

LAURA PEUTERE

Trajectories of labour market attachment after family and work related transitions

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ACADEMIC DISSERTATION

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Tampere University, Faculty of Social Sciences
Finland

*Responsible
supervisor
and Custos*

Docent Pekka Virtanen
Tampere University
Finland

Pre-examiners

Docent Susan Kuivalainen
University of Turku
Finland

Professor Mikko Niemelä
University of Turku
Finland

Opponent

Professor Heikki Hiilamo
University of Helsinki
Finland

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Laura Peutere

ABSTRACT

The purpose of this study is to analyse the development of labour market attachment for individuals and their predictors after different transitions during their life course; the birth of a first child, the division of domestic responsibilities among couples after transition to parenthood, and participation in active labour market policy interventions after a period of unemployment. In particular, family related transitions are usually planned and a normative part of life. Also, participation in subsidised employment is usually voluntary and positive in terms of well-being. However, these life events may also be turning points after which individual life courses diverge, depending on other circumstances or specific contexts.

Three studies are based on register data combined from the Finnish Public Sector study (FPS), which includes information on employees in ten municipalities and six hospital districts in Finland. One study is based on Health and Social Support (HeSSup) surveys from 1998 and 2003 and register data, which represents working age population in Finland. Latent class growth analysis was used to identify patterns of labour market attachment based on the National Pension Register. In this study, labour market attachment refers to the number of months an individual worked as a wage earner or as an entrepreneur, while trajectory refers to the pattern of attachment in the long-term. Multinomial logistic regression was used to analyse the associations of the main independent variables on the trajectories when adjusting for control variables.

The first two studies analysed mothers' labour market trajectories after having their first child from 2000-2002 based on register data in the FPS, and thus, representing mainly public-sector employees. The majority (71-76%) of mothers with a valid job contract at the time of the first birth had stable attachment to the labour market during a follow-up period of 11 years. At the end of this period, about 86-88% of them had stable attachment. Those without a job contract at the time of the first birth had weaker and slower attachment to the labour market, and a lower proportion (72%) of them were fully attached to the labour market at the end of the follow-up period. Having a temporary job contract at the start of the maternity leave, or previously, was related to a weaker and delayed attachment. Living in a municipality offering additional supplements for child home care was associated with

a greater risk of weak labour market attachment among mothers without a job contract at the time of the first birth.

The third study focused on men and women living with children and a partner in their household, and based on HeSSup survey data from 1998 and 2003. The majority of both men, at 74%, and women, at 72%, had strong attachment to the labour market during the follow-up period in 2004-2011, while smaller proportions had strengthening, weak, and weakening attachments. A high responsibility for both housework and children during the survey years were associated with weak labour market attachment in later years for both genders. Among men, these associations were somewhat stronger when fully adjusted for baseline attachment and other background variables.

The fourth study focused on labour market attachment for subsidised employees in ten municipalities in the late 1990s and early 2000s. In both periods, the majority of employees (62-68%) had a strengthening attachment to the labour market after the subsidised period during a six-year follow-up, while about 10% were not employed at all. None of the trajectories led to stable attachment to labour market in this study. Higher volumes of subsidised employment in municipalities could indicate poorer quality, especially during the late 1990s, and also indicate more random selection of individuals to jobs, more competition in municipal vacancies, and, thus, poorer employment possibilities for individuals. The results showed that high volumes in municipal subsidised employment were associated with stronger labour market outcomes among participants in both periods, when adjusted for individual and municipal level factors, for example unemployment rates.

As the main contribution, this study provides descriptive information on the development of labour market trajectories for individuals after certain transitions, focusing on the shape, proportion, and predictors of these tracks and based on large samples of relevant populations. In international comparison, Finnish family policies seemed to support a combination of family roles and employment quite well. However, the structure of family leaves may have led to increased difficulties for those mothers with originally weak labour market attachment. Mothers are, on average, more responsible for children and housework, reflecting the cultural gender roles, while fathers may have more problems with combining work and unpaid work. Labour market attachment after a period of subsidised employment was, at best, weakly strengthening, weakening, or later weakly strengthening.

TIIVISTELMÄ

Tässä tutkimuksessa tarkastellaan työmarkkinakiinnittymisen kehityspolkuja ja niiden ennustajia elämän eri vaiheissa; ensimmäisen lapsen syntymän jälkeen, vanhemmaksi siirtymisen ja perhevastuiden muotoutumisen jälkeen, sekä työvoimapolitiittiseen toimenpiteeseen osallistumisen jälkeen. Etenkin perheeseen liittyvät siirtymät ovat usein suunniteltuja, normatiivisia elämäntapahtumia. Myös osallistuminen palkkatuettuun työhön on useimmiten vapaaehtoista ja myönteistä hyvinvoinnin kannalta. Nämä siirtymät voivat kuitenkin olla myös käännekohtia, joiden jälkeen yksilölliset elämänkulut eriytyvät, riippuen muista olosuhteista.

Kolme osajulkaisua perustuu Kunta-alan seurantalutkimuksessa (FPS) yhdistettyihin rekisteritietoihin, sisältäen tietoa kymmenen kunnan ja viiden sairaanhoitopiirin henkilöstöstä. Yksi osajulkaisu perustuu työikäistä väestöä edustavaan pitkittäiskyselyyn vuosilta 1998 ja 2003 (Health and Social Support, HeSSup), sekä vastauksiin yhdistettyyn rekisteriaineistoon. Tiedot työsuhteista perustuvat ansaintarekisteriin, josta tunnistettiin trajektorianalyysin avulla erilaisia työmarkkinakiinnittymisen kehityspolkuja. Tässä tutkimuksessa työmarkkinakiinnittyminen viittaa palkansaajana tai yrittäjänä työskentelyn kuukausimäärään tietynä ajanjaksona, kun taas kehityspolulla, tai trajektorilla, viitataan kiinnittymisen kehitykseen pitkällä aikavälillä. Selittävien tekijöiden yhteyttä kehityspolkuihin analysoitiin multinomiaalisella logistisella regressioanalyysillä.

Kaksi ensimmäistä osajulkaisua tarkastelivat vuosina 2000-2002 ensimmäisen lapsen saaneiden äitien työmarkkinakiinnittymisen kehityspolkuja perustuen Kunta-alan seurantalutkimukseen, edustaen pääasiassa julkisen sektorin työntekijöitä. Valtaosa (71-76%) äideistä, joilla oli voimassa oleva työsuhde ensimmäisen lapsen syntyessä, olivat vakaasti kiinnittyneitä työmarkkinoille koko 11 vuoden seurantajakson ajan. Seurannan lopussa noin 86-88% heistä oli vakaasti kiinnittynyt työmarkkinoille. Äidit, joilla ei ollut työsuhdetta lapsen syntyessä, kiinnittyivät työmarkkinoille hitaammin ja heikommin, ja pienempi osa heistä (72%) oli seurannan lopussa vakaalla työuralla. Määräaikainen työsuhde äitiysvapaan alkaessa (tai aikaisemmin, mikäli työsuhdetta ei ollut) oli yhteydessä heikompaan ja viivästyneeseen työmarkkinakiinnittymiseen. Äidin asuinkunnan tarjoama

kotihoidon tuen kuntalaisä oli myös yhteydessä heikkoon työmarkkinakiinnittymiseen äideillä, joilla ei ollut työsuhdetta lapsen syntyessä.

Kolmas osajulkaisu kohdistui naisiin ja miehiin, jotka asuivat lasten ja kumppanin kanssa vuosina 1998 ja 2003 perustuen kyselyaineistoon (HeSSup). Valtaosa sekä miehistä (74%) että naisista (72%) oli vakaasti kiinnittyneitä työmarkkinoille seurannan aikana vuosina 2004-2011, kun taas pienemmällä osuuksilla oli vahvistuva, heikko tai myöhemmin heikentyvä työmarkkinakiinnittyminen. Vastuu kotitöistä ja lapsista kyselyvuosien aikaan oli yhteydessä heikompaan työmarkkinakiinnittymiseen seurannassa molemmilla sukupuolilla. Miehillä nämä yhteydet olivat jossain määrin vahvempia, kun analyysissa otettiin huomioon kiinnittymisen lähtötaso ja muita taustatekijöitä.

Neljäs osajulkaisu keskittyi kymmenen kunnan palvelukseen 1990-luvun lopulla ja 2000-luvun alussa tukityöllistettyjen henkilöiden työmarkkinakiinnittymiseen perustuen Kunta-alan seurantatutkimukseen. Molempina ajanjaksoina valtaosa (62-68%) heistä sijoittui vahvistuvan työmarkkinakiinnittymisen kehityspolulle kuuden vuoden seurannassa tukijakson jälkeen, kun taas noin 10% ei kiinnittynyt työmarkkinoille lainkaan. Mikään kehityspoluista ei johtanut vakaaseen kiinnittymiseen. Tukityöllistämisen suuri volyyymi kunnissa voi merkitä tukimuodon heikompa laatua, etenkin 1990-luvun lopussa, satunnaisempaa henkilöiden valikoitumista työpaikkoihin, suurempaa kilpailua kunnan viroista, ja siten heikompa työmarkkinakiinnittymistä yksilön kannalta. Tulosten mukaan korkeammat volyymit olivat yhteydessä vahvempaan, pikemmin kuin heikompaan työmarkkinakiinnittymiseen molempina ajanjaksoina, kun analyysissa vakioitiin yksilöiden taustatietoja ja kuntatason tekijöitä, kuten työttömyysasteet.

Tutkimus tarjoaa tärkeimpänä antinaan kattaviin aineistoihin perustuvaa kuvailevaa tietoa työmarkkinakiinnittymisen kehityspoluista ja niihin yhteydessä olevista tekijöistä tiettyjen elämänsiirtymien jälkeen. Kansainvälisesti vertaillen suomalainen perhepolitiikka näyttää tukevan hyvin työn ja perheen yhteensovittamista. Perhevapaiden rakenne voi kuitenkin koitua ongelmaksi työmarkkinakiinnittymisen kannalta äideillä, joilla alun perinkin on heikompi asema työmarkkinoilla. Äidit kantavat enemmän vastuuta kotitöistä ja lapsista, heijastaen kulttuurisia sukupuolirooleja, kun taas miehillä nämä vastuut voivat olla suuremmassa ristiriidassa työroolien kanssa. Kunnallisen tukityöjakson jälkeinen työmarkkinakiinnittyminen oli parhaimmillaan vahvistuvaa, heikentyvää tai myöhemmin vahvistuvaa.

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ORIGINAL PUBLICATIONS

The thesis consists of the following publications, which are referred to in the text by Roman numerals.

- I Peutere Laura, Vahtera Jussi, Kivimäki Mika, Pentti Jaana & Virtanen Pekka (2015). Job contract at birth of the first child as a predictor of women's labor market attachment: Trajectory analyses over 11 years, *Nordic journal of working life studies* 5(1), 9-30.
- II Peutere Laura, Haataja Anita, Vahtera Jussi, Kivimäki Mika, Pentti Jaana & Virtanen Pekka (2014). Heikentääkö kotihoidon tuen kuntalisä äitien kiinnittymistä työelämään? *Yhteiskuntapolitiikka*, 79(3), 291-305.
- III Peutere Laura, Rautava Päivi & Virtanen Pekka (2017). Domestic responsibilities as predictors of labour market attachment trajectories in men and women. *International journal of sociology and social policy*, 37(9/10), 536-554.
- IV Peutere Laura, Aho Simo, Vahtera Jussi, Virtanen Marianna, Pentti Jaana & Virtanen Pekka. Volume of subsidized employment and future labor market attachment. Manuscript submitted for publication.

1 INTRODUCTION

The purpose of this study is to describe labour market attachment trajectories for individuals in different life stages. Broadly, labour market attachment refers to the chain of relationships with work during an individual's life course, between compulsory basic education and retirement (Virtanen et al. 2011). In practice, in this study, labour market attachment refers to the number of months an individual has been working as a wage earner or as an entrepreneur indicating the strength of attachment in the long-term. Although the division between unpaid and paid work is artificial, it is especially paid work that defines the lives, identities, and living conditions of individuals and their families in many ways (Moen 2016). Paid work affects also the income level after having a working career (Koskenvuo 2016; Kuivalainen et al. 2018).

I examine labour market trajectories as part of one's life course that are shaped by historical and cultural contexts as well as institutional structures (Mayer 2004; Moen 2016). I focus especially on those life stages that may be important turning points during one's life course or other ways that directly affect the development of a later working career; the birth of the first child, parenthood during one's mid-life stage, and participation in active labour market policy intervention after a period of unemployment.

The birth of a child and the transition to parenthood, and subsidised re-employment are partly structured by the Finnish welfare regime. It is possible to choose from different ways to arrange child care in families, while different benefits and interventions are available in case of unemployment. In practice, the availability or quality of these options offered by the state may differ for certain subgroups or regions, possibly leading to increased differences in later labour market attachment.

Previous studies and statistics give detailed information on employment rates and careers from different perspectives. The Labour Force Surveys of Statistics Finland and Employment Service Statistics from the Ministry of Economic Affairs and Employment provide cross-sectional information on employment and unemployment rates in Finland. Research based on register data on work according to the earnings-related pension acts tells about the length of working careers of men

and women and different age cohorts. For example, the average length of a working career was 32.6 years among those who retired in 2011, and men's careers were two years longer than women's (Kautto & Salonen 2013). However, these statistics do not tell how employment spells are temporally situated during one's life course, and if there are differences between individuals, or men and women, with this respect.

The purpose of this study is to identify patterns of labour market attachment within different groups of individuals. Certain methods, such as latent class growth analysis, provide the possibility to evaluate the shape and prevalence of developmental patterns based on longitudinal data. These kinds of methods have been increasingly used in studies on employment careers both in Finland and internationally (e.g. Damaske & Frech 2016; García-Manglano 2015; Lu et al. 2017; Madero-Gabib & Fasang 2016; Nwaru et al. 2018; Ojala et al. 2018; Serra et al. 2017; Wahrendorf et al. 2017). Trajectories provide descriptive information as such and are also more informative as employment outcomes than the level of average development or employment situation at single time points.

The present study is based on survey and register data from Finland in the 1990s and 2000s. The employment and family policies, employment structures, macro-economic situation, and the division of paid and unpaid work between men and women create the main context for this study.

In international comparisons, gender equality and the possibilities to combine work and care are relatively good in Finland (e.g. Ray et al. 2010). On the other hand, there are features in the Finnish labour market and in family policies that reinforce traditional roles for men and women. Also, the attitudes of parents are quite traditional, preferring extended child home care periods especially for mothers. For example, a survey in 2013 showed that 91% of mothers with a two-year-old child would prefer child home care at least until the child turns three, if they didn't have to think about income, career, or others' opinions (Närvi 2017, 79). Another survey showed that almost 60% of Finns prefer the traditional family model, in which the father is the main breadwinner in families with children under school-age, while 40% support an equal earner-carer model (Salin et al. 2016). Finland, like some other Nordic countries, has provided benefits for child home care and private care in addition to the possibilities to public childcare (Duvander & Ellingsæter 2016). Child home care is especially popular in Finland, partly due to relatively short parental leave periods and poorer possibilities to return to work part-time (Duvander & Ellingsæter 2016; Salmi et al. 2017). The use of temporary employment is also common in Finland among young women, meaning that their job contracts often do not continue after childbirth.

As a result of the structure of such family policies, women's weaker positions in the labour market, and ideals for child care, infers that mothers take the majority of family leaves in Finland. A lack of a valid job contract, temporary jobs, and the availability of municipal supplements for child home care allowance have been associated with weaker labour market attachment after childbirth among mothers (e.g. Kosonen 2014; Närvi 2017). This study contributes to these previous findings with register based samples, register data on employment contracts, longer follow-up periods, and with separate analyses according to the mothers' labour market status at the time of their first birth.

On average, mothers take the main responsibility for children and other unpaid work at home also after returning to the labour market, and may have more problems than men in combining work and unpaid work. This study is the first to examine how the division of these kind of domestic responsibilities among couples are related to both men and women's later labour market trajectories.

Periods of unemployment may also affect employment trajectories and pension income, depending partly on the ways in which re-employment is supported. Subsidised employment in municipalities has been typically used as the last option to relieve long-term unemployment, and usually does not help individuals to attach to the regular labour market (e.g. Asplund et al. 2018). However, previous studies, especially from Finland, have not taken into account regional differences in volumes of subsidised employment, for example how large of a proportion of the unemployed are participating in this kind of intervention within a municipality. This study focuses on the municipal context with varying volumes in this intervention during two different time periods.

This study is based on data from two longitudinal research projects. The first is the Finnish Public Sector study (FPS), conducted by the Finnish Institute of Occupational Health. The second is the Health and Social Support (HeSSup) survey study for working age men and women that began in 1998, and continued in 2003 and 2011. Three sub-studies are based on register data combined in the FPS study, and one sub-study is based on the HeSSup surveys from 1998 and 2003 combined with register data. In all studies, employment trajectories are analysed with latent class growth analysis based on the National Pension Register maintained by the Finnish Centre for Pensions.

Although the data are from two previous decades, the questions regarding mothers' labour market attachment and division of domestic responsibilities between men and women are still relevant. There have been many attempts to renew the structure of family policies in Finland in recent years (Haataja 2016; Salmi 2017),

but no major reforms have been made to improve gender equality. This study contributes to the discussions on the structure of family leaves and gender equality in the labour market. Active labour market interventions have also been reformed in recent decades, while the main types of interventions still exist. This study offers a new kind of descriptive information on the development of labour market attachment among subsidised employees in the late 1990s when a relatively large share of the unemployed participated in this kind of intervention, and in the early 2000s when there were limited volumes and more restricted access to subsidised employment.

2 REVIEW OF THE LITERATURE

2.1 Conceptual framework

In this study, labour market trajectories are analysed from the sociological perspective on life course. According to this perspective, there are three main mechanisms that shape life courses (Mayer 2004). First, institutional structures set the boundaries for the development of individual lives. These include, for example, the educational system with age norms and qualifications, labour laws, occupational structures, social insurance, and family norms and laws. The second mechanism relates to the ways in which previous experiences in life direct the development of subsequent trajectories – either through rational choice or guided by social norms or cultural factors. Thirdly, the composition of typical life course patterns, as a whole, within a given age cohort creates an important context for individuals' lives (Ibid.).

Individual life courses are not only the product of these mechanisms, but they are also, as a whole, a source for change in social structures (Mayer 2004). For example, mothers' participation in paid labour has partly created a demand for public childcare (see Steiber & Haas 2012, 358), while the availability of childcare, in turn, facilitates mothers' abilities in future cohorts to participate in the labour market. On the other hand, changes in family policies may change gender roles and attitudes over time.

Research on the life course is often interested in transitions within individuals lives. Transition refers to changes in state or role, such as having a child, that may lead to changes in identity and subsequent behaviour (Elder 2003). In this study, the focus is on labour market attachment after a transition to parenthood on one hand, and the transition from unemployment to employment, or subsidised employment, on the other hand. Conceptually, these are normative life transitions as opposed to non-normative or unexpected life events, such as illness or death of a family member (e.g. Levy et al 2005). Although job loss and unemployment itself can be sudden and stressful, the transition to subsidised employment is usually planned, voluntary, and a positive event in terms of well-being (e.g. Sage 2013; Aho et al. 2005).

These two different kinds of transitions also provide the possibility to examine labour market attachment from the perspective of two welfare structures or state

interventions; family leaves taken around childbirth may interrupt employment for a shorter or longer time, while the purpose of subsidised employment is to interrupt unemployment.

These transitions have been characterized with different terms depending on the focus of the study. Some major life events may be described as “turning points”, changing the direction of development (Elder 2003). For example, normative transitions related to work, family, education, and social transitions were commonly mentioned as turning points among Finnish men and women in their 30s, leading to positive or negative changes in their lives by their own evaluations (Rönkä et al. 2003). DiPrete and McManus (2000) used the term “trigger event” in their analyses of important life events, such as changes in employment status and family structure based on subsequent earnings and household income. The birth of a child has also been examined as a poverty risk (Barbierry & Bozzon 2016; Vandecasteele 2010).

Although transitions have been described as “discrete and bounded in duration” (George 1993, 358), some transitions may be less distinct than others. For example, the transition from studies to working life, or forming a relationship or starting a family, usually happen step-by-step. As an example of a less discrete transition, this study is interested in the life stage during which the division of domestic responsibilities is negotiated between couples with children.

Life course research is often interested in cumulative processes, how early advantages or disadvantages accumulate in later life (DiPrete & Eirich 2006; O’Rand 2009). With respect to adult lives, employment breaks, such as unemployment and child care periods, may affect later employment outcomes through different mechanisms. “Motherhood wage” and “career penalty” refers to the negative effects of children and childcare breaks (e.g. Aisenbrey et al. 2009; Budig & England 2001), whereas “unemployment scarring” refers to the negative effects of unemployment on later career periods (Gangl 2006). Both childcare breaks and unemployment may affect later wage and career development by the loss of human capital on the one hand, and by the stigma related to these breaks on the other hand (Becker 1993; Evertsson & Duvander 2011; Gangl 2006; Williams et al. 2013). In addition to these mechanisms, the transition to unemployment or parenthood may affect an individual in psychological ways, for example changing their orientations or well-being. These different processes may take time and accumulate gradually. Institutional and cultural contexts and possible state interventions, such as job protected family leaves, may further modify these effects.

2.1.1 Transition to motherhood

The birth of a child and the transition to motherhood is an event that varies according to the life stage and other life conditions. A mother is usually at home taking care of their baby after the birth, but the length of this period depends on her previous labour market status, her spouse's employment situation, what kind of family leaves and childcare options are available, personal orientations, and cultural norms towards mothers and child care.

Individual factors that are related to shorter periods outside of the labour market after childbirth are, especially, higher levels of education and high occupational status (e.g. Närvi 2017; Rønsen & Kitterod 2015). With respect to institutional factors, paid and job-protected parental leaves and public childcare improve mothers' labour market attachment after childbirth, while on the other hand, the possibility for long, unpaid leave is associated with lower maternal employment (Boeckmann et al. 2014). The availability of part-time jobs has been linked with an earlier return to work (e.g. Pacelli et al., 2013).

Also, working conditions, such as the pace of work and parents' evaluations on the quality of day care, are related to child care choices (Hietamäki et al. 2018; Närvi 2017). Working in family-friendly public sector positions has been associated with more continuous work careers among mothers (Lu et al. 2017, Stier & Yaish 2008). In Finland, mothers working in the municipal sector, social care, health care, and education take longer child home care leaves compared to other mothers. However, the employment sector was not associated with a return to work for two years after childbirth, when sociodemographic factors were controlled for. Those working in the municipal sector were less likely to be unemployed when the child was two years old. (Närvi 2017.)

The cultural context regarding ideal child care also affects mothers' decisions, and may explain the discrepancies between possibilities and practices (Pfau-Effinger 2012). In Finland, child home care and especially the mother's role in caring is appreciated despite opportunities for public childcare (Hietamäki et al. 2018; Närvi 2017; Repo 2012). In practice, the decisions on childcare are made considering the, often controversial, ideals of child care, the children's well-being, the economic situation in the family as a whole, and the parents' well-being and employment situations (Närvi 2014; Repo 2012; Terävä et al. 2018).

The transition itself can change mothers' orientations to work and family. Evertsson (2013) showed that mothers' work commitments decrease temporarily after childbirth. Steiber and Haas (2012) further note in their review that the

association between preferences and employment behaviour seem to be reciprocal; while preferences direct mothers' decisions in working life, their preferences and attitudes also adapt to the prevailing situation. Gangl & Ziefle (2015) showed that extensions in parental leaves in Germany lowered mothers' work commitment through two different mechanisms; creating a norm of the length of the time spent at home with a child, and changing the orientations among those who take leave from work. A qualitative study also showed how mothers' working orientations may change after being "exposed" to a family leave (Halrynjo & Lynn 2009).

2.1.2 The division of domestic responsibilities after the transition to parenthood

The birth of a child is an event after which the division of unpaid and paid work among couples changes; women often start to take more responsibility over home care and children, which makes it possible for men to focus on paid work (e.g. Baxter et al. 2008; Grunow et al. 2012; Nitsche & Grunow 2016). For example, Nitsche and Grunow (2016) describe the transition to parenthood as a turning point towards traditional gender roles. Their follow-up study showed that the division of housework among couples changed to more traditional roles after the birth of a child and stayed this way in subsequent years, while similar development could not be seen among childless couples.

Longitudinal studies have evaluated the role of relevant theories explaining the division of unpaid work among couples after the transition to parenthood. For example, Grunow et al. (2012) showed that parents' labour market positions – indicating relative resources – mainly did not explain the division of responsibilities in the long-term, supporting the role of gender norms. Nitsche and Grunow (2016) found that a wife's relatively higher income was related to a more equal division of housework among couples with children, but was not significant when controlling for gender ideologies. Thus, egalitarian gender ideologies were more important predictors of equal division of housework over time. However, the birth of a child also remained a significant factor in explaining more traditional sharing of responsibilities, even when both relative resources and gender ideologies were controlled for.

Also, the institutional and cultural context affects the division of responsibilities among couples (see Lachance-Grzela & Bouchard 2010). For example, Bühlmann et al. (2010) showed with cross-sectional data that the proportions of couples with

egalitarian values and practices relating to paid work and domestic work were highest in socio-democratic countries, including Finland, at all life-stages, and also among those with small children. The ideal of shared parenting was present also in interviews among Finnish parents, while their relative positions in the labour market partly defined the ways in which couples could follow this ideal in practice (Närvi 2014).

When looking at one's life course as a whole, men and women make choices and behave according to the "beliefs, values and identities" they are socialized to and the possibilities and constraints they later have in the labour market (Moen 2016). For example, socialization directs men and women to different occupations and subsequent positions and resources in the first place, which in turn reinforces previous divisions between genders (Ibid).

2.1.3 Transition from unemployment to subsidised work

In principle, a subsidised job offers an opportunity for an unemployed person to re-employ temporarily, to increase employability, and accrue skills needed in the labour market. The main, explicit purpose of this intervention, as in other active labour market policy measures, is to cut unemployment and improve attachment to the regular labour market. Since the recession in the 1990s in Finland, however, the explicit and implicit purpose of activation has also more commonly been to prevent social exclusion, as a response to the increase of structural and long-term unemployment and principles outlined in EU employment strategies. Thus, in some cases, the purpose of interventions is to achieve social political goals. (Aho & Arnkil 2008.)

Evaluations from Finland show that subsidised work in municipalities or in the public sector in general does not usually lead to a more stable position in the labour market (Aho et al. 2018; Aho & Kunttu 2001; Asplund et al. 2018; Hämäläinen & Tuomala, 2006). Also, international meta-analyses on employment effects of different active labour market policy measures show that subsidised employment in the public sector does not improve later employment, neither in the short-term nor long-term (e.g. Card et al. 2018). The reason for poorer results is targeting and selection. In Finland, subsidised jobs have been meant to be used as a secondary intervention for the unemployed compared to other measures, such as assistance in job seeking and vocational training provided by employment services. Studies also show that it is common to participate in interventions repeatedly, which means that

periods of unemployment and participation in different activation measures follow each other (Aho et al. 2018; Aho & Koponen 2008). Longer periods of unemployment are relatively common for participants in municipal subsidised employment, as well as repeat participation in the same intervention (Aho et al. 2018).

