LIKE PARENT, LIKE CHILD?
The role of resources and life events from an intergenerational perspective

Sanna Kailaheimo-Lönnqvist
LIKE PARENT, LIKE CHILD?

The role of resources and life events from an intergenerational perspective

Sanna Kailaheimo-Lönqvist
University of Turku

Faculty of Social Sciences
Department of Social Research
Sociology
Doctoral Programme on Inequalities, Interventions and New Welfare State

Supervised by

Professor Jani Erola
Department of Social Research
University of Turku
Finland

Assistant professor Elina Kilpi-Jakonen
Department of Social Research
University of Turku
Finland

Reviewed by

Professor Marlis Buchmann
University of Zurich
Switzerland

Professor Carina Mood
Stockholm University
Sweden

Opponent

Professor Marlis Buchmann
University of Zurich
Switzerland

The originality of this publication has been checked in accordance with the University of Turku quality assurance system using the Turnitin Originality Check service.

ISBN 978-951-29-8339-1 (PDF)
ISSN 0082-6987 (Print)
ISSN 2343-3191 (Online)
Painosalama Oy, Turku, Finland 2021
ABSTRACT

Intergenerational transmission occurs in most aspects of life, influencing our life events and future achievements. This dissertation examines how different resources and life events are related to the individual’s outcomes from the intergenerational perspective. The dissertation approaches these phenomena from three perspectives. First, it is studied how different life events, both positive (such as union formation) and negative (such as losing a parent), are associated with various outcomes of an individual by accounting for parental resources in the light of intergenerational inequalities. Second, the role of parental resources (such as economic and occupational status or educational level) on an individual’s outcomes is examined when facing the above-mentioned life events. In addition to parental resources, it is studied how the parents of an individual’s partner and the resources of the partner’s parents are related to the individual’s outcomes (such as occupational attainment or union dissolution), thus providing new information about intergenerational effects in a seldom studied area. Third, it is examined whether the association between life events and resources is modified by parental resources. In addition, it is examined whether compensation or multiplication occurs, i.e. whether the lack of a resource or a negative life event can be compensated with other resources or whether individuals from different family backgrounds cannot benefit from the resources equally.

This dissertation consists of four parts that use Finnish register data (FinGEP) and apply various regression models. The part I examines the role of parental resources when facing a negative event, such as a health problem, by examining how parental resources are linked to the offspring’s probability of receiving a disability pension. The offspring’s labour market status two years after the disability pension is studied using a sample of children born between 1980 and 1985. The part II focuses on the positive life event, union formation, by investigating how changes in the partner’s parents’ resources are related to the individual’s occupational development using a sample of individuals born between 1970 and 1979. The part III analyses how shared life events between spouses are linked to union dissolution behaviour by investigating the role of both partners’ parental divorce on the couple’s union dissolution risk and comparing the associations between cohabitation and marriage. Lastly, the part IV studies the timing of an event by examining how a
child’s age at parental death is related to the child’s educational attainment using a sample of children born between 1982 and 1990.

Life events and parental resources contributed to the children’s adulthood outcomes in all studies, and the associations between life events and an individual’s outcome often varied by parental resources. For example, children with high parental resources were more frequently in education and employment after receiving a disability pension, demonstrating that high parental resources were helpful after facing a negative event (i.e. health problem). This finding supported the theory of compensatory advantage. In addition to the parental resources, extended family networks through partnering had positive associations: the change in the partner’s parents’ resources (i.e. union formation) are positively related to an individual’s occupational development. However, the high resources of the partner’s parents only benefited individuals whose own parental resources were high, which supports the multiplication theory. Evidence on shared life events between spouses demonstrates cumulative processes: children of divorced parents had a higher risk for union dissolution; the risk was even higher if both couple’s parents had divorced. This association was stronger in marriage than in cohabitation. In addition, the timing of a life event was found to be important: the younger the child was when the child experienced parental death, the more adverse was the effect of parental death. No variation between parental resources was observed, but children with low resources are more likely to encounter parental death than individuals with high resources, thus some support for the theory of cumulative (dis)advantage is found.

To conclude, the interplay between life events and resources of an individual’s own parents and extended family networks is clear in the individual’s outcomes. Individuals with high resources are often less affected by negative life events than individuals with low resources.

KEYWORDS: parental resources, life events, partner’s parents, siblings, education, disability pension, occupation
TIIVISTELMÄ:

Ylisukupolvia periytymistä tapahtuu melkein kaikilla elämän osa-alueilla, ja sillä on vaikutusta niin elämäntapahtumiin kuin tulevaisuuksiin. Tässä väitöskirjassa tutkitaan, kuinka erilaiset resurssit ja elämäntapahtumat ovat yhteydessä yksilön saavutuksiin ylisukupolvista näkökulmasta. Väitöskirja lähestyy tätä ilmiötä kolmesta näkökulmasta.


yhteys erilainen avo- ja avioliitossa. Lopuksi, osatutkimuksessa IV tarkastellaan elämäntapahtuman ajankohdan merkitystä tutkimalla, kuinka lapsen ikä vanhemman kuollessa on yhteydessä lapsen koulutukselliisiä saavutuksiin käytävä otosta lapsista, jotka ovat syntyneet 1982 ja 1990 välillä.


Tiivistäen, elämäntapahtumien sekä vanhempien ja puolison vanhempien resurssien vuorovaikutus näkyi selvästi yksilön tulemissa. Negatiivisilla elämäntapahtumilla näyttää usein olevan vähemmän haitallinen vaikutus yksilöille, joilla on korkeat vanhempien resurssit, kuin yksilöille, joilla on matalat vanhempien resurssit.

ASIASANAT: vanhempien resurssit, elämäntapahtumat, puolison vanhemmat, sisarukset, koulutus, työkyvyttömyyselä, ammattiasema
Acknowledgements

I have learnt a lot during the dissertation journey, and I have had the pleasure to meet many brilliant people who have supported and encouraged me. This dissertation would look very different without you.

I would like to thank my great supervisors Jani Erola and Elina Kilpi-Jakonen. Thank you for all support, encouragement, guidance, and opportunities that you have given me. Thank you for believing in me and guiding me through!

I also want to thank all co-authors. I would like to thank my co-authors Laura Salonen and Heta Pöyliö for the enjoyable article process. In addition to being co-authors, they have been amazing colleagues and friends who have supported me during this journey. I would also like to thank my co-author Antti O. Tanskanen for all your support, advice and help. I also thank Anette Fasang, Marika Jalovaara and Emanuela Struffolino for being great co-authors. It has been fun to write an article with you! I have learnt so much from you, such as new methods and ways to do research. I would also like to thank Anette Fasang for hosting me at the Humboldt University of Berlin during my research visit.

I thank my pre-examiners Marlis Buchmann and Carina Mood for their critical comments and suggestions. These all improved the thesis a lot. In addition, I thank Marlis Buchmann for accepting the invitation to act as an opponent in my public defence.

I conducted my thesis mainly in the INDIRECT-project and I would like to thank the team members: Irene Prix, Hannu Lehti, Patricia McMullin, Outi Sirniö, Sehar Ezdi, Johanna Kallio, and Helena Hautala. In addition, thank you Jani Erola for hiring me to the project! The project and team have provided me with important support and advice.

I also thank my PhD peers for support, discussions and lunches. Particularly I would like to thank Laura Heiskanen and Sanni Kotimäki. Among the other colleagues from the unit of sociology and economic sociology I would like to thank Professor Mikko Niemelä, Professor Hannu Ruonavaara, Irene Prix, Vesa-Matti Paasivirta, Emma Lamberg, Erica Åberg, Katja Pohjola, Antti Kähärä, Esa Karonen, Aleks Karhula, Mirkka Danielsbacka, Minna Tuominen, Antti Kouvo, Niko Eskelinen, Teemu Vauhkonen, Jukka Vuorinen and many others! I would also like
to thank Maria Vaalavuo and Timo Kauppinen from the Finnish institute for health welfare. I would also like to thank administrative staff, especially Jaana Tähti who has guided me through the university bureaucracy.

I thank the organisations that have funded my thesis: ERC for funding INDIRECT-project where I worked for years, Faculty of Social Sciences (University of Turku), and Olvi-foundation. I also thank all funders that have provided me with the opportunity to visit many conferences. I also thank for the opportunity to use “Manun Kammari”. It has been valuable, especially during the corona crises when everyone must work remotely. Without Manun Kammari the finalizing process of the thesis would have been much slower.

I would like to thank all my friends who have provided me with balance for academic life. It has been important, thank you!

I also thank my family. I am grateful to my parents for believing in me. Without their support, I would never have applied to university and this thesis would not exist. I am also grateful for my sister’s support. My deepest gratitude goes to my wife, Linda Kailaheimo-Lönnqvist, who has seen dissertations all the ups and downs and still supported – and loved! Thank you!

