to do so in an in-depth analysis of the research question now in preparation.

**Table 3: Variables**

| <b>Variable</b>  | <b>NKPS</b>                                       | <b>pairfam</b>  |
|--|---|---|
| <b>Birth of a child between waves</b><br>(dep. variable)                                       | C019, C021, C041, C042,<br>C080A (2. and 3. wave) | Event history calendar of 2.<br>and 3. wave (ehc8k_) or<br>data-file ‘biochild’         |
| <b>Intention/expectation to have<br/>a child</b>   | C706, C708  | frt7, frt9  |
| Demographic information  |   |   |
| <i>Gender, age<br/>education</i>   | sex, age,<br>edu                                  | Generated variables: sex, age<br>Generated variable: isced                              |
| Childhood experiences and<br>parents’ relationship   |   |   |
| <i>Family structure after birth</i>  | B101, B102  | cla3, cla4 (2. wave)  |
| <i>Parents alive</i>   | X401F, X401M;                                     | igr5, igr7  |
| <i>Parents family status</i>   | B400FA, B400MA, X701,<br>B401, B402, computed     | igr27, igr28, igr29, igr34 (2.<br>wave)   |
| Relationship to parents  |   |   |
| <i>Frequency of contact,<br/>Travel-time distance,<br/>Satisfaction</i>                        | X603, X604<br>Computed<br>G501                    | igr10, igr12<br>igr14, igr15<br>igr11, igr13  |
| <i>Emotional support<br/>Counsel or advice,<br/>Financial support<br/>Help with child care</i> | G306<br>G302<br>G206                              | igr60_ (2. wave)<br>igr63_ (2. wave)<br>igr68_ (2. wave)                                |
| Household situation  |   |   |
| <i>Living arrangement</i>  | Generated variable: hhtyp                         | Generated variable: relstat   |
| <i>Household composition</i>   | E102, E201  | Generated variable: hhcomp  |
| <i>Division of labour</i>  | S11A-S11e, S14A-S14 E                             | pa14i1 - pa14i5   |
| <i>Housing</i>   | L101  | hc5, hc13h1, hc14h1   |
| Employment   |   |   |
| <i>Activity status</i>   | M101  | Generated variable: lfs   |
| <i>Occupation</i>  | M201, M202  | Generated variable: isei  |
| <i>Change in status</i>  | BS14F-BS14U                                       | Event history calendar of 2.<br>and 3. wave (ehc19i_)                                   |
| Partnership  |   |   |
| <i>Age partner</i>   | C102  | Generated variable: page  |
| <i>Education</i>   | M801  | Generated variable: pisced  |
| <i>Activity status partner</i>   | M810, M811  | Generated variable: plfs  |
| <i>Quality partnership</i>   | S9A-E, S10D, G501,                                | sat3 (satisfaction), pa19i1,<br>pa19i4, pa19i8, conflict<br>strategies, pa22r (1. Wave) |

#### 4.1 Some descriptive information

We now present some descriptive information on the most relevant variables included in the analysis. First we compare the age distribution of the respondents included.

In the NKPS, we cover the age range of 18 to 45 for women and 18 and 49 for men at the first wave. The pairfam-respondents considered in this analysis were 24 to 28 and 34 to 38 years of age at the first wave (cf. Table 2). In the pairfam case we skip the adolescents, which makes sense because they are still far removed from the main childbearing ages.

##### **Table 4: Pooled intentions to have a child in NKPS**

(respondents participating in waves 1 and 2 and intending to have a child within two years either in wave 1 or in wave 2 or in both waves)

|                               |               |
|-------------------------------|---------------|
| Child intended within 2 years |               |
| No<br>(Row percentage)        | 3,204<br>80.2 |
| Yes<br>(Row percentage)       | 793<br>19.8   |
| Total                         | 3,997         |

A sensitivity analysis could show whether the different age coverage of the NKPS and pairfam has effects on the findings of the analysis. We do not present this here. Such effects can vary enormously depending on the research question to be studied.

