# 13.1 Concepts

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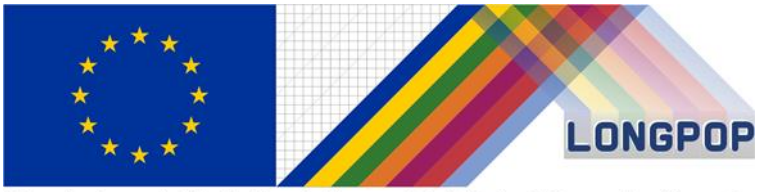


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*a) Definition of household and family instability that can be used comparatively*

In my project, parental death during childhood (before age 16) is used to define household and family instability as it increases the child's vulnerability dramatically. Parental death is one of the most traumatic events and the most far-reaching form of instability that can occur in childhood and may influence the individual's life course in many different ways. Studying the short-term and long-term consequences of parental death during childhood therefore allows me to analyze the potential for resilience of families and individuals to overcome stress and disaster in their private lives.

Compared to children who do not experience parental death, parentally bereaved children have significantly lower self-esteem and experience more feelings of helplessness, sadness, guilt, and anger (Worden 1996; Worden and Silverman 1996). As parental resources are important for a child's well-being and future status attainment (Blau and Duncan 1967; Duncan et al. 2012; Meyer 1997), losing a parent automatically deprives children of assets that would have been beneficial for their future if the parent had not died. Especially in the past, parental death

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often meant that the household's risk of poverty increased and that children's plans for education or work were thwarted (Bras and Kok, 2004). On a household level, parental death in historical populations deprived the child either of the breadwinner or the main caregiver. This also had consequences for the unity of the household as the remaining family members had to develop certain survival strategies in order to cope with the event of parental death (Dribe et al. 2007; Humphries 2010).

Parental death during childhood also has negative consequences on later-life outcomes. Research on contemporary Western societies shows that parental death during childhood increases the risk of negative outcomes both in adolescence and adulthood. Bereaved adolescents are more likely to develop various behavioral problems, to attempt suicide, to be hospitalized due to psychiatric disorders, and to commit violent criminal acts (Feigelman et al. 2017; Jakobsen and Christiansen 2011; Wilcox et al. 2010). Studies also found that adults who experienced parental death during childhood had a greater risk of developing depression and to be hospitalized due to affective disorders (Appel et al. 2013; Berg et al. 2016; Mack 2001), attempt suicide (Hollingshaus and Smith 2015; Rostila et al. 2016), and to die prematurely (Li et al. 2014). Therefore, studying the relationship between early parental death, household instability in childhood and later-life outcomes for a historical population offers furthers insights into the complexity of the long-term consequences of losing a parent in childhood.

Using parental death as a concept for household instabilities is especially beneficial when studying historical populations and comparing societies as well as social groups. First, losing a parent during childhood was quite a common experience for children born all over the world in the nineteenth and the beginning of the twentieth century, the study period. For instance, van Poppel and colleagues (2013) estimated the percentage of children born between 1850 and 1985 that had experienced parental death in the Netherlands at age 7 and age 15 (see Table 1). More than 10 percent of children born between 1850 and 1879 had lost a mother and/or father at age 7 and nearly one out of four had experienced parental death by age 15. This percentage decreased over time due to lower parental mortality risk. Nevertheless, nearly 6% of children born between 1900 and 1922 were faced with parental loss at age 7 and more than 13% at age 15. For comparison, in the latest birth cohorts for which information is available, 1975 to 1985, the proportions are 1% and 3%, respectively.

| | At age 7 | At age 15 |
|---|---|---|
| **1850-1879** | 10.8 | 23.0 |
| **1880-1899** | 8.5 | 18.6 |
| **1900-1922** | 5.9 | 13.4 |
| **1975-1985** | 1.0 | 3.0 |

**Table 1** Percentage of Dutch children, alive at age 7, respectively, age 15, of which one or both of the parents had died, by birth cohort, derived from van Poppel et al. (2013)