The long-term unemployed may have problems with their health or work ability and thus a need for health services or other support in transitions to work (Saikku 2011; Saikku & Hannikainen 2019). When examining the employment outcomes of activation interventions, it is therefore useful to understand the ways in which these interventions may relate to changes in well-being. Research has increasingly taken into account the health effects of interventions (Strandh 2001; Rose 2018; Sage 2015). It has been emphasized that increased well-being among the unemployed may improve their re-employment possibilities (Rose 2018; Saloniemi et al. 2014).

Strandh (2001) developed a framework that has been utilized, also in later research, on the health effects of different activating measures (e.g. Andersen 2008). He identified three factors that are related to poor mental well-being among the unemployed; psychosocial need for employment, lack of economic control, and predictability in life. The first issue, psychological need for employment, is based on Jahodas (1982) theory on the reasons for which employment is important for well-being, while economic control and life course predictability are based on Fryer's (1986) agency theory. Different state interventions may improve well-being among the unemployed to the extent they include these different elements (Strandh 2001).

The context of activation may also create an artificial boundary between "normal" work and subsidised work, although the latter may provide important services for society (Tedre & Perälä, 2010). Saloniemi et al. (2014), in turn, found that well-being effects of training interventions differed according to socioeconomic groups, being less beneficial for those with lower socioeconomic status. However, as Sage (2013, 14) points out, most quantitative studies have not found harmful effects of participation for well-being.

While the transition from unemployment to subsidised work may improve well-being, there is less information on how long this effect lasts. When subsidised jobs are temporary, they may not improve the predictability of life course and well-being as much as a transition to a permanent job (Strandh, 2000). Andersen (2008) found that the well-being effects of training last longer than the training period itself, but decrease over time.

The transition from unemployment to subsidised work, as well as the experience of unemployment itself, may also differ according to the economic context (Strandh

et al. 2010). Meta-analyses show that interventions improve employment outcomes especially during economic downturn (Card et al. 2018). In line with these findings, Rose (2018) concluded that well-being effects could also be better during a financial crisis, although this hypothesis has not yet been tested.

In Finland, subsidised jobs in municipalities take place among employees in the regular labour market and are paid according to their task description. Before 1997, it was also possible to renew the right to earnings-related unemployment benefits with subsidised jobs, which guaranteed a better financial situation also after the period. Subsidised work may, thus, improve an individual's well-being, including the psychological aspects of work, increasing the predictability of life, and their financial situation. Improvements in well-being and increases in social contacts may both improve later employment possibilities as well. On the other hand, based on previous studies on employment outcomes and well-being, it is probable that these effects are mainly temporary.

2.1.4 Labour market attachment and trajectories

In this study, labour market attachment refers to formal relationships with work, rather than subjective perceptions of attachment (Virtanen et al. 2011). This restriction also means that all kinds of informal work, such as volunteer work or undeclared work, are not included. Labour market attachment refers to the presence of a valid job contract, which may also include periods out of work, such as parental leaves or absences caused by sickness. The emphasis on formal relationships with work also refers to the ways in which employment spells are recorded in the National Pension Register, which is the main data source. For example, participating in subsidised re-employment initiatives are included, as these periods accrue pension. This data is described in more detail in the following “Methods” section.

This study counts the number of months employed each year as referring to the strength of attachment, whereas the reasons for the periods without employment contract are not differentiated. They can include unemployment, studying, periods spent abroad, or longer child care periods, for example. Ideally, the measure of attachment would also differentiate between permanent and different temporary contracts, or full-time and part-time jobs. However, that is not possible in this study. Thus, those with a long-term, permanent job contract and those with consecutive, short-term temporary jobs and self-employed are regarded as equally and fully attached to the labour market, as long as they receive some earnings each month.

Labour market attachment refers to the strength of attachment during a certain time point (in this case year or a half year period), whereas labour market trajectories refer to the longitudinal nature of attachment. In principle, one's work life course begins gradually after the age of 16, after completing compulsory comprehensive schooling, and lasts until retirement. In practice, the strength of labour market attachment may vary during one's life course depending on, for example, the length of education, child care breaks, and unemployment.

Research has increasingly focused on labour market trajectories, or labour market attachment in the long-term. Studies have identified different patterns in development, how common these patterns are, and how they are linked to other factors. Inter-cohort studies focus on the differences between age cohorts, while intra-cohort studies analyse more detailed differences between individuals and subgroups within one age cohort (Elder & George 2016). Inter-cohort studies show whether there are differences in employment careers between generations, focusing especially on the role of historical context (e.g. Manzoni et al. 2014; Simonson et al. 2011). Intra-cohort studies may reveal, for example, the relative role of external constraints (e.g. health limitations, discriminated at work), individual preferences (e.g. expectations to work), and timing of parenthood (e.g. teen mother) for the development of employment patterns within a single age-cohort (García-Manglano 2015).

2.2 Research on labour market trajectories: methodological perspectives

Longitudinal data offer the possibility to analyse employment careers or trajectories in many different ways. In this section, I compare these possibilities from both methodological and substantial viewpoints.

Regression analyses has been used to analyse the effect of independent variables on employment status in subsequent time points (e.g. Baxter 2009; Bonet et al. 2013; Närvi 2017). Studies have also analysed, for example, the time until entering employment after childbirth (Rønsen & Sundström 2002), time until career progress (Evertsson & Duvander 2011), or the time until a person experiences a year without unemployment after participating in an active labour market policy measure (Nordlund 2011). Similarly, event history analyses have been used to analyse the time until exiting and re-entering employment (e.g. Stier & Yaish 2008).

Research has also utilized panel data to control for fixed unobserved factors that account for both the independent and dependent variables. Fixed effect regression has been used to analyse the effect of housework (Bryan & Sevilla-Sanz 2011), career breaks and reduced working time (Coltrane et al. 2013) on earnings, and the number of children on labour market status, occupational status, and earnings (Kahn et al. 2014). Fixed effect regression is based on the assumption that unobserved factors, such as personal orientations, are stable during the life course. However, previous experiences may change orientations and expectations and direct the development of later career choices. Also, other methods, such as instrumental variables (Bonet 2013) and difference-in-differences analyses (Gangl 2006; Rose 2018), have been used to study employment and related outcomes in order to identify causal associations.

The above-mentioned methods focus on average effects, while with other methods it is possible to focus on the development as a whole. There are many possible ways to analyse developmental trajectories longitudinally. These choices relate to at least three issues: 1) what kind of variables are used to measure development, 2) is the research interested in average patterns of variations among individuals, and 3) are the developmental trajectories based on theory or derived from the data itself (George 2009, 171-175.) With categorical variables, it is possible to form trajectories that describe transitions between different statuses (transition-based trajectories), while trajectories based on continuous variables are level-based (Ibid, 172).

It is useful to analyse disaggregated trajectories if there is variability in the data and if the developmental patterns differentiate from each other in meaningful ways (George 2009, 172-173). The study by Frech & Damaske (2012) is an example of a research in which mothers' employment trajectories were formed based on theoretically relevant groups, using certain pre-defined decision rules. For example, a group of "steady workers" included those who worked at least 35 hours per week during the follow-up time, allowing for two periods of unemployment at maximum.

There are also ways to identify developmental trajectories from the data itself. Growth curve analysis can be used to estimate the average development pattern from the data (George 2009). Manzoni et al. (2014), for example, analysed career progression with German survey data from different birth cohorts separately for men and women. The study showed that men progressed in their career with a higher rate, and during a longer period of time, than women. Career progress was slower among women, suggesting that some women experienced downward shifts in their careers (Ibid.). This method offers detailed information on the effect of different

factors on the level and rate of development, although it does not take into account different directions in development that well.

When using latent class growth analyses (and growth mixture models) and sequence analysis, it is possible to identify latent groups or clusters with different developmental patterns. Latent class growth analyses, or “group-based trajectory modeling” (Nagin 2005), are mostly based on continuous variables creating level-based trajectories, whereas sequence analysis is based on categorical variables describing transitions between states. With both methods, each individual can be assigned to the most likely latent group or cluster. The strengths of these methods lie in visually illustrative descriptive information of developmental patterns, and these methods have been increasingly used. These methods have been used to study employment careers or patterns as such (Virtanen et al. 2011; Serra et al. 2017), linked to predictors (Damaske & Frech 2016; García-Manglano 2015; Hynes & Clarkberg 2005; Majeed et al. 2015), or linked to outcomes (Madero-Cabib & Fasang 2016).

Only a few studies have analysed labour market attachment trajectories of mothers after childbirth. Hynes & Clarkberg (2005) analysed mothers’ employment patterns around their first and second childbirth with a follow-up of two years based on the National Longitudinal Survey of Youth from the US. Also, the previously mentioned study by Frech & Damaske (2012) used the same survey data, and categorized women’s employment patterns to four theoretically relevant groups following the birth of the first child, with a follow-up of 12 years. These groups were “steady”, “pulled back or part-time”, “interrupted” and “stay at home”. Also based on data from the United States, Lu et al. (2017) analysed mothers’ employment patterns with sequence analyses one year after childbirth. They found four relevant clusters and labelled them as “full-time”, “part-time”, “withdrawal” and “transition to part-time”. Stewart (2009) analysed, with British data, employment patterns among lone mothers up to 13 years after the birth of the youngest child, finding nine different clusters of development.

Research has also focused on women’s employment patterns during their life course in general, not only after childbirth. In addition to those with full-time or stable attachment, these studies have found groups of housewives, detached, part-time or discontinuous employment careers (Simonson et al. 2011; Damaske & Frech 2016; García-Manglano 2015).

Studies have also compared men and women with respect to their employment patterns. Huang et al (2011) utilized the National Longitudinal Survey of Youth from the US, and analysed men and women’s employment patterns separately between ages 23-43. Five groups were found among both genders. The proportion of those

with the strongest attachment was 76.5% among men and 58.8% among women. Among men, they found a group with low attachment at 5.1%, while among women a group with a U-shaped attachment at 7.9%.

Serra et al. (2017) analysed employment trajectories with register data from Spain. They identified four relevant groups: “high” (40.2%), “increase” (23.9%), “decreased” (9.2%), and “low” (26.6%) labour force participation. The majority of those in the high group were men (73%), while the majority of those with the low labour force participation were women (63%). Virtanen et al. (2011) also analysed genders together with the Northern Swedish Cohort study using latent class growth analysis. They found six tracks for labour market attachment between ages 30-42 among men and women born in 1965. The proportion of the strongest, high level trajectory was 68%, and the majority of individuals assigned to that track were men (57%).

Majeed et al. (2015) analysed, with Australian retrospective survey data, employment patterns for persons between ages 20-65 separately for men and women who were born between 1947 and 1951, being 60-64 years old when surveyed for the first time. The proportion of “mostly full-time-work” was 35.6% among women and 61.9% among men. Only among women, groups with “increasing part-time work” (18.4%) and “mostly not in paid work” (17.3%) were identified.

There is less research on employment patterns among those who are less advantaged in the labour market or who have experienced unemployment. Nwaru et al. (2017; 2018) analysed labour market attachment trajectories among those who participated in municipal subsidised employment in Finland, based on a restricted version of the same data that is used in the present study. Jolkkonen et al. (2017) compared labour market attachment trajectories among employees after downsizing in firms, comparing the trajectories between displaced and retained workers. Ojala et al. (2018) analysed labour market attachment based on the Finnish Quality of Work Life Surveys and register data, comparing development among those with originally temporary and permanent job contracts.

Although previous studies have been based on different samples, methods, and variables, it is possible to find common features in results. It is possible to compare the shape of trajectories, and the proportions of those with stable or strong labour market attachment, or those who are out of the labour market. As a rule, men more commonly than women belong to the strongest, continuous, stable, or full-time groups. When men and women have been analysed separately, different patterns have been identified for genders.

Most of the previous studies on employment patterns have been based on prospective or retrospective survey studies. With retrospective surveys, it is possible to focus on long periods of time, but there are problems related to selected attrition in samples and memory biases. Studies utilizing latent class growth analyses have been based on dichotomous repeated variables such as employed or not employed (García-Manglano 2015; Hynes & Clarkberg 2005), weekly working hours (Damaske & Frech 2016), or the percent of weeks worked per year (Huang et al. 2011). With a categorical variable and sequence analysis, it is possible to take into account different statuses, such as working full-time or part-time. Latent class growth analysis can also be applied to multiple outcomes in each time point. Saloniemi et al. (forthcoming), for example, analysed the development of four binary variables at the same time, indicating whether or not individuals had experience with employment, education, unemployment, or receiving other social security benefits in a given year. Finnish studies have commonly been based on the National Pension Register, for example, indicating the number of months employed in each full or half year period (Jolkkonen et al. 2017; Nwaru et al. 2017; 2018). Also, a study based on Spanish register data used information on the number of working days per year (Serra et al. 2017). With this kind of data, it is possible to focus on the intensity of labour market attachment.

2.3 Predictors of labour market attachment in this study

This study analyses how certain factors are related to individuals' labour market attachment after the transitions described previously. The following is a review of these factors based on previous studies.

2.3.1 Mothers' labour market attachment after their first birth

The effects of family leaves and benefits on mothers' employment around childbirth have been widely studied. The results of these studies emphasize the role of job protected parental leave supporting job continuity (e.g. Baker & Milligan 2008; Brugiavini et al. 2013). However, only a few studies have taken into account the quality of job contracts and their effects on mothers' labour market attachment after childbirth. A temporary job contract may end during pregnancy or during the maternal or parental leave.

A survey study among Finnish parents with a two-year-old child in 2013 showed that mothers with a previous permanent job contract were more likely to return to work, and less likely to be unemployed compared to temporary employees (Närvi 2017). On the other hand, 24% of temporary employees, compared to 7% of permanent employees, told that the fear of losing their job was the reason to return to the labour market (Närvi 2017, 94). Likewise, a qualitative study among Finnish parents showed that some temporarily employed mothers felt the pressure to return to the job soon after giving birth (Närvi 2014).

However, based on results from other countries, it seems that temporary employment is more likely associated with a slower return to work, although the follow-ups in these studies have been quite short, less than two years (Baxter 2009; Bonet 2013; Gutiérrez-Domènech 2005; Saurel-Cubizolles et al. 1999). Also, a study from Spain found that a high proportion of fixed-term contracts in the region was related to a higher likelihood for mothers to withdraw from the labour market after childbirth (Herrarte et al. 2012). Having a temporary job contract or no valid contract at all, thus, seem to prolong child care periods.

Another study from Spain also found that mothers with a temporary job contract a year before the birth of their first child were more likely than permanent employees to change to self-employment a year after the birth of the child (Bonet et al. 2013). The finding was explained by the fact that temporary employees have worse possibilities to combine work and family than permanent employees, and thus, may prefer self-employment after childbirth. Also in Finland, it is easier for those with a valid job contract to return to work with reduced working hours after a childbirth (see Närvi 2012).

A mother's return to work may also be prolonged if child home care periods are specifically supported for a longer time. In Finland, Kosonen (2014) has analysed the effects of municipal variations in additional support for child home care allowances on mothers in the labour market. The study showed that a 100 euro increase in the supplement payment per month reduced mothers' labour market participation by 3%. A more recent study confirmed these findings showing that municipal supplements for child home care decreased the numbers of working mothers (Kosonen & Huttunen 2018). The effect was found in different subgroups of mothers and also among those with a valid job contract, yet not among single mothers.

Also, a Finnish study among parents with a two-year-old child analysed the associations between municipal supplements for child home care and the length of mothers' child home care periods (Närvi 2017, 78-79). Receiving additional

municipal supplements was negatively associated with a very long child home care period (>24 months), but not associated with long (>15 months) or short periods (<8 months) when adjusting for labour market status at the time of childbirth and other individual background aspects. The result was explained by the fact that municipal support is available especially in areas with high employment rates, good employment possibilities, and a high demand for day care.

The effects of childcare subsidies have also been analysed in other Nordic countries. In Norway, it was possible to get support for child home care after policy reform in 1998 if a 1-2 years old child was taken care of at home instead of at public day care. This policy reform decreased the number of mothers in the labour market (Naz 2004; Rønsen 2009; Schone 2004). A further study showed that the subsidy had long-term effects on employment among mothers without a university degree or with relatively lower earnings. Their full-time employment was reduced when the child was four and five years old and they were no longer eligible for the care subsidy. A similar effect was not found among mothers with higher education or higher earnings (Drange & Rege, 2013).

In Sweden, child care subsidies were available in some municipalities from 2008-2015. Giuliani & Duvander (2017) compared women's employment rates in municipalities offering this benefit with municipalities not offering the benefit. The growth of female employment rates was slower in non-urban municipalities that offered the childcare benefit during the study period compared to municipalities not using this policy – when controlling for other municipal characteristics (e.g. women's educational level and fertility rates). The introduction of the policy was not associated with female employment growth rates in urban municipalities.

2.3.2 Domestic responsibilities and parents' labour market attachment

As noted in the previous chapter 2.1.2, the birth of the first child is an event during the life course after which the domestic responsibilities are divided among couples, quite often in traditional way. This study focuses on the division of responsibilities during this life stage and the consequences on parents' later labour market attachment.

Having responsibilities for housework and children may affect the possibilities in the labour market through different mechanisms. It is also evident that the association is reciprocal; spouses' relative positions in the labour market, as well as the gendered use of family leave, may direct the division of responsibilities at home. This, in turn,

may affect their later decisions, orientations, and possibilities in working life. In particular, qualitative studies have described this as a process (Becker & Moen 1999; Halrynjo & Lynn 2009; Närvi 2014; Singley & Hynes 2005).

Those with greater responsibilities, as well as those reducing work hours for family reasons, may be perceived as less committed and reliable workers by employers, and thus offered poorer career possibilities (Williams et al. 2013). Greater domestic responsibilities may also contribute to conflict between work and family roles, thus making it more difficult to cope with work demands (Greenhaus & Beutell 1985). Harryson et al. (2012) found that taking entire responsibility for domestic work was associated with psychological distress among Swedish women living with a partner and children.

Previous quantitative studies have analysed especially the association between time used on housework and wages utilizing fixed effect regression with panel data (e.g. Bryan & Sevilla-Sanz 2011; Noonan 2001), and the division of routine housework tasks among couples with women's employment outcomes (Cunningham 2008). The focus of this study is the subjective feeling of responsibility, which has not been previously linked with employment trajectories. Previous studies have mainly analysed, for example, how the family composition, as a whole, is related to the labour market attachment of men and women (Biemann et al. 2012; Huang et al. 2011). Gender ideologies and work-family orientations have additionally been taken into account in predicting women's labour market attachment (Damaske & Frech 2016; García-Manglano 2015; Hynes & Clarkberg 2005).

2.3.3 Labour market attachment among subsidised employees

As noted above, subsidised employment in the public sector or municipalities does not commonly lead to regular employment. The outcomes may also partly depend on the volumes of interventions, for example how large of a proportion of the unemployed are placed in interventions. At the macro-level, high volumes of subsidised employment can have indirect negative effects that weaken the overall benefits. These include, for example, displacement and substitution effects. Displacement effects means that the subsidised jobs replace positions that would have been available without the intervention, while substitution effects refer to individuals receiving wage support being recruited instead of regular job seekers due

to their lower wage costs. (see e.g. Brown ja Koettl, 2015; Asplund et al. 2018 for reviews.)

The volume of interventions may also have an effect on individual outcomes, which is the focus of this study. In Finland, municipalities have an independent role, together with local employment services, to allocate national funding to subsidised jobs. The volumes of subsidized employment were especially high in the late 1990s as a response to the recession, and were decreased after an evaluation at the end of the decade (Skog & Räisänen 1997). However, there is still variation in activation rates between municipalities (e.g. Riipinen 2014; Saikku 2016). The economic situation recovered between the late 1990s and 2000s, and may have played a role in the ways in which subsidised employment and their volumes are related to their outcomes.

The municipalities may also differ in targeting their employment interventions. Some municipalities seem to recruit especially those with a relatively short history of unemployment, whereas other municipalities offer employment opportunities to those with a longer history of unemployment to prevent exclusion from the labour market (Sihto et al. 2012, 16–20). It is also possible that higher volumes, in general, result in a more random selection of participants for the jobs (Aho 2008), and possibly poorer employment outcomes.

Economists have analysed the larger equilibrium effects, and cost and benefits of different interventions, such as the role of intervention volumes in their outcomes (Crépon et al., 2013; see also Crépon & Berg 2016). For example, Ferracci et al. (2010) found, with combined administrative and survey data, that the volume of training programs for the unemployed in different regions was negatively related to individual outcomes both among participants and non-participants. Thus, the net benefits were decreased possibly due to increased competition.

In Finland, the limited number of vacancies available in municipalities may restrict later employment possibilities of subsidised employees (Aho & Kunttu 2001). It has also been pointed out that to reduce displacement effects and increasing cost-effectiveness, the amount of subsidised work should be restricted and targeted only for limited groups, such as the long-term employed (e.g. Asplund et al. 2018, 27). In Finland, since the 1990s, municipal subsidised employment has been targeted chiefly toward the long-term unemployed, while the details of this intervention have changed with time. In practice, those who could re-employ without the intervention are also recruited, and part of the subsidised employees have applied for the interventions themselves (Aho et al. 2005; Aho 2008).

2.4 Starting points of this study

The purpose of this study is to analyse the development of labour market attachment after certain family and work related transitions. Based on previous studies, it is expected that the development may vary according to the initial situation or context. Having a valid job contract is important for the continuity of mothers' labour market attachment and, therefore, those with and without a job contract at the time of the childbirth were analysed separately. The possibilities for men and women in the labour market also differ in many ways, and so genders were analysed separately. Finally, the national economic context, and volumes or access to interventions, may relate to their outcomes. Labour market trajectories among those participating in subsidised employment at different time periods were therefore analysed separately.

The underlying idea is that the initial differences in life course transitions may also lead to a process during which experiences accumulate and developmental trajectories further diverge; individuals themselves, their relationships with others, as well as others perceptions of them, may change gradually. The purpose of this study is to capture this kind of development with a method that makes it possible to evaluate the form and prevalence of different kinds of "hidden" trajectories in the sample populations. Individuals may change, for example, with respect to their health and well-being, skills or personal orientations. This study focuses on attachment to the labour market.

Especially in recent years, studies have utilized longitudinal data to identify employment trajectories. The form and prevalence of labour market trajectories have been compared between different age cohorts, men and women, and combined with other information about the individuals. Most of the previous studies on labour market trajectories of men, women, and mothers are from countries with different labour market and family policies, and are not generalizable to the situation in Finland. As another contribution, this study is based on prospective, register data on employment contracts, which is in many ways more reliable than survey or retrospective data. With respect to samples of mothers and subsidised employees, the study is completely based on register data, and thus, not biased by non-response.

With respect to factors associated with mothers' labour market attachment after childbirth, the contribution of this study relates to both quality of data mentioned above and a relatively long follow-up period of 11 years. Another contribution relates to the study design in which mothers with and without a job contract are followed-up on in separate analyses. The possibility to combine survey data in the division of

domestic responsibilities from two time points with register information on employment contracts is also unique in this study.

Various studies have analysed the effectiveness of different active labour market policy interventions but, especially in Finland, have not considered the role of regional or macro economical contexts of interventions in their outcomes. Also, descriptive information on the development of subsidised employees' labour market attachment trajectories as such is scarce both internationally and in Finland.

3 THE AIMS OF THE STUDY

The purpose of this study is to analyse the development of labour market attachment trajectories at different life stages in certain contexts. How do mothers' labour market attachment trajectories differ after the birth of their first child according to their labour market status at the time of birth? What kind of labour market trajectories can be identified among working age men and women living with a partner and children? What kind of labour market trajectories can be identified among subsidised employees in ten municipalities during two different time periods? This study examines these questions.

This study also investigates these more specific research questions:

1. Is the quality of a mother's job contract prior to the birth of their first child associated with labour market attachment trajectory after the birth? (Study I)
2. Is the municipal supplement for child home care allowance associated with a mother's labour market attachment trajectory after their first birth? (Study II)
3. Are domestic responsibilities associated to men's and women's labour market attachment trajectories? (Study III)
4. Is the volume of municipal subsidised employment associated with participants' later labour market attachment trajectories? (Study IV)

4 MATERIALS AND METHODS

4.1 Samples

4.1.1 The Finnish Public Sector (FPS) study

The Finnish Public Sector (FPS) study includes employees in ten municipalities (11 since 2014) and six hospital districts in Finland. Three of the sub-studies are based on register data on employees who were employed for at least six months in municipalities or hospitals in any year between 1991-2005 ($n = 151,901$) (see e.g. Kivimäki et al., 2009). The FPS has been approved by the ethics committee of the Hospital District of Helsinki and Uusimaa.

Studies I and II included women who had their first birth between 2000-2002 ($n=3,835$), excluding those who died during the follow-up ($n=4$). Information on births was based on the Finnish Care Register for Health Care, including data on hospital visits. For the purposes of the study I, the data was restricted and organized in the following way. Mothers were divided into two groups according to their labour market status at the time of their first birth. The first group included mothers without a job contract, yet who had been employed in municipalities or hospitals within five years before the first birth ($n=1,532$). The second group included mothers who, according to the personnel registries of the municipalities or hospitals, had a valid job contract ($n=1,613$). Mothers employed elsewhere were not included in the sample.

Study II included all mothers who had been employed in municipalities or hospitals within five years before their first birth ($n=3,544$), and whose place of residence was known ($n=3,452$). This data was also divided into mothers not employed ($n=1,486$) and employed ($n=1,966$) at the time of their first birth. Information on job contracts was based on the National Pension Register. In total, 80% of employed mothers were still working in municipalities or hospitals included in the FPS.

Study IV was based on a sample of employees who had had their first period of subsidised employment in any of the ten municipalities between the years 1994-2005

(n=37,514). The data was further restricted to those who were 18-60 years of age at the end of the subsidised job and had not died or retired to their pension within six months after the employment. We analysed separately those who were employed between 1996-1997 (n=10,888) and between 2001-2005 (n=5,726).

4.1.2 The Health and Social Support study (HeSSup)

Study III was based on the first two surveys of the longitudinal Health and Social Support study (HeSSup) (Korkeila et al. 2001). The sample of the first postal survey in 1998 was stratified by age and gender including four age groups: 20-24, 30-34, 40-44, and 50-54 years old. The response rate in the first survey was 40%, including 25,901 responses. A follow-up survey was posted in 2003 to those participants who were still living in Finland. The response rate in the second survey was 80% (n=19,629). The answers of participants who had given a written consent (n=19,009) were linked with different register data (Korkeila et al., 2010). To analyse the association between domestic responsibilities and later labour market attachment, the survey data was restricted in the following way. First, the data was restricted to two age groups, those who were 30-34 and 40-44 years old in 1998, and were living with a partner and had children in their household in both survey years. Those who had missing register data (n=34), died during the follow-up (n=30), or who were on disability pension in 1998 or 2003 (n=45) were excluded from the sample. The final data included 2,691 women and 1,618 men.