January 2021
Sanna Kailaheimo-Lönnqvist
Table of Contents

Acknowledgements ............................................................................................................. 7

Table of Contents ............................................................................................................. 9

List of original publications ............................................................................................. 12

1 Introduction ..................................................................................................................... 13

2 The role of resources and life events from the intergenerational perspective ................................................................................................................................. 16
   2.1 Social inequality and stratification in intergenerational transmission ...................................................... 16
   2.2 How are intergenerational inequalities maintained? .............................................................................. 17
   2.3 The interplay between life events and resources from intergenerational perspective ....................................... 19
   2.4 Empirical examples of the interplay between resources and life events on an individual’s outcomes .................................................................................................................. 21
       2.4.1 Research questions ...................................................................................................................... 21
       2.4.2 The role of parental resources when facing a negative life event ......................................................... 22
       2.4.3 The role of parental resources when facing a positive life event ........................................................ 23
       2.4.4 The role of shared life events ........................................................................................................ 25
       2.4.5 The role of timing of a life event ................................................................................................... 27

3 Research design ............................................................................................................... 29
   3.1 Summary of the research design ..................................................................................................... 29
   3.2 Data .............................................................................................................................................. 30
   3.3 Measures ..................................................................................................................................... 30
   3.4 Methods ...................................................................................................................................... 33
   3.5 Finnish context ............................................................................................................................ 35

4 Main results ...................................................................................................................... 37
   4.1 I The role of parental resources when an individual faces a negative life event: Parental resources and child’s disability pension .................................................................................. 37
   4.2 II The role of parental resources when an individual faces a positive life event: Partner’s parents’ resources and individual’s occupational attainment ........................................................................ 38
4.3 III The role of shared life events between spouses: The role of both partners’ parental divorce on couple’s union dissolution
.................................................................................................................. 38

4.4 IV The role of timing of a life event: Child’s age at parental death and education........................................................................................................ 39

5 Discussion and conclusion .................................................................................. 41

References ................................................................................................................ 46

Original publications ............................................................................................... 53
Figures and Tables

Figure 1. The interplay between parental resources and life events on an individual’s outcomes from an intergenerational perspective ................................................................. 21
Figure 2. The role of parental education and income when a child faces a negative life event (DP=disability pension) .................. 23
Figure 3. The role of partner’s parents’ resources on an individual’s occupational development when facing a positive life event (union formation) .................................................. 25
Figure 4. The role of shared life events between partners: parental divorce of own parents and partner’s parents on a couple’s union dissolution risk .............................................. 26
Figure 5. The role of the timing of a life event on child’s educational attainment ............................................................... 27
Table 1. The summary of the research design .................................................. 29
This dissertation is based on the following original publications, which are referred to in the text by their Roman numerals:

I  Salonen, Laura, Kailaheimo-Lönnqvist, Sanna and Pöyliö, Heta. Unravelling the Relationship between Parental Resources and Disability Pension in Young Adulthood. *Social Science Research*, 2019; 83, 102315.

II  Kailaheimo-Lönnqvist, Sanna, Kilpi-Jakonen, Elina, Tanskanen, Antti O. and Erola, Jani. Behind Every Successful (Wo)man is a Successful Parent-in-law? The Association between Resources of the Partner’s Parents and Individual’s Occupational Attainment. *Research on Social Stratification and Mobility*, 2019; 64, 100438


The original publications have been reproduced with the permission of the copyright holders.
The phrase ‘like parent, like child’ is often used to describe the resemblance between parents and their children. This idea is supported in many academic fields, such as sociology and economics, that study intergenerational transmissions (Beller, 2009; Björklund & Jäntti, 2020; Breen & Jonsson, 2005; Bukodi & Goldthorpe, 2013; Ermisch & Francesconi, 2001; Erola, 2012; Heckman, 2006; Mood, 2017). Intergenerational transmission takes place almost in every aspect of life and influences our future outcomes and life events. It has been found that parents and children have similar education, occupational status, divorce risk, and health (e.g., Erola, Jalonen, & Lehti, 2016; Lyngstad & Jalovaara, 2010; Waters et al., 2000; Wolfinger, 2003). Thus, by looking at the life situations of parents we may also learn something about children’s futures. For example, in addition to their own parents, a partner’s parents may become an integral part of an individual’s life after union formation and may also contribute to intergenerational transmission (Raaum et al., 2007).

This dissertation contributes to the literature by examining the interplay between resources and life events on an individual’s outcomes from three perspectives. First, the roles of one’s own and one’s partner’s parental resources on an individual’s outcomes are examined. Second, it examines how different life events, both positive and negative, are related to an individual’s outcomes. Third, it examines whether the association between life events and resources on an individual’s outcomes differs between individuals depending on their parental resources. In addition, it examines whether resource multiplication and compensation occur or whether the association is due to the accumulation of (dis)advantages.

Different life events, such as union formation or parental death, are related to intergenerational transmission because different life events can promote or interfere with the transmission. Studying the interplay between life events and resources is important because generally—not always—low resources and negative events are related to weaker outcomes, and high resources and positive events are related to better outcomes. For example, low resources and negative life events are associated with weaker health and lower education (Björklund & Jäntti, 2020; Devenish, Hooley, & Mellor, 2017; Erikson & Torssander, 2008, 2009; Montez & Hayward,
However, as mentioned, all negative events or low resources do not lead to weak outcomes; sometimes the missing resources or negative life events may be compensated with other resources. For instance, high resources of the parents may protect from the negative outcomes when an individual faces a struggle in life. On the other hand, it may be that all individuals cannot benefit from the resources available equally (multiplication), and thus certain events may be more influential for them. However, it is unclear who is most influenced by both positive and negative life events. This dissertation aims to provide some answers in light of intergenerational transmission.

The dissertation examines the interplay between resources and life events on an individual’s outcomes from the intergenerational perspective. The life events covered in this dissertation are the child’s health problems, union formation, parental divorce, and parental death. The interplay between life events and resources is examined using educational, economic, and occupational resources of the parents. The outcomes of this dissertation are varied and include disability pension, labour market status after disability pension, occupational development, union dissolution, and education.

This dissertation has four research parts. In part I, the role of parental resources is studied when a child faces a negative event, in this case, health problems, by examining how different parental resources are related to the risk of disability pension in early adulthood and child’s labour market status after having a disability pension. The part II focuses on the role of parental resources when an individual faces a positive event, i.e. union formation. In addition, the association between partner’s parents’ resources and an individual’s occupational development is studied covering all coresidential partnerships in adulthood. In part III, the role of shared life events between spouses is studied by examining the role of both partners’ parental divorce on couple’s union dissolution risk and examining differences in cohabitation and marriage covering all individuals’ coresidential partnerships during adulthood. Lastly, in part IV, the timing of a life event is examined by looking at how a child’s age at parental death is associated with a child’s educational attainment. Thus, this dissertation covers a wide range of life events and outcomes of an individual and their relation to parental resources.

The dissertation consists of two main sections: first, an overview of the four research parts, and second, the original publications. In the section 1, the Chapter 2 discusses the intergenerational transmission of resources and life events in light of previous literature by discussing social inequality and stratification, how inequalities are maintained, and how life events and outcomes are linked from an intergenerational perspective. The research questions of this dissertation are also presented in Chapter 2. Chapter 3 describes the research design, demonstrating an overview of the dissertation, data, measures, methods, and the Finnish context. The
results of this dissertation are presented in Chapter 4. Finally, in Chapter 5, the results are linked to previous findings, the limitations of the study are discussed, and policy recommendations are provided.
2 The role of resources and life events from the intergenerational perspective

2.1 Social inequality and stratification in intergenerational transmission

Social inequality is a widely used concept in sociological and popular literature. Taking the two words separately, inequality means that there are disparities in, for example, accessing and possessing resources that make us unequal, and adding social refers to the social perspective of inequality. The structure of inequality between individuals in a society is called social stratification. It is a hierarchical grouping of people based on, for example income, education and status (Keister & Southgate, 2012).

Social inequality and stratification influence all, affecting an individual’s educational attainment and health. For instance, low socioeconomic resources are associated with weaker health, lower education and a higher probability for early death (Björklund & Jäntti, 2020; Devenish et al., 2017; Robert Erikson & Torssander, 2008, 2009).

One concrete tool to describe social inequality in society is social class. Social class is often linked to our possibilities in life and how we see the future. For example, it is influenced by both an individual’s current status and childhood family background. Therefore, parents and their status also influence an individual’s class (Bukodi & Goldthorpe, 2013; Erola, 2012; Erola et al., 2016). An example of this is the origin-education-destination (OED) association studies where the idea is that social origin, i.e. family background, has a direct effect on the destination, i.e. individual’s adulthood status, but also that education passes some effects of social origin and influences an individual’s outcomes, i.e. destinations. Therefore, family background and parental resources have both direct and indirect effects on an individual’s outcomes (Bernardi & Ballarino, 2016; Fleury & Gilles, 2018).