In the two studies, *intention to have a child* is measured differently. In the NKPS, fertility intentions are asked in a two-step procedure. First, all respondents in the fertile ages (i.e. up to 45 for women and up to 49 for men) are asked if they intend to have children in the future. Subsequently, those who mentioned a positive intention are asked within how many years they intend to realise a child birth. Three waves of data are available for the NKPS. The following tables show how many respondents have articulated fertility intentions in wave 1 and in wave 2 and were not pregnant during the interview.

In pairfam, respondents are asked whether they expect to have another child and, if so, at which age they expect to get it (version A) as well as whether they intend to have it within the next two years (version B). In table 5 the distributions obtained by the two versions are displayed in a cross-tabulation. We include only respondents of the two older age groups who were not pregnant and infertile at the time of interview of wave 1 and who also participated in wave 3. The table shows that the responses to version A und B correspond quite well but

show also characteristic differences. Information on intention provides a more differentiated picture.

**Table 5: Intending to have child within two years in pairfam**

(respondents participating in wave 1 and 3, not pregnant at wave 1 and reporting being fertile at wave 1)

|   | Version A: Difference between age at interview and expected age of childbirth at wave 1 |                         |         |       |
|---|---|-------------------------|---------|-------|
| Version B:<br>Intention to have child within next two years at wave 1 | More than two years/<br>No other child  | Less or equal two years | Missing | Total |
| Yes, definitely   | 87  | 365                     | 0       | 452   |
| Yes, perhaps  | 431   | 258                     | 1       | 690   |
| No, probably not  | 693   | 41                      | 0       | 734   |
| No, definitely not/ No other child                                    | 2,180   | 11                      | 0       | 2,191 |
| Missing   | 0   | 0                       | 50      | 50    |
| Total   | 3,391   | 675                     | 51      | 4,117 |

For reasons of comparability, we decided to use the version based on the age difference as the intention indicator in the pairfam case. This means that 675 respondents expect to have child within the next two years.

In Table 6 we show for the NKPS and the pairfam samples how many of the respondents who wanted to have a child within the next two years (childbearing intention) in fact *realised* childbirth within two years thereafter.

The ‘realisation rate’ is higher in the NKPS-data by 10 percent. A more detailed look at these figures is needed to draw sound conclusions on this difference.

**Table 6: Realizing the intention to have a child within two years**

(NKPS: respondents with childbearing intention in wave 1 and/or wave 2; pairfam: respondents with childbearing intention in wave 1, participating in wave 1 and 3, not pregnant at wave 1, and reporting being fertile at wave 1)

| Study            | Child Realized |       |       |
|------------------|----------------|-------|-------|
|                  | No             | Yes   | Total |
| NKPS             | 280            | 285   | 565   |
| (Row percentage) | 49.6%          | 50.4% |       |
| pairfam          | 405            | 270   | 675   |
| (Row percentage) | 60.0%          | 40.0% |       |

## 4.2 Multivariate analysis

Now we turn to the question of whether the intensity of contact with the mother and the relationship between the biological parents impact the likelihood of realising the intended birth of a child. Are there obvious differences between the Netherlands and Germany in this regard? We estimated the transition probability of having a child during the two years following the interview.

For biological parents, we check whether they are alive and – if so – live together (not both biological parents alive, both parents alive and not living together, both parents alive and living together). The contact frequency indicator varies in both studies between 1 (never) and 7 (daily). In the German case we had to reverse the scale. In addition to an indicator of the contact frequency with the mother and of the fact whether the parents still live together or not, we include as additional controls gender, age, education (on a scale from 1= no degree to 11 = postgraduate level), employment status (employed vs. not employed at the first wave) and partnership status (single, LAT, cohabitation, married) in wave 1.

We estimate the models separately for male and female respondents and restrict the sample to those whose mother is still alive.

In table 7 more descriptive information on the variables included into the model is displayed. N means the number of valid cases and differs by a variable. Although we do not analyse a representative sample, the means of the variables look reasonable and are in many cases quite similar in the NKPS and pairfam.