4.2 Variables

4.2.1 Dependent variable

In all sub-studies, information on labour market attachment was based on the National Pension Register maintained by the Finnish Centre for Pensions. In Finland, all work irrespective of employment sector has to be insured according to the earnings-related pension acts. The register data covers all work done in all sectors and work as an entrepreneur (Kautto & Salonen 2013). However, there have been some changes in recordings after the pension reform of 2005. Before 2005, there were varying thresholds for reporting minor work and short employment spells for different earnings-related pension acts. Since 2005, minor periods of work were also

insured and accrue pension similarly in all sectors (the minimum was 47 euros per month in 2005) (Ibid., 30). Before 2005, unpaid periods such as parental leaves lasting less than one year did not appear as breaks, whereas unpaid periods lasting more than one year appeared as breaks in the continuity of registered employment spells. After 2005, unpaid periods such as parental leaves from a valid job contract do not appear as breaks irrespective of their length (Kuivalainen et al., 2018).

In this study, information on employment spells was recorded to the accuracy of one month. In studies I and II, mothers' labour market attachment was followed up on from the next month after their first birth from 2000-2002 until the end of 2011. So the length of follow-up varied between 9-11 years. In study IV, the follow-up started in the next month after ending subsidised employment and lasted six years at maximum. In studies I, II, and IV, the time period of the follow-up was six months, so that the possible number of months employed varied between 0-6.

In study III, the surveys were conducted in 1998 and 2003, and labour market attachment was analysed during calendar years 2004-2011. In these analyses, information on employment indicated the number of months employed each year.

4.2.2 Independent variables

Type of job contract (Study I)

In the study I, the type of job contract, permanent or temporary, was based on the information available in personnel registers of municipalities and hospitals. For those not employed at their first birth, information was taken from the latest job contract before the birth. For those employed, information on type of contract shows the situation at the start of the maternity leave.

Municipal supplement for child home care allowance (Study II)

Information on supplement for child home care allowance was obtained from the study conducted at the Social Insurance Institution (Miettunen, 2008). The data was classified to a binary variable (1= supplement for child home care paid in the municipality a year after the first birth, 0= no supplements). In addition to this binary variable, a more detailed variable was formed based in terms of the supplements. We gathered more specific information on the terms from the 10 municipalities included in the FPS study and in Helsinki, where 71% of the mothers lived. The terms of

other municipalities paying supplements were not compiled. This information was classified to three groups:

- 1) The supplement for child home care is available for all families in the municipality (Helsinki, n = 263; Vantaa, n = 340; Espoo, n = 546).
- 2) The terms for the municipal supplement are restricted (Oulu, n = 336; Tampere, n = 357).
- 3) Supplements are not available; this includes all municipalities included in the FPS study without the supplements as well as other municipalities without the supplements (n=1,217).

Domestic responsibilities (Study III)

The division of domestic responsibilities was based on survey questions available in both survey years, 1998 and 2003. The respondents were asked “How is the responsibility for children, other relatives, and household tasks divided in your home?”. The responsibility for children at preschool age, school age, adult children, and housework were rated separately. The options were:

- 1=all of the responsibility is on someone else.
- 2=most of the responsibility is on someone else.
- 3=the responsibility is evenly divided.
- 4=most of the responsibility is on me.
- 5=all of the responsibility is on me.
- 6=this does not concern me.

The last option was recorded as a missing value. The mean responsibility for children of different ages was first calculated separately for 1998 and 2003, and then combined to a single score indicating the mean for both survey years. Also, the mean answer for housework responsibilities in 1998 and 2003 was used as the independent variable.

The volume of subsidised employment in municipalities (Study IV)

The volume of subsidised employment was calculated based on data from the Employment Service Statistics by the Ministry of Economic Affairs and Employment. The number of individuals subsidised in the service of the ten

municipalities was divided by the sum of the unemployed and all participants in active labour market interventions in the same municipality in a given year. The latter number included wage subsidies in the public and private sector, and start-up grants for entrepreneurs, job alteration places, vocational labour market training, and employment training (the latter only in 2001-2005). The numbers represent annual averages calculated from monthly figures.

4.2.3 Control variables

In studies I and II, the control variables included mothers' socioeconomic status, age, and the number of children born during the follow-up period. In study IV, individual level control variables were age, gender, education, and number of employment months two years prior to the subsidised job. Municipal-level control variables were unemployment rate in the municipality during the subsidising year, population growth in municipalities during the follow-up, and the year of subsidised employment.

In the study III, labour market attachment in the baseline was measured with survey and register data, indicating employment status (full-time job vs not) and the number of employment months between the baseline years 1998-2003. Other control variables were age cohort, educational level, working time, children under three years of age in the household, number of children in the household, partners' full-time job, and importance of work.

4.3 Latent class growth analysis

The trajectories for labour market attachment were analysed with group-based modelling of development (Nagin 2005), also called latent class growth analysis and trajectory analysis. With this method, it is possible to identify latent groups from longitudinal data. It is assumed that the data consists of, "...a finite set of different polynomial functions of age or time" (Ibid. 25). Thus, the individuals are assumed to be homogenous within each group, while differences between groups can exist. As a result, individuals can be classified to these groups.

The first steps in analysis included the choice of distributional assumption, the choice of polynomial model (i.e. linear, quadratic, cubic), and choosing the suitable number of latent groups (Jung & Wickrama 2008; Nagin 2005). The solutions with

different specifications were statistically compared based on information criteria (Bayesian Information Criteria, BIC) and the Lo, Mendell, and Rubin (2001) likelihood ratio test (Jung & Wickrama 2008; Nylund et al. 2007). Substantial interpretation is especially useful when the information criteria keep improving although new, distinctive trajectories no longer emerge. These analyses were conducted with Mplus version 7 (Muthén and Muthén 1998-2012), utilizing the features available for this method.

The distribution of the number of months employed was highly skewed in the cohorts of first-time mothers (Studies I & II) and in the HeSSup cohort (Study III). A large proportion of the participants were employed a full 6/6 or 12/12 months during the follow-up period. In the study based on subsidised employees, the distribution of the variable was U-shaped; the proportions of those with zero months and those with full attachment were higher in many time points compared to those with medium level attachment. In all sub-studies, different possibilities for skewed variables were tested and compared. The choice of the distributional assumption was based on information criteria, especially the BIC values (see also Morris & Slocum 2012) and substantial interpretation.

The data for first-time mothers and subsidised employees were analysed with zero-inflated Poisson models. In the third sub-study, the data was analysed assuming negative binomial distribution. In all models, a quadratic growth model was applied, as in many previous studies on labour market attachment (e.g. García-Manglano 2015; Huang et al. 2011; Serra et al. 2016).

In all studies, the characteristics of the trajectories were analysed in two ways. First, the distribution of the independent variables and control variables among the trajectories were compared with suitable methods. Secondly, multinomial logistic regression was used to analyse the associations of the main independent variables on the trajectories when adjusting for the control variables.

In latent class growth analysis, the assignment of observations to the latent classes is based on probabilities. Different methods have been developed to take this uncertainty into account (e.g. Asparouhov & Muthén 2014; Clark & Muthén 2009). In studies I and II, the characteristics of the trajectories were analysed with a pseudo-class method that takes into account that the classification to latent groups is based on probabilities (Mplus Technical Appendices 2010). Also, in these studies, the independent variables and covariates were included in the model itself, effecting the individuals' probabilities to be assigned in each trajectory. In studies III and IV, the most likely latent class was used in further analyses. This method is also suitable, when the class separation is high.

5 RESULTS

5.1 Labour market attachment among first-time mothers; trajectories and predictors (Studies I & II)

5.1.1 Trajectories

In studies I and II, labour market trajectories among mothers after their first birth were first identified. In both studies, mothers with and without job contracts at the time of the first birth were analysed separately. There were small differences in the samples, which is reflected in the trajectory results and their distributions.

In both studies I and II, four groups for labour market attachment among mothers without a job contract at the time of their first birth were identified. They were described as “early strengthening” (26.2% in study I and 26.1% in study II), “intermediately strengthening” (20.8% and 20.9%), “slowly strengthening” (25.0% and 24.8%), and “weakly strengthening” (28.0% and 28.1%, respectively).

In both studies I & II, over 70% of mothers employed during their first birth were characterized as having “stable attachment” to the labour market during the follow-up of 11 years (proportions were 76.4% in study I and 71.2 in study II). In study II, two temporarily weakening trajectories were identified and characterised as “short-term weakening” (10.3%) and “intermediately weakening” (6.7%). In the study I, only one “temporarily weakening” group was identified (9.8%). In a five-class model, the proportion of an additional intermediately weakening group would have been only 3.5%, so a four-class model was chosen. In both studies, the two other trajectories were “long-term weakening” (8.4% and 6.9%) and “later-on weakening” (5.4% and 4.9%).

5.1.2 Type of job contract

Among women without a valid job contract at the time of their first birth, 94% had a temporary contract and 6 % had a permanent contract in municipalities and

hospitals within five years before the birth. The proportion of temporary employment was at 31%, and permanent employment at 69%, among those who were employed at the time of the birth.

Among women not employed at their first birth, the proportion of previous temporary employment was lowest among those with early strengthening labour market attachment (87.3%), while the proportions varied between 95.9-97.4% in the other three trajectories. Compared to women with early strengthening trajectory, having a previous temporary job contract was associated with all weaker trajectories in multinomial logistic regression. This also occurred when age, occupational status and number of subsequent births were adjusted for. The relative risk ratios of prior temporary employment were 3.81 (95% CI 1.91-7.61) for intermediately strengthening, 5.53 (95% CI 2.58-11.86) for slowly strengthening, and 4.01 (95% CI 2.17-7.42) for weakly strengthening trajectory.

With respect to women employed at the time of their first birth, the proportion of temporary employment at the start of the maternity leave was least common among women with stable labour market attachment (25.3%). The proportions of temporary employment in the other three trajectories was 49.1% for temporarily weakening, 57.8% for long-term weakening, and 32.6% for later-on weakening. Compared to women with stable attachment, having a temporary job contract was associated with temporarily weakening and long-term weakening attachment in multinomial logistic regression when age, socioeconomic status, and number of subsequent births were adjusted for. The relative risk ratios of temporary employment were 3.16 (95% CI 2.13-4.67) for temporarily weakening, and 4.72 (95% CI 2.52-8.84) for long-term weakening trajectory. Additional analyses among those without new births during the follow-up period confirmed the associations among both subgroups of mothers.

5.1.3 Municipal supplement for child home care allowance

Among women not employed at the time of their first birth, living in a municipality offering additional supplement for child home care was most common in the trajectory of weak attachment (70.8%). In the other three trajectories, the proportion of the municipal supplement varied between 57.9%-59.7%.

Compared to early (in the Finnish version “nopea”) strengthening attachment, a municipal supplement was associated with a greater risk of weak attachment. This association remained statistically significant after adjusting for covariates; age,

socioeconomic status, and number of subsequent births (RRR 1.71, 95% CI 1.25–2.36).

Additional analyses showed that municipal supplement for child home care available for all families was statistically significantly associated with intermediately strengthening (RRR 1.74, 95% CI 1.05–2.88), slowly strengthening (RRR 1.77, 95% CI 1.15–2.72), and weak attachment (RRR 3.16, 95% CI 2.04–4.90) compared to those with early attachment when adjusted for control variables. A restricted municipal supplement was only associated with weak attachment (RRR 1.48, 95% CI 1.00–2.17) compared to those with early strengthening attachment when fully adjusted.

Among women employed at childbirth, the association of municipal supplement for child home care allowance with trajectories for labour market attachment was less clear. The additional supplement in the place of residence was most common among those with later-on weakening attachment (75.9%) and least common among those with short-term weakening attachment (59.2%), while the proportions in the other three trajectories were stable at 66.6%, intermediately weakening at 69.0%, and long-term weakening at 72.0%. In multinomial logistic regression, compared to those with stable attachment, availability of a municipal supplement was only negatively associated with short-term weakening attachment. The relative risk ratio was 0.69 (95% CI 0.50–0.94) in a fully adjusted model. This means that women living in a municipality offering extra support for child home care were less likely to have short-term weakening than stable attachment. The additional analyses showed that, compared to stable attachment, municipal support available for all families was statistically significantly associated with later-on weakening attachment in a fully adjusted model (RRR 2.01, 95% CI 1.05–3.82). Similar associations were found among women with no new childbirths during the follow-up period.

5.2 Domestic responsibilities and labour market attachment among men and women (Study III)

5.2.1 Trajectories

In study III, trajectories for labour market attachment were first identified separately for men and women. Among women, four relevant trajectories were identified: “strong attachment” (72.2%), “strengthening attachment” (9.2%), “weakening

attachment” (5.8%), and “weak attachment” (12.7%). Among men, a similar four-class model was chosen with the following proportions: “strong” (74.1%), “strengthening” (10.2%), “weakening” (6.2%), and “weak attachment” (9.5%).

5.2.2 Domestic responsibilities as predictors of trajectories

Women assigned to all four trajectories had, on average, more than half of the responsibility for both childcare and housework, while men had less than half of these responsibilities in their households.

A high responsibility for housework measured between 1998-2003 was associated with a greater risk of weak compared to strong or strengthening labour market attachment among women later on during the years 2004-2011. When adjusted for baseline labour market attachment and other control variables, only the latter association remained statistically significant (RRR 1.49, 95% CI 1.05-2.13). Also, a high responsibility for housework was unexpectedly negatively associated with strengthening compared to strong attachment in the fully adjusted model (RRR 0.68, 95% CI 0.50-0.94). A high responsibility for childcare was associated with weak compared to strong labour market attachment and strengthening compared to strong attachment, but these associations were not significant when fully adjusted.

A high responsibility for housework was also associated with weak compared to strong, and weak compared to strengthening attachment among men. These associations remained significant when fully adjusted with prior labour market attachment and other control variables (RRR 2.37, 95% CI 1.43-3.92 and 2.51, 95% CI 1.41-4.47, respectively). Likewise, a high responsibility for childcare was associated with weak compared to strong, and weak compared to strengthening attachment. These associations were not statistically significant in fully adjusted models, but the p-values remained below 0.10.

5.3 Labour market attachment among subsidised employees in municipalities (Study IV)

5.3.1 Trajectories

In both periods, five similar trajectories were identified to describe labour market attachment after participation in subsidised employment. The majority of individuals had “early strengthening” attachment to the labour market in both periods. The proportion of this group was 67.7% in the late 1990s sample, and 62.3% in the early 2000s sample. At the end of the six-year follow-up, the individuals assigned to this group were on average, less than five months employed within a period of six months. In both periods, some of the individuals did not attach to the labour market at all; the proportion of “no attachment” track was 8.9% in the late 1990s sample and 11.5% in the early 2000s sample. The other tracks identified were “early weakening” attachment (6.5 % and 8.3%), “later weakening” attachment (10.1% and 12.0%), and “later strengthening” attachment (6.9% and 5.9%), respectively.

5.3.2 Municipal volume on subsidised employment and individuals’ labour market attachment

The differences between mean volumes in subsidised employment among the trajectories were small. In the late 1990s sample, the mean volumes in municipalities varied between 5.6-5.8% among the tracks. However, the volume was positively associated with early strengthening (RRR 1.08, 95% CI 1.01-1.15) and later strengthening attachment (RRR 1.11, 95% CI 1.02-1.22) compared to those with no attachment, when individual and municipal level control variables were adjusted for. A similar association was not found among those with no new spells in subsidised employment.

In the late 2000s sample, the volumes varied between 3.1-3.3% in the trajectories. Compared to the group with no attachment, the volume of subsidised employment was associated with early strengthening attachment in the fully adjusted model (RRR 1.10, 95% CI 1.01-1.21). Also, among those with no new periods in subsidised employment, the volume was associated with early strengthening attachment (RRR 1.10, 95% CI 1.00-1.20).

6 DISCUSSION

6.1 Mothers' labour market attachment after the first child birth

The transition to motherhood is an interesting period with respect to later labour market attachment. Maternity leave is four months, but parental leaves and child home care leaves can be divided between the parents as they wish. The majority of mothers take leave from work immediately after childbirth, while fathers employment rates remain high. For these reasons, studies I and II focused especially on mothers.

This study showed that 71-76% of mothers with a valid job contract at the time of their childbirth had stable attachment to the labour market during the follow-up period of 11 years. At the end of the follow-up, about 86-88% of them had stable attachment to the labour market. This proportion corresponds to the cross-sectional information on employment rates; the employment rate of mothers with 3-6 year old children was above 80% in the late 2000s, whereas the rate was around 90% among mothers with children 7-17 years old (Official Statistics of Finland 2009; 2011). Also, a register-based follow-up showed that, on average, about 77-80% of mothers in Finland who had their first child between 2000-2002 were employed 8-10 years after the first birth (Haataja 2014, 20).

On the other hand, this study showed that a lower proportion of those without a job contract at the time of the first birth (72%) were fully attached to the labour market at the end of the follow-up. Those without a job contract may not have found a job before the birth of other children, and end up spending longer periods at home. They may end up having a longer "exposure" to child home care, which in turn may have changed their orientations toward working life, at least temporarily, or the ways they are perceived by employers (cf. Evertsson & Duvander 2011). Some mothers may have also taken over the main responsibility for childcare at the expense of their career, which in turn, had made it possible and necessary for the fathers to invest in their careers (Närvi 2014; 2012). These results are in line with family leave studies from Finland based on follow-ups of two to three years; those without a prior job take longer child home care periods (Lammi-Taskula 2004; Närvi 2017; Salmi et al. 2009).

This study also gave information about the shape of labour market trajectories among mothers. Corresponding methods have been used increasingly internationally, but with shorter follow-ups (Hynes & Clarkberg 2005; Lu et al. 2017). A study based on a US sample followed up on mothers' labour market participation 12 years after childbirth from 1978-1995. In this study, 10.9% were classified, based on pre-defined rules, as stay-at-home mothers during a 12 year period, and only 30.8% of women were classified as steady workers (Frech & Damaske 2012). In the present study, no group with zero attachment or very weak attachment was identified.

This study was based on mothers working in the public sector, municipalities, and at hospitals. According to the Family Leave Survey in 2013, mothers working in municipalities were less likely unemployed when their child was two years old (Närvi 2017, 87) and felt less of a threat of losing their jobs compared to mothers working in other sectors (Närvi & Salmi 2017, 42-43). Thus, different labour market trajectories might be found among mothers working in other employment sectors.

The register study also shows that mothers' employment situations have improved during the 2000s. Mothers having their first child in the late 2000s returned to work or were employed sooner than mothers with first births in the early 2000s (Haataja 2014, 17-20). Also, about 12% of mothers that had their first child in 2000 were unemployed and about 69% were employed a year preceding the first birth, while the proportions were a little less than 6% and 80% among those having their first child in 2009, respectively (ibid, 20).

6.1.1 The quality of job contract

Study I showed that temporary job contracts at the start of a maternity leave were associated with a greater risk of temporarily and long-term weakening labour market attachment during the follow-up period of 11 years. Among those without a valid job contract at the time of the first birth, mothers' prior temporary jobs – compared to permanent ones – were associated with weaker and delayed labour market attachment. Temporary job contracts may have ended just before the maternity leave took place or much earlier before the pregnancy. However, those also with a prior permanent job lacked job protected family leaves. Therefore, it is possible that having a previous permanent job contract partly reflects better employability or employment possibilities of these women, both before and after giving birth. This result is in line with previous quantitative studies that have analysed the association

of temporary job contracts on mothers' employment outcomes after childbirth (Baxter 2009; Bonet 2013; Gutiérrez-Domènech, 2005; Närvi 2017; Saurel-Cubizolles et al. 1999).

Based on previous studies among Finnish mothers, we also hypothesized that it is possible that temporary employees are reluctant to stay at home for a long period for fear of losing their jobs (Närvi 2014; see also Närvi 2017). However, we did not find any indication of this. Also, in this respect, it is possible that the situation would be different among mothers working under temporary contracts in other sectors or occupations. A recent study based on representative data among Finnish employees showed that common fixed-term employees were in a better position in terms of long-term labour market attachment compared to temporary employees with poorer contracts (seasonal, on-call, temporary agency and subsidised employees) (Ojala et al. 2018).

The share of temporary employment was highest in Finland after the recession in the late 1990s, after which it decreased and stabilized in the 2000s (Sutela & Lehto 2014). In the 2000s, the use of temporary employment has been restricted and their rights as employees has improved (Julkunen 2009; Sutela & Lehto 2014). However, the share of temporary employment among women is still higher compared to men (Official Statistics of Finland 2019).

6.1.2 Municipal supplement for child home care allowance

This study found that living in a municipality offering additional supplements for child home care was associated with a greater risk of weak labour market attachment among mothers without a job contract at the time of their first birth. The risk of weak and delayed attachment was even stronger if the municipal supplement was available for all families without restrictions. Among women employed when having their first child, municipal supplements were not associated with a weak labour market attachment in the similar manner.

The results support previous studies in Finland showing that municipal supplements decrease the employment of mothers (Kosonen 2014; Kosonen & Huttunen 2018). However, there are some differences in the results as well. Kosonen (2014) did not find an association among mothers whose children were no longer eligible for the supplement. The present study showed that the availability of municipal supplements increased a risk of weak labour market attachment in the long-term, with a follow-up of 11 years, among those without a job contract when

having their first child. Also, a Norwegian study found that child home care allowances decreased full-time employment among mothers with lower education and income also after the right to these benefits ended (Drange & Rege 2013). Kosonen & Huttunen (2018) found that municipal supplements decrease mothers' employment with a follow-up of three years in several subgroups. This was the same also among those employed before the birth of their child. In the present study, a similar association was not found among those with a valid job contract at the time of first birth.

There are many possible reasons for the differences in results. Kosonen & Huttunen (2018) compared women living in municipalities without home care supplements to women living in municipalities adopting this policy with difference-in-difference methods, taking fixed municipal factors and time varying trends into account to better discover causal relationships. The previous studies were also based on data from mothers representing different employment sectors (Kosonen 2014; Kosonen & Huttunen 2018), while this study was based on mothers working mainly in the public sector. Also in this study, in contrast to previous studies, employment outcomes were measured as entire trajectories representing the development during the 11 year follow-up period.

Receiving municipal supplements for child home care was negatively associated with the longest child home care periods among mothers who participated in the Family Leave Survey in 2013 (Närvi 2017). However, mothers with and without a job contract before the birth of a child were not analysed separately.

A recent Swedish study found that child home care allowances were associated with slower female employment growth rates in non-urban, but not in urban, municipalities (Giuliani & Duvander 2017). In the present study, municipal-level covariates were not included in the analyses, such as size of the town or unemployment rates.

The rate of families receiving municipal supplements to child home care allowances increased during the 2000s, yet started to decrease in the early 2010s (Haataja 2016, 52-53). In 2014, the supplement was available in 30% of the municipalities, while in 2018 the rate was 19% (Lahtinen & Svartsjö 2018). In 2015, the subjective right to public childcare was restricted to 20 hours, so that in practice, full time care is available only for children whose parents are employed full-time or studying, or if otherwise a need for full-time care can be shown (HE 80/2015 vp). Municipalities can choose whether to use this restriction, which in turn, puts families living in different municipalities to different positions.

6.2 Labour market attachment among parents

Study III focused on middle-aged men and women living with children and a partner in their household. They lived at a family stage in which, at least, the first child had been born and the division of unpaid and paid work between partners had been settled to some extent. This analysis was based on respondents who were 30-34 or 40-44 years of age during the first survey in 1998. The respondents were 36-40 and 46-50 years of age at the start of the labour market follow-up in 2004, and were 43-47 and 53-57 years of age at the end of the follow-up in 2011 (born in 1954-58, 1964-68).

The respondents' situations in this family stage reflects the gendered norms and practices regarding paid and unpaid work in families. As expected, women took more responsibility for both housework and children than men, on average, while men were more commonly employed full-time.

Four groups of labour market attachment among both men and women during 2004-2011 were identified. The majority of both men (74%) and women (72%) had a strong attachment to the labour market during the follow-up. Also, the other three trajectories turned out to be quite similar among both genders with respect to their shape and proportions.

The proportions with strong attachment were somewhat lower compared to the cross-sectional employment rates of parents. In late 2000s, fathers' employment rates were about 90% irrespective of the age of children, while mothers' employment rates were about 80% among those with 3-6 year old children and 90% among those with 7-17 year old children. (Official Statistics of Finland 2009; 2011).

Although the sample was restricted to those with a partner and children, and does not represent the working age population, it is possible to roughly compare the shape and proportions of labour market trajectories to other studies. Based on the US National Longitudinal Survey of Youth, Huang et al. (2011) found that 76.5% of men and 58.8% of women had "high" labour market attachment between ages 23-43 (born in 1957-1965). A later study based on the same cohort found that 57.5% of women had a "steady" labour force participation and 4.5% was assigned to an "overwork" trajectory during ages 25-45 (Damaske & Frech 2016). Although based on cohorts from different country contexts and earlier life stages, the proportions with stable attachment are at similar levels compared to the trajectories based on the Finnish data.

Another US study based on an older cohort found that a lower proportion, at 40%, of women had strong attachment between ages 20-55 (born in 1944-1954)

(García-Manglano 2015). Also, in a study based on Spanish register data, only 40% of individuals had strong labour force participation between ages 16-25 and 48-57 (born in 1956-1965) (Serra et al. 2017). Out of those with strong attachment, 73% were men. Many other studies have also found that men more commonly have full-time or stable employment trajectories, whereas women have weaker attachment or are distributed to more various trajectories or clusters (e.g. Majeed et al. 2015).

With respect to the shape of trajectories, similar solutions have been found in studies utilizing latent class growth or growth mixture analysis. For example, García-Manglano (2015) and Serra et al. (2017) identified four similar groups of trajectories as the present study with respect to their direction; strong, increasing, decreasing and weak attachment. In addition, Huang et al. (2011) and Damaske & Frech (2016) differentiated a U-shape or re-entry groups among women.

In the present study, no groups with zero attachment were found. Those men and women with weak attachment were, on average, employed for 5-8 months each year. In other studies, employment among those with weak or low attachment has been relatively at a lower level (Huang et al. 2011) and described as a “stay at home” group (Damaske & Frech 2016) or “consistently detached” (García-Manglano, 2015).

Among women, the mean responsibility for housework and children was between the response options “responsibility is evenly divided” and “most of the responsibility is on me”, while among men, the mean values were between options “most of the responsibility is on someone else” and “responsibility is evenly divided”. Somewhat similar responses have been obtained among Swedish (Harryson et al. 2012) and German men and women with children (Nitche & Grunow 2012).

Those with a high responsibility for housework in 1998-2003 and living with a partner and children in their household were more likely to have weak than strengthening labour market attachment during later years, between 2004-2011. This association was found among both men and women, and was statistically significant when fully adjusted for prior labour market attachment and other control variables. In addition, men with a high responsibility for housework were more likely to have weak compared to strong attachment. Also among men, and contrary to women, a high responsibility for children seemed to be associated with weak labour market attachment, although not statistically significantly.