This leads to the conclusion that many inequalities between individuals and across generations exist because parents have a different amount of resources. One way to conceptualise resources is to divide them to economic, social, cultural and
human resources. Economic resources include income and wealth, social resources, social networks, cultural resources, lifestyle and status, and human resources education and abilities (Becker & Tomes, 1986; Bourdieu, 1986). Generally, parental resources, such as educational and economic, are positively related to child outcomes (Bukodi & Goldthorpe, 2013; Erola et al., 2016; Mayer, 1997). This means that children of parents with higher resources, such as a higher levels of education, are more likely to have higher levels of education or better health than children with fewer parental resources (e.g., Erola et al., 2016; McEwen and McEwen, 2017).

However, the association between family background and children’s outcomes is often not that simple because individuals are embedded in different social settings and have different experiences in their life. Life course studies contribute to knowledge on social inequalities by describing different resources and their accumulation effect at different time points across an individual’s life (Bernardi, Huinink, & Settersten, 2019; Buchmann, 1989; Buchmann & Steinhoff, 2017; Fasang & Mayer, 2020; Mayer, 2009). This means that the question is not only how we are unequal but what are the long-term processes that cause it within and between specific life stages (Fasang & Mayer, 2020). This kind of thinking and research enables us to better target and reduce social inequalities because it gives us information on where, how and to whom the disadvantages and advantages are formed. When we understand which processes and mechanisms cause social inequality we understand society better and have better tools to reduce inequality.

2.2 How are intergenerational inequalities maintained?

In a society where inequality is low and equal opportunity is high, parental resources and family background are weak influences because individuals' opportunities and chances in life are mostly determined by their own talent and achievement. However, this is often not the case because the influence of parents and family background has been found persistent for children’s outcomes, even in comparatively open and equal societies such as Finland (Björklund & Jäntti, 2009; Breen & Jonsson, 2005; Erikson & Goldthorpe, 1992; Erola, 2012; Erola et al., 2016). In general, parents impact their children through both biological and social transmissions (Silventoinen et al., 2020). Several theories have been developed to describe the relationship between parents’ resources and their offspring’s outcomes. The theories of relative risk aversion, cumulative (dis)advantage, compensation, compensatory advantage, and multiplication are discussed below to shed light on the mechanisms of intergenerational inequalities.

Relative risk aversion theory claims that, for example, educational decision-making is mainly motivated by the desire to avoid downward social mobility, and
the motivation for upward mobility is less desired if there is any risk for downward mobility (Breen & Goldthorpe, 1997). This means that parents often try to help their children to maintain the same socioeconomic position as they have themselves, and promote upward mobility only if it is guaranteed that downward mobility does not happen. One concrete example of this is the decision of whether to continue studies towards a higher level of education or take a full-time job. Children with high resource parents may be encouraged to continue their studies to higher education, while children with lower resource parents might be encouraged to join work life. Continuing studies may be seen as a risk for downward mobility if the educational returns (e.g. wage) from higher education are seen as not certain, thus joining the work force post haste may be seen as a risk minimising action.

The cumulative (dis)advantage theory (O’Rand, 2009) states that parental resources accumulate, and these resources and their accumulation has an effect on children’s achievements and well-being. According to the theory, both advantages (having more resources) and disadvantages (a lack of resources) tend to accumulate. Many studies demonstrated intergenerational accumulation of disadvantages, such as a receipt of social assistance and unemployment (Vauhkonen, Kallio, Kauppinen, & Erola, 2017). Advantages and disadvantages are often concentrated in families, thus, for instance in the case of parental death, there are likely other factors too that are related to child’s lower educational attainment such as low parental education. Compensation may happen between individuals, and through institutions and resources (Erola & Kilpi-Jakonen, 2017). In this dissertation the focus is on resource compensation that may happen through a specific resource, outside the advantageous background. In general, compensation occurs when a negative life event or the lack of a resource did not lead to a negative outcome (Erola & Kilpi-Jakonen, 2017). This was found in the case of parental death in two Finnish studies which showed that high resources of the surviving parent compensated for the loss of the parent in terms of educational attainment (Kailaheimo-Lönnqvist & Kotimäki, 2020; Prix & Erola, 2017).

Compensatory advantage complements the theories of compensation and cumulative advantage (Bernardi, 2014; Bernardi & Boado, 2014; Bernardi & Triventi, 2020). According to this theory, children from advantaged family backgrounds are less affected by negative events or disadvantages during their life course compared to children with less advantaged family backgrounds. This is because individuals from advantaged family backgrounds have higher resources and better opportunities to compensate for a lost resource or negative life event, whereas individuals from lower family backgrounds have weaker opportunities to do so. This phenomenon has commonly been reported in studies examining educational transitions (Bernardi, 2014; Bernardi & Boado, 2014; Bernardi & Triventi, 2020; Tanskanen, Erola, & Kallio, 2016).
Another mechanism of intergenerational transmission of resources is multiplication, which indicates that individuals from different family backgrounds cannot benefit from the resources equally (Erola & Kilpi-Jakonen, 2017). Multiplication was, for example, observed in a study that showed that women from families with high resources are more likely to achieve adult education (which is beneficial to career progress) than women from families with fewer resources (Minello & Blossfeld, 2017). Thus, adult education seems not to act as a compensatory mechanism but rather as a multiplier.

All these theories describe how social inequalities are maintained or compensated from one generation to another and the key element is the differential distribution of resources between individuals and generations.

2.3 The interplay between life events and resources from intergenerational perspective

Both negative life events, such as losing a close relative or parental divorce, and positive life events, such as union formation or the entry to parenthood, are closely connected to the resources available for an individual. Positive events often entail gaining resources, whereas negative life events entail losing resources. Negative life events and the loss of resources have been linked to more negative outcomes in children, whereas positive life events and high resources have been associated with better outcomes (Mayer, 2009; McEwen & McEwen, 2017; Montez & Hayward, 2014; Prix & Erola, 2017). For example, in the event of parental death, a child loses some economic resources (such as the potential income of the deceased parent) and social resources (such as having a role model in everyday life). This is seen in many studies that show losing a parent due to death during childhood is generally associated with negative outcomes in terms of educational achievement and health (Amato & Anthony, 2014; Cerel, Fristad, Verducci, Weller, & Weller, 2006; Cerel, Fristad, Weller, & Weller, 1999; Lin, Sandler, Ayers, & Wolchik, 2004; Prix & Erola, 2017; Wolchik, Tein, Sandler, & Ayers, 2006).

This dissertation examines the interplay between parental resources and life events on individuals’ outcomes from an intergenerational perspective. The negative life events discussed in this dissertation are parental death, a child’s health problems, and parental divorce, while union formation is examined as an example of a positive life event. One way to conceptualise the interplay between resources and life events on an individual’s outcomes is illustrated in the model of the interplay between resources and life events in Figure 1. Family background and parental resources are separated in this model. The term parental resources are used to describe measurable characteristics of the family background, such as economic resources or the educational level of the parents. The term family background refers to a broader
concept that includes parental resources, but also other, sometimes hard-to-measure, components such as taste, social recognition and perceived entitlements. Thus, family background is much more than just easily measurable characteristics of family background. However, these easily measurable characteristics of family background, i.e. parental resources, of course catch some of the hard-to-measure characteristics that are related to them. This dissertation focuses on observed parental resources such as the income, occupation, and educational level of parents.

In the following sections, the model of the interplay between parental resources and life events (Figure 1) will be described more specifically by using empirical examples that apply to the model. In this section, the overview of the model is presented. First, parental resources influence the life events that an individual faces, and these life events have effects on the individual’s outcomes. For instance, some positive life events such as union formation are more commonly experienced by individuals with high as compared to low parental resources (Jalovaara & Fasang, 2017), while the opposite is true for some negative life events such as early parental death (Berg, Rostila, Saarela, & Hjern, 2014).

Second, life events influence parental resources because negative events entail losing resources and positive events entail gaining them; these resources have effects on the individual’s outcomes. For example, in the case of parental death, the family income is likely reduced because the family loses the income provided by the deceased parent (Corak, 2001; Kailaheimo-Lönnqvist & Kotimäki, 2020).

Third, family background influences the parental resources available to an individual, and these resources affect an individual’s outcome. Thus, family background has also an indirect link to the individual’s outcomes through parental resources (Bernardi & Ballarino, 2016; Fleury & Gilles, 2018).