**Table 7: Description of the included variables**

(NKPS: respondents with childbearing intention in wave 1 and/or wave 2; pairfam: respondents with childbearing intention in wave 1, participating in wave 1 and 3, not pregnant at wave 1, and reporting being fertile at wave 1)

|                                     | Variable                            | NKPS                           |       |         | pairfam |       |         |
|-------------------------------------|-------------------------------------|--------------------------------|-------|---------|---------|-------|---------|
|                                     |                                     | N                              | Mean  | Std.Dev | N       | Mean  | Std.Dev |
| Men                                 | Father not alive, mother alive      | 280                            | 0.12  | 0.32    | 241     | 0.17  | 0.37    |
|                                     | Both parents alive, not co-residing | 280                            | 0.20  | 0.40    | 241     | 0.14  | 0.34    |
|                                     | Both parents alive, co-residing     | 280                            | 0.66  | 0.47    | 241     | 0.70  | 0.46    |
|                                     | Frequency of contact with mother    | 267                            | 4.57  | 1.16    | 248     | 5.76  | 1.31    |
|                                     | Cohabiting with a partner           | 257                            | 0.91  | 0.29    | 247     | 0.78  | 0.41    |
|                                     | Being married to the partner        | 280                            | 0.53  | 0.50    | 247     | 0.52  | 0.50    |
|                                     | Age at wave 1                       | 280                            | 33.50 | 5.05    | 248     | 32.30 | 4.91    |
|                                     | Level of schooling (scale)          | 280                            | 7.20  | 2.28    | 248     | 7.00  | 2.84    |
|                                     | Employed                            | 280                            | 0.93  | 0.26    | 248     | 0.87  | 0.34    |
|                                     | Planned childbirth realised         | 208                            | 0.50  | 0.50    | 248     | 0.40  | 0.49    |
|                                     | Women                               | Father not alive, mother alive | 464   | 0.13    | 0.33    | 325   | 0.14    |
| Both parents alive, not co-residing |                                     | 464                            | 0.25  | 0.43    | 325     | 0.20  | 0.40    |
| Both parents alive, co-residing     |                                     | 464                            | 0.63  | 0.48    | 325     | 0.66  | 0.47    |
| Frequency of contact with mother    |                                     | 457                            | 4.88  | 1.27    | 329     | 5.81  | 1.34    |
| Cohabiting with a partner           |                                     | 438                            | 0.89  | 0.31    | 330     | 0.80  | 0.40    |
| Being married to the partner        |                                     | 464                            | 0.54  | 0.50    | 330     | 0.49  | 0.50    |
| Age at wave 1                       |                                     | 464                            | 31.00 | 4.26    | 330     | 30.10 | 4.83    |
| Level of schooling (scale)          |                                     | 464                            | 7.40  | 2.04    | 330     | 7.00  | 2.85    |
| Employed                            |                                     | 464                            | 0.85  | 0.36    | 330     | 0.72  | 0.45    |
| Planned childbirth realised         |                                     | 380                            | 0.51  | 0.50    | 330     | 0.40  | 0.49    |



**Table 8: Realizing the intention to have a child within two years: NKPS-Model**  
(respondents with childbearing intention in wave 1 and/or wave 2; mother still alive)

| Variable  | Men        |         | Women      |         |
|---|------------|---------|------------|---------|
|   | Odds Ratio | p-Value | Odds Ratio | p-Value |
| Father not alive, mother alive  | 0.93       | 0.88    | 0.81       | 0.52    |
| Both parents alive, not co-residing<br>(Ref: both parents alive, co-residing) | 0.68       | 0.34    | 0.61       | 0.08    |
| Frequency of contact with mother  | 1.18       | 0.27    | 0.90       | 0.24    |
| Cohabiting with a partner   | 1.75       | 0.43    | 2.36       | 0.07    |
| Being married to the partner  | 0.74       | 0.33    | 1.06       | 0.81    |
| Age at wave 1   | 0.96       | 0.24    | 0.96       | 0.17    |
| Level of schooling (scale)  | 1.12       | 0.13    | 1.03       | 0.57    |
| Employed  | 0.61       | 0.58    | 1.23       | 0.52    |
| Constant  | 0.92       | 0.97    | 2.01       | 0.58    |
| N   | 179        |         | 369        |         |
| Nagelkerke-R <sup>2</sup>   | 0.049      |         | 0.047      |         |

As one can see in Table 8, in the Dutch case the frequency of contact with the mother does not play a major role for the realization probability of an intended child. Only the fact that parents do not live together contributes a lower probability of having the intended child among women. The odds ratio is 0.61. Among men the effect is of similar size but not significant. Only in the model for women do we also find a positive effect of cohabitation on the realization probability whilst, interestingly, being married does not play a significant role.