More domestic responsibilities were associated with weaker attachment in the beginning of the follow-up period, yet not weakening labour market attachment in later life. This seems natural, as the burden of responsibilities decrease when children

grow older. However, other caring responsibilities could be related to weaker attachment also in later years.

It is possible that combining domestic responsibilities with a working career is more difficult for men than for women. Majeed et al. (2015) partly came to the same conclusion in their study; men may have less opportunities to combine caring roles and paid work than women do. They found that men who provided informal care “to a disabled/sick friend or family” had a greater risk of interrupted labour market pattern and decreasing paid work after 55 years, moreso than other men. Among women, providing informal care was not associated with work patterns.

In this study, questions on domestic responsibilities were asked in 1998, 20 years ago, and in 2003. However, according to the Gender Equality Barometer in 2017, women are still more commonly responsible than men for many daily domestic duties and childcare, such as caring for a sick child or keeping contacts with daycare and school (Pietiläinen & Attila 2017).

6.3 Labour market trajectories after subsidised employment to municipalities

This study found five labour market trajectories following the period of municipal subsidised employment in 1996-1997 and 2001-2005. In both periods, the majority (62-68%) of subsidised employees had strengthening attachment to the labour market during the six-year follow-up time, while about 10% were not employed at all. As opposed to the mothers and parents described above, none of the trajectories lead to stable attachment to the labour market. Many of the participants had new periods in subsidised work during the follow-up. Repeat participation in subsidised employment was especially common among those with a weakening attachment to the labour market.

Compared to previous studies, these trajectories summarize the labour market trajectories of subsidised employees in a simple way (see also Nwaru et al. 2017; 2018 for previous analyses on this data). In Finland, regular reports are available on the employment rates among those who have participated in different activating measures only with short follow-ups of 3 and 6 months (Tuomaala, 2018). Ojala et al. (2018) analysed labour market attachment among those with permanent and different kinds of temporary jobs in the baseline. However, as based on a representative survey of the working age population, the numbers of subsidised employees were small and not analysed as a separate group.

The trajectories and their proportions were quite similar despite the changes in labour market policies, national economic situation, and overall volumes of subsidised employment. On the other hand, the follow-up times also overlap. Since 1997, it was not possible to renew the right to earnings-related unemployment benefits by participating in subsidised employment (HE 72/1996). This restriction concerned those who already participated in subsidised employment in 1997. A larger reform came to force in 1998, which also covered most of the follow-up time of those subsidised in 1996-1997 (HE 178/1997). In 2001, municipalities became responsible for organizing rehabilitative work as a new intervention for those who are in the most vulnerable positions and do not benefit from other active labour market interventions (HE 184/2000). In 2006, the policies were renewed again. It was made possible to sanction those who refused participation in active labour market policies, and municipalities became financially responsible to pay labour market support to those who were long-term unemployed and not participating in activation measures (see Hämäläinen et al. 2009). In particular, the volumes of rehabilitative work increased since 2006, at least in some municipalities (Riipinen 2014, 43-47). These changes in policies also concerned those who participated in subsidised employment between 2001-2005, at least during some years in their follow-up.

Study IV focused on the volume of municipal subsidised employment in the late 1990s and early 2000s. It was expected that higher volumes of subsidised employment in municipalities would indicate poorer quality of interventions, especially in the late 1990s, and a more random selection of individuals for the jobs. Also, a higher extent of volume could also mean greater competition for the limited number of vacancies in the municipalities.

The volumes of subsidised employment were generally higher in municipalities in the 1990s sample than in the 2000s sample. Somewhat in contrast to the expectations, the volumes were positively related to stronger labour market trajectories in both periods, when unemployment rates in municipalities were adjusted for. However, the associations were weak. This may be explained by the fact that the range of volumes of subsidised employment between municipalities was small, and the data included only ten municipalities. In municipalities with high volumes of subsidised employment, it may also have been more common for the unemployed to participate in subsidised jobs repeatedly, which partly explains the association between volumes and later labour market attachment. Thus, in the late 1990s sample, higher volumes of subsidised employment were not associated with

stronger labour market levels among those with no new subsidised periods of employment.

Although the effects of different active labour market policy interventions have been analysed in Finland, the role of regional contexts or the extent of these measures have not been previously taken into account. Thus, results of this study give a new kind of descriptive information on the association between volumes and individual outcomes.

6.4 Methodological considerations

6.4.1 The samples

The samples of studies I and II were based on the Finnish Public Sector (FPS) study representing all employees working between 1995-2005 in ten municipalities and six hospital districts in Finland. The sample of study IV was based on all subsidised employees in the ten municipalities during the selected study periods. Thus, the data represents well employees in the municipal sector. With respect to regions and different municipalities in Finland, the data is more limited. Study IV included subsidised employees in ten municipalities in Finland, all of which represented urban areas. In study II, most mothers also lived, at the time of the childbirth, in the same municipalities where they had a job contract or had previously been working (i.e. the municipalities and hospitals included in the FPS).

Study III was based on the Health and Social Support (HeSSup) surveys from 1998 and 2003. The non-response rate in the first survey in 1998 was analysed by Korkeila et al. (2001) and showed that men, those with lower education levels, and older age groups were less likely to respond to survey questions. A more detailed analysis showed that responses were more common among older men and younger women. There were no major differences in physical health between the respondents and the general population. The response rate in the follow-up survey in 2003 was high, at 80%.

6.4.2 The predictors of trajectories

The strength of study I was that the type of job contract was based on personnel data of the municipalities and hospitals – this is information not available from the

commonly used National Pension Register. In study II, a limitation was that the variables indicating the availability of municipal supplements for child home care allowance did not show the amount of the benefit. Also, the data only showed whether the supplements were available in the municipalities, not whether the mothers had received these benefits themselves.

In study III, domestic responsibilities were measured with survey questions separately with respect to housework and childcare. It was possible to calculate the mean value from the two survey years, which is a strength of this study. As a limitation, it must be noted, for example, that men and women may have evaluated their responsibilities with a different logic. In study IV, the volume of subsidised employment in municipalities was calculated based on information available from the Ministry of Economic Affairs and Employment. A limitation is that the volume does not tell about the expenditures allocated to employment services to the unemployed in the municipalities.

Studies I, II, and IV were based solely on register data, including only basic sociodemographic factors used for control variables. Study III was based on two surveys that included a larger variety of control variables related to a respondent's family and work situation in the baseline. However, the surveys did not include detailed information on respondents' work and family orientations or gender ideologies, and possibly related to both the division of domestic responsibilities and later labour market attachment.

6.4.3 Measure of labour market attachment

The National Pension register can be regarded as a comprehensive and reliable information source for labour market attachment. In this study, employment spells were recorded to the accuracy of month. A limitation is that the variable does not separate those who were working full-time for the whole month from those who had been working only a few days or hours per week. Also, information on the type of job contracts involved is not available. It is probable that those with weak labour market attachment have more commonly been employed temporarily and part-time.

In all studies, the analysis was based mainly on data from the 2000s. The pension reform in 2005 caused some changes in the recordings of employment contracts. Since 2005, more detailed register data is available, and it would be possible to separate parental and home care leaves from the employment periods. As the mothers were followed-up on from 2000-2002, these examinations were not

possible. On the other hand, the focus on valid employment contracts, including possible leaves from work, indicates labour market attachment is interesting in its own respect.

6.4.4 Latent class growth analysis

With latent class growth analyses, interesting and distinctive developmental trajectories with varying shape and directions were identified in this study. In all studies, the class separation was good, so that individuals could be assigned to these tracks with high certainty.

There are also limitations related to this method. There is no single criterion on which to base the choice of a model. Instead, the choice of the solution is based on a combination of statistical information and interpretation of the tracks. The results may also be difficult to compare with other studies, as the latent groups are unique to each sample. This makes it also more complicated to compare subgroups within a study; within a subgroup, an optimal solution may be different as compared to the main sample. In study I and II, latent class growth analyses were also conducted among those with no new births during the follow-up period. In study IV, the same latent groups found in the main samples were used in sensitivity analyses among those with no new periods in subsidised employment.

It is better to use this method for descriptive purposes than to test very specific hypotheses. When analysing the role of predictors, the entire trajectories are the outcomes. As George (2009, 176) notes, it is not possible to know what features in the trajectories are the reasons for the associations between predictors and trajectories. When the trajectories are created based on some theoretical rules, it is possible to highlight the preferred differences between trajectories (Ibid.). With latent class growth analyses a certain theoretically interesting group may not emerge in a preferred way, while the analyses may find unexpected tracks. The latter can also be considered as an advantage (Nagin & Tremblay 2005). In this study, small groups with later weakening trajectories were found both among mothers, parents, and subsidised employees. A more detailed interpretation of these tracks would have required more information on the individuals, measured during or at the end of the follow-ups. For example, it is probable that health problems, not measured in this study, were common among those with the weak and weakening trajectories. Also, unexpected associations were found in the studies. In study I, the availability of municipal supplements for all families was negatively associated with short-term

weakening attachment and positively associated with later-on weakening attachment among mothers employed during their first birth. These associations may be explained by other municipal-level or individual factors that were not taken into account in the study.

It was possible to take into account some of the events that take place during the follow-up. In studies I and II, the analyses were therefore replicated among those who did not have more children during the follow-up period. In study IV, the analyses were replicated among those with no new periods in subsidised employment. Study III was based on a sample of men and women living with a partner and children in their household. However, during the follow-up period, their family situation may have changed in many ways; more children may have been born or the couples may have divorced. It was not possible to take these situations into account.

6.4.5 Study designs

The main strength of this study is that it provides descriptive information on the development of labour market attachment at different life stages and transitions, based on large samples of relevant populations. From a life course perspective, experiences accumulate and previous events affect later development in individuals' lives. Diverging developments could be seen among the individuals after their family- and work-related transitions.

While offering detailed descriptive information, the results do not tell about causal associations between different predictors and labour market trajectories. The study neither tells about the mechanisms by which certain factors are related to labour market trajectories. When the focus is strictly on causal associations, other methods are more suitable.

Those who were chosen for subsidised jobs in municipalities are a selected group, and a comparison group of non-participants was not included. Also, the volume of subsidised employment in municipalities is not an exogenous factor. Instead, the municipal authorities decide to use a certain amount of subsidised employment based on their evaluation of what is best for the unemployment situation and the amount of funding available from the central government. Although we controlled for relevant individual and municipal factors in the analyses, it is still probable that the association between municipal volumes of subsidised employment and labour market trajectories are explained by some unobserved factors. As there were only

ten municipalities in the study, it was not possible to control for many more municipal level factors. Register data on the health of the participants could have been controlled for as indicators of employability, but information was available only for a selected group of participants in the FPS. This kind of endogeneity may also be the case with the municipal supplements for child home care; municipalities decide to offer the additional benefit based on their evaluation of the day care and employment situation in the region.

Also, mothers with a temporary or a permanent job contract, or no contract at all, are selected groups. As Bonet et al. (2013, 77) note, some women may try to find a permanent job before giving birth in order to make it easier to combine childcare and work. On the other hand, those with a permanent job may be more career-oriented both before and after the childbirth. However, Sutela (2013, 29) notes that temporary employment is so common in Finland that it does not indicate any specific selection; rather it can be regarded as a rule for when entering the labour market particularly in certain fields, such as health care. On the other hand, having a temporary job is related to a lower likelihood of having a child in the short-term (Sutela 2013), indicating that it is important for women to start a family while in a secure position.

In a similar manner, the same personal orientation may explain both the division of responsibilities and later employment outcomes in study III. Taking a greater responsibility may indicate greater orientations toward home instead of work, and thus, explain the association with weaker attachment to labour market afterwards. Taking a greater responsibility could also indicate greater capabilities in both spheres, and in this case, greater responsibilities would be associated with stronger labour market attachment.

The studies were based on ongoing research projects, in which ethical issues have been taken into account, including the permissions to use and combine register data for research purposes. The FPS has been approved by the ethics committee of the Hospital District of Helsinki and Uusimaa. In the HeSSup project, survey respondents were asked a consent to linking their answers with different registers. Personal identification numbers have been removed from the datasets used in research. It is not possible to identify individuals from the study reports.

6.5 Conclusions

This study focused on labour market trajectories after certain life course transitions; the birth of a mother's first child, the transition to parenthood and formation of domestic responsibilities among couples, and participation in subsidised re-employment. In particular, these family related transitions are usually planned and a normative part of life. However, these life events may also be turning points or trigger events after which individual life courses diverge, depending on other circumstances or specific contexts (e.g. Vandecasteele 2010; Diprete & McManus 2000). As its main contribution, this study provides descriptive information on the development of labour market attachment after certain transitions or life events, showing the shape and proportion of these tracks. The study also tells how different factors are associated with these tracks, partly confirming previous results and partly giving new information.

The possibilities to participate in the labour market differ by gender in many ways. Specifically, the transition to parenthood leads to differences between men and women, and differences among mothers as well. This study showed that the majority of mothers employed during their first birth remain attached to the labour market in the long-term, while mothers without a job contract had a weaker and delayed attachment. Also, having a temporary job contract was related to a weaker and delayed attachment in the long-term. Although in some occasions temporary job contracts may work as a stepping stone in a working career, for mothers, it means losing their job protected family leave. The municipal supplements for child home care were also associated with weaker labour market attachment among those without a job contract when having their first child. These results support the findings of previous studies, noting that the structure of family leaves and benefits gives more opportunities and freedom to choose for those in stable labour market positions, while leading to increased difficulties for those with an originally weak attachment (e.g. Lammi-Taskula 2004; Närvi 2017).

Although specific analyses found different trajectories among subgroups of mothers, a broader examination, with more heterogeneous samples during the same time period in the 2000s, found quite similar labour market trajectories among mothers and fathers regarding their shape and proportions. Thus, with the exception of the first few years following a child's birth, differences in mothers' and fathers' employment trajectories were smaller. This is the case with parents' employment rates in general; both mothers and fathers' employment rates are high compared to other groups in the labour market. Previous studies from other countries have shown

that the employment patterns of mothers or women are more varied compared to those of men. Thus, in international comparison, Finnish family policies seem to support the combination of family roles and employment quite well.

Mothers were, on average, more responsible than fathers for housework and childcare, reflecting the prevailing gender roles. However, among men, higher responsibilities were more strongly associated with weak labour market attachment, suggesting that fathers may have more problems with combining work and care. It is commonly argued that increasing earmarked parental leave possibilities for fathers would improve gender equality in both families and working life in many ways. It can improve mothers' labour market attachment (Rønsen & Kitterød 2015), and thus their relative resources and negotiating power among couples. Fathers taking longer parental leaves could also affect the ways in which domestic responsibilities are later divided in families (Evertsson et al. 2018; Almqvist & Duvander 2014). It could also change the ways in which employees evaluate men and women as possible employees, what kind of job contracts and positions they get, and how easy it is for men to take longer family leave.

However, improving gender equality by changing the structures seems to be a slow process. In Finland, the possibility to divide the family leaves between parents as they wish is more commonly supported than an equal share allocated to each parent (Kontula 2018; Salmi & Närvi 2017). Finns also support maintaining the right to child home care leave at least until the child is three years old (Kontula 2018). However, also a large proportion support the lengthening of the fathers leave allowance a little, from the current length to three months (Kontula 2018). The fathers' allowances in family leaves has been lengthened in recent decades, increasing the share of fathers using such leaves accordingly (Saarikallio-Torp & Haataja 2016). It seems to be easier for fathers in work organizations to take leaves that are especially entitled to them, while longer leaves are automatically connected to mothers (Närvi & Salmi 2019). However, in addition to increasing gender equality, changes in family leaves and policies (e.g. increasing fathers' quotas) may also lead to unexpected results in some contexts, such as delaying fertility (Farre & González 2019).

Although a less normative life event than family transitions, the transition to subsidised work can also be regarded as a positive event in terms of well-being. As previously noted, subsidised work can improve well-being through increasing the psychological aspects of work, predictability of life, and one's financial situation (Strandh 2001). As the periods in subsidised work are short, the well-being effects can also be expected to decrease with time. This study showed that labour market

attachment after participating in subsidised work was, at best, weakly strengthening, weakening, non-existent, or later weakly strengthening.

In Finland, municipalities have an independent role in organizing services, which is also reflected in regional variations in childcare. These variations may lead to discrepancies within national governmental objectives in improving employment rates, gender equality in working life, and equality among children in their possibilities to early education (Haataja 2012; Hietamäki et al. 2017; Sihto 2018). Also, with respect to subsidised employment, municipalities have a role as an employer and service provider, and are also tasked with preventing unemployment and financing the benefits paid to the long-term unemployed. Particularly during a bad economic situation, subsidised employment may be used to replace regular jobs in municipalities, or the activating measures may be increased simply to avoid the labour market support paid to the unemployed (Saikku 2016), possibly relating to poorer employment outcomes among the unemployed. However, the descriptive analyses of the present study showed that higher overall volumes in municipal subsidised employment were associated with better labour market outcomes among the participants. Future studies could take the municipal strategies in targeting measures into account, in more detail, when analysing the effectiveness of these interventions.

This study focused on labour market attachment after specific life transitions yet future studies could also take into account other aspects, such as the development of well-being or health after subsidised work. It is common for the unemployed to participate in active labour market policies repeatedly. In some cases, the subsequent interventions seem to complete each other in order to create a path to the regular labour market. However, in other cases, similar interventions follow each other with periods of unemployment between them, especially among those who are in the most vulnerable positions in the labour market. (Aho et al. 2018.) It is not yet known how this kind repeated participation is related to well-being.

Labour market trajectories among subsidised employees could also be analysed with more recent data representing a larger variety of municipalities in Finland. It would also be interesting to analyse mothers' labour market attachment with samples representing different employment sectors, given that information on the quality of job contracts was available from employers' registers. Likewise, the association of domestic responsibilities on later labour market attachment could be tested in other country contexts.

Regarding family-related transitions and parents' labour market trajectories, it would be interesting to analyse the development of both labour market attachment

and changes in family situations longitudinally (such as births of children and partnership formation/dissolutions) or through subjective evaluations (such as working orientations and domestic responsibilities). Following the principles of life course research, more specific study designs could be created. For example, what is the role of timing or duration of certain event, such as childbirth and subsequent family leave, for later labour market attachment? Overall, this kind of holistic perspective to labour market trajectories during one's life course requires rich data on the individuals involved, as well as their social contexts.

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I

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Peutere Laura, Vahtera Jussi, Kivimäki Mika, Pentti Jaana & Virtanen Pekka

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Job Contract at Birth of the First Child as a Predictor of Women's Labor Market Attachment: Trajectory Analyses over 11 Years

■ **Laura Peutere¹**

Doctoral student, University of Tampere, School of Health Sciences, Finland

■ **Jussi Vahtera**

Professor, University of Turku, Department of Public Health, Finland

■ **Mika Kivimäki**

Professor, University College London, Department of Epidemiology and Public Health, UK

■ **Jaana Pentti**

Statistician, Finnish Institute of Occupational Health, Finland

■ **Pekka Virtanen**

Senior research fellow, University of Tampere, School of Health Sciences, Finland

ABSTRACT

There is a lot of evidence that pre-birth employment and access to parental leave are important predictors of mothers' labor market attachment after childbirth. This register-based study from Finland aimed to analyze in which ways the type of job contract (none, temporary, or permanent) at the start of maternity leave predicts labor market attachment in the long term. The mother cohorts were followed up for 11 years. Labor market attachment was analyzed with latent class growth analysis, which makes it possible to identify subgroups with differing track and level of development. Lack of employment and having a temporary contract at baseline were associated with slower and weaker labor market attachment irrespective of mother's age, socioeconomic status, and subsequent births. These findings suggest that the polarization of women into the core and periphery of the labor market structure tends to continue after the birth of the first child. Temporary employment might be an obstacle for having rights for a job-protected family leave and have long-term consequences on the continuity of employment and the division of paid and unpaid work in the family.

KEY WORDS

Finland / labor market attachment / latent class growth analysis / mothers' employment / temporary employment

1 Laura Peutere, University of Tampere, School of Health Sciences, Finland, Email: laura.peutere@uta.fi



I Introduction

Prior research has shown that working during pregnancy and being eligible for parental leave are related to stronger labor market attachment after birth (e.g., Brugiavini et al., 2013; Burgess et al., 2008; Fagan & Norman, 2012; Hoffert & Curtin, 2006). However, there is less research on the role of the employment contract prior to childbirth in later employment outcomes in the long term, and especially whether one has been working on a permanent or temporary basis (Baxter, 2009; Bonet et al., 2013; Bratti et al., 2005; Gutiérrez-Domènech, 2005; Saurel-Cubizolles et al., 1999). This is important as the right to keep a job after childbirth does not necessarily apply to temporary employees.

Nordic countries are often viewed as leaders in family-friendly policies, with a high female employment rate (see Datta Gupta et al., 2008). On the other hand, differences in labor market participation between men and women, and among subgroups of women, remain even here. The present study was set up to analyze patterns of labor market participation and their determinants after the birth of a woman's first child in one of the Nordic countries, Finland.

In contrast to the other Nordic countries, the Finnish system of family leave has been characterized as being among the least flexible, leading to relatively long periods out of the labor market (Datta Gupta et al., 2008; Rønsen & Sundström, 2002; see also Boje & Ejrnæs, 2012). In Finland, there are restrictions for taking family leave part-time, saving leave for later use, and working between leave periods (Salmi & Lammi-Taskula, 2014). In Sweden, for example, the days of parental leave can be taken flexibly full-time or part-time, and saved for later use until the child is 12 years old (Duvander et al., 2014). On the one hand, also in Finland, these periods out of the labor market are mainly temporary: the employment rate for mothers with children from 3 to 6 years old is nearly 80%, and the rate rises almost to the same level as that for fathers, 90%, when children grow older (Statistics Finland, 2013a). On the other hand, a large proportion of young women of childbearing age work temporarily, especially in the public sector (Lehto & Sutela, 2009), and almost 40% of mothers with a child under 1 year old caring for their children at home do not have a valid employment contract (Statistics Finland, 2013b). While the majority of mothers return to employment in a few years after childbirth, the effects of childbirth on employment might be worse among those with weaker labor market status before the childbirth—an association not visible in the average figures. The purpose of this study is to analyze the importance of the employment contract (none, temporary, or permanent) at the time of the first birth for mothers' labor market trajectory with a follow-up over 11 years.

2 Background

2.1 Labor market and family policy context in Finland

In Finland, the family benefits that enable the integration of family life and participation in the labor market are relatively generous (see Tab. 1). There is a 4-month period of earnings-related maternity leave that is stipulated for the mother; about 1 month before, and 3 months after childbirth. The earnings-related parental leave of 6 months has to

Table 1 Summary of the family leave in Finland

	Mother	Father
	Earnings-related maternity leave starts 30–50 days before the estimated date of birth. The leave is in total 105 working days.	
Child birth/estimated date of delivery		
Child is about 0–3 months	The maternity leave continues about 3 months after birth.	Earnings-related paternity leave is 54 working days. At maximum, 18 days can be used while the mother is receiving maternity or parental allowance.
Child is about 3–9 months	Earnings-related parental leave (158 working days, i.e., about 6 months) can be divided between the parents. Part-time leave is possible only if both parents reduce their working hours and take partial leave at the same time.	
Child is about 9 months -> 2nd birthday		The rest of the paternity leave can be used only after the parental leave has been used in total. It is available until the child turns 2 years old.
Child is about 9 months -> 3rd birthday	Mother or father can take child home care leave and receive home care allowance (341.06 EUR in 2014), with possible additional means-tested, sibling, and municipal supplements.	
Child is 9 months -> child's second school year ends	Parents can take partial child care leave and work reduced hours (available for those who have been employed at least 6 months for the same employer within a previous year). For a child under 3 years of age, parents can receive flexible care allowance (since 2014). For a child in 1st and 2nd grade in school, parents can receive partial home care benefit.	

Sources and further details: Salmi & Lammi-Taskula 2014; Social Insurance Institution of Finland (<http://www.kela.fi/web/en/families>); Employment Contracts Act, Health Insurance Act, Act on Child Home Care Allowances and Private Care Allowances.

be taken after the maternity leave, and can be divided between the parents as they wish. After parental leave, when the child is about 9 months, either one of the parents can take home care leave until the child's third birthday. For fathers, there is a paternity leave of 9 weeks that can be taken until the child turns 2 years old. After the parental leave, public childcare (or a benefit for private childcare) is available to all families until the child goes to school (see Salmi & Lammi-Taskula, 2014). In practice, mothers use most of the family leave that could be divided between parents. Mothers are continuously on leave on average 20 months per one child (including a 2 month's break at maximum) (Haataja & Juutilainen, 2014: 28–29). In this study, we use “family leave” to refer to both maternity, paternity, and parental leave and home care leave in general in Finland.



When referring to previous research, we, however, use the terms used in the studies in question.

An important phenomenon in the Finnish labor market, related to the use of family leave, is the use of fixed-term job contracts. The proportion of Finnish women working temporarily is 18% and of men is 12%, whereas in other European Union (EU) countries, the difference in employment in temporary work between the genders is smaller on average (14% and 13%, respectively) (Eurostat, 2014). Fixed-term work is most common in the female-dominated public sector, in education, social work, and healthcare. Furthermore, sequential fixed-term job contracts for the same employer are more common for women than for men (Lehto & Sutela, 2009). As women more commonly have fixed-term jobs than men, parents' choices regarding family leave are often "made in the context of the father's stable versus the mother's unstable career" (Närvi, 2012: 467). On the other hand, in the municipal (i.e., local government) sector, there is a constant need for substitutes. Many of the jobs are statutory and have to be carried out during parental and sick leave (Palanko-Laaka, 2005: 39), ensuring that temporary jobs at least are available.

In Finland, women traditionally work full-time (see e.g. Pfau-Effinger, 1993). Working part-time is less common (19%) than for women in the European Union countries on average (32%) (Eurostat, 2014; see also Lehto & Sutela, 2009). However, mothers of young children would often prefer working part-time instead of full-time (Hakovirta & Salin, 2006), but it is not always possible. Parental leave cannot be taken part-time unless both parents take part-time leave. Also, after parental leave, the opportunity to work reduced hours for the purposes of childcare has been granted only to those who have had the same job at for at least 6 months and not for those trying to find a new job after childbirth. This makes it more difficult for mothers with no valid job contract or with temporary jobs expiring during the period of family leave to combine work and family (see also Närvi, 2012).

This situation in the labor market is also reflected in the debate about child home care. On the one hand, users strongly support home care, while on the other, the scope for reconciling work and care is criticized (Repo, 2010: 53). It is also widely believed in Finland that small children should first be cared for at home (Pfau-Effinger, 2012). In addition to the problems associated with combining full-time work and care, there are strong cultural incentives toward home care, which together lead to longer periods out of the labor market.

2.2 Return to employment after childbirth

Previous research has shown that women working during pregnancy and returning to employment relatively soon after childbirth have stronger attachment to the labor market in the long term than other women (e.g., Fagan & Norman, 2012; Shapiro & Mott, 1994). In addition, women with higher education or a higher occupational position return to work sooner (Fagan & Norman, 2012; Vlasblom & Schippers, 2006), which might partly indicate stronger preferences for paid work both before and after childbirth.