Fourth, family background has a direct link on an individual’s outcomes which is supported in many studies (Bernardi & Ballarino, 2016; Björklund & Jäntti, 2009; Fleury & Gilles, 2018; McEwen & McEwen, 2017). For example, in addition to the parental resources, family background is linked to aspirations, values and self-esteem which are all connected to children’s outcomes (Swartz, 2008). Fifth, family background is also linked with the life events that an individual faces; these life events are linked to the individual’s outcomes. Early parental death is more common among children with low parental resources, and it is generally found that parental death during childhood is negatively associated with a child’s education (Amato & Anthony, 2014; Kailaheimo-Lönnqvist & Kotimäki, 2020). The same pattern can be found in a child’s health problems which are more common among low resource parents (McEwen & McEwen, 2017).
The role of resources and life events from the intergenerational perspective

![Diagram](Figure 1. The interplay between parental resources and life events on an individual's outcomes from an intergenerational perspective.)

2.4 Empirical examples of the interplay between resources and life events on an individual’s outcomes

2.4.1 Research questions

This dissertation examines the interplay between life events and resources on an individual’s adulthood outcomes. More, the aim is to examine how negative and positive life events are related to the intergenerational transmission, and how the association is possibly modified by resources available for an individual. In addition, I examine how the timing of an event matters and what is the role of shared life events between spouses.

In the following sections, empirical examples of the model described in Figure 1 are presented. Two examples of the model cover both positive and negative life events. In addition, two extensions of the model are presented: (1) the role of shared life events and (2) the timing of an event. The empirical results and more specific information regarding each research part and models will be presented in the following chapters.

1. What is the role of parental resources when an individual faces a negative life event? (Part I)
2. What is the role of parental resources when an individual faces a positive life event? (Part II)
3. What is the role of shared life events between spouses on their outcomes? (Part III)
4. What is the role of the timing of an event? (Part IV)
2.4.2 The role of parental resources when facing a negative life event

When an individual faces a negative life event, high parental resources may protect the individual while low resources may make them more vulnerable to struggles. In this dissertation, the role of parental resources when a child faces a negative life event is examined. Figure 2 is an empirically applied model of the general model of the interplay between resources and life events (Figure 1). The negative life event in Figure 2 is the child’s health problems, and the outcomes are the child’s disability pension and labour market status after receiving a disability pension. Receiving a disability pension is used both as an indicator of health and as an outcome of health problems. Disability pension is an indirect measure for health, because in order to receive a disability pension, an individual has to have long-lasting health-related problems. Work disability at a young age can have long-term consequences on individuals’ future attainments (Harkko, Kouvonen, & Virtanen, 2016). Different parental resources, such as parental income and education, are examined as modifying variables. Specifically, it is asked, does the child’s likelihood of receiving a disability pension or labour market status after receiving a disability pension depend on the level of parental resources?

The empirical model presented in Figure 2 can be interpreted as follows. First, parental resources, such as education and income, are related to child’s health problems, and child’s health problems are related child’s outcomes such as the likelihood of receiving a disability pension (Gravseth et al., 2007; Halonen et al., 2017; Upmark, Lundberg, Sadigh, & Bigert, 2001) and child’s labour market status after receiving the disability pension. Second, a child’s health problems are linked with parental resources—most probably to income due to increased health expenses—and parental resources are linked with a child’s outcomes (McEwen & McEwen, 2017).

Third, parental resources may modify the association between negative life events (i.e. health problems), and child’s outcome (i.e. probability of receiving a disability pension and labour market status after receiving a disability pension). Generally, previous studies have shown that individuals with more advantaged family backgrounds receive disability pensions less often than individuals from less advantaged families (Halonen et al., 2017; Upmark et al., 2001). High parental education, however, has also been found to increase the probability of receiving disability pensions when controlling for various confounding factors (Gravseth et al., 2007). Thus, it seems that the probability of receiving disability pension differs by parental resources and is linked with the accumulation of (dis)advantages and maybe a compensatory advantage. This is because when an individual has problems with their health, for example, parental resources may affect the tendency and ability to seek help. Previous literature has shown that low socioeconomic resources are
linked to lower use of health care (Blomgren & Virta, 2020). In addition, highly educated parents may have better knowledge to seek help for their child and they may be better equipped to navigate different health and social security systems such as applying disability pensions. This may be shown as compensatory advantage when individuals from advantaged family backgrounds are less affected by negative life events and health problems.

Lastly, family background predicts parental resources (education and income), the likelihood of a negative life event (health problems) as well as the outcomes (disability pension and labour market status after disability pension) (Figure 2).

This research adds to the existing literature by examining what is the role of parental resources when an individual faces a negative life event. More specifically: it is examined how different resources of parents are linked with an individual’s disability pension and the individuals’ labour market position after receiving the disability pension.

![Diagram](image)

**Figure 2.** The role of parental education and income when a child faces a negative life event (DP=disability pension).

### 2.4.3 The role of parental resources when facing a positive life event

In addition to the negative life events, the association between positive life events and resources on an individual’s outcomes are studied in this dissertation. Figure 3 is the second empirical example of the general model of the interplay between resources and life events (Figure 1). The positive life event in this empirical model is the union formation, and the outcome is the individual’s occupational development. In this model both the resources of their own parents and partner’s parents are examined, and more specifically, it is studied how the level of own
parental resources modify the association between partner’s parents’ resources and individual’s occupational attainment.

The model presented in Figure 3 can be described as follows. First, parental resources and family background are linked with an individual’s occupational development (Erola et al., 2016). This also happens through union formation which is more commonly experienced by individuals with high as compared to low parental resources (Jalovaara & Fasang, 2017). Family background is also associated with the resources of the partner’s parents due to assortative mating (Erola, Härkönen, & Dronkers, 2012; Mäenpää, 2015): individuals tend to choose partners similar to themselves, for example, in terms of family background.

Second, the resources of the partner’s parents are associated with the occupational development of an individual. This is because after union formation, individuals are linked with their partner’s parents in addition to their own parents, and the partner’s parents become part of the social life of the individual (Danielsbacka, Tanskanen, & Rotkirch, 2015). Partner’s parents’ resources are also related to an individual’s occupational development through the union formation due to the individual gaining more resources. There are often multiple relationships in an individual’s life and thus also multiple partner’s parents which may contribute to the individual’s resources during their life course—for example by providing useful social networks. Social networks and resources, in terms of both their size and the social status of their members, have been found to be beneficial for status development (Bernasco, de Graaf, & Ultee, 1998; Calvó-Armengol & Zenou, 2005; de Graaf & Flap, 1988; Lin, 1999; Rözer & Brashears, 2018; Verbakel & de Graaf, 2007). On the other hand, union dissolution, i.e. change in partnership, is negatively associated with socioeconomic standing (Avellar & Smock, 2005). Thus, union dissolution may also interfere with occupational development, but when an individual forms a new relationship new resources are gained once again.

Lastly, the association between partner’s parents’ resources and individual’s occupational attainment may be modified by the level of an individual’s own parental resources. It is yet unknown whether the resources of the partner’s parents can act in a compensatory or multiplicative way, i.e. is there modification by parental resources. In other words, can the high resources of the partner’s parents compensate for the low resources of their own parents or can only individuals with high parental resources benefit from the resources of the partner’s parents?

The role of partner’s parents on an individual’s socioeconomic success is very rarely studied. To my knowledge, only one previous article has examined the influence of partner’s parents on an individual’s socioeconomic success: the correlation between individual’s earnings and partner’s parents’ earnings was studied in Raaum et al. (2007). They found that although earnings were correlated, the correlation was weaker than that between the individual’s earnings and the
earnings of their own parents. A probable explanation for this phenomenon is that the influence of one’s parents continues over the entire life course, whereas partner’s parents enter the individual’s life after union formation, which often happens during adulthood.

This research adds to the literature in several ways. First, it examines the role of parental resources when an individual faces a positive event, i.e. union formation. Second, it adds knowledge to a rarely studied area in intergenerational transmission, the role of partner’s parents. Third, it reveals that it is not yet known whether the role of the partner’s parents likely differs between individuals with different parental resources.

**Figure 3.** The role of partner’s parents’ resources on an individual's occupational development when facing a positive life event (union formation).

### 2.4.4 The role of shared life events

Shared life events between partners may also have an influence on an individual’s outcomes. Thus, in addition to an individual’s own experiences, the set of experiences at the couple level may matter. In Figure 4, the model of shared life events is presented: the life event is shared experience of parental divorce between spouses, and the outcome is the couple’s divorce risk. The model can be described as follows.