**Table 9: Realizing the intention to have a child within two years; pairfam-Model**  
 (respondents with childbearing intention in wave 1, participating in wave 1 and 3, not pregnant at wave 1, reporting being fertile at wave 1, and mother still alive)

| Variable  | Men        |         | Women      |         |
|---|------------|---------|------------|---------|
|   | Odds Ratio | p-Value | Odds Ratio | p-Value |
| Father not alive, mother alive  | 1.50       | 0.28    | 0.34       | 0.02    |
| Both parents alive, not co-residing<br>(Ref: both parents alive, co-residing) | 1.04       | 0.93    | 1.15       | 0.67    |
| Frequency of contact with mother  | 1.08       | 0.54    | 1.18       | 0.14    |
| Cohabiting with a partner   | 1.19       | 0.66    | 3.17       | 0.00    |
| Being married to the partner  | 1.61       | 0.13    | 2.01       | 0.02    |
| Age at wave 1   | 0.96       | 0.2     | 0.90       | 0.00    |
| Level of schooling (scale)  | 1.09       | 0.12    | 1.01       | 0.80    |
| Employed  | 1.50       | 0.37    | 1.23       | 0.47    |
| Constant  | 0.37       | 0.46    | 1.36       | 0.80    |
| N   | 240        |         | 325        |         |
| Nagelkerke-R <sup>2</sup>   | 0.057      |         | 0.206      |         |

For the German men (comp. table 9) we also find no effects of the parental living arrangement and contact with the mother. The model fits very badly. In the case of the German women, contact frequency is positively related to the probability of having the intended child. The p-value is only 0.14, however. Surprising is the finding that the realisation probability is lower if the biological father is not alive anymore. More differentiated analyses have to show what might be the real mechanism behind this effect. In contrast to what we found in the NKPS data, whether the parents live together or not does not make a difference for the realization probability.

In the Netherlands and in Germany alike, partner status is significant only among women. Cohabiting with a partner was found to increase the realisation odds. An additional effect of marriage could only be found in the German case. The reason might be that marriage still plays an important role in (West-)Germany when it comes to family formation. This seems not to be the case in the Netherlands. In fact, rate of children born to unmarried parents in the Netherlands was about 45 percent 2011 while in Germany it was only 34 Percent (West-Germany: 27 Percent).

## 5 Summary and Discussion

The current paper was intended to demonstrate the opportunities for comparative research using two major large-scale surveys from the Netherlands and Germany, the NKPS and pairfam. In an endeavour to show how these surveys can be used for comparative research we elaborated on similarities and differences with regard to study development, research design, respondents, instruments and measures. Furthermore, we presented one research example investigating the realisation of a positive fertility intention among young men and women in the Netherlands and Germany. Specifically, we examined whether demographic as well as intergenerational relationship characteristics determine the odds of realising positive fertility intentions after two years. Despite the narrow focus of this research question, comparative research is still possible based on small but considerable subsamples of the two panel studies.

For German women we found weak evidence that the frequency of contact with the mother, which is one indicator of the strength of the relationship, might favour the realisation of an intended childbirth. With regard to intergenerational ties, it was also found for the German sample that having a mother alive and a father dead decreased the childbearing realisation probability among women. It is hard to interpret this effect without going into more detail on possible underlying mechanisms.

In the Netherlands, having parents not living together decreased the realisation odds for women. Although at first sight not easy to interpret, this effect may point to the long reaching influence that parental divorce may have. Ample evidence has shown that parental divorce can have negative effects across the life course with regard to all kinds of adaptive outcomes (Amato & Sobolewski, 2001; Lundberg, 1993; Maier & Lachman, 2000). It may very well be that also with regard to the childbearing decision making process, the experience of parental divorce may predict outcome. The experience of having one distant parent, often the consequence of divorce, may have led to a strong sense of self-reliance and independence in adulthood. Individuals with such experiences may have difficulties with being close or dependent on others as well as with having others depend on them. They tend to be less self-confident and may lack the beliefs in their parenting capacities and their caregiving abilities and therefore, although they reported positive fertility intentions, ultimately refrain from realising this intention.