Returning to work after childbirth is also highly related to the right to parental leave and to keep their old jobs. In some countries, the number of working hours or the length of service for the same employer, for example, are (or have been) related to the

right to parental leave and job protection, and therefore promote job continuity around childbirth (e.g., Burgess et al., 2008; Hoffert & Curtin, 2006).

Only a few studies have considered the type of contract—whether permanent or temporary—preceding the birth of a child. An Australian study found that women with a permanent job contract were more likely to return to the labor market than women with a casual or fixed-term job during the 18 months after the birth (Baxter, 2009). The permanent employees had more often taken parental leave (or had the opportunity to do that), whereas for casual and fixed-term employees, this was more unlikely. Saurel-Cubizolles et al. (1999) also found that women with fixed-term job contracts were less likely to return to work than permanent employees a year after childbirth in Spain, Italy, and France. Other studies conducted in Spain obtained comparable results, with a 6–9 months follow-up (Gutiérrez-Domènech, 2005) and with a 1-year follow-up after childbirth (Bonet et al., 2013). Both of these studies indicate that temporary workers are less likely to be employed after childbirth. Bratti et al. (2005) found that Italian women working on both a permanent and a temporary basis before childbirth were as likely to be in the labor force 3 years after the first birth. The reason for this result might be that the outcome variable—labor force participation—combined women both employed and unemployed (versus those out of the labor market).

In summary, previous studies indicate that temporary jobs are related to weaker attachment to the labor market after childbirth. Although temporary employment among women is very common in Finland, there is little research on its effects on women's labor market attachment after the advent of parenthood. A study based on a survey in 2013 found that those with a valid job contract at the time of the childbirth were more commonly employed at about 2 years after the birth of a child, as well as were those with a permanent job contract compared with those with only a temporary job (Närvi, 2014b). A register-based study of women who gave birth in 1998 found that fixed-term employment was typical for women not using the home care allowance at all (i.e., not staying on home care leave after parental leave when the child is about 9 months old), or postponing it to a later occasion. Women with a secure labor market status were able to use the home care allowance more flexibly and plan their leave periods depending on other circumstances in the family. Moreover, it was typical for women with previous unemployment periods to use the allowance for as long as possible and also to end up being unemployed after the home care period (Rissanen, 2012). A qualitative study among Finnish parents found that mothers with unstable employment situation were concerned about their future career after childbirth; some of them started applying a new job relatively soon or accepted a job offer to guarantee their chances in the labor market. Others with a long temporary contract felt obligated to return to work when the contract was still effective. At the same time, it was typical for the mothers to feel pressure to take care of their child(ren) at home as long as possible. Moreover, for some of them, lack of a job contract meant that they did not have to plan the return to work in advance (Närvi, 2014a: 125–137).

2.3 Methodological issues for analyzing women's employment patterns around the start of parenthood

Various study designs and methods have been applied in longitudinal analyses of the impacts of childbirth on women's employment. There are a number of studies that analyze



the average employment patterns with respect to known background variables, such as education, country, age, or age cohort. For example, Fouarge et al. (2010) have studied mothers' employment on the basis of survey data from Germany, the Netherlands, and Great Britain 2 years before and 20 years after childbirth. The study showed that women's participation in the labor market decreases before the birth but increases after the birth, following "a saddle-shaped pattern." Although younger age cohorts have a higher participation rate than older cohorts, the rates do not recover to the same level as before the birth (Fouarge et al., 2010).

Some studies have applied methods that enable identification of clusters or subgroups following different employment patterns (Aassve et al., 2007; Simonson et al., 2011). Combining retrospective and panel data, Aassve et al. (2007) identified nine work–family patterns among British women between the ages of 13 and 30. The authors conclude that the trajectories indicating "work-oriented" preferences seemed to prevail among these young women, whereas evidence for the existence of women with pure family orientation remained scarce. Simonson et al. (2011) analyzed the life histories of German women between the ages of 15 and 45 and identified four clusters, characterized by the predominance of full-time employment, discontinuous employment, part-time employment, or housewife status.

In addition, latent class growth analysis and growth mixture modeling have been used in the analysis of employment trajectories in general (e.g., Huang et al., 2011; Virtanen et al., 2011), and in particular for men or women (Dariotis et al., 2011; Hynes & Clarkberg, 2005). Hynes and Clarkberg (2005) analyzed women's employment trajectories around the time of childbirth in the USA. They identified six different types of employment patterns surrounding first and second births, ranging from continuously employed to continuously out of the labor market. The follow-up time after both births was 2 years (Hynes & Clarkberg, 2005).

In summary, research on women's employment patterns surrounding the start of parenthood that combines both the type of contract preceding childbirth and a long follow-up time is limited. In addition, using methods that enable the distinguishing of latent classes in the data may reveal different features in the development of labor market attachment that would remain unobserved when focusing only on previously known background factors and average levels of attachment. The present study applies latent class growth analysis to the examination of women's labor market attachment with a relatively long follow-up time and register-based data. In addition, research conducted in specific countries may not be transferable to different labor markets and family policy contexts. This study contributes to the research on mothers' employment outcomes in the contexts set by the Nordic type of welfare state and a high rate of fixed-term job contracts, especially among women of childbearing age.

3 The aims of the study

The aim of this study is to elicit different trajectories for labor market attachment subsequent to the first childbirth, taking into account the labor market status prior to maternity leave. Women with and without a job contract when the leave started are studied separately. Having obtained a relevant set of trajectories, we analyze their associations with the job contract (permanent or temporary) prior to the birth.

Our hypothesis is bidirectional. According to previous survey and register-based studies reviewed above, it may be expected that—compared with permanent employment—previous temporary employment predicts delayed and weak labor market attachment after the birth. On the other hand, based on the qualitative study among Finnish parents (Närvi, 2014a), an opposite result could also be possible; women with a temporary contract or unstable labor market status preceding childbirth are more reluctant to stay at home for a long time, as this might lead to increasing difficulties for re-entry to the labor market.

4 Data and methods

4.1 The sample

The sample for the present study was derived from the Finnish Public Sector Study (FPSS) that follows up the employees of 10 urban municipalities and six hospital districts in Finland (see e.g. Kivimäki et al., 2009). The study is based on an open cohort, meaning that new employer cohorts have been included to the study regularly. The study includes employees who have been employed for at least 6 months in any year between 1991 and 2005 ($n = 151,901$) in the municipalities. The FPSS has been approved by the ethics committee of the Hospital District of Helsinki and Uusimaa.

The study cohort included the women who, according to the Finnish Care Register for Health Care, had their first birth in the years 2000–2002 ($n = 3,835$). This register contains data on hospital visits covering the whole country (Sund, 2012). Using the information from the National Pension Register (see section 4.2), the cohort obtained was divided into two subgroups according to labor market status (employment contract or not) at the time of the birth. Further criteria for being included in the subgroup were as follows. The subgroup without a contract at the time of the birth included women who had been employed in the municipalities or hospitals within a 5-year period before the birth. The subgroup with a contract included those who were employed in the municipalities or hospitals at the time of the birth. Women employed somewhere other than in the municipalities or hospitals ($n = 690$) at the time of the first birth were excluded from the analysis, as information on the type of employment contract was not available. In addition, four women who died during the follow-up were excluded from the analysis. The final number of women included in the study was 3145, 1532 not employed and 1613 employed at the time of the birth of their first child.

4.2 Variables

The type of job contract prior to the first birth was defined on the basis of the information in the personnel registers of the municipalities and hospitals. For the cohort of women with a valid job contract at the time of the birth, this variable indicates whether they started the maternity leave under a permanent or a temporary contract. For women not employed, the variable indicates the nature of their job contract (permanent or temporary) during the most recent period in the service of the employer. In the present study,



temporary employment refers to fixed-term jobs, that is, job contracts with a limited duration for any reason, such as substitution.

The measure of labor market attachment was based on data obtained from the National Pension Register managed by the Finnish Centre for Pensions. The register includes information on all work in both public and private sectors, and work on a self-employed basis, that is insured according to the Earnings-related Pension Acts.¹ As all work has to be insured, the register data can be regarded comprehensive. The start and end days of employment periods are recorded to the register according to the information given by the pension insurance companies and other institutions.

Employment periods, that is, the periods person has been insured from 2000 to 2011 were included. The periods were recorded to an accuracy of 1 month on the basis of the information on start and end days. Labor market attachment was measured as the number of months worked per 6 months. Therefore, the data consisted of 18–22 variables with values ranging from 0 to 6. The follow-up lasted 9–11 years, starting from the month following the first birth.

As a general rule, maternal (about 4 months) and parental (about 6 months) leave from permanent (or long temporary) jobs are not reported to the Finnish Centre for Pensions and therefore do not appear as breaks in the continuity of employment contracts. Therefore, the proportion of women attached to the labor market is artificially high, especially among women who were employed at the time of the first birth. As the employment recorded to the register also includes some periods when the person actually is not attending at work, the term “labor market attachment” instead of “employment” describes the variable more exactly.

A variable indicating socioeconomic status is based on the personnel registries of the employer. Information on employees' occupation available in the registries has been coded according to the classification of Statistics Finland (Statistics Finland, 1987). It is categorized into upper-level white collar, lower-level white collar, and blue collar workers. The socioeconomic status indicates both the educational and the occupational status of women included in the data. The majority of upper-level white collar workers included in this data are teachers in kindergartens and schools, and doctors, occupations requiring a university degree. The main occupations among lower-level white collar workers are nurses in hospitals and kindergartens. Blue collar workers are mainly assistants in hospitals, cleaners, and kitchen staff.

Age is also based on the information retrieved from the personnel registries. It is treated as a continuous variable. As for the first birth, information on the number of subsequent births during the follow-up is based on the dates of births available in the Care Register for Health Care. The values of this covariate range from 0 to 4.

4.3 Statistical methods

We used latent class growth analysis as the principal method (Nagin, 2005). This method requires that the same individuals (or any other observational units) are followed over age or time, so that there are measures from different time points available. The purpose is to find clusters of individuals that follow the same kind of patterns over time. For example, there might be a subgroup of individuals who have an increasing pattern in the measured property during the follow-up, or those whose values do not change at all. These different developmental patterns are “hidden” in the data. The purpose is

to identify a proper number of hidden patterns and their shapes from the data so that each individual follows one of the patterns as closely as possible. This means that the aim is to find a solution in which the probability for each individual to be classified in one track is as high as possible, whereas the probability to belong to any other track is as low as possible. The solution should also be as simple as possible; the aim is to find the lowest number of distinctive patterns with the best fit for each individual. The best solution can only be identified by trying out different models, comparing different statistical criteria and interpreting visually the emerging trajectories (Jung & Wickrama, 2008; Nagin, 2005).

The distribution of the variable used has to be taken into account when modeling the data. In the present study, the number of months worked during every 6-month period is a count that can be analyzed by applying Poisson distribution. The distribution of the variable is skewed, as up to 96% of the women have been attached to the labor market for a full 6/6 months. Therefore, a zero-inflated Poisson (ZIP) distribution was used in the analyses (e.g., Lambert, 1992; Nagin & Land, 1993). The values of the outcome variables were recoded so that the highest value 6 (months worked per half-year period) is equal to 0, 5 is equal to 1, 4 is equal to 2, and so on, to make it possible to apply the ZIP models in the analyses.

Development of labor market attachment was assumed to be nonlinear; therefore, quadratic growth model was applied for all models and groups extracted. The models were compared with Bayesian information criteria (BIC), with a Lo, Mendell, and Rubin (LMR) likelihood ratio test (Lo et al., 2001), comparing k and $k-1$ class models (Nylund et al., 2007), and with substantive criteria (Nagin, 2005).

In latent class growth analysis, the assignment of individuals into different trajectories is based on (highest) probabilities. For example, as a result of the analysis, the probability for an individual to belong to a certain latent trajectory might be 91%—and regarded as the most likely latent class—while at the same time, the individual's probability to belong to all other classes is in total 9%. Thus, in most cases, there is always some uncertainty within the classification. Therefore, we analyzed the distribution of independent variables in the latent trajectories with Wald test using pseudo-class method that utilizes information on the posterior probabilities (Mplus Technical Appendices, 2010; Muthén & Muthén, 1998–2012). With pseudo-class method, the uncertainty related to the membership in latent classes is taken into account in a similar manner, as multiple imputation is done in missing data analysis to estimate the missing value (Clark & Muthén, 2009). The effect of the independent variable (i.e., temporary versus permanent job contract) on the latent class membership in the model was estimated with and without covariates in multinomial logistic regression. The analyses were conducted with Mplus version 7 (Muthén & Muthén, 1998–2012).

5 Results

5.1 Descriptive findings

The majority (94%) of the women who were not employed at the time of the first birth had had a temporary job contract in municipalities and hospitals. Among the women who were employed at the time of the first birth, 69% had a permanent and 31% a temporary contract.



Table 2 shows the proportion of women employed for 6/6 months during the follow-up, according to labor market status and job contract. Only a small proportion of women (4.3%) not employed at the time of the birth and having had a temporary job in the past returned to employment during the second 6-month period after the birth, and 3 years later almost half of them were employed for 6/6 months. Women with past experience of a permanent job returned more quickly to the labor market.

In contrast, on average, over 95% of women having a permanent employment contract at the time of the first birth maintained maximum labor market attachment throughout the 11-year follow-up time. The proportions of maximum attachment are also high for women with a temporary job contract at the time of the first birth, but not as high as for women with a permanent job. The high proportion even in the first half-year period (see Tab. 2) means that the contracts continued to be valid, and therefore, the maternity and parental leave do not appear as breaks in the register based on employment contracts.

Table 2 also shows that subsequent births take place most commonly between the second and fourth year after the first birth, after which the percentage of births decreases. There are some differences in the proportions and timings of subsequent births between the subgroups. Women not employed at the time of the first birth and with a past experience of a permanent job were less likely to have a second birth during the second year of the follow-up compared with women with a past experience in a temporary job. Also, women with a permanent job at the time of the first birth were less likely to have subsequent children in the third and fourth year of the follow-up than those with a temporary job.

A quarter (25.7%) of women not employed at the time of the first birth are upper-level white collar workers, a majority (61.4%) are lower-level white collar workers, and 12.8% are blue collar workers. The corresponding proportions for women employed at the time of the first birth are somewhat different: 39.7%, 52.8% and 7.6%, respectively.

Women employed at the time of the first birth are older (mean 31.5, range 20–49 years) than women not employed (mean 28.4, range 19–46 years).

5.2 Analysis of women not employed at the time of their first birth

A latent class growth model with two to six groups was conducted among women not employed at the time of the first birth. Although the fit indices (BIC and LMR Likelihood ratio test) improved as more classes were extracted, a model with four classes was chosen on the basis of substantive criteria (Fig. 1). It was possible to identify trajectories of early strengthening (26.2%), intermediately strengthening (20.8%), slowly strengthening (25.0%), and weakly strengthening (28.0%) labor market attachment. In the last named group, the average attachment level stays low, whereas the remaining three groups only differ with respect to the time that elapses until the attachment attains full strength.

A sensitivity analysis was conducted among women who did not have more children during the follow-up ($n = 435$). In the four-class model, the form of trajectories was quite similar to that in the original model and there were only some differences between proportions of individuals assigned to each latent class (figure not shown). This indicates that the composition and type of latent classes are not merely a result of the timing of subsequent births.

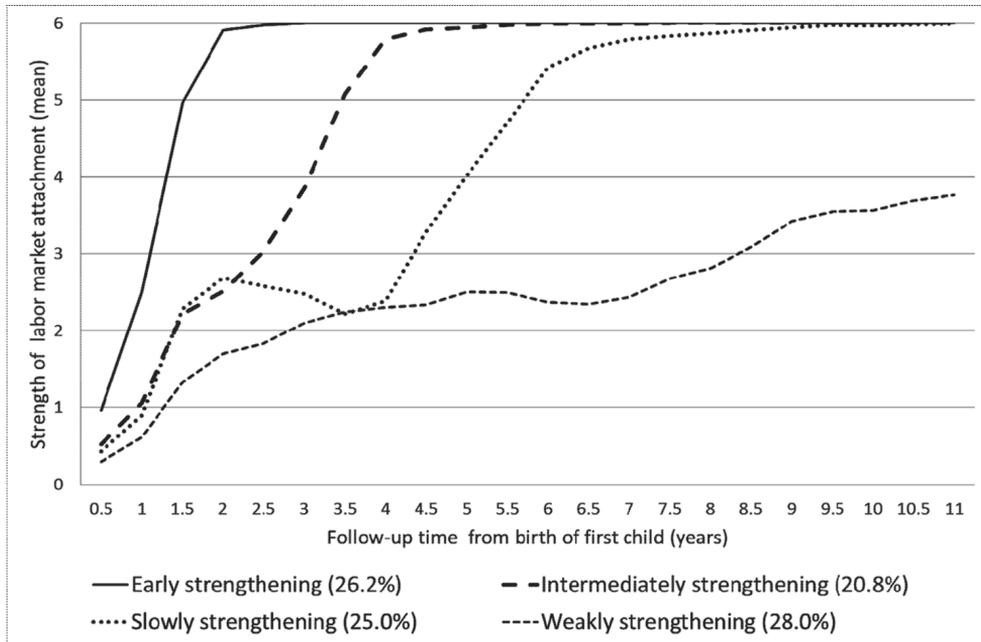
Table II Full (6/6 months) labor market attachment at the follow-up time periods, according to labor market status at the time of the first birth and frequencies of subsequent births by the period

	Not employed at the time of first birth				Employed at the time of first birth			
	Past permanent (n = 91)		Past temporary (n = 1441)		Permanent (n = 1115)		Temporary (n = 498)	
The follow-up time periods	Employed 6/6 months (%)	Births (%)	Employed 6/6 months (%)	Births (%)	Employed 6/6 months (%)	Births (%)	Employed 6/6 months (%)	Births (%)
Year 1a ^a	0	0	0	0	99.3	0	91.2	0
Year 1b	27.5	0	4.3	0.5	95.8	0.4	82.9	0
Year 2a	60.4	2.2*	30.5	8.5*	96.2	6.5	82.3	5.6
Year 2b	71.4	9.9	40.0	13.2	96.0	12.3	84.1	15.3
Year 3a	75.8	7.7	44.0	11.5	95.3	10.7*	85.1	14.7*
Year 3b	74.7	14.3	47.7	10.4	96.6	9.1	83.3	9.8
Year 4a	78.0	8.8	51.7	9.6	96.3	6.1*	85.5	9.0*
Year 4b	81.3	5.5	57.2	8.1	97.1	5.3**	85.9	9.0**
Year 5a	80.2	5.5	62.2	5.7	96.9	6.2	88.6	4.6
Year 5b	83.5	6.6	67.1	5.1	96.8	3.3	88.2	4.4
Year 6a	84.6	5.5	70.4	4.9	96.1	2.9	90.8	4.0
Year 6b	86.8	1.1	72.9	5.1	95.2	2.5	90.8	3.4
Year 7a	86.8	3.3	75.6	4.4	96.1	3.1	90.6	4.4
Year 7b	84.6	5.5	77.1	4.9	96.1	1.7	89.6	2.8
Year 8a	84.6	3.3	78.0	3.1	95.7	2.0	89.6	2.6
Year 8b	84.6	2.2	78.5	3.3	96.1	2.1	91.4	3.4
Year 9a	83.5	1.1	80.3	2.1	95.4	1.0	92.4	1.6
Year 9b	84.6	0	82.8	1.5	94.9	0.7	90.8	1.2
Year 10a ^b	84.0	0	84.0	2.1	94.1	0.6	91.0	1.2
Year 10b ^b	82.0	2.0	83.2	1.8	95.3	0.4	91.6	0.3
Year 11a ^b	69.6	0	84.1	1.7	95.6	0.3	91.8	0.6
Year 11b ^b	69.6	0	85.0	0.4	96.2	0	95.6	0

^aFor each year, "a" is the first 6 months and "b" is the second 6 months.

^bThe number of observations for 10th and 11th years are 50 and 23 (past permanent) and 957 and 473 (past temporary), respectively, for women not employed at the time of first birth. The number of observations for 10th and 11th years are 716 and 341 (permanent) and 321 and 159 (temporary), respectively, for women employed at the time of first birth. For subsequent births: *p < 0.05, **p < 0.01.

Figure 1: Trajectories of labor market attachment among women not employed at time of first birth ($n = 1532$).



The type of job contract preceding the first birth and other independent variables were analyzed separately on the basis of the posterior probabilities from the four-class model. The proportion of temporary job contracts turned out to be relatively small (87.3%) in the group of early strengthening trajectory (Tab. 3). The groups also differ significantly with respect to age and socioeconomic status: on average, women assigned to the trajectory of weakly strengthening attachment are younger and belong more commonly to the category of blue collar workers. In addition, women assigned to the trajectories of slowly or weakly strengthening attachment had more children during the follow-up.

In line with the findings of Tab. 3, multinomial regression analysis with temporary employment as the only predictor shows that, compared with women with the trajectory of early strengthening labor market attachment, those with slowly, intermediately, and weakly strengthening labor market attachment are more likely to have had a history of temporary job contracts (Tab. 4, Model 1). In other words, even if they do not have a job contract at the time of the birth, those with a trajectory of early strengthening attachment have more often had a period of permanent employment in the past.

The effect of a previous temporary contract on the trajectory group remains after inclusion of socioeconomic status and age (Model 2) and the number of subsequent children (Model 3) in the analysis. In cases with weak labor market attachment, the odds ratios for temporary contract even increased after including the other covariates, whereas among trajectories of slowly and intermediately strengthening attachment, the changes in odds ratios are smaller.

Table III Means of covariates in latent class trajectories of labor market attachment among women not employed at the time of first birth (n = 1532)

Covariates	Early strengthening	Intermediately strengthening	Slowly strengthening	Weakly strengthening	Wald test (p-value)
	% or mean	% or mean	% or mean	% or mean	
Temporary job (versus permanent) %	87.3	95.9	97.4	95.9	0.000***
Age (mean)	29.2	28.7	27.9	27.7	0.000***
Socioeconomic status					
Upper-level white collar workers %	27.9	30.3	25.8	20.3	0.020*
Lower-level white collar workers %	66.2	61.0	62.5	56.6	0.104
Blue collar workers %	5.9	8.6	11.8	23.1	0.000***
Subsequent children born during the follow-up (mean)	0.84	0.88	1.04	1.34	0.000***

*p < 0.05, **p < 0.01, ***p < 0.001.

Table IV Labor market attachment of women not employed at time of first birth

		Trajectories of labor market attachment			
		Early strengthening	Intermediately strengthening	Slowly strengthening	Weakly strengthening
			OR (95% CI)	OR (95% CI)	OR (95% CI)
Model 1 (a)	Reference	3.69 (1.85–7.37)	5.61 (2.69–11.67)	3.44 (1.94–6.11)	
Model 2 (b)	Reference	3.79 (1.89–7.60)	5.30 (2.47–11.35)	3.78 (2.04–7.00)	
Model 3 (c)	Reference	3.81 (1.91–7.61)	5.53 (2.58–11.86)	4.01 (2.17–7.42)	

(a) Crude (n = 1532).

(b) Occupational status and age as covariates (n=1,531).

(c) Occupational status, age and number of subsequent births as covariates (n=1,531).

Odds ratios (ORs) and 95% confidence intervals (CIs) from multinomial logistic regression with reference to the employment history (temporary versus permanent job) and to the trajectory of labor market attachment (early strengthening versus intermediately, slowly, and weakly strengthening trajectories).

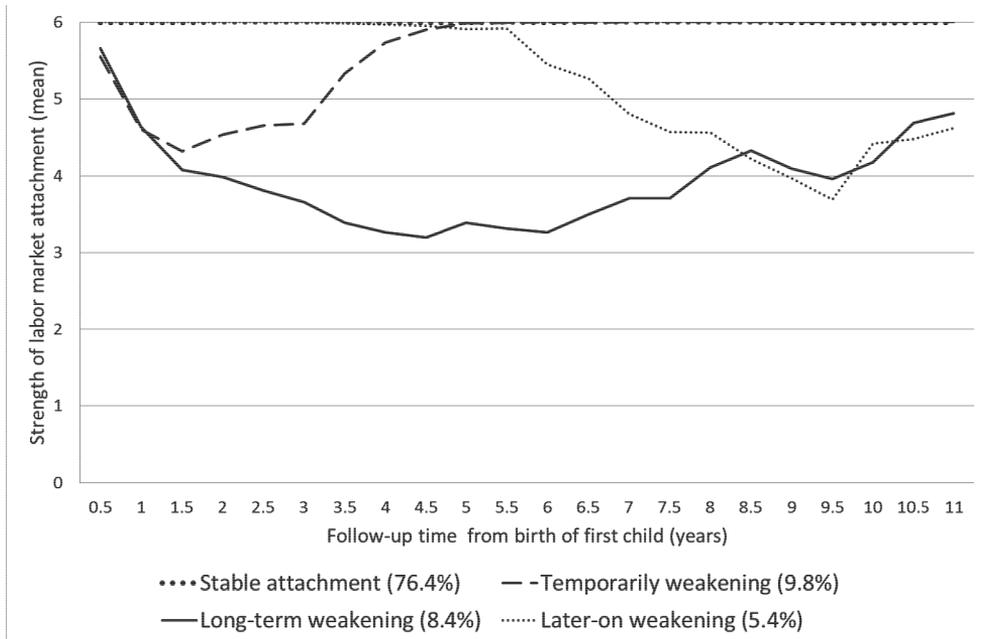
Temporary employment was also related to intermediately, slowly, and weakly strengthening attachment in an analysis of women with no other children born during the follow-up (not in table).

5.3 Analysis of women employed at the time of their first birth

Latent class growth analyses with two to six groups were also conducted among women employed at the time of the first birth. In all models, a class of stable labor market



Figure 2: Trajectories of labor market attachment among women employed at the time of first birth ($n = 1613$).



attachment, comprising 76–77% of the sample, was identified. Although the fit indices (BIC and LMR likelihood ratio test) improved as more classes were extracted, a model with four classes was chosen on the basis of substantive criteria (Fig. 2). In addition to the trajectory of stable labor market attachment (76.4%), this model revealed the trajectories of temporarily weakening (9.8%), long-term weakening (8.4%), and later-on weakening attachment (5.4%). Similar trajectories were also obtained in a four-class model among women who did not have more children during follow-up, with some differences in the proportions of individuals assigned to each class (figure not shown).

It was most common for women assigned to the long-term weakening attachment to have a temporary job contract at the time of their first birth (Tab. 5). Temporary job contract in the beginning of the follow-up was least common among women who maintained a stable attachment during the follow-up. The differences between other covariates across the classes are less prominent. On average, women assigned to stable attachment are older than others. A larger proportion of women assigned to long-term weakening attachment are blue collar workers, and women with later-on weakening attachment are less commonly upper-level white collar workers. Women with a stable attachment had fewer children during the follow-up.