First, due to homogamy both parental resources of own parents and partner’s parents, and the experience of parental divorce of own parents and partner’s parents are associated: individuals tend to form a partnership with similar individuals both in terms of socioeconomic background and experience of parental divorce (Mäenpää, 2015; Storksen, Roysamb, Gjessing, Moum, & Tambs, 2007). Second, resources such as education are associated with divorce risk—high resources are linked with
lower union dissolution risk (Jalovaara, 2013). Third, both parental resources and parental divorce are associated with the couple’s union dissolution risk (de Graaf & Kalmijn, 2006). Lastly, in those relationships where both partners’ parents have divorced, the couple’s divorce risk is likely much stronger due to accumulation (Amato, 1996; Storksen et al., 2007; Wolfinger, 2003): the divorce risk is up to three times higher compared to couples in which neither partner had experienced parental divorce (Wolfinger, 2003).

Possible mechanisms that drive the intergenerational transmission of union dissolution include status transmission, social learning from parents to children, and lower thresholds to an own divorce or separation when it was observed in parents (Amato, 1996; Amato & DeBoer, 2001; Review: Lyngstad & Jalovaara, 2010). However, thus far only a few studies of partners (Amato, 1996; Storksen et al., 2007; Wolfinger, 2003) have investigated the role of parental divorce when it is experienced by both individuals.

This research adds to the existing literature by examining the role of shared life events between spouses. In addition, it is unknown whether the role of shared life events (in this case, the experience of parental divorce) is similar in both married and cohabiting couples. Previous research has not accounted for an individual’s whole coresidential partnership history. Such an accounting may be an important factor when explaining couple’s union dissolution behaviour, as past experiences tend to affect present behaviour.

Figure 4. The role of shared life events between partners: parental divorce of own parents and partner’s parents on a couple’s union dissolution risk.
2.4.5 The role of timing of a life event

The interplay between resources and life events on an individual’s outcomes may differ according to their timing. Thus, the role of a life event and the associated loss or gain of an individual’s resources may vary depending on the age or life stage of the individual when the event occurs. The event might be more harmful or more beneficial the younger or older the child is; different life stages during the life course may matter (Bronfenbrenner, 1979; Duncan & Brooks-Gunn, 2000; Elder, Johnson, & Crosnoe, 2003; Fasang & Mayer, 2020; Heckman, 2006; Mare, 1980; McEwen & McEwen, 2017; Müller & Karle, 1993).

In this dissertation, the timing of a life event is studied by examining the role of a child’s age at parental death on a child’s educational attainment. This is illustrated in Figure 5, which is an extension of the model on the interplay between resources and life events (Figure 1). The life event in this model is parental death during childhood, and the outcome is a child’s education. It is examined how a child’s age at parental death moderates the association between parental death and the child’s education. The model can be described as follows.

First, parental resources are linked with the likelihood of experiencing parental death during childhood—low resources are linked with a higher risk of early death (Berg et al., 2014). Second, parental death is linked with parental resources because losing a parent often entails, for instance, losing income provided by the deceased parent (Kailaheimo-Lönnqvist & Kotimäki, 2020). Thus, as resources are linked with a child’s education, some of the effects of parental death transmit through the resources.

![Figure 5. The role of the timing of a life event on child's educational attainment.](image)

Third, parental death is linked with child outcomes such as education (Amato & Anthony, 2014; Gimenez, Chou, Liu, & Liu, 2013; Prix & Erola, 2017) because
parental death may cause short-or long-term trauma that can interfere with the child’s educational performance (Kailaheimo-Lönnqvist & Kotimäki, 2020).

Lastly, the child’s age at the life event, i.e. parental death, modifies the association between resources and the child’s education. Previous research has shown that family resources in early childhood are more decisive than family resources in late childhood in terms of socioeconomic outcomes and health (Duncan & Brooks-Gunn, 2000; Heckman, 2006; McEwen & McEwen, 2017). In line with these findings, the toxic stress model states that stress, especially chronic stress, during early childhood has detrimental effects on the individual’s later life and wellbeing. According to the model, this is due to an overreaction of the child’s stress system that may interfere with health and cognitive performance (McEwen & McEwen, 2017). Older children may be more equipped to cope with parental death because they are more independent from their parents (Mare, 1980; Müller & Karle, 1993; Pfeffer, 2008), possibly making the association weaker. On the other hand, the older the individuals are, the more likely the educational decisions are already made, which is likely seen as a weaker connection between parental death and the child’s education.

On the other hand, life events and disruptions may have greater influence at transition points because they interfere with important transitions (Bronfenbrenner, 1979; Elder et al., 2003; Fasang & Mayer, 2020). For instance, a negative life event at the time when an individual is about to transition from one level of education to another may have a larger impact than the same event occurring a year earlier.

Many of the previous studies have found that parental death is negatively associated with the child’s outcomes (Amato & Anthony, 2014; Gimenez et al., 2013; Prix & Erola, 2017). However, some studies have not found such an association (Biblarz & Gottainer, 2000; Francesconi, Jenkins, & Siedler, 2010). One possible reason for this may be that the individuals’ ages during the time of parental death have not been the same across studies. Only a few studies have addressed the issue of age in the case of parental death (Fronstin, Greenberg, & Robins, 2001; Steele, Sigle-Rushton, & Kravdal, 2009); these studies compared very broad age groups of children. Results suggest that when paternal death occurs before the teenage years it has the greatest adverse effect on children’s education (Steele et al., 2009), thus it supports the finding that early experiences matter most. However, another study finds that when paternal death occurs after the teenage years, the greatest adverse effect is found for labour market outcomes (Fronstin, Greenberg and Robins 2001). Thus, the association between child’s age at parental death may also depend on the outcome.

Thus, this research adds to the previous literature by examining more carefully the role of timing on an event. This research aims to fill this gap by examining how a child’s age at parental death, both maternal and paternal deaths, is associated with a child’s educational achievement.
Table 1. Summary of the research design.

<table>
<thead>
<tr>
<th>RESEARCH QUESTION</th>
<th>EVENT</th>
<th>SAMPLE SIZE AND BIRTH COHORT</th>
<th>METHODS</th>
<th>OUTCOME</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Child's health problems</td>
<td>71,745 children; 1980-1985</td>
<td>Discrete-time event history analysis</td>
<td>Child's disability pension (DP) and labour market status after DP</td>
<td>Children with high parental resources are better off two years after their first disability pension.</td>
</tr>
<tr>
<td>II</td>
<td>Union formation</td>
<td>98,278 individuals; 1970-1979</td>
<td>Individual level fixed effects</td>
<td>Individual's ISEI</td>
<td>High resources of parents-in-law are positively associated with one's own status. High parent-in-law resources are more beneficial for individuals with high parental resources.</td>
</tr>
<tr>
<td>III</td>
<td>Shared experience of parental divorce</td>
<td>28,021 couples; 1969-73</td>
<td>Piecewise exponential model with woman-level frailty</td>
<td>Union dissolution</td>
<td>The risk of union dissolution is highest for couples in which both partner's parents had divorced. The risk is higher for married couples than for cohabiting couples.</td>
</tr>
<tr>
<td>IV</td>
<td>Parental death</td>
<td>88,727 children; 1982-1990</td>
<td>OLS &amp; Sibling fixed effects</td>
<td>Child's university education</td>
<td>The younger the child is at parental death, the more adverse it is.</td>
</tr>
</tbody>
</table>

Notes: OLS=Ordinary least square regression, DP=Disability pension, ISEI= the International Socio-Economic Index of occupational status.
3.2 Data

Extensive and high-quality Finnish population-based register data which is compiled and provided by the Statistics of Finland is used in all articles of the dissertation. The data used is the Finnish Growth Environment Panel (FinGEP), which has yearly information from the 1987 to 2014, and also information for years 1970, 1980 and 1985. The data is based on a 10% representative sample of the entire population residing in Finland in 1980, and the sample is expanded with sample persons’ children, partners, and partners’ parents covering approximately 2,000,000 cases. All individuals are followed until 2014.

Register-based data has many advantages compared to survey-data. First, the samples are very large, which enables studying also rare life events, such as parental death in childhood or disability pension in young adulthood. Second, register-based data does not suffer from non-response or recall. These all make register data very reliable sources of information. However, FinGEP is not suitable for studying immigrants because when the original sample was drawn, 1980, there were not many immigrants in Finland. Thus, the analysis derived using this data covers mainly Finnish born individuals and their descendants.

3.3 Measures

Part 1: The role of parental resources when facing a negative life event

The analytical sample (n=71 745) consists of young adults (age 19–27) born in 1980–1985. Individuals are followed from when they turn 19 until they either receive a disability pension, die, or reach the age of 27 years. Those individuals who received continuously disability pension from the age of 16 or 17 are excluded (n=330) because most of these individuals are diagnosed with malformations and chromosomal abnormalities. Also, those individuals who lost both of their parents before the age of 19 are excluded (n=82).