Second, in the past all social classes and groups were hit by parental death and those who experienced parental death did not differ substantially from those who were not bereaved during childhood. Table 2 compares the childhood conditions of male children that experienced parental death with their non-bereaved male counterparts. The figures are based on the Historical Sample of the Netherlands (HSN) which contains life course information about individuals born in the Netherlands between 1850 and 1922. The table reveals that both groups are comparable except that bereaved children had on average older mothers, more older siblings, and fewer younger siblings. The mother's older age and hence the higher number of older siblings is expected as mortality risk for older parents is generally higher. The lower number of younger siblings is explained by the fact that parental death was more frequent towards the end of the parental reproductive age. Two-sample t-tests reveal that differences regarding the father's HISCAM score at birth are not significant either. HISCAM is a social stratification scale that translates occupational codes into scores estimating the social prestige of occupations (Lambert et al. 2013). This implies that socioeconomic status at birth does not differ between the two groups and that class differences in parental death were not present in the Netherlands in the nineteenth and beginning of the twentieth century.

| | No parental death | Parental death |
|---|---|---|
| **Father's HISCAM at birth,** | 52.35 | 52.22 |
| | | |
| **Siblings** | | |
| Number younger | 3.2 | 2.3 |
| Number older | 2.5 | 3.0 |
| Total number | 5.7 | 5.2 |
| | | |
| **Mother's age at birth, %** | | |
| <25 | 15.8 | 11.2 |
| 25-30 | 57.0 | 50.6 |

| | | |
|---|---|---|
| >35 | 27.2 | 38.2 |
| **Father's Literacy, %** | | |
| Literate | 83.7 | 84.4 |
| Illiterate | 5.5 | 6.1 |
| Unknown | 10.8 | 9.6 |
| **Urban, %** | 34.3 | 30.3 |
| **Religion, %** | | |
| Catholic | 29.8 | 31.6 |
| Liberal protestant | 46.4 | 45.1 |
| Orthodox protestant | 13.7 | 12.1 |
| Unknown/Other | 10.1 | 11.2 |
| **Total Number** | 4,607 | 1,703 |

**Table 2** Childhood conditions, by parental death

To summarize, parental death during childhood turns out to be a very useful concept to define household and family instability. As it took place quite frequently in the past and was experienced by all social groups, it is the ideal concept for cross-cultural comparisons.

*b) Devise typologies of households and families*

In order to study the family decision making in reaction to parental death, the definitions of households are based on the relationships of the household members to the research person, in case of my project the minor child. Accordingly, the research persons are divided into two groups. First, children that lost a parent before they turned age 16. Second, for matters of comparison, children that did not lose a parent before they turned age 16.

Humphries (2010) showed that widowed fathers in the UK during the industrial revolution were much more likely to leave their minor children than widowed mothers. Therefore, the first step in the analysis is to identify if the widowed parent is still present in the household of his or her minor children or if parent and offspring got separated. Second, the presence of other family members is analyzed. In case other family members than parents and siblings are present in the household of the research person (for example aunts, uncles or grandparents), the household structure will be defined as extended. Otherwise, the household is called nuclear (Hammel and

Laslett 1974). Third, household members that are unrelated to the research person or whose relation is unknown are added. Finally, research persons that are lost from observation or died during the period of consideration are indicated.

Accordingly, the main household states for minor children are defined as follows: (whether all these states can be identified depends on the quality of the database at hand):

| | |
|---|---|
| PN | Only parent(s) and possibly siblings (not applicable in case of full orphans) |
| PEX | Parent(s) and extended family members (not applicable in case of full orphans) |
| PST | Parent and stepparent (not applicable in case of full orphans) |
| R | Family member(s), but no parent(s) |
| NR | Only unrelated individuals present |
| O | Orphanage |
| U | Relationship unclear |
| L | Research person lost from observation |
| D | Research person died |

**Table 3** Household states following the death of a parent, basic model

The state R (family members, but no parent(s)) can be subdivided even further based on the specific family household heads and the quality of the database:

| | |
|---|---|
| RS | Married or adult siblings |
| RAU | Aunt(s) and/or uncle(s) |
| RST | Stepparent but no biological parent |
| RG | Grandparent(s) |
| RO | Other related such as adult cousins |

**Table 4** Household states following the death of a parent, subdivision of state R (related)

*c) Devise a typological system of children's household careers over time, by region*

In my project, longitudinal datasets are used that contain information about the household composition of minor children following the death of a parent. Depending on the region, it is expected that especially the share of nuclear and extended families differs a lot: While Western European countries such as the Netherlands are traditionally characterized by the nuclear family system, Southern European countries have high shares of extended families (Reher 1998). Therefore, researching the different regional responses to a family crisis such as parental death is a very interesting approach.