With multinomial logistic regression, we compared the probability to have a certain labor market trajectory using stable attachment as the reference category and temporary employment as the explaining factor. Mothers who had a temporary job contract at the time of their first birth were more likely—than those with a permanent job—to have a

Table V Means of covariates in latent class trajectories of labor market attachment among women employed at time of first birth (n = 1613)

Covariates	Stable	Temporarily weakening	Long-term weakening	Later-on weakening	Wald test (p-value)
	% or mean	% or mean	% or mean	% or mean	
Temporary job (versus permanent) %	25.3	49.1	57.8	32.6	0.000***
Age (mean)	31.7	30.8	30.2	30.8	0.022*
Socioeconomic status					
Upper-level white collar workers %	40.1	40.8	39.3	32.7	0.696
Lower-level white collar workers %	52.9	54.1	46.8	57.3	0.420
Blue collar workers %	7.0	5.1	13.9	10.0	0.103
Subsequent children born during the follow-up (mean)	0.78	0.93	1.01	1.04	0.036*

*p < 0.05, **p < 0.01, ***p < 0.001.

Table VI Labor market attachment of women having a valid employment contract at time of the first birth

	Trajectories of labor market attachment			
	Stable	Temporarily weakening	Long-term weakening	Later-on weakening
		OR (95% CI)	OR (95% CI)	OR (95% CI)
Model 1 (a)	Reference	3.06 (2.15–4.37)	4.35 (2.83–6.68)	1.38 (0.84–2.25)
Model 2 (b)	Reference	3.17 (2.15–4.69)	4.63 (2.97–7.22)	1.49 (0.86–2.56)
Model 3 (c)	Reference	3.16 (2.13–4.67)	4.72 (2.52–8.84)	1.37 (0.73–2.58)

(a) Crude.

(b) Occupational status and age as covariates.

(c) Occupational status, age, and number of subsequent births as covariates.

Odds ratios (ORs) and 95% confidence intervals (CIs) from multinomial logistic regression with reference to the employment contract (temporary versus permanent job) and to the trajectory of labor market attachment (stable versus temporarily, long-term weakening, and later-on weakening trajectories) (n = 1613).

temporarily weakening or long-term weakening labor market attachment during the follow-up (Tab. 6). However, those with a temporary job contract in the beginning of the follow-up were not more likely to end up in the later-on weakening trajectory. The results change only a little after including socioeconomic status and age (Model 2) and the number of subsequent births as covariates to the model (Model 3).

Temporary employment was related to temporarily and long-term weakening attachment also among women who did not have more children during the follow-up (not in table).



6 Discussion

The aims of the study were to define different trajectories for labor market attachment after the first birth and to examine whether the preceding job contract (none, temporary, or permanent) predicts the labor market attachment trajectory. Women with and without a job contract at the beginning of their maternity leave were studied separately. On the basis of the analysis, it can be concluded that a temporary job contract preceding the first birth—both at the time of the first birth and previously—is associated with weaker and delayed labor market attachment. Therefore, this study did not support the opposing hypothesis, that is, the assumption that women with previous temporary jobs would be more reluctant to stay at home for longer, as this might lead to increased difficulties for re-entry to the labor market.

The result is in line with previous studies with shorter follow-up times conducted in other European countries and Australia; those with a temporary job contract are less likely to be employed after giving birth than those with a permanent contract (Baxter, 2009; Bonet et al., 2013; Saurel-Cubizolles et al., 1999). The results also support those of the previous research on the use of family leave in Finland; those with weak labor market status and no job to return to after childbirth stay at home longer or are more likely to be unemployed after their leave (Närvi, 2014b; Rissanen, 2012). The present study also indicates that the weakening effects of temporary job contracts on labor market attachment after childbirth might be prolonged. Likewise, lack of an employment contract at the time of the birth is related to weaker and delayed attachment to the labor force. Absence from the labor market might also be prolonged by the fact that when trying to find a new job after a family leave period—when children are still small—it is more difficult to negotiate flexible or shorter working hours (Närvi, 2012). As noted previously, it is possible to take partial home care leave only for those who have been working for the same employer at least 6 months. It might also be more difficult to get a place in a day care in a short time and with a reasonable distance from home or work after getting a new job (Miettinen & Manninen, 2006: 73–75). For those without a previous job contract, combining work and family becomes more complicated.

It is possible that those who had previously worked on a temporary basis might have had periods of unemployment and problems with finding a job after family leave. However, it was not possible to take unemployment into account in this study. On the other hand, the employment situation in the municipal sector is quite secure, and employees feel the threat of unemployment and layoffs less commonly compared with those in other employment sectors (Forma et al., 2008: 18). It may be assumed that in the municipal sector, the effects of longer periods out of the labor market are evident mainly in the accrual of earnings-related pensions. In the public sector in general, mothers seem to reach the wage level of women without children as they get older, whereas in the private sector, the wage difference remains between women with and without children (Kellokumpu, 2006: 51).

The follow-up time period was 11 years, including the first decade of the 2000s. There have been changes in the labor market during these years. For example, the unemployment rate decreased and the proportion of fixed-term employment decreased slightly during the study period among women in Finland (Statistics Finland, 2010a, 2010b). The economic crisis began during the end of the follow-up in 2008, and might have weakened employment possibilities of these women. On the other hand, as the

crisis took place only in the end of the follow-up, it is not that relevant regarding the main findings of the present study. It is possible that in a different economic situation, the shape of the trajectories and proportions of individuals assigned to them would be different. This study focused on women with their first birth in 2000–2002, living in the same historical time period.

Four trajectories of labor market attachment were identified, among both women not employed and those employed at the time of the first birth. The majority of women (76.4%) employed at the time of the first birth also remained attached to the labor force during the follow-up time, whereas women not employed at the time of the first birth were more evenly assigned to the four different trajectories. A smaller proportion (72%) of women not employed at the time of the first birth had reached a stable attachment after the follow-up time of 11 years compared with those who were employed at the time of the first birth (86%). This finding is in line with that of previous research; being employed around the time of the first birth is related to more stable labor market attachment after the birth in the long term (e.g., Shapiro & Mott 1994).

This is one of the first studies applying LCGA in research on mothers' employment around parenthood (see also Hynes & Clarkberg, 2005; Peutere et al., 2014). As regards the statistical methods used, the LCGA seemed to work well with the data. Trajectories with different patterns were identified, indicating that the method revealed features that had remained unobserved if we had focused only on average growth curve or used other methods for longitudinal data, such as survival analysis. Another advantage is in visually meaningful presentation of the developmental trajectories and their proportions in the study population (Nagin, 2005: 185). The probabilities for most likely latent class membership were high on average (over 90%), also indicating a good model fit.

None of the trajectories identified showed a complete exit out of the labor market during the 11 years of follow-up. This might be due to the fact that all of the women in this study had had some work experience in municipalities or hospitals prior to the first birth, and were to some extent attached to the labor market. On the other hand, among mothers, remaining a housewife for a long period is rare in Finland; in the majority of families with two parents, both of them are employed when children grow older (Statistics Finland, 2013a).

The strengths of the study relate to register-based data with a long follow-up time. Combining data from employers' personnel registers, the National Pension Register, and Care Register for Health Care, it was possible to analyze women's labor market trajectories after the first birth with a follow-up time of 11 years. With register-based data, the problems of selection, missing data, and recall bias were avoided.

The data relating to the first and possible subsequent births are based on the Care Register for Health Care. Although the register data can be regarded as a reliable source of information on births in Finland, it is possible that for some of the women, the birth was not the first one; they might have given birth previously or during the follow-up while abroad, or adopted a child, for example.

There are some limitations to the measure of labor market attachment that are related to the register data and Finnish pension system. Information on the nature of the job contracts is not available (e.g., working full-time or part-time). Furthermore, the data do not include information on periods out of the labor market, such as unemployment and studying, or long periods of work abroad or undeclared work. However, the register data can be considered a good measure of labor market attachment—not



employment as such—irrespective of unpaid periods out of the labor market. It is possible that women with a weak attachment to labor market also more commonly have part-time or temporary jobs than women with a stable attachment.

It is also possible that a woman not employed at the time of the first birth, and recorded as having only a temporary job in municipalities or hospitals preceding the first birth, had had a permanent job in another municipality or in the private sector. Therefore, the group of women recorded as having a temporary job may also include women with an experience in permanent jobs. Despite this possible underestimation of permanent jobs among women not employed at the time of the first birth, previous experience on a temporary job contract seemed to be associated with weaker and delayed labor market attachment.

Finally, one limitation of this study relates to the lack of information of the possible partner's employment situation. The decisions on work and care are made in relation to the partner's position in the labor market. For example, Fagan and Norman (2012) showed that lone mothers and mothers whose partner was not employed were more likely employed full-time than part-time when the child was 3 years old. In addition, mothers with partners working long hours were less likely employed at all 3 years after childbirth.

7 Conclusion

This study shows that unstable labor market status—that is, lack of employment or temporary employment—preceding the first birth is associated with mothers' weaker labor market attachment after giving birth, irrespective of the mother's age, socioeconomic status, and possible subsequent births. However, it must be noted that these results apply to a Nordic type of welfare context, with universal rights to child day care, relatively generous family benefits, and a large public sector offering employment opportunities for women. In any case, these findings suggest that the polarization of women into the core and periphery of the labor market structure tends to continue after the birth of the first child. This finding is also relevant internationally, as the proportion of female temporary employment is also significant in many other European countries, such as Spain, Poland, and Sweden (Eurostat, 2014). In Finland, municipality might not be such a secure employer in the near future, as structures of the social and health services will be renewed, outsourcing to private firms seems to increase, and the public sector is forced to implement austerity measures. This may mean increased threats of losing employment contracts, also around the family leave, in particular among the temporary employees.

Among the main objectives of the European Union are to improve gender equality in working life and raise female employment rate. Although family leave support combining parenthood and paid employment, these are not equally available for all groups in the labor market. Temporary employment might be an obstacle for having rights for a job-protected family leave and have long-term consequences on the continuity of employment and the division of paid and unpaid work in the family. Mother's temporary job contract expiring before or during the family leave might also in some cases be an obstacle for the father to take family leave as he has to be the breadwinner (Närvi, 2014a). Therefore, not only family leave and benefits but also the use of temporary employment should be taken into account when supporting combining work and childcare.

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End note

- ¹ Since 2005, earnings-related pension has been accrued from all paid work and work in a self-employed capacity between the ages of 18 and 67. Although before 2005 the age limit for starting to accrue earnings-related pension was 23, information on employment contracts is also available for younger employees.

PUBLICATION

II

Heikentääkö kotihoidon tuen kuntalisä äitien kiinnittymistä työelämään?

Peutere Laura, Haataja Anita, Vahtera Jussi, Kivimäki Mika, Pentti Jaana & Virtanen Pekka

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Heikentääkö kotihoidon tuen kuntalisä äitien kiinnittymistä työelämään?

LAURA PEUTERE & ANITA HAATAJA & JUSSI VAHTERA & MIKA KIVIMÄKI & JAANA PENTTI & PEKKA VIRTANEN

Kotihoidon tuen kuntalisät saattavat viivästyttää äitien paluuta työhön. Kuntalisät saattavat vaikuttaa naisten asemaan työmarkkinoilla tätä yleisemminkin. Tutkimuksessa seurattiin kunta- ja sairaalaorganisaatioissa työskentelevien äitien työmarkkinakiinnittymistä noin kymmenen vuoden ajan.

.....

Johdanto

Vaikka nykyinen perhevapaiden ja -etuuksien järjestelmä on pääosin sukupuolineutraali, pitävät naiset suurimman osan vapaista. Järjestelmään on kuitenkin odotettavissa muutoksia. Pääministeri Jyrki Kataisen hallitus esitti pidempiä työuria tavoitellessaan syksyllä 2013, että kotihoidon tuki kohdennetaan puoliksi molemmille vanhemmille (Valtioneuvosto 2013). Esitystä on kritisoitu monelta taholta: oppositio vastustaa muutosta perheiden valinnanvapauden vedoten (esim. VK 4/2013 vp), ja toisaalta on epäilty, että uudistus ei todellisuudessa lisäisi isien perhevapaiden käyttöä ja pienten lasten äitien työssäkäyntiä (esim. Salmi 2013). Kuntien tarjoamat paikalliset etuudet näyttävät kuitenkin olevan ristiriidassa hallituksen työuria pidentävien tavoitteiden kanssa (esim. Haataja 2012; Haataja & Pylkkänen 2009, 154–157).

Monet kunnat parantavat lakisäateisen kotihoidon tuen tasoa maksamalla kuntalisää. Sen uskotaan kannustavan perheitä hoitamaan lapsia pidempään kotona ja tuovan sitä kautta säästöjä päivähoitokuluissa. (Miettunen 2008.) Toisaalta yhtenä kotihoidon tukijärjestelmän alkuperäisenä tavoitteena on ollut päivähoitoon tarpeen keventäminen (Anttonen 1999, 30–44; Perhetuki-toimikunnan mietintö 1993, 10–11). Kuntali-sillä voidaan luoda myös lapsiystävällistä kuvaa kunnasta (Miettunen 2008). Lisäksi osa kunnista tukee kuntalisien avulla lasten yksityistä hoi-

toa (Pohjola & al. 2013). Kunnat itse päättävät, maksavatko kuntalisää vai eivät, minkä suuruisen se on ja millä ehdoilla sitä maksetaan.

Kotihoidon tuen käyttö vanhempainvapaan päättymisen jälkeen on hyvin yleistä. Lähes 90 prosenttia perheistä käyttää tukea, ja melkein aina (98 %) vanhempi hoitaa itse lasta kotona, vaikka tuen saaminen ei tätä edellytä. Vain pieni osa kotona lastaan hoitavista vanhemmista on isä (3 %). (Kela 2013, 264.) Tapio Rissasen (2012, 158–159) mukaan vuonna 1985 perustetun kotihoidon tuen suosio on seurannut työttömyydessä tapahtuneita muutoksia: työttömyyden kasvaessa tukea on käytetty yleisemmin, kun taas työllisyystilanteen parantuessa sen käyttö on vähentynyt. 2000-luvun aikana kotihoidon tuen käyttö on laskenut jonkin verran (Kela 2013). Kotihoidon tukea käytetään pääasiassa kokoaikaisena: alle 10 prosenttia perheistä käyttää osittaista hoitorahaa alle 3-vuotiaan lapsen hoitamiseen (Kela 2013, 264; ks. myös Aalto 2013).

Suomen kotihoidon tukijärjestelmää on sen suosiosta huolimatta myös kritisoitu. Esimerkiksi Jorma Sipilän ja kumppaneiden (2012) mukaan järjestelmä lisää lapsiperheiden köyhyysriskiä ja vakiinnuttaa osaltaan sukupuolten välistä eriarvoisuutta työmarkkinoilla ja toimeentulossa. Kotihoidon tuki on melko pieni, ja sen taso on 1990-luvun puolivälistä lähtien jäänyt jälkeen yleisestä ansio- ja hintakehityksestä (Hirvilammi & Laatu 2008, 21; Salmi & al. 2009a). Samaan aikaan lapsiköyhyys on kolminkertaistunut (Sau-

li & al. 2011). Alimpiin tuloluokkiin kuuluvat ja vähemmän koulutetut käyttävät tukea pidempään ja yleisemmin kuin ylempiin tuloluokkiin kuuluvat ja korkeammin koulutetut (Salmi & al. 2009b; Hämäläinen 2005; Takala 2000). Suomen vanhempainvapaa- ja kotihoidontukijärjestelmä on ollut joustamaton, eikä se tue vanhempien osa-aikaista paluuta työelämään (Rantalaiho 2012; toisaalta ks. HE 129/2013).

Läheskään kaikilla äitiysvapaalle jäävillä naisilla ei ole työsuhdetta johon palata. Esimerkiksi vuonna 2011 reilu kolmannes äideistä, joiden nuorin lapsi oli alle 1-vuotias, oli hoitamassa lasta kotona ilman voimassa olevaa työsuhdetta (Tilastokeskus 2011). Kotihoidon tuki merkitsee eri asioita riippuen äidin työmarkkinatilanteesta (Lammi-Taskula 2004). Vakaasti työllistynyt voi käyttää tukea joustavasti työn ja perheen yhteensovittamisen välineenä riippuen muusta elämäntilanteesta. Heikommin työelämään kiinnittyneille tuki voi puolestaan tarjota mahdollisuuden pitkittää työmarkkinoilta poissaoloa, jolloin uudelleentyöllistyminen voi olla entistä vaikeampaa. (Lammi-Taskula 2004; Rissanen 2012, 177–178.) Rahallisen etuuden ohella pidempi kotihoidon jakso voi houkutelaa siksi, että työn ja perheen yhteensovittaminen koetaan hankalaksi pikkulapsiperheissä (Repo 2010). Esimerkiksi perhevapaakyselyyn vastanneista, kotona kaksivuotiaista lasta hoitavista äideistä lähes puolet piti työelämän tahtia liian kiivaana. Reilu kolmasosa puolestaan kertoi hoitavansa lasta mieluummin kotona, koska työ on niin huonosti palkattua. (Salmi & al. 2009b, 41.)

Useissa tutkimuksissa on todettu, että lastenhoidosta johtuvat tyourakatko heikentävät naisten työurien kehitystä (esim. Evertson & Duvander 2011; Fagan & Norman 2012; Shapiro & Mott 1994). Taloustieteissä tätä selitetään inhimillisen pääoman heikkenemisellä (esim. Mincer & Ofek 1982). Poissaolojen aikana työkokemus ei kartu samalla kun aikaisemmin hankittu ammattitaito voi vanhentua (mt.). Tämän vuoksi uudelleentyöllistyminen voi olla vaikeampaa tai palkkakehitys heikompaa. Toisaalta perhevapaakyselyyn vastanneista työnantajien edustajista noin puolet arvioi, että työntekijöiden ammatillinen suoriutumisen on pysynyt samana perhevapaiden aikana, ja noin neljännes arvioi sen heikentyneen. Kyselyyn vastanneiden äitien arviot perhevapaidensa vaikutuksista olivat samansuuntaiset. (Salmi & al. 2009b, 75, 113.)

Keskimääräistä pidemmällä kotona vietetyllä jaksolla voi myös olla ”signaali vaikutus”, eli työnantajat tulkitsevat sen merkiksi vähäisemmästä kunnianhimesta työtä kohtaan (Evertson & Duvander 2011). Toisaalta kotona vietetyn jakson aikana äidin orientaatiot voivat muuttua: jakso voi vahvistaa perheeseen liittyviä tavoitteita työhön liittyvien odotusten kustannuksella (esim. Halrynjo & Lyng 2009). Myös perheen työnjako voi muuttua sellaiseksi, että äiti työhön palttuaankin kantaa suuremman vastuun lapsista ja kodista (Närvi 2014, 151, 173), millä voi olla kielteisiä vaikutuksia myöhempiin työmahdollisuuksiin.

Lasten kotihoidolla on kuitenkin vahva ideologinen tuki Suomessa, ja oikeutta siihen vaalitaan vetoamalla perheiden valinnanvapauteen ja lapsen parhaaseen (Hiilamo & Kangas 2009; Varjonen 2011). Toisaalta perhevapaat ja -etudet myös omalla tavallaan luovat ja ylläpitävät normeja siitä, kuinka pieniä lapsia pitäisi hoitaa (esim. Sipilä & al. 2010, 29; Hennig & al. 2012). Kotihoidon tuen kuntalisällä voi olla myös paikallisen tason symbolinen merkitys – se voi vaikuttaa paikkakunnan hoitokulttuuriin ja siten myös siihen, miten vanhemmat ratkaisevat lastenhoidon. Tämän tutkimuksen tarkoituksena onkin selvittää, ovatko kotihoidon tuen kuntalisät yhteydessä äitien työmarkkinakiinnittymiin pitkällä aikavälillä.

Aikaisempia tutkimuksia ja selvityksiä kuntalisistä

Aikaisemmissa tutkimuksissa on selvitetty, mitkä tekijät selittävät kuntalisien käyttöönottoa ja miten kuntalisä on yhteydessä kotihoidon tuen käytön yleisyyteen sekä vanhempien työvoiman tarjontaan. Kuntaliiton uusimman kyselyn mukaan kuntalisä on käytössä lähes joka kolmannessa kunnassa ja näistä melkein kaikki ovat asettaneet ehtoja sen maksamiselle (Kuntaliitto 2012). Yleisimmin ehtona on, että perheen kaikki lapset hoidetaan kotona (80 %) ja vanhempi hoitaa lasta (67 %). Vakituudesta työstä poisjäämistä edellyttää 27 prosenttia ja opiskelun keskeyttämistä 20 prosenttia kuntalisää tarjoavista kunnista. (Mt.) Näiden ehtojen käyttö on vähentynyt viime vuosina (vrt. esim. Kuntaliitto 2007). 2000-luvulla kuntalisää maksavat yleisimmin muuttovoihtoiset ja väkiluvultaan suuret kunnat,

joissa on pieni veroprosentti, hyvä työllisyys-tilanne ja paljon pieniä lapsia (Miettunen 2008).

Lakisääteinen kotihoidon tuki oli 327,46 euroa kuukaudessa vuonna 2012. Lisäksi osana kotihoidon tukea jokaisesta alle kolmivuotiaasta sisaruksesta maksettiin 98,04 euroa hoitorahaa, ja yli kolmivuotiaasta, mutta alle kouluikäisestä sisaruksesta 63 euroa. Pienituloisille perheille maksettiin hoitolisää enintään 175,24 euroa. (Kela 2013, 255.) Kotihoidon tuen kuntalisää maksettiin vuonna 2012 keskimäärin 148 euroa yhdestä lapsesta kuukaudessa, ja summa vaihteli 50–264 euron välillä (Kuntaliitto 2012). Etujen kokonaisuus näyttäisi kannustavan etenkin matalapalkkaisia (äitejä) ja useampilapsisia perheitä valitsemaan kotihoidon tuen kaikille alle kouluikäisille lapsilleen (Haataja 2006, 49; ks. myös Väinälä 2004).

Kuntalisän yhteyttä kotihoidon tuen käyttöön ja työvoiman tarjontaan on selvitetty useissa tutkimuksissa (esim. Ilmakunnas 1993; Ilmakunnas & Lankinen 1989; Kosonen 2011a; 2011b; Kuismanen 1992; Takala 2000). Seija Ilmakunnaksen (1993) mukaan kuntalisän suuruus oli yhteydessä kotihoidon tuen käyttöasteeseen 1990-luvun alussa, mutta vaikutus ei ollut kovin suuri. Tuki näytti olevan suositumpaa siellä, missä lasten kotihoito oli yleisempää jo alun perin, ennen kuntalisien yleistymistä. (Mt., 39–41.) Mika Kuismanen (1992) samaan ajankohtaan kohdistuvassa tutkimuksessa kuntalisän suuruudella puolestaan ei ollut yhteyttä kotihoidon tuen käyttöasteeseen. Erot tuloksissa voivat johtua tutkimusasetelmien eroista (ks. Ilmakunnas 1993, 42).

Pentti Takalan (2000) 1990-luvun lopun kysely- ja rekisteriaineistoon pohjautuvan tutkimuksen mukaan kotihoidon tuen kuntalisä ei ollut yhteydessä tuen käyttöön perheissä, joissa oli alle 3-vuotias lapsi. Perheet päinvastoin käyttivät enemmän kunnallista päivähoitoa kunnissa, joissa maksettiin kuntalisää. Takalan mukaan tämä selittyy sillä, että kotihoitoa tuetaan kuntalisin kunnissa, joissa päivähoidon kysyntä on suuri. (Mt., 69.)

Tuomas Kosonen (2011a, ks. myös 2011b) on tutkinut kuntalisän vaikutusta vanhempien työn tarjontaan vuosina 1994–2005. Tutkimuksen mukaan 100 euron korotus kotihoidon tukeen kuukaudessa pienentää äitien työllisyyttä noin 3 prosentilla. Isien työllisyyteen kuntalisillä ei ollut vaikutusta. Kuntalisällä ei ollut ”viivästettyä” yhteyttä sellaisten äitien työssäkäyntiin, joiden lap-

set olivat ylittäneet kotihoidon tuen maksun ikärajan. Kuntalisällä ei myöskään ollut ennakoivaa vaikutusta sellaisten naisten työllisyyteen, jotka vasta olivat saamassa lapsen. Lapsiperheet eivät näyttäneet hakeutuvan kuntiin, joissa kuntalisä oli tarjolla, eikä tuki myöskään ollut yhteydessä syntyyvyyteen. (Kosonen 2011a.)

Kuntalisistä on tehty myös kuntakohtaisia tutkimuksia ja selvityksiä (esim. Ilmakunnas & Lankinen 1989; Koskinen 2002; Riihelä 2010). Esimerkiksi Vantaalla kuntalisän korotus 143 eurosta 215 euroon lisäsi perheiden suunnittelemaa lapsen kotihoidon pituutta keskimäärin yhdellä kuukaudella. Tulos perustui vastaajien arviointiin siitä, miten pitkään lapsia olisi hoidettu kotona aikaisempien ehtojen ja tukisumman vallitessa. (Riihelä 2010.) Kuntalisien tilanne näyttää elävän koko ajan, kun kunnat pohtivat erilaisia vaihtoehtoja lasten päivähoidon järjestämiseksi.

Yhteenvedon voidaan todeta, että kuntalisien vaikutusta äitien työllisyyteen on tutkittu jonkin verran viimeisen 20 vuoden aikana, mutta tulokset ovat osin ristiriitaisia keskenään. Laura Miettusen (2008, 13) mukaan synnä tutkimuksen vähäisyyteen lienee tilastotietojen hajanaisuus ja rekisterien puutteet. Kuntalisän yhteyttä äitien työssäkäyntiin onkin tutkittu eri tavoin kerätyillä aineistoilla ja tutkimusasetelmilla, mikä osaltaan voi selittää ristiriitaisia tuloksia. Aikaisempien tutkimusten perusteella voidaan olettaa, että kuntalisä viivästyttää äitien paluuta työelämään (toisaalta ks. Takala 2000, 69).

Tässä tutkimuksessa selvitetään, onko kotihoidon tuen kuntalisillä yhteyttä ensimmäisen lapsensa saavien äitien työmarkkinakiinnittymiseen pitkällä aikavälillä. Yhteyttä tarkastellaan erikseen sen mukaan, oliko äidillä työsuhdetta lapsen syntymän aikaan vai ei.

Aineisto

Tutkimuksen aineisto perustuu Kuntasektorin henkilöstön seurantatutkimukseen, joka muodostuu kahdesta yhdistetystä rekisteri- ja kyselyaineistosta; kymmenen kaupunkia kattavasta Kunta10-tutkimuksesta sekä Sairaalahenkilöstön hyvinvointitutkimuksesta, johon kuuluu kuuden sairaanhoitopiirin palveluksessa oleva henkilöstö (esim. Kivimäki & al. 2009). Seurantatutkimuksessa on valmiiksi yhdistetty rekisteritiedot äitien työsuhteista, lasten syntymistä ja kotikun-

nasta, joten se tarjoaa uudenlaisen mahdollisuuden tutkia kuntalaisien yhteyttä äitien työmarkkinakiinnittymiseen. Kuntasektorin henkilöstön seurantatutkimus on hyväksytty Helsingin ja Uudenmaan sairaanhoitopiiriin eettisessä toimikunnassa.