The outcome variables are an individual’s disability pension and individual’s labour market status two years after the disability pension. The first outcome variable is a binary variable indicating whether an individual receives a disability pension between ages 19 and 27. The information on disability pension is measured at the end of the calendar year every year. Different types of disability pensions are not separated. The second outcome variable is an individual’s labour market status two years after the first disability pension and it is measured at the end of the year. It is categorised as follows: 0 an individual is employed, 1 an individual is a student, 2 an individual is a pensioner (i.e. still receiving disability pension), 3 an individual
Research design

is unemployed, and 4 other. Category ‘other’ includes individuals that have died, were in civil service or army or outside the labour market.

The main independent variables are different parental resources. Parental resources are indicated by parental income and education measured between ages 12 and 18. Yearly information on the income of the parents is available from 1987 to 2014 (adjusted for the cost-of-living index in 2014). Parental income is an average of parents’ total gross income when the child was 12–18 years old. In the analysis, parental income is used with a log transformation. Parental education is measured as the highest parental education (i.e. dominance principle), and it is categorised into primary, secondary (including vocational and general tracks) and tertiary education (including those with a bachelor’s degree or higher).

Part II: The role of parental resources when facing a positive life event

The analytic sample (n=98 278) are individuals born between 1970 and 1979, and they are followed from the age of 18 to the age of 35–44, and thus cover their all coresidential partnerships during that period. Those individuals who do not have information on both partner’s parents are excluded (1.9%). In these analyses both men’s and women’s unions are included.

The outcome variable is the individual’s ISEI (the International Socio-Economic Index of occupational status). The ISEI is a continuous index based on the scaling of occupational titles according to average levels of education and income and it can take values from 16 to 90 (Ganzeboom, de Graaf, & Treiman, 1992). The variable is derived from a Finnish occupational coding variable which is converted to ISCO88 and then coded to ISEI using Ganzeboom and colleagues’ coding strategy which is adjusted to the Finnish context using Erola’s coding strategy (Erola, 2011). The advantage of a continuous socioeconomic variable such as ISEI is that it is more sensitive to career mobility than discontinuous measures such as social class.

The main independent variables of interest are the ISEI of the partner’s parents and own parents. A detailed description of ISEI is in the Outcome variable section. ISEI of the partner’s parents is added to the model as a fully time-varying variable using the higher of the two parent-in-law ISEI scores (i.e. dominance principle). Parental ISEI is time-invariant and takes value using the dominance principle, i.e. the highest ISEI of the parents.

Part III: The role of shared life events

The analytical sample (n=28 021 couples) follow individuals born between 1969–1973 for every year between the ages 18 and 41/45 (i.e. between years 1987 and 2014) and thus cover all their coresidential partnerships. Cohabitating couples enter
the analysis when they start to cohabit, i.e. move in together, and married couples enter the analysis when they marry. In both cases, right censoring occurs due to emigration, a partner’s death, and age 41/45. In the case of cohabitations, entry into marriage was an additional right censor. Only women’s partnerships are included in the analysis because by using both men’s and women’s partnerships some relationships would be included multiple times, which would inflate the sample. However, robustness analysis show that results do not change if men’s unions are used. This is understandable because union formation and dissolution are dyadic outcomes.

The outcome variable is a couple’s union dissolution. Union dissolution is defined as moving apart from either marriage or cohabitation. Union dissolution is a dummy variable that takes the value 0 if union dissolution did not occur, and 1 if it occurred that year.

The independent variable is parental divorce. It is operationalised as follows: 0 ‘not divorced’, 1 ‘female partner’s parents divorced’, 2 ‘male partner’s parents divorced’, and 3 ‘both partners’ parents divorced’. Category ‘not divorced’ includes both intact married parents, single-parents and widowed. As a parental resource highest parental education (dominance principle) both for own parents and partner’s parents is used. It is categorised as follows: 1 primary education, 2 secondary education, and 3 tertiary education.

Part IV: The role of timing of a life event

The analytical sample (n= 88 727) includes only siblings who were born in 1982–1990, thus excluding singletons, twins and those who were the only child of their family born within the year range. This was necessary due to research method that relies on sibling analysis. Also, those children who lost both of their parents during childhood are omitted (n=240).

The outcome is an individual’s university education. It is dummy coded as 1 for ‘has enrolled in university education or completed it by the age of 24 years’, and 0 for ‘not enrolled or completed university education’. The independent variables are parental death and child’s age at parental death. Parental death -dummy takes value 1 if parental death is experienced later than the age of 23. The average age of experiencing parental death was about 15 years.

Parental resources are measured by using family income and parental education. Annual information on the income of the parents is available from 1987 to 2014 (adjusted for the cost-of-living index in 2014). Family income is an average of all incomes of a household when the child is 5–18 years old. The income measure contains all earnings and taxable income transfers in a household, such as universal child allowance and widow’s and children’s pensions, before taxes. It also includes
the possible income of a stepparent for those years when the stepparent lived in the same household as the child. In the analysis, income is divided into income centiles. Parental education is measured as the highest parental education (i.e. dominance principle), and it is categorised into primary, secondary (including vocational and general tracks), and tertiary education (including those with a bachelor’s degree or higher).

3.4 Methods

This dissertation relies methodologically on a variety of regression models to study intergenerational relations. Methods used are sibling fixed effects which are compared to ordinary least square regression, discrete-time event history analysis, individual level fixed effects models and piecewise constant exponential event history models with gamma frailty corrections. All these modelling methods aim to take into account unobserved heterogeneity as much as possible and thus the aim was to provide as unbiased results as possible.

Discrete-time event history

Event history models are widely used when modelling longitudinal data because they take into account time to an event such as disability pension. Discrete-time event history analysis is an analysis of length of time until the occurrence of some event and thus the dependent variable is the duration until event occurrence (Blossfeld, Golsch, & Rohwer, 2009; Jenkins, 2005). Censoring, time-varying covariates, and structural modelling can all be taken into account in event history analysis, resulting in more reliable model estimates than those provided by ordinary least square models (Jenkins, 2005).

Individual level fixed effects model

Linear (individual) fixed effects models are designed to reduce omitted variable bias in the longitudinal analysis (Allison, 2009; D’Onofrio, Sjölander, Lahey, Lichtenstein, & Öberg, 2020; Fan, 2012). Unobserved but time-invariant individual characteristics are controlled for in these models as in sibling fixed effects models but on an individual instead of on a family level. These unobserved constant individual level factors are, for example, temperament. Because fixed effects models estimate the effect of change, all variables that can change over time must be included in the model or the results will be biased (Allison, 2009). What is left in the fixed effects model is individual-level change over time.
Piecewise constant exponential event history model and frailty correction

Piecewise constant hazard modelling is a subtype of an event history analysis. In piecewise constant hazard models, the time axis is divided into intervals and the hazard rate is assumed to be constant in each interval (Blossfeld et al., 2009). It is a generalisation of the standard exponential model and unlike many other event history models such as cox, it also allows measuring of the baseline hazard.

It is also possible to account for frailty in piecewise constant exponential models. Frailty is an individual-level random effect that controls for the time-invariant unmeasured characteristics of an individual (or unobserved heterogeneity) that could influence the hazard of union dissolution for any of their partnerships, for example, personality traits. It describes the excess risk distinct to individuals, thus, the idea is similar to what is done in fixed effects models. The most common model is the shared frailty model that follows Gamma distribution instead of the default Gaussian distribution. The advantage of Gamma frailty is that it has a flexible shape and is analytically tractable, and thus it is widely used (Gutierrez, 2002).

Sibling fixed effects

Ordinary least square regression estimates may be misleading if important unobserved factors accounting for selection are missing from the model. Fixed effects models are one way to control for the selection (Amato & Anthony, 2014; D’Onofrio, Sjölander, Lahey, Lichtenstein, & Öberg, 2020; Elstad & Bakken, 2015; Grätz, 2015), thus it is very helpful when studying events that include much selection such as parental death.

In sibling fixed effect models, any effects that are shared by siblings are controlled for but cannot be estimated. Sibling fixed effects models allow controlling for many parental characteristics such as parental education and also to many less easily controlled characteristics such as parenting styles. The estimated effects are based on the characteristics that distinguish siblings (D’Onofrio et al., 2020; Grätz, 2015), such as age and personality.

Like all methods, sibling fixed effect models also have their limitations. First, the method assumes that parents treat their children exactly the same and that children respond to this treatment similarly (Carbonneau, Eaves, Silberg, Simonoff, & Rutter, 2002; Jenkins, Rasbash, & O’Connor, 2003; Steele et al., 2009). However, parents can treat their children differently, for example due to different ages, and even if the parents did treat children in the same way, children can react to that differently. Thus, unobserved factors that are not shared among siblings can lead to bias. Second, sibling fixed effects models can only be estimated in families with two or more children, and it is possible that some life events influence singletons differently to those with siblings (Francesconi, Jenkins, & Siedler, 2010).
3.5 Finnish context

All the analyses in the dissertation are conducted using Finnish population-based register data, and some familiarity with the Finnish educational and health-system is therefore essential for interpreting the results. This section briefly describes the most relevant aspects of the Finnish institutional context regarding the dissertation, which covers a wide range of life events and outcomes in an individual’s life.