One promising way to analyze the different responses is to apply sequence analysis. Sequence analysis is the ideal tool to visualize state sequences over a long period of time and identify differences as well as similarities between societies and social groups. It also helps to assess changes over time and define specific life trajectory clusters (Gabadinho et al. 2011; Puschmann and Solli 2014). As an example, the household compositions of 137 male and female HSN research persons who became full orphans between 1863 and 1905 are depicted in Figure 1. In this figure, the household situation of the full orphans is followed over five years from the date of death of the second parent onwards. Every 90 days an observation of the household situation was made which means that each individual is observed 20 times. The states are divided according to the basic typology developed in Table 3. As full orphans are considered, the states PN, PST and PEX are not applicable.

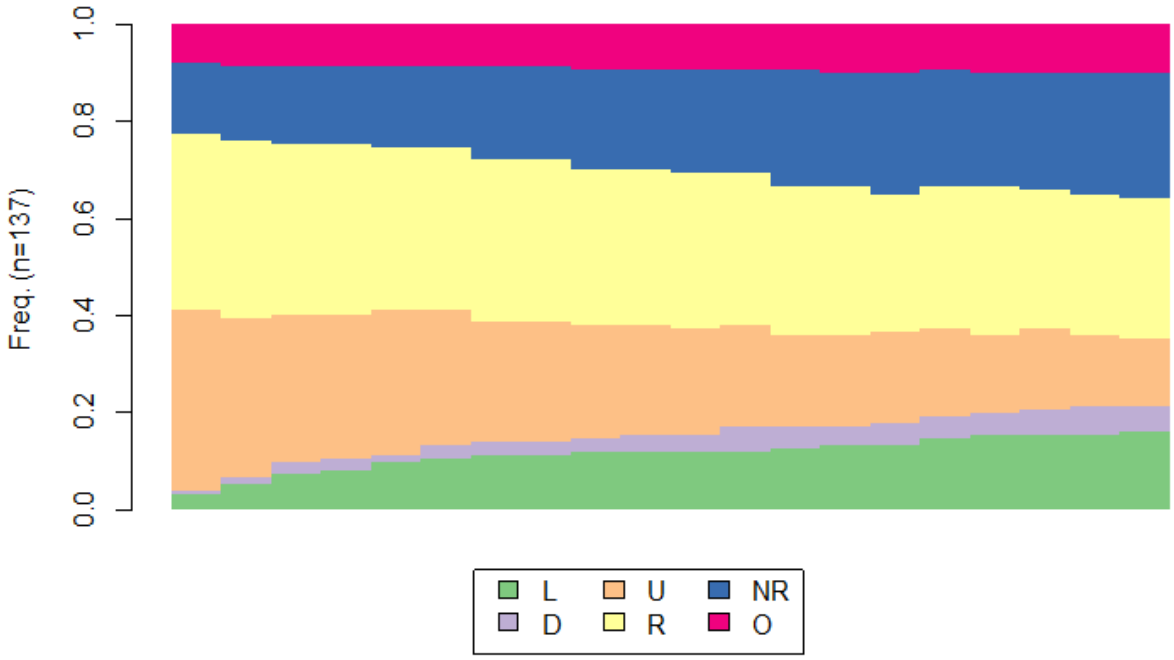


**Figure 1**: Household state sequences over a period of five years, full orphans

As can be seen in Figure 1, only a very small percentage of full orphans dies over the entire observation period while more than 10% are lost from observation after five years. Especially in the beginning of the observation period, the share of full orphans whose household status is unclear is nearly as high as 40%. This share, however, drops considerably over time. Of the remaining full orphans who are neither lost, dead or whose relationship is unclear, roughly two thirds are directly after parental death residing with family members such as adult siblings, stepparents, aunts, uncles or grandparents. While this share seems to be constant over time, the percentage of full orphans living with unrelated household members increases. This might be due to the increasing age of the full orphans which allows them to work as a farm hand or as a civil servant. The share of institutionalized orphans remains stable at around 10% of the entire sample. This estimate, however, is very conservative as it can be assumed that children sent to orphanages are much more likely to be lost from observation.

This example demonstrates that sequence analysis is a very useful tool to visualize orphans' household compositions over a longer period of time. It can also help to identify certain life trajectories and if these life trajectories have a different impact on later-life outcomes such as occupational status, marriage age and fertility. Moreover, sequence analysis can be applied over a much longer period of time (for example until age 40) in order to investigate whether the life trajectories of (half-)orphans differ considerably compared to non-orphans. This was for instance done for handicapped individuals who grew up in Northern Sweden in the nineteenth century (Vikström et al. 2017).

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