Kuntien suurimmille toimialoille (opetus-, sosiaali- ja terveystoimi) on ominaista naisvaltaisuus ja määräaikaisten työsuhteiden suuri määrä (Lehto & Sutela 2008). Noin 20 prosenttia Suomen kuntahenkilöstöstä kattavan Kuntasektorin henkilöstön seurantatutkimuksen perusjoukosta oli mahdollista erottaa erilaisissa kunnissa asuvia ja erilaisissa ammateissa olevia äitejä edustava aineisto. Tähän tutkimukseen valittiin henkilöt, jotka Hilmo-hoitoilmoitusrekisterin (ks. Sund 2012) mukaan synnyttivät ensimmäisen lapsensa vuosina 2000–2002 ja jotka olivat olleet työsuhteessa kunta- tai sairaalaorganisaatioon lapsen syntymää edeltävän viisivuotiskauden aikana (n = 3 544). Äidit jaettiin kahteen ryhmään sen mukaan, oliko heillä työsuhte lapsen syntymän aikaan vai ei. Tieto työsuhteesta perustui Eläketurvakeskuksen ansaintarekisteriin (ks. alla). Kun seurannan aikana kuolleet (n = 4) jätettiin pois analyysistä, tuli aineiston kooksi 3 540 äitiä, joista 1 532:lla ei ollut työsuhdetta ja 2 008:lla oli työsuhte ensimmäisen lapsen syntymässä. Analyysissä olivat mukana kaikki 3 452 äitiä, joiden asuinkunta oli tiedossa (ei työsuhdetta n = 1 486, työsuhte n = 1966). Työsuhteesta olevista 80 prosenttia oli tuossa vaiheessa edelleen töissä tutkimukseen osallistuvassa kunnassa tai sairaalassa, loput jossain muissa kunnissa tai muulla sektorilla. Ilman työsuhdetta olevien tilanteesta ei ole tietoa; heidän työsuhteensa on voinut päättyä äitiysvapaaseen tai he ovat voineet olla työttömiä, opiskelijoita tai jostain muusta syystä työelämän ulkopuolella.

Muuttujat

Kuntalaisä-muuttuja perustuu Miettusen (2008) tutkimukseen, jonka tieto kuntalaisista vuosilta 1998–2005 oli peräisin Tilastokeskuksen Altika-tietokannasta ja Kelan kuntalaisasopimuksista (mt., 40). Muuttujan arvoksi merkittiin 1, mikäli äidin asuinkunnassa oli kuntalaisä käytössä ensimmäisen lapsen syntymää seuraavana vuonna, ja 0, mikäli näin ei ollut. Lisäksi muodostimme muuttujan, joka kuvaa tarkemmin kuntalaisän erilaisia ehtoja. Nämä selvitettiin niistä Kunta10-kunnista, joissa Miettusen tutkimuksen mukaan oli

käytössä kuntalaisä 2000-luvun alussa, sekä Helsingistä, joka oli asuinkuntana kahdeksalla prosentilla äideistä. Kunta10-kunnissa ja Helsingissä asui seurannan alussa yhteensä 71 prosenttia äideistä. Muiden kuntalaisäkuntien ehtoja ei selvitetty. Muuttuja sai seuraavat luokat:

- 1) Kotihoidon tuen kuntalaisä on käytössä, ja se on tarjolla kaikille (Helsinki, n = 263; Vantaa, n = 340; Espoo, n = 546)
- 2) Kotihoidon tuen kuntalaisä on käytössä, mutta ehdot ovat rajatut (Oulu, n = 336; Tampere, n = 357)
- 3) Ei ole kuntalaisä (sisältää kaikki Kunta10-kunnat, joissa ei kuntalaisä, sekä kaikki muut kunnat, joissa ei ole kuntalaisä, n = 1 217)

Työmarkkinakiinnittymistä kuvaava muuttuja perustuu Eläketurvakeskuksen ansaintarekisteriin. Rekisteri sisältää tiedot työeläkelakien mukaan vakuutetusta työskentelystä yrittäjänä tai palkansaajana yksityisellä tai julkisella sektorilla. Työmarkkinakiinnittymistä mitattiin kuuden kuukauden ajanjaksolla kertyneiden työsuhte-kuukausien lukumäärällä (0–6). Aineisto sisältää tiedot äitien työsuhteista vuosina 2000–2010, joten seuranta-ajaksi tulee synnytyvuodesta riippuen 9–11 vuotta ja kiinnittymisen mittauspisteitä on 18–22. Suurin osa äideistä työskenteli koko seurannan ajan kunta-alalla. Kuntien eläkelakien (KuEL) mukaisen työn osuus oli yhteensä keskimäärin 74 prosenttia kaikesta seuranta-aikana tehdystä työstä, ja 57 prosenttia äideistä teki pelkästään kunta-alan töitä.

Tieto ammattiasemasta on saatu kuntien henkilörekistereistä ja luokiteltu Tilastokeskuksen ammattiluokituksen mukaan (Tilastokeskus 1987) ylempiin toimihenkilöihin, alempiin toimihenkilöihin ja työntekijöihin. Ylempien toimihenkilöiden yleisimmät ammatit olivat lastentarhanopettaja, opettaja ja lääkäri. Alemmat toimihenkilöt olivat yleisimmin sairaanhoitajia, lastenhoitajia ja perushoitajia. Työntekijät olivat ammateiltaan esimerkiksi sairaala-apulaisia, keittiöapulaisia ja siivoojia. Koska kunta-alan ammatteihin vaaditaan usein tutkinto, kuvastaa ammattiasema kunta-alalla hyvin myös henkilöiden koulutus- ja palkkatasoa. Ikä on myös saatu kuntien henkilöstörekistereistä, ja se on mukana jatkuvana muuttujana. Seuranta-aikana syntyneiden seuraavien lasten lukumäärä vaihteli välillä 0–4.

Tilastolliset menetelmät

Keskeisenä tilastollisena menetelmänä käytetään trajektorianalyysia (ts. kehityspolkuanalyysia), jonka avulla pitkäaikaisaineisto on mahdollista jakaa kehityksen mukaan erilaisiin ryhmiin. Menetelmän avulla voidaan selvittää, minkälaisia kehityspolkuja aineistosta itsestään on löydettävissä, ja mitkä taustatekijät selittävät tietyille kehityspolulle päätymistä (esim. Nagin 2005).

Työmarkkinakiinnittymistä kuvaava muuttuja on jakaumaltaan hyvin vino, sillä suuri osa äideistä oli kiinnittyneenä työmarkkinoille kaikki seuranta-ajan kuukaudet (ks. taulukko 1). Siksi sovelsimme muuttujaan nollalla inflaatioita Poisson-jakaumaa (ks. esim. Lambert 1992; Nagin & Land 1993).

Kaikkiin analyyseihin ja latentteihin ryhmiin sovitettiin toisen asteen mallia, koska voidaan olettaa, että työmarkkinakiinnittymisen kehitys ei ole lineaarista. Vertasimme eri ratkaisuja – eli malleja, joissa on kaksi tai useampi latentti ryhmä – Bayesian informaatiokriteerillä (BIC) ja Lo, Mendell & Rubinin (2001) ”uskottavuustestillä” (*likelihood ratio test*) (Nylund & al. 2007). Näiden tilastollisten arvojen lisäksi käytimme sopivan mallin valinnassa sisällöllistä harkintaa – eli valitsimme tilastollisten arvojen sallimissa rajoissa ratkaisun, joka on tulkinnallisesti mielekkäin (ks. esim. Nagin 2005). Tämä tarkoittaa, että latenttien ryhmien määrää ei välttämättä kasvateta, vaikka tilastollisten arvojen mukaan se olisi mahdollista, jos ryhmien väliset erot eivät ole enää mielekkäitä.

Selittäviä tekijöitä tutkimme kahdella tavalla. Vertasimme ensin kuntalaisämuuttujien ja muiden yksittäisten taustatekijöiden jakaumia eri kehityspoluilla menetelmällä, joka ottaa huomioon latenttien ryhmien luonteen eli sen, että yksilöiden jako ryhmiin perustuu todennäköisyyksiin (Mplus Technical Appendices 2010; Muthén & Muthén 1998–2012). Lisäksi analysoimme kuntalaisämuuttujien ja muiden taustatekijöiden yhteyttä työmarkkinakiinnittymiseen multinomiaalisella regressioanalyysillä lisäämällä selittävät muuttujat malliin siten, että ne vaikuttavat yksilöiden todennäköisyyteen sijoittua kullekin kehityspolulle. Analyysit tehtiin Mplus-tilasto-ohjelman 7-versiolla (Muthén & Muthén 1998–2012).

Tulokset

Kuvailevia tuloksia

Taulukko 1 esittää äitien työmarkkinakiinnittymisen kehitystä seuranta-aikana alun työsuhtedetailanteen ja asuinkunnan kuntalisätiedon mukaan. Sarakkeissa on tieto siitä, kuinka suuri osa äideistä oli kiinnittynyt työmarkkinoille täydet 6 kuukautta kussakin puolen vuoden aikapisteessä.

Taulukosta havaitaan ensinnäkin, että seurannan alussa työsuhteessa olleiden vahva työmarkkinakiinnittyminen jatkuu koko seurantajakson (yli 90 % oli työsuhteessa täydet 6 kuukautta lähes kaikissa aikapisteissä). Kuntalisäkunnissa asuvien prosenttiluku oli säännöllisesti pienempi, mutta ero oli vähäinen, korkeimmillaankin vain kolmisen prosenttiyksikköä.

Kuntalisän yhteys työmarkkinakiinnittymiseen näkyi selvemmin äideillä, joilla ei ollut työsuhdetta ensimmäisen lapsen syntyessä. Kuntalisää maksavissa kunnissa oli seurannan aikana täydet 6 kuukautta työsuhteessa selvästi pienempi osa äideistä kuin kunnissa, joissa ei maksettu kuntalisää. Esimerkiksi toisen seurantavuoden kohdalla ero on noin kymmenen prosenttiyksikköä.

Taulukkoon sisältyy myös sarake, joka kertoo, miten suurelle osalle syntyi lapsi kunkin puolen vuoden jakson kohdalla. Osuuksissa ei ole suuria eroja sen mukaan, asuiko äiti seurannan alussa kuntalisää maksavassa kunnassa vai ei. Hieman suurempi osa äideistä, joilla ei ollut työsuhdetta ja jotka asuivat kuntalisää maksavassa kunnassa, sai seuraavan lapsen kolmannen puolivuotisjakson eli noin 1,5 vuoden päästä ensimmäisen syntymästä verrattuna äiteihin, joiden asuinkunta ei kuntalisää maksanut.

Ilman työsuhdetta olleista äideistä suurin osa (61,1 %) oli alempia toimihenkilöitä. Neljäsosa (26,0 %) oli ylempiä toimihenkilöitä ja 12,9 prosenttia työntekijöitä. Seurannan alussa työsuhteessa olleista hieman suurempi osa (39,8 %) oli ylempiä toimihenkilöitä, alempien toimihenkilöiden osuus oli 52,1 ja työntekijöiden 8,1 prosenttia.

Ilman työsuhdetta olleet äidit olivat seurannan alussa keskimäärin 28,4-vuotiaita (vaihteluväli 19–46 vuotta), kun taas työsuhteessa olevat äidit olivat keskimäärin hieman vanhempia eli 31,4-vuotiaita (vaihteluväli 20–49 vuotta).

Taulukko 1. Työmarkkinakiinnittyminen (täydet 6 kuukautta) seuranta-aikana sen mukaan, oliko äidillä työsuhdetta seurannan alussa ja oliko asuinkunnassa kuntalaisä käytössä.

Seurantajaksot	Ei työsuhdetta (n = 1 486)				Työsuhde (n = 1 966)			
	Ei kuntalaisää (n = 564)		Kuntalaisä (n = 922)		Ei kuntalaisää (n = 653)		Kuntalaisä (n = 1 313)	
	Työssä 6/6 kk (%)	Seuraavan lapsen syntymä (%)	Työssä 6/6 kk (%)	Seuraavan lapsen syntymä (%)	Työssä 6/6 kk (%)	Seuraavan lapsen syntymä (%)	Työssä 6/6 kk (%)	Seuraavan lapsen syntymä (%)
1. vuosi (1. 6kk jakso)	0	0	0	0	96,2	0	96,0	0
1. vuosi (2. 6kk jakso)	4,8	0,7	6,1	0,3	88,5	0,3	89,2	0,2
2. vuosi (1.)	37,6	6,0 *	28,6	9,2 *	88,8	5,1	88,3	6,9
2. vuosi (2.)	47,7	12,9	38,0	13,2	90,0	12,3	89,0	13,1
3. vuosi (1.)	51,6	10,5	42,6	11,8	89,7	11,8	89,1	12,1
3. vuosi (2.)	52,3	11,5	47,3	10,2	90,0	9,2	89,0	9,5
4. vuosi (1.)	56,4	8,9	51,1	10,1	90,8	7,4	89,6	7,1
4. vuosi (2.)	61,9	7,3	56,6	8,7	92,5	5,4	89,9	7,0
5. vuosi (1.)	68,6	5,5	60,2	5,5	93,4	4,6	90,9	5,6
5. vuosi (2.)	72,9	5,1	65,1	5,3	93,4	4,4	91,5	3,3
6. vuosi (1.)	76,4	4,6	68,1	4,9	94,3	3,2	92,0	3,5
6. vuosi (2.)	79,8	3,4 *	70,5	5,7 *	93,9	2,9	92,0	3,0
7. vuosi (1.)	82,1	4,3	73,5	4,6	95,4	3,4	92,2	3,8
7. vuosi (2.)	84,8	4,1	73,5	5,6	94,9	2,1	92,1	2,0
8. vuosi (1.)	83,3	3,4	75,5	2,9	95,1	3,4*	92,2	1,8*
8. vuosi (2.)	84,9	2,5	75,1	3,7	95,6	2,3	93,1	2,3
9. vuosi (1.)	85,1	2,3	77,5	2,0	96,3	1,4	92,8	1,2
9. vuosi (2.)	87,9	1,6	79,7	1,2	95,6	0,5	91,9	1,0
10. vuosi (1.) ¹	88,5	2,7	81,3	1,5	96,0	1,2	91,1	0,8
10. vuosi (2.) ¹	87,5	1,3	80,7	2,2	96,2	0,5	92,3	0,4
11. vuosi (1.) ¹	88,0	1,6	81,3	1,7	95,9	0	92,9	0,5
11. vuosi (2.) ¹	90,1	0,5	81,3	0,3	95,4	0	94,1	0

¹ Havaintojen määrä 10. ja 11. vuodelle ovat 375 ja 191 (ei kuntalaisää) sekä 600 ja 294 (kuntalaisä) äideillä, joilla ei ollut työsuhdetta ensimmäisen lapsen syntyessä. Havaintojen määrä 10. ja 11. vuodelle ovat 422 ja 218 (ei kuntalaisää) sekä 841 ja 392 (kuntalaisä) äideillä, joilla oli työsuhde ensimmäisen lapsen syntyessä. Seuraavien lasten syntymät: * p<0.05.

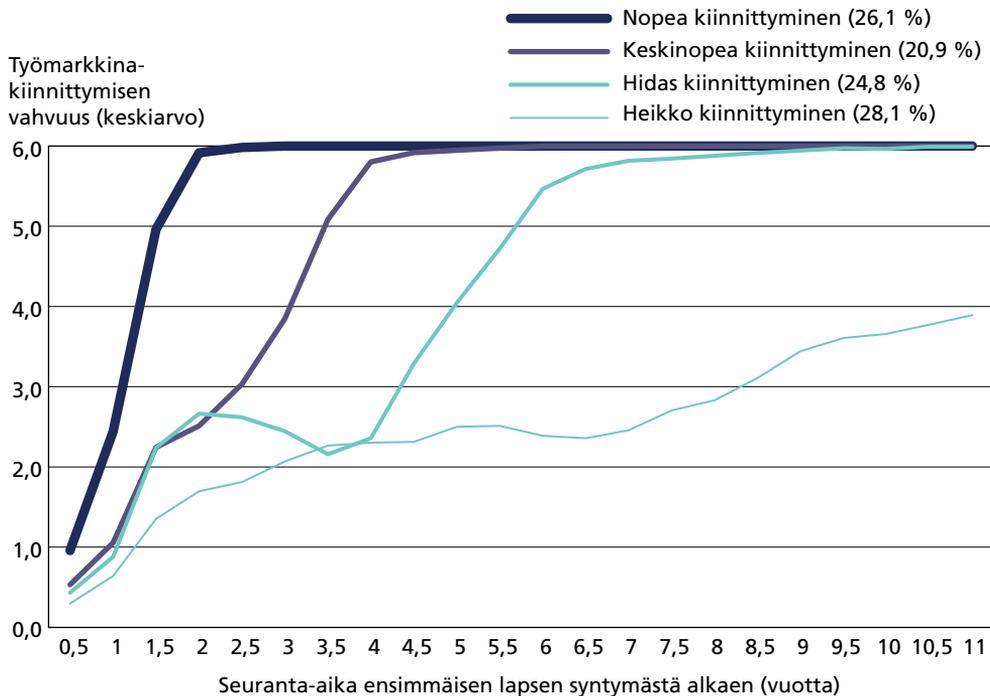
Työsuhdetta vailla olevien äitien kehityspolut

Ilman työsuhdetta ensimmäisen lapsen syntymän aikaan olleilta oli löydettävissä neljä työmarkkinakiinnittymisen kehityspolkua. Kiinnittyminen vahvistui täyteen 6 kuukauden työskentelyyn nopeasti (26,1 %), keskinopeasti (20,9 %) tai hitaasti (24,8 %). Lisäksi 28,1 prosentilla kiinnittyminen jäi matalammalle tasolle koko seurannan ajaksi (kuvio 1).

Trajektorianalyysi tehtiin myös pelkästään niille äideille, joille ei syntynyt uusia lapsia seuran-

nan aikana (n = 417). Neljän ryhmän mallissa oli erotettavissa vastaanlaiset kehityspolut kuin koko joukossa. Tämä viittaa siihen, että kehityspolkujen eriytyminen ei ratkaisevalla tavalla liity seuraavien lasten määrään ja syntymien ajankohtaan.

Taulukossa 2 tarkastellaan, miten dikotominen kuntalaisämuuttuja on yhteydessä työmarkkinakiinnittymiseen työsuhdetta vailla olevilla naisilla. Heikon työmarkkinakiinnittymisen kehityspolulle kuuluneista noin 71 prosenttia asui seurannan alussa kunnassa, joka maksoi kuntalaisää.



Kuvio 1. Vailla työsuhdetta olevien äitien työmarkkina-kiinnittymisen kehityspolut ensimmäisen lapsen syntymän jälkeen (n = 1 486).

Muilla kehityspoluilla vastaavat luvut olivat pienempiä, 58–60 prosentin välillä.

Taulukosta 2 nähdään myös, että heikon kiinnittymisen kehityspolulla olevista äideistä merkittävästi suurempi osa asui seurannan alussa kunnassa, jossa kuntalisä oli tarjolla kaikille perheille. Nopean kiinnittymisen kehityspolulla tällaisten äitien osuus oli puolet pienempi. Rajatusti tarjolla olevan kuntalisan osuus on myös suurin heikon kiinnittymisen ryhmässä, mutta pienin keskinopean kiinnittymisen kehityspolulla.

Taustatekijöiden mukaisessa tarkastelussa (taulukko 2) nähdään, että nopean ja keskinopean kiinnittymisen kehityspoluilla äidit ovat keskimäärin hieman muita vanhempia ja heikon työmarkkina-kiinnittymisen ryhmään kuuluvat äidit ovat yleisemmin työntekijöitä ja saavat enemmän lapsia seurannan aikana.

Taulukon 3 regressioanalyysi vahvistaa, että kuntaliskunnassa asuminen on yhteydessä siihen, että äiti päätyi heikon työmarkkina-kiinnittymisen kehityspolulle (malli 1), ja yhteys säilyy merkittävänä, vaikka otetaan huomioon ikä ja sosioekonominen asema (malli 2) sekä seuranta-aikana syntyneiden lasten lukumäärä (malli 3). Taulukosta 3 havaitaan myös, että verrattuna nopeaan kiinnittymiseen, keskinopealle, hitaalle ja

heikon kiinnittymisen trajektorille kuuluvat äidit asuivat seurannan alussa yleisemmin kunnassa, jossa kuntalisä on tarjolla kaikille perheille (malli 4). Myös rajatusti tarjolla oleva kuntalisä on yhteydessä heikkoon työmarkkina-kiinnittymiseen.

Analyysit (mallit 3 ja 4) toistettiin pelkästään niillä äideillä, joilla ei syntynyt lapsia seuranta-aikana (ei taulukossa). Kuntaliskunnassa asuminen ennusti heikkoa työmarkkina-kiinnittymistä myös tässä ryhmässä.

Työsuhteessa olevien äitien kehityspolut

Työsuhteessa seurannan alussa olevien äitien joukosta valittiin trajektorianalyysin avulla malli, jossa oli viisi erilaista työmarkkina-kiinnittymisen kehityspolkua. Suurin osa (71,2 %) oli vakaasti (6/6 kuukautta) kiinnittyneinä koko seurannan ajan. Loput äidit analyysi eritteli lyhytaikaisesti heikentyvän (10,3 %), keskimääräisesti heikentyvän (6,7 %), pitkäaikaisesti heikentyvän (6,9 %) ja myöhemmin heikentyvän (4,9 %) työmarkkina-kiinnittymisen kehityspoluille.

Vastaavat kehityspolut oli löydettävissä myös sellaisten äitien joukosta, jotka eivät saaneet uusia lapsia seurannan aikana (n = 738, ei kuviota). Tämä viittaa siis siihen, että analyysin tulos ei riipu pelkästään seuraavien lasten syntymien ajankohdasta.

Taulukko 2. Äidit, joilla ei ollut työsuhdetta ensimmäisen lapsen syntymän aikaan. Kuntalisän ja taustamuuttujien jakaumat eri kehityspoluilla (n = 1 486).

	Työmarkkinakiinnittymisen kehityspolut				Waldin testin p-arvo
	Nopea kiinnittyminen	Keskinopea kiinnittyminen	Hidas kiinnittyminen	Heikko kiinnittyminen	
Ikä, ka.	29,1	28,7	28,0	27,7	0,000***
Ylempi toimihenkilö, %	28,1	31,1	26,1	20,3	0,007**
Alempi toimihenkilö, %	66,1	60,6	62,2	56,3	0,054
Työntekijä, %	5,9	8,4	11,8	23,4	0,000***
Lasten lukumäärä seuranta-aikana, ka.	0,85	0,87	1,02	1,35	0,000***
Kuntalisä, %	57,9	57,9	59,7	70,8	0,000***
Kuntalisän ehdot					
Kuntalisä on tarjolla kaikille, %	15,0	25,5	26,3	31,7	0,000***
Kuntalisä rajatusti, %	26,3	20,2	23,4	28,4	0,054
Ei kuntalisää, %	42,1	42,1	40,3	29,2	0,000***

* p< 0.05, ** p< 0.01, *** p< 0.001

Taulukko 3. Niiden äitien työmarkkinakiinnittyminen, joilla ei ollut työsuhdetta ensimmäisen lapsen syntymän aikaan. Multinomiaalisen regressioanalyysin tulokset (OR ja 95 % luottamusvälit) suhteessa siihen, että äidin asuinkunnassa oli käytössä kuntalisä seurannan alussa.

	Työmarkkinakiinnittymisen kehityspolut			
	Nopea kiinnittyminen	Keskinopea kiinnittyminen	Hidas kiinnittyminen	Heikko kiinnittyminen
Kuntalisä (vs. ei kuntalisää)				
Malli 1	1 (vertailuryhmä)	0,99 (0,71–1,38)	1,05 (0,77–1,43)	1,82 (1,34–2,46)
Malli 2	1 (vertailuryhmä)	0,98 (0,71–1,35)	1,02 (0,75–1,40)	1,75 (1,28–2,41)
Malli 3	1 (vertailuryhmä)	0,98 (0,70–1,35)	1,03 (0,75–1,41)	1,71 (1,25–2,36)
Kuntalisän ehdot (vs. ei kuntalisää)				
Malli 4				
Kuntalisä tarjolla kaikille	1 (vertailuryhmä)	1,74 (1,05–2,88)	1,77 (1,15–2,72)	3,16 (2,04–4,90)
Kuntalisä rajatusti	1 (vertailuryhmä)	0,75 (0,49–1,13)	0,90 (0,61–1,32)	1,48 (1,00–2,17)

Malli 1: kuntalisä (n = 1 486)

Malli 2: kuntalisä, sosioekonominen asema ja ikä (n = 1 485)

Malli 3: kuntalisä, sosioekonominen asema, ikä ja seuraavien lasten lukumäärä (n = 1 485)

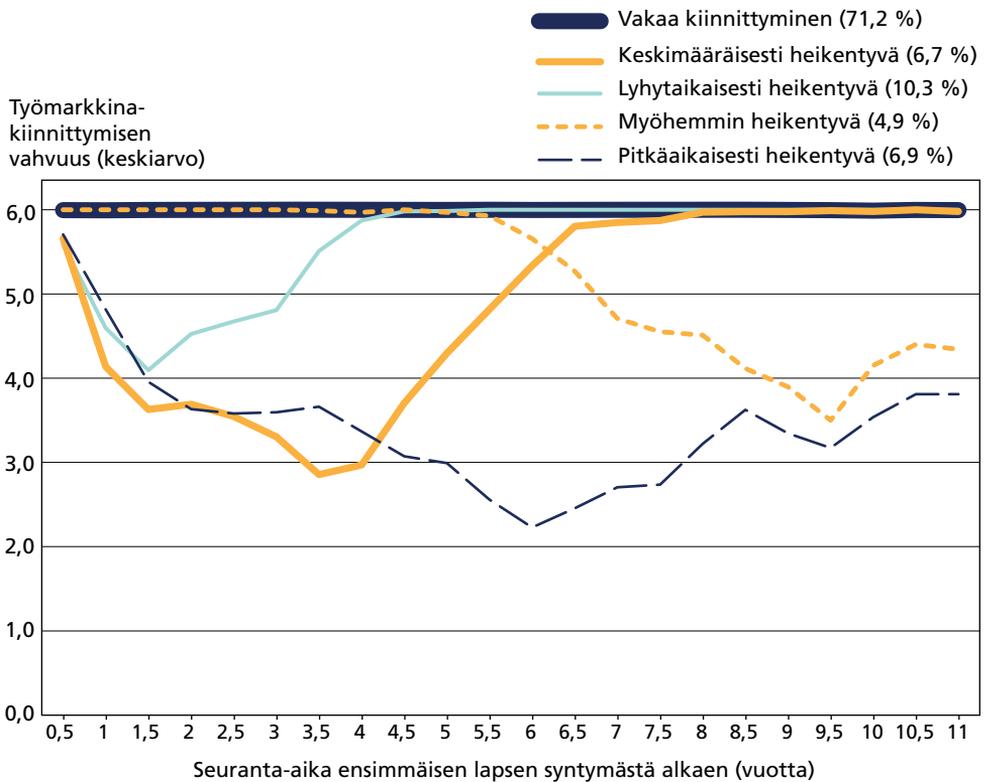
Malli 4: kuntalisä, sosioekonominen asema, ikä ja seuraavien lasten lukumäärä (n = 1 301)

Kuntalisän osuus on suurin myöhemmin heikentyvän työmarkkinakiinnittymisen ryhmässä, ja pienin lyhytaikaisesti heikentyvän kiinnittymisen ryhmässä (taulukko 4). Kun tarkastellaan vain kaikille tarjolla olevan kuntalisän jakaumaa, havaitaan, että erot ryhmien välillä vahvistuvat; osuus on suurin myöhemmin heikentyvän työmarkkinakiinnittymisen kehityspolulla.

Rajatuin ehdoin tarjolla olevan kuntalisän yh-

teys työmarkkinakiinnittymiseen on päinvastainen; osuus on suurin lyhytaikaisesti heikentyvän kiinnittymisen ryhmässä ja pienin myöhemmin heikentyvällä kehityspolulla.

Eroja ryhmien välillä on myös taustatekijöissä: vakaalle työmarkkinapolulle päätyneet äidit olivat keskimäärin vanhempia ja saivat keskimäärin vähiten lapsia seurannan aikana. Työntekijöiden osuus oli suurin pitkäaikaisesti heikentyneen



Kuvio 2. Työsuhteessa olevien äitien työmarkkina-kiinnittymisen kehityspolut ensimmäisen lapsen syntymän jälkeen (n = 1 966)

kiinnittymisen kehityspolulla.

Taulukosta 5 havaitaan, että pelkkä kuntalisä-kunnassa asuminen ei ole yhteydessä työmarkkina-kiinnittymisen heikentymiseen äideillä, joilla oli työsuhte ensimmäisen lapsen syntyessä, kun ikä, sosioekonominen asema ja lasten lukumäärä vakioidaan (mallit 1–3). Sen sijaan löytyy käänteinen yhteys asuinkunnan kuntalisän ja lyhytaikaisesti heikentyvän työmarkkina-kiinnittymisen väliltä (malli 1). Tämä tarkoittaa, että seurannan alussa kuntalisäkunnissa asuneilla oli pikemminkin vakaa kuin lyhytaikaisesti heikentyvä työmarkkina-kiinnittyminen. Yhteys säilyy, kun analyysissä vakioidaan ikä ja sosioekonominen asema (malli 2) sekä seuraavien lasten syntymät (malli 3).

Asuinkunnan kaikille perheille tarjoama kuntalisä on merkittävästi yhteydessä siihen, että äiti päätyy myöhemmin heikentyvän työmarkkina-kiinnittymisen kehityspolulle, mutta ei lyhytaikaisesti heikentyvälle polulle (malli 4). Rajatusti tarjolla oleva kuntalisä ei ole tilastollisesti merkittävästi yhteydessä työmarkkina-kiinnittymisen kehityspoluihin.

Analyysit tehtiin myös pelkästään äideille, joille ei syntynyt uusia lapsia seuranta-aikana (n = 738, ei taulukossa). Myös näin tarkasteltuna kuntalisä on yleisintä myöhemmin heikkenevän työmarkkina-kiinnittymisen kehityspolulla ja harvinaisinta lyhytaikaisesti heikkenevällä kehityspolulla. Yhteys ei siis selity seuraavien lasten syntymien ajankohdalla, vaan se johtuu muista tekijöistä, joita tässä tutkimuksessa ei ole ollut mahdollista ottaa huomioon.

Pohdinta

Kysyimme tässä tutkimuksessa, ovatko kotihoidontuen kuntalisät yhteydessä äitien työmarkkina-kiinnittymiseen ensimmäisen lapsen syntymää seuraavien 9–11 vuoden aikana.

Äideillä, joilla ei ollut voimassaolevaa työsuhdetta lapsen syntyessä, asuminen kuntalisän myöntävässä kunnassa ennusti heikompaa työmarkkina-kiinnittymistä. Näin oli varsinkin, jos kuntalisä oli tarjolla rajoituksetta kaikille perheille. Työsuhteessa ensimmäisen lapsen syntymän aikaan olleilla äideillä kuntalisä ei

Taulukko 4. Äidit, joilla oli työsuhde ensimmäisen lapsen syntymän aikaan. Kuntalisän ja taustamuuttujien jakaumat eri kehityspoluilla (n = 1 966).

	Vakaa kiinnittyminen	Lyhytaikaisesti heikentyvä kiinnittyminen	Keskimmärisesti heikentyvä kiinnittyminen	Pitkäaikaisesti heikentyvä kiinnittyminen	Myöhemmin heikentyvä kiinnittyminen	Waldin testin p-arvo
Ikä, ka.	31,7	30,8	30,2	30,4	30,5	0,002**
Ylempi toimihenkilö, %	40,8	40,3	38,8	34,4	32,6	0,480
Alempi toimihenkilö, %	52,0	52,3	52,3	48,3	59,2	0,679
Työntekijä, %	7,2	7,4	8,8	17,3	8,1	0,048*
Lasten lukumäärä seuranta-aikana, ka.	0,78	0,87	0,86	1,17	1,05	0,002**
Kuntalisä, %	66,6	59,2	69	72,0	75,9	0,022*
Kuntalisän ehdot						
Kuntalisä on tarjolla kaikille, %	39,9	24,9	42,5	46,9	55,3	0,000***
Kuntalisä rajatusti, %	15,7	24,0	15,2	17,8	9,7	0,016*
Ei kuntalisää, %	33,4	40,8	31,0	28,0	24,1	0,022*

Taulukko 5. Työsuhteessa ensimmäisen lapsen syntymän aikaan olevien äitien työmarkkinakiinnittyminen. Multinomiaalisen regressioanalyysin tulokset (OR ja 95 % luottamusvälit) suhteessa siihen, että äidin asuinkunnassa oli käytössä kuntalisä seurannan alussa.

	Työmarkkinakiinnittymisen kehityspolut				
	Pysyvä kiinnittyminen	Lyhytaikaisesti heikentyvä kiinnittyminen	Keskimmärisesti heikentyvä kiinnittyminen	Pitkäaikaisesti heikentyvä kiinnittyminen	Myöhemmin heikentyvä kiinnittyminen
Kuntalisä (vs. ei kuntalisää)					
Malli 1	1 (vertailuryhmä)	0,71 (0,52–0,96)	1,13 (0,74–1,74)	1,29 (0,85–1,95)	1,64 (0,98–2,77)
Malli 2	1 (vertailuryhmä)	0,69 (0,50–0,94)	1,07 (0,70–1,66)	1,31 (0,86–2,00)	1,61 (0,96–2,70)
Malli 3	1 (vertailuryhmä)	0,69 (0,50–0,94)	1,06 (0,69–1,63)	1,34 (0,88–2,05)	1,62 (0,97–2,72)
Kuntalisän ehdot (vs. ei kuntalisää)					
Malli 4					
Kuntalisä tarjolla kaikille	1 (vertailuryhmä)	0,45 (0,31–0,67)	1,06 (0,64–1,73)	1,45 (0,93–2,27)	2,01 (1,05–3,82)
Kuntalisä rajatusti	1 (vertailuryhmä)	1,29 (0,86–1,94)	0,99 (0,54–1,83)	1,53 (0,88–2,65)	0,86 (0,34–2,13)

Malli 1: kuntalisä (n = 1 966)

Malli 2: kuntalisä, sosioekonominen asema ja ikä (n = 1 966)

Malli 3: kuntalisä, sosioekonominen asema, ikä ja seuraavien lasten lukumäärä (n = 1 966)

Malli 4: kuntalisä, sosioekonominen asema, ikä ja seuraavien lasten lukumäärä (n = 1 756)

ollut samalla tavalla yhteydessä työmarkkinakiinnittymiseen.

Ilman työsuhdetta ensimmäisen lapsen syntymän aikaan olleille äideille määriteltiin neljä työmarkkinakiinnittymisen kehityspolkua ja työsuhhteessa olleille viisi. Suurin osa (71 %) työsuhhteessa olleista säilytti pysyvän työmarkkinakiinnittymisen koko seurannan ajan, kun taas ilman työsuhdetta seurannan alussa olleet jakautuivat tasaisemmin neljälle eri kehityspolulle. Vahvasti kiinnittyneet näyttävät siis varsin yleisesti säilyttävän asemansa työmarkkinoilla perhevapaiden suoman työsuhdeturvan ansioista. Jos äidillä ei ole työsuhdetta lapsen syntyessä, kestää kiinnittyminen pidempään. Heilläkään mikään kehityspolku ei kuitenkaan johtanut kokonaan pois työmarkkinoilta seuranta-ajan puitteissa. Täytyykin huomata, että tutkittava joukko ei edusta kaikkia ensisynnyttäjiä, vaan kaikilla aineistoon kuuluvilla äideillä oli ennen lapsen syntymää ollut vähintään puolen vuoden pituinen työsuhde kunta-alalla. Myös seurannan aikana he työskentelivät pääasiassa kunta-alalla (ks. Aineisto). Kehityspolkukohtaisessa tarkastelussa huomattiin, että kunnallisen eläkelain (KuEL) piiriin kuuluvan työntöön osuus säilyi korkeana pysyvän kiinnittymisen ryhmässä, mutta varsinkin myöhemmin heikentyvällä kehityspolulla sen osuus laski seurannan loppua kohden. Siirtyminen jonkun muun kuin kuntasektorin töihin voisi siis osaltaan selittää työmarkkinakiinnittymisen heikkenemistä osalla äideistä seurannan lopussa.

Tuomas Kososen (2011a, 23) laskelmien mukaan kuntalisten maksaminen ei ole kunnille taloudellisenä säästönä kannattavaa, sillä tukea joudutaan maksamaan myös heille, jotka joka tapauksessa valitsisivat kotihoidon. Laskema perustui Kososen tutkimuksen tuloksena saatuun arvioon siitä, että 100 euron kuntalisä vähentää äitien työllisyysastetta kolme prosenttia: kaikille maksettavan kuntalisen määrän ylittäessä kokonaisuudessaan päivähoitossa saadut säästöt, jos kolme prosenttia äideistä siirtyisi kuntalisen seurauksena hoitamaan lapsia kotonaan. Kososen tutkimuksessa kuntalisillä ei ollut yhteyttä 3–5-vuotiaiden eli kotihoidon tuen ikärajan ylittäneiden lasten äitien työsäkäyntiin – kuntalisät eivät siis näyttäneet viivästyttävän äitien työhön paluuta. Tämän tutkimuksen tulos kuitenkin osoittaa, että tarkemmassa eritelyssä osalla äitejä kunnallinen tuki voi viivästyttää työhön paluuta ja heikentää työmarkkinakiinnittymistä pidemmällä aikavälillä.

Tulokset poikkeavat myös Pentti Takalan (2000) tuloksista, joiden mukaan kuntalisällä ei ollut yhteyttä kotihoidon tuen käyttöön. Takalan tutkimus kohdistui 1990-luvun loppuun, ja tässä seuranta alkoi 2000-luvun alussa. Toisaalta äitien työllisyystilanne oli 1990-luvun lopulla heikompi kuin 2000-luvulla; tämä voi osin selittää tulosten eroja. Kaiken kaikkiaan 2000-luvun alkupuoli oli tasaisen taloudellisen kasvun aikaa. Alle 1-vuotiaiden lasten äitien kohdalla työvoimaan kuuluvien osuus kasvoi noin kymmenen prosenttiyksikköä 1990-luvun lopulta 2000-luvun alkuun mennessä, samalla kun työttömyys väheni pienten lasten äitien keskuudessa (Haataja 2005, 28–29). Erot voivat johtua myös siitä, että tässä tutkimuksessa tarkasteltiin kuntalisen yhteyttä työmarkkinakiinnittymiseen tarkemmin erikseen sen mukaan, onko äidillä ollut työsuhdetta lapsen syntyessä vai ei: kuntalisen yhteys heikompaan työmarkkinakiinnittymiseen näkyi erityisesti siinä ryhmässä, jossa äideillä ei ollut työsuhdetta lapsen syntyessä. Lisäksi tässä tutkimuksessa tarkasteltiin vain ensisynnyttäjiä, Takalan aineistossa ei ollut vastaavaa rajausta. Takalan analyysissä olivat mukana kaikki perheet, joiden äiti tai isä ei ollut enää vanhempainvapaalla ja joiden nuorin lapsi oli alle 3-vuotias (Takala 2000, 62).

Trajektorianalyysi toimi hyvin pitkittäisaineiston analyysissä useista aikapisteistä huolimatta. Analyysin avulla löydettiin mielekkäitä työmarkkinakiinnittymisen kehityspolkuja, jotka eivät olisi tulleet esille vain keskimääräistä kehitystä mallinnettaessa tai kuvatessa aikaa ensimmäisen lapsen syntymästä siihen, kun siirrytään takaisin työelämään. Menetelmän etuna on myös se, että trajektorianalyysin tuloksia on helppo tulkita kuvioiden avulla ja arvioida eri ryhmien osuuksia perusjoukossa (Nagin 2005, 185). Toisaalta erilaisten kehityspolkujen tulkinta voi olla vaikeaa, jos saavilla ei ole tarpeeksi taustatietoja niitä selittämään.

Tutkimuksen vahvuutena on pitkä seuranta-aika: yhdistämällä tietoja kuntien henkilöstörekistereistä, Eläketurvakeskuksen ansaintarekisteristä ja sairaaloiden hoitoilmoitusrekisteristä, voitiin äitien työmarkkinakiinnittymistä seurata 11 vuoden ajalta. Rekisteritietoihin pohjautuvan aineiston etuna on se, ettei tutkittava joukko ole valikoitunut esimerkiksi vastaajakadon vuoksi eikä vastaamatta jättämisestä johtuvia puuttuvia tietoja ole seurannan ajalta. Kuntatason ”ekologinen” kuntalisesämuuttuja ei kerro, ketkä aineistoon kuuluvat äidit ovat käyttäneet lisää ja

ketkä eivät. Tämän tutkimuksen nimenomaisena tarkoituksena olikin selvittää, löytyykö tällaisen aluetason tekijän ja yksilöiden työmarkkinakiinnittymisen väliltä yhteyttä. Kattavaa rekisteritietoa kuntalisän saajista ei ole olemassa, mutta yksittäisen kunnan tasolla voisi olla mahdollista tehdä tutkimus, jossa verrataan kuntalisää käyttäviä ja käyttämättömiä äitejä. Tällainen tutkimus täydentäisi kuvaa kuntalisän työuravaikutuksista.

Koska aineisto ei edusta kaikkia ensisynnyttäjiä, vaan kuntien palveluksessa työskennelleitä äitejä, voidaan tulokset yleistää vain viitteellisesti kunta-alan ulkopuolelle. Toisaalta noin joka kolmas työllisistä naisista työskentelee kunta-alalla Suomessa, joten kyse ei ole aivan marginaalisesta ryhmästä (Tilastokeskus 2009). Tutkimuksen tarkoituksena ei myöskään ollut kuvailla äitien työmarkkinapolkuja sinänsä, vaan tutkia kuntalisien yhteyttä työmarkkinakiinnittymiseen, mistä johtuen aineiston edustavuus ei ole niin kriittistä kuin kuvailevassa tutkimuksessa. Tuloksia tulkitessa täytyy kuitenkin ottaa kunta-alan erityispiirteensä huomioon, että ala on suhteellisen varma työllistäjä, ja epävarmuus töiden jatkumisesta on vähäisempää kuin yksityisellä sektorilla (Forma & al. 2008, 18). Joillakin alueilla, ja erityisesti sosiaali- ja terveydenhuollossa, esiintyy ajoittaista työvoimapulaa (esim. Kuntatyönantajat 2005–2013). Kunta-alalla uskotaan lisäksi muita sektoreita yleisemmin, että perhevapaat eivät vaikuta omiin etenemismahdollisuuksiin ja asemaan työelämässä (Salmi & al. 2009b, 76–77). Toisaalta alaa leimaa myös määräaikaisten työsuhteiden suuri määrä, millä paikataan jatkuvaa perhevapaiden ja sairaslomien aiheuttamaa sijaisien tarvetta – toisin kuin vielä ennen 1990-luvun alun lamaa, jolloin käytössä oli varahenkilöjärjestelmiä (Palanko-Laaka 2005, 39–40).

Työmarkkinakiinnittymistä kuvaavaan muutujaan sisältyy joitakin rajoituksia, jotka liittyvät työsuhteiden kirjaustapoihin ansaintarekisterissä. Rekisteri ei sisällä tietoa työsuhteen laadusta, kuten siitä, työskenteleekö koko- vai osa-aikaisesti, tai määräaikaisessa vai vakituudessa työsuhteessa. Tietoa ei myöskään ole siitä, mistä johtuvat jakot työmarkkinoiden ulkopuolella. On oletettavaa, että määräaikaiset ja osa-aikaiset työsuhteet ovat yleisempiä heikon työmarkkinakiinnittymisen kehityspoluilla. Lisäksi pidemmät hoitovapajakset näkyvät työsuhteiden katkeamisena ansaintarekisterissä, kun taas vanhempainvapaiden aikana katkoa ei tule. Näin esimerkiksi seu-

rannan alussa työsuhteessa ja pidempään hoitovapaaalla olleet äidit ovat voineet sijoittua lyhytaikaisesti heikentyvälle työmarkkinakiinnittymisen kehityspolulle.

Tämän tutkimuksen perusteella voi todeta, että kuntalisien käyttö saattaa viivästyttää työmarkkinakiinnittymistä niiden äitien kohdalla, joilla ei ole voimassaolevaa työsuhdetta. Työsuhteessa olevilla kuntalisän yhteys työmarkkinakiinnittymiseen ei ollut yhtä selkeä, eikä se näyttänyt heikentävän työmarkkinakiinnittymistä ainakaan lähivuosina lapsen syntymän jälkeen.

Hoitovapaata ja sen tukia voidaan käyttää työn ja perheen yhteensovittamisen välineenä periaatteessa kahdenlaisissa tilanteissa (vrt. esim. Rissanen 2012). Toisaalta se sopii nykyjärjestelmässä vakaaseen työtilanteeseen, jossa voidaan olla suunnitelmallisesti pois töistä. Toisaalta kaikilla tuen saajilla ei ole työpaikkaa johon palata. Tällaisessa tilanteessa kuntalisät pönkittävät omalta osaltaan nykyistä järjestelmää, jonka seurauksena äidit pitävät suurimman osan perhevapaista. Tämä puolestaan heikentää kaikkien naisten asemaa työmarkkinoilla.

Nykyisiin perhe-etuuksiin on esitetty muutoksia, joiden tavoitteena on pidentää työuria. Laki osa-aikatyötä tukevasta joustavasta hoitorahasta pienten lasten vanhemmille astui voimaan vuonna 2014 (HE 129/2013). Toisaalta tiedetään, että mahdollisuutta osa-aikatyöhön käyttävät lähinnä hyvässä työmarkkina-asemassa olevat ja hyvätuloiset äidit (Aalto 2013). Lisäksi hallituksessa on vireillä kotihoidon tuen kohdentaminen puoliksi vanhemmille. Tällaisen uudistuksen vaikutukset on syytä selvittää, koska on todennäköistä, että isät eivät irtaudu työmarkkinoilta yhtä helposti kuin äidit. Pienet uudistukset voivat heijastua odottamattomalla tavalla jonnekin muualle. Mikäli tavoitteena on parantaa sukupuolten tasa-arvoa työelämässä ja lastenhoidossa, tulisi koko nykyistä perhevapaajärjestelmää arvioida uudelleen.

Kuntalisiä harkitessaan kunnat toimivat parhaaksi katsomallaan tavalla vallitsevien säädösten ja paikallisten rakenteiden puitteissa. Tässä kontekstissa lisät näyttäivät toimivan siten kuin on tarkoitettukin: ne vähentävät päivähoidon kustannuspainetta pidentämällä työmarkkinoilta poissaoloa. Laajemmassa katsannossa kuntalisät voivat kuitenkin osaltaan vaikuttaa naisten asemaan pitkälläkin aikavälillä. Viime kädessä äitien heikentynyt työmarkkinakiinnittymisen näkyminen pienentyneenä eläkekertymänä.

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SUMMARY

Laura Peutere & Anita Haataja & Jussi Vahtera & Mika Kivimäki & Jaana Pentti & Pekka Virtanen: Does the municipal supplement for child home care allowance weaken mothers' labour market attachment? (Heikentääkö kotihoidon tuen kuntalaisäitien kiinnittymistä työelämään?)

The child home care allowance is a very popular benefit that is used by the great majority of families in Finland for at least some time after parental leave. Even though the benefit is gender neutral, men rarely take advantage and use it to look after their child(ren) at home. In addition to the statutory home care allowance, some municipalities pay a supplement to families who do not use municipal day care services. The supplement amount and terms and conditions of its use vary between municipalities. This study analyses whether availability of the municipal supplement for child home care allowance is related to mother's weaker labour market attachment in the long term.

The study is based on register data originally collected for the longitudinal Finnish Public Sector Study. The study population consists of mothers who, according to the Hospital Discharge Register, gave their first birth in 2000–2002. Data on these mothers' employment contracts from the first birth until 2010 were retrieved from the National Pension Register. Information on the availability of the municipal supplement in each mother's home municipality one

year after the first birth was used as the independent variable. Mothers' labour market attachment was first categorized into different trajectories, with latent class growth analysis conducted separately for women with (n=1966) and without an employment contract (n=1486) at the time of their first birth.

Among women without a job contract at the time of first birth, the availability of the municipal supplement was related to weak labour market attachment. The association remained statistically significant when age, socioeconomic status and number of children born during the follow-up were taken into account. Availability of the supplement was not related to weak labour market attachment among women with a job contract at the time of their first birth.

The municipal supplements seem to work as intended: they keep women out of the labour force for a longer period of time, thus relieving the demand for public child care. On the other hand, municipal supplements, for their part, reinforce the present situation where most of the family leaves and benefits are used by women, who suffer from a weaker position in the labour market. At the individual level, the effects of weaker labour market attachment are even reflected in a lower level of pensions.

Keywords: labour market attachment, latent class growth analysis, family benefits, mothers' employment.

PUBLICATION III

Domestic responsibilities as predictors of labour market attachment trajectories in men and women

Peutere Laura, Rautava Päivi & Virtanen Pekka

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Domestic responsibilities as predictors of labour market attachment trajectories in men and women

Purpose: The aim of this study is to analyse whether high responsibility for housework or childcare is related to weak labour market attachment.

Design/methodology/approach: Survey data on domestic responsibilities in 1998 and 2003 were linked to register data on respondents' employment spells for 2004-2011. Effects of the responsibilities on labour market trajectories – identified with latent class growth analyses – were analysed with multinomial logistic regression analyses.

Findings: Four trajectories for labour market attachment were identified among both genders. When adjusted for prior labour market attachment and other control variables, a high responsibility for housework predicted weak labour market attachment, compared to the trajectory of strong attachment, only among men. Compared to the trajectory of strengthening attachment, a high responsibility for housework was related to weak attachment among both men and women.

Research limitations/implications: Personal orientations may, to some extent, explain both the division on domestic responsibilities and attachment to the labour market. In the Finnish type of welfare state, domestic responsibilities have long-term effects, especially on men's careers. More attention should be given to men's roles in families and their possible consequences.

Originality/value: This is the first study analysing the division of domestic responsibilities on later labour market attachment among both genders. The strength of this study is the long follow-up time and methodology; it combines survey data at two time points and register data on

employment spells over eight years, identifying patterns in employment with latent class growth analyses.

Key words: childcare, employment, gender, housework, life course, trajectories

Paper type: Research paper

Introduction

It is often difficult to combine work and family; it is a task that requires the negotiation of different coping strategies. In the case of co-habiting couples, the partners must divide the duties and responsibilities of the home, at least to a certain extent. When there are children, the need for housework increases and the division of domestic responsibilities becomes more complex. It is often the case that women are more likely to compromise their careers and take more responsibility for the family compared to their male partners (Becker and Moen, 1999; Singley and Hynes, 2005). Also, in some cases, one of the partners may be assumed to take more responsibility due to their gender or their relative earnings potential (e.g. Bittman et al., 2003). However, there is little longitudinal research on the consequences of these responsibilities on individuals' later employment patterns.

There is much evidence that the time spent on housework and childcare is related to the wage differences between mothers and childless women, and between women and men (e.g. Kühhirt and Ludwig, 2012; Noonan, 2001; Shirley and Wallace, 2004). Time used on daily housework (e.g. cooking, cleaning and laundry) is associated with lower wages among both men

and women (Bryan and Sevilla-Sanz, 2011; Hersch, 2009; Noonan, 2001). To some extent, the association goes both ways; time used in paid work decreases time used on housework in both genders, and the wife's proportion of family income is especially positively related to a more equal division of housework among couples (e.g. Bianchi et al., 2000; Cunningham, 2007). The division of responsibilities, and their association with employment careers, may also differ with respect to national and cultural contexts.

In contrast to the study of housework and wages, there is less research on the effect of domestic responsibilities on labour market attachment in general; research on wages focuses on those in paid work, whereas research on labour market attachment also takes into account the unemployed and those outside the labour market. A study from the USA showed that women with husbands who did a relatively greater share of the routine housework in 1977 were more likely to be employed up to eight years later, and to work longer hours up to 16 years later (Cunningham, 2008). An earlier cross-sectional study based on data from the early 1980s also found that, in certain countries (Sweden and Norway), doing a larger share of the daily housework tasks was negatively related to the employment hours of women, but not of men (Kalleberg and Rosenfeld, 1990).

In addition to being based on relatively old data, previous research on the effect of housework on employment has focused only on women, or the designs have been cross-sectional. The purpose of this study is to address this gap in the literature, and to analyse in a longitudinal setting whether the division of responsibilities for housework and childcare is related to men's and women's later labour market attachment. This study is based on two waves of Finnish surveys from 1998 and 2003, linked with register data on employment spells from

1998-2011. Labour market attachment is defined as having a job contract or working as self-employed, and not separating part-time and full-time work, or quality of job contracts.

It must be noted that combining work and family – including both childcare and housework – is not inevitably difficult; it can also be enriching and unproblematic, depending on how family responsibilities are divided among couples and the ways in which combining work and care is supported in working life and in society as a whole. This study focuses particularly on parents' own accounts of their share of the responsibility for childcare and housework – not the time used on these duties or the sense of fairness or burden related to them. The term domestic responsibilities is used to refer to both housework and childcare.

Domestic responsibilities and employment

In previous research, housework has usually been measured as the time used on different tasks, or the proportion of time used by respondents in comparison to the time used by their spouses. The division of responsibilities for housework and childcare has been used as an independent variable in studies related to psychological distress (e.g. Harryson et al., 2012), but not in studies related to employment outcomes. Family research has especially conceptualised parental responsibilities. Lamb et al. (1985) distinguished three components in paternal involvement: interaction, availability and responsibility. Interaction and availability refer to the time spent with children or being accessible for them, while responsibility has a wider meaning and cannot be measured solely with time (Lamb et al., 1985). Pleck (2010) specified the concepts further and