Finland has one of the world’s highly praised comprehensive school system and a comprehensive welfare system. The welfare system is based on a residence and earnings-related social insurance system that covers a wide range of benefits and comprehensive universal health care. The Finnish welfare state seeks to economically compensate for losses related to negative life events, such as health issues or low resources in general. This means that the loss of resources may not be as decisive in a country like Finland as it is in a country with a less extensive welfare system. This is relevant because it may reduce the association between life events and resources on individual’s outcome (c.f. Figure 1).

The general health and well-being have improved over the years in Finland—individuals are healthier and live longer than ever. However, despite the relatively low level of inequality, there are still socioeconomic differences in health (Palosuo et al., 2009). For example, socioeconomic differences in mortality are still rather large (Mackenbach et al., 2017; Martikainen, Mäkelä, Koskinen, & Valkonen, 2001). It has been linked that in addition to their own socioeconomic standing, childhood conditions are also linked with mortality (Elo, Martikainen, & Myrskylä, 2014; Myrskylä, 2010). However, the differences in healthcare use are small in countries with universal healthcare systems because access to healthcare is also economically subsidised for those in need (Sourander et al., 2004). Nonetheless, it is found that individuals with low resources still use health services less than individuals with high resources (Blomgren & Virta, 2020). If an individual has a long-term illness, an individual can be entitled to a disability pension if long-term health problems prevent an individual from working or studying. Disability pension is a compensation for the economic losses due to health problems, and it can be granted either part or full time and either as fixed-term or permanently. Most young individuals receive disability pension due to mental health problems and it is often fixed-term (e.g. rehabilitation) (Knudsen, Øverland, Hotopf, & Mykletun, 2012).

Education is free of charge at all educational levels in Finland. In addition, school differences are very small (Bernelius & Kauppinen, 2012; Tervonen, Kortelainen, & Kanninen, 2018), and the quality of education do not vary between schools and regions. Secondary and tertiary studies are subsidised by student benefits and loans, which makes higher education accessible for everyone regardless of the financial situation of the family. Only 11% of adolescents under the age of 25 did not have a completed secondary degree in 2014 (Statistics of Finland, 2014).
Finland is a forerunner of the changes in partnership dynamics associated with the second demographic transition (Guzzo, 2014; Lesthaege, 2010). Finland is an egalitarian country where gender equality is high in terms of labour force participation of women (Jaumotte, 2013). The average age for first marriage was 28 in 1997, and it has since risen (Statistics of Finland, 2015). In 2017, the average age for first marriage was 31.7 for women and 33.9 for men (Statistics of Finland, 2018). The pattern with divorce is similar: the age when divorce occurs has risen. On average women were 40.6 and men 42.9 years old when they divorced in 2017 (Statistics of Finland, 2018). Cohabitations are a culturally accepted form of intimate relationships even though most of the cohabitations convert into marriage or separation (Jalovaara, 2013). It is common that younger adults cohabit for long periods before marriage. In general, cohabitations dissolve at a much higher rate than marriages (Jalovaara, 2013; Jalovaara & Kulu, 2018).
4 Main results

4.1 The role of parental resources when an individual faces a negative life event: Parental resources and child’s disability pension

The first part of the research examines the role of parental resources when an individual faced a negative event, i.e. health problems (c.f. Figure 2). The results of the discrete-time event history models demonstrate that parental resources are associated with the probability of having a disability pension; however, the association is different for parental income and education. High parental income decreases the probability of disability pension, whereas parental education increases it slightly. Further, the association between parental resources and a child’s disability pension seems to vary by the child’s educational level. Parental education seems to matter if a child has only primary education. Among these children those with high parental resources are better off after a disability pension, as they are more often working or studying than unemployed or still receiving a disability pension, than those individuals with low parental resources. Thus, this research supports the theory of compensatory advantage, which states that individuals with high parental resources are less affected by negative life events than individuals with low parental resources.

In addition, the results suggest that a disability pension may be seen as a positive outcome. Disability pension in young age is often in the form of rehabilitation which aims to help an individual to return to work or education. Individuals receive help in the form of disability pension, which helps individuals to return back to work or studies, especially if the parents are highly educated.

To conclude, parental resources matter when an individual faces a negative event such as health problems. High parental resources may help individuals to overcome their struggles.
4.2 The role of parental resources when an individual faces a positive life event: Partner’s parents’ resources and individual’s occupational attainment

The second research studies the role of parental resources when an individual faces a positive life event, i.e. union formation (c.f. Figure 3). Positive life events like partnering entail gaining resources such as resources of the partner’s parents. In this research, it is examined how the level of own parental resources modify the association between partner’s parents’ resources and individual’s occupational development.

The results of the individual level fixed effects models suggest that the resources of the partner’s parents are associated with improved occupational status, even after the resources of the partner and of one’s own parents as well as various other factors are controlled for. Similar result is found in the robustness analyses in which earnings are used as a sign of socioeconomic status.

However, the association is not similar for everyone and it is moderated by parental resources. The higher the parental resources of an individual, the stronger is the association between their partner’s parents’ resources and the individual’s occupational status. In other words, high status partners’ parents improve occupational attainment the most for individuals coming from high resource families. This is a sign of resource multiplication.

To conclude, the part II demonstrates that parental resources may have a modifying role when an individual faces a positive life event. More, the resources of partners’ parents are linked with individuals’ socioeconomic outcomes, but only the individuals with high parental resources can benefit from the high resources of the partner’s parents. Thus, positive life events such as union formation do not always lead to gaining resources that benefit an individual—at least if one does not have high resource parents.

4.3 The role of shared life events between spouses: The role of both partners’ parental divorce on couple’s union dissolution

The third part of the research examines the role of shared life events between spouses (c.f. Figure 4). It is studied how the shared life event, i.e. an experience of parental divorce, is linked with the couple’s union dissolution risk.

The results of the piecewise constant exponential event history models show that individuals who experienced parental divorce have higher separation risk than those who did not, and the risk is even higher if both partners experienced parental divorce. Thus, parental divorce from both partners’ sides seems to be associated with elevated
union dissolution risk, i.e. accumulation of higher separation risk. The increase in separation risks due to parental divorce on both sides of the couple is almost exactly twice as high as when only one partner’s parents divorced, clearly supporting an additive and not a multiplicative effect. This is contrary compared to previous studies conducted in the United States (Amato, 1996; Wolfinger, 2003) and Norway (Storksen et al., 2007) that have approximately about a triple increase.

The association is stronger for married couples than for cohabiting couples. However, since the difference between cohabiting and married couples is small, findings are in line with previous research (Jalovaara, 2013) that the antecedents of separation are similar in cohabitation and marriage. In addition, previous studies have found that children of divorced parents are more likely to marry an individual whose parents are divorced (Storksen et al., 2007; Wolfinger, 2007). This research shows that this result holds both for cohabitations and marriages, which also reinforces the accumulation.

To conclude, this research shows that the shared life events between spouses are linked with their outcomes, in this case, the couple’s union dissolution risk. This research contributes to existing research by investigating the role of both partners’ parental divorce on the couples’ union dissolution risk, and by studying whether the association is different in cohabitation and marriage. More specifically, those couples in which both partners’ parents have divorced have the highest union dissolution risk, and the association seems to be stronger for married couples compared to cohabiting couples.

4.4 IV The role of timing of a life event: Child’s age at parental death and education

The fourth part of the research studied the role of timing of a life event by examining how a child’s age at parental death is related to a child’s education (c.f. Figure 5). Thus, it is examined how a child's age at parental death modifies the association between parental death and child’s education.

The results of the sibling fixed effects models show that children who experienced parental death during childhood and youth have weaker educational attainment at the age of 24. The younger the child is at the time of the death of the parent, the stronger the association between parental death and educational attainment. Even though early parental death itself is selective by parental socioeconomic background and resources, the study did not find evidence of a modifying effect of parental resources on the influence of parental death on education. In addition, there are no statistically significant differences between experiencing the mother’s or father’s death.
To conclude, the timing of a life event seems to play an important role, since it is found that the younger the child is when a parent dies, the more detrimental the parental death is for the child’s educational achievement.
5 Discussion and conclusion

This dissertation examines the role of resources and life events in an individual’s life from the intergenerational perspective. Two examples of the theoretical model of the interplay between resources and life events (Figure 1) were presented—positive and negative life events—as well as two extensions of the model that include the role of shared life events and timing of a life event.

The model itself is very simple but it demonstrates the interplay between resources and life events, and it can be easily adapted and extended to different empirical questions as it was shown in this dissertation. The idea behind the model is not new as both life course research and social stratification research has been done for decades (Bernardi et al., 2019; Fasang & Mayer, 2020; Mayer, 2009), but the model brings together these literature and emphasises their close link. The dissertation handles many classical life course events such as union formation and educational achievement, but from the intergenerational perspective.

The dissertation contributes to the previous literature by, first, showing that parental resources are in many ways decisive in terms of children’s adulthood outcomes and that even the resources of the partner’s parents play a role. The role of the partner’s parents and their resources are very seldomly studied from the perspective of intergenerational transmission. Second, the dissertation demonstrates that different life events, both positive and negative, are associated with an individual’s outcomes. Third, this association often differs between individuals depending on their parental resources. In addition, it was examined whether, for example, compensation or multiplication occurs: whether the lack of a resource or a negative life event can be compensated with other resources or whether individuals with different amounts of parental resources cannot benefit from the resources equally (multiplication). Resource multiplication, accumulation of (dis)advantages and compensatory advantage by parental resources were observed in this dissertation. However, clear signs of resource compensation or relative risk aversion were not observed.

The dissertation demonstrates in several ways that the interplay between resources and life events is important with regard to the individual’s outcomes. First, parental resources matter when an individual faces a negative life event such as
health problems: individuals with high resource parents are more likely than their peers with less parental resource working or studying after receiving disability pension. However, it should be noted that disability pension is only an indirect measure for health and it does not catch all health problems — likely only serious health problems. Results also show that different parental resources play a different role: high income seems to decrease the probability for disability pension whereas high parental education increase it, but only among individuals with compulsory education. However, individuals with high parental education and income were better off after having a disability pension, thus it seems that even though different parental resources seem to play a slightly different role, they have a similar role when an individual has been in disability pension. High parental resources seem to promote better outcomes and workability after the disability pension, which gives support for the theory of compensatory advantage.

Second, in the case of positive life events (union formation) the role of parental resources is also important, and the association between partner’s parents’ resources and an individual’s occupational development varies by parental resources. Results show that only individuals with high parental resources benefit from the high resources of partner’s parents in terms of occupational development, giving support for the multiplication theory. The same phenomenon is seen in income development; thus, it seems that the results are quite robust regardless of which socioeconomic outcome is measured. It may be so that individuals with high parental resources can, for example, better utilise the social networks provided by the partner’s parents or the networks may be better matched in regard to their occupational development.

Third, it was demonstrated that the shared life events between spouses matter too: children of divorced parents are more likely to experience union dissolution than children from intact family, and the risk for union dissolution is even higher if both partners had experienced parental divorce. Thus, these results give support for the accumulation of (dis)advantages. It might be so that individuals who have experienced parental divorce have lower thresholds for union dissolution if a partnership is unhappy (Amato, 2010). In addition, it was found that individuals who have experienced parental divorce form a union more likely with a fellow individual that has experienced parental divorce, which also reinforces the accumulation. The difference in the association of both partners’ parental divorce across union types is very small, but the association was stronger in marriage than in cohabitation.

Fourth, the timing of a life event is important: the younger an individual is when their parent dies, the stronger the negative association between parental death and an individual’s education. It may be that older children are less educationally affected by parental death because they have longer overlapping time spent with two parents and they are more independent from their parents (Mare, 1980; Müller & Karle, 1993; Pfeffer, 2008). Thus this research supports the previous findings that have
shown that parental resources in early childhood are more decisive than parental resources in adolescence (Duncan & Brooks-Gunn, 2000; Heckman, 2006; McEwen & McEwen, 2017). There was also no evidence for that specific transition ages, such as at the age of 15 when individuals end compulsory education in Finland, would play an important role. In addition, even though the association between child’s age at parental death and child’s education did not vary by family background, the probability of experiencing parental death is much higher in families with low resources. This all gives support for the accumulation of disadvantages. There are also studies that have examined the link between early parental death and child’s adulthood mortality finding that those children who have experienced parental death have excess mortality (Myrskylä, Elo, Kohler, & Martikainen, 2014). Authors (Myrskylä et al., 2014, p. 221) suggest that the timing of parental death may both be a proxy for shared within-family frailty and intergenerational investments from parents. Thus, it seems that early parental death and its timing is linked with various outcomes in an individual’s life, not only educational attainment as it was studied in this dissertation.

This dissertation gives some answers to how and whom the interplay between resources and life events may influence most. The results of this dissertation suggest that, first, multiplication seems to happen in the top of the social stratum and when positive life events occur: those that are already advantaged can benefit from a positive life event and high resources available for them, but those that are less advantaged cannot. Second, resource compensation as such was not observed in any parts of the research, but once again, it seems that high resource families can help their children better when they face a negative life event, thus giving support for compensatory advantage. On the other hand, the research designs in this dissertation may be partly a cause and thus it is still uncertain how compensation would work in a slightly different research design. Third, the accumulation of advantages and disadvantages seems to touch everyone to some extent since both resources and life events (negative and positive) seem to accumulate. For example, accumulation of negative shared life events was observed in this dissertation: individuals who have experienced parental divorce form a union more often with a fellow individual who has experienced parental divorce. This accumulation seemed to elevate the couple’s union dissolution risk. On the other hand, accumulation of advantage was also observed as those with high resources parents benefitted from the resources of the partner’s parents.

Inequality still exists even in countries with strong welfare systems, such as Finland, especially with regard to parental resources that are closely connected with life events. This means that narrowing inequalities is hard, because those who are already advantaged seem to receive more advantage, and those that have less have lower opportunities to compensate for the possible negative event or loss of a
resource. Thus, the state of equal opportunity does not hold good in Finland, even though its social security system and policies are the best in reducing the inequalities (see Chapter 3.5 Finnish context).

The results of this dissertation bring forth two ways in which the negative effects of parental death can be reduced through policymaking. First, targeting help such as psychological support after parental death by child’s age is important, since early parental death seems to be most detrimental for children who are young when their parent dies as shown by part IV. Second, investing in parents and families is an investment in children. This means that by improving health at population level the rate of early deaths decreases and fewer children experience parental death during their childhood. Resources should be targeted towards improving the health of less-advantaged individuals as health-problems are linked to low resources (Braveman, Cubbin, Egerter, Williams, & Pamuk, 2010; Chen, Matthews, & Boyce, 2002). Families with low resources should be provided preventive help and more information on available support. These recommendations are corroborated by the findings of part I demonstrating that individuals from low-resource families are less likely than individuals from high-resource families to achieve a positive labour market status after receiving disability pension in early adulthood.

Giving clear policy recommendations based on parts II and III is harder because both union formation and divorce are very private matters. For example, divorce is not always a bad outcome since it is a way to survive from an unhappy relationship, thus reducing divorce or union dissolution is not a good recommendation. However, what can be recommended is to make sure that there are different counselling services available so that the number of unnecessary union dissolutions would decrease. Divorce is linked with negative economic outcomes because new households often are single-income households that are at higher risk of poverty (Hübgen, 2018; Smock, Manning, & Gupta, 1999), which is a risk for further negative outcomes.

The methods of this dissertation include various regression methods such as fixed effects models and event history methods with frailty corrections. These modelling methods allow to take into account some unobserved heterogeneity and therefore provide more unbiased results than some more traditionally used methods, such as ordinary least square regressions. However, unobserved heterogeneity is often not taken into account in analyses, even though it is well known that models with unobserved characteristics may produce biased estimates. However, work is still to be done when developing new better methods and encouraging researchers to employ them.

The connection between life events and resources should be also further studied since this dissertation was able to cover it only to a limited extent; only the role of parental resources, i.e. observed parental characteristics of family background, was
covered in this dissertation, and further investigation of family background as a latent factor would be worthwhile. One important avenue for this would be the role of genetics. In general, the role of genetics in life events and inequalities are still quite seldomly examined in social sciences, mainly due to data limitations, but great progress in this direction is being taken. The reader should also take into account that the results of the current dissertation should be interpreted as associative, rather than causal, relations. The strongest article in this thesis from the causal point of view is part II which studies the link between partner’s parents’ resources and individual’s occupational development. However, further development and use of causal methods is needed. In addition, the role of partners’ parents should be further studied because in addition to this dissertation their role in research literature is mostly restricted as grandparents even though not all partner’s parents are grandparents.

As the interplay between parental resources and life events is observed in this dissertation, and there are differences on outcomes according to resources available for an individual, I believe that reducing inequality is still important and should be seriously taken to the political agenda. Individuals themselves seem to have only a very limited ability to reduce social inequality, but policies and institutions likely can (Pöyliö, 2019; Pöyliö, Erola, & Kilpi-Jakonen, 2018; Pöyliö & Kallio, 2017).
References


References


LIKE PARENT, LIKE CHILD?
The role of resources and life events from an intergenerational perspective

Sanna Kailaheimo-Lönnqvist