It has been suggested before that the nature of available kin support is one motivation for early fertility (Trent & Crowder, 1997). Humans have been identified as cooperative breeders (e.g., Hrdy, 2007) and good relationships with parents may indicate available support

for childrearing and may play a general role in fertility. Having parents not living together anymore may point to a less available and supportive intergenerational network and therefore hamper the probability of realising the intended goal of having a child.

## References

- Amato, Paul R., and Juliana M. Sobolewski. 2001. The effects of divorce and marital discord on adult children's psychological well-being. *American Sociological Review*, 66, 900-921.
- Arránz-Becker, Oliver, Josef Brüderl, Petra Buhr, Laura Castiglioni, Daniel Fuß, Volker Ludwig, Jette Schröder, and Nina Schumann. 2012. The German Family Panel: Study Design and Cumulated Field Report (Waves 1 to 3). Technical Paper of the German Family Panel, No. 1. Chemnitz.
- Brüderl, Josef, Laura Castiglioni, Uli Krieger, Volker Ludwig, Klaus Pforr, and Nina Schumann. 2010. pairfam Data Manual, Wave 1. Mannheim.
- Dykstra, Pearl A., Matthijs Kalmijn, Trudie C. M. Knijn, Aafke E. Komter, Aart C. Liefbroer, and Clara H. Mulder. 2004. Codebook of the Netherlands Kinship Panel Study, a Multi-Actor, Multi-Method Panel Study on Solidarity in Family Relationships, Wave 1. NKPS Working Paper No. 1. The Hague: Netherlands Interdisciplinary Demographic Institute.
- Dykstra, Pearl A., Matthijs Kalmijn, Trudie C. M. Knijn, Aafke E. Komter, Aart C. Liefbroer, and Clara H. Mulder. 2007. Codebook of the Netherlands Kinship Panel Study, a Multi-Actor, Multi-Method Panel Study on Solidarity in Family Relationships, Wave 2. NKPS Working Paper No. 6. The Hague: Netherlands Interdisciplinary Demographic Institute.
- Hrdy, Sarah B. 2007. Evolutionary context of human development: The cooperative breeding model. In Catherine A. Salmon, and Todd K. Shackelford (Eds.), *Family relationships. An evolutionary perspective* (pp. 39-68). Oxford: Oxford University Press.
- Huinink, Johannes, Josef Brüderl, Bernhard Nauck, Sabine Walper, Laura Castiglioni, and Michael Feldhaus. 2011. Panel Analysis of Intimate Relationships and Family Dynamics (pairfam): Conceptual framework and design. *Zeitschrift für Familienforschung* 23, 1, 77-101.
- Kreyenfeld, Michaela, Rainer Walke, Veronika Salzburger, Christine Schnor, Sonja Bastin, and Anne-Kristin Kuhnt. 2011. DemoDiff – Wave 1; Supplement to the pairfam Data Manual. Wave 1. Version 1.0. Rostock.
- Lundberg, Olle. 1993. The impact of childhood living conditions on illness and mortality in adulthood. *Social Science Medicine*, 36, 1047-1052.

- Merz, Eva-Maria, Pearl A. Dykstra, Aafke E. Komter, Aart C. Liefbroer, and Clara H. Mulder. 2012. Codebook of the Netherlands Kinship Panel Study, a Multi-Actor, Multi-Method Panel Study on Solidarity in Family Relationships, Wave 3. NKPS Working Paper No. 10. The Hague: Netherlands Interdisciplinary Demographic Institute.
- Maier, E. Hailey, and Margie E. Lachman. 2000. Consequences of early parental loss and separation for health and well-being in midlife. *International Journal of Behavioral Development*, 24, 183-189.
- Trent, Katherine, and Kyle Crowder. 1997. Adolescent birth intentions, social disadvantage, and behavioural outcomes. *Journal of Marriage and the Family*, 59, 523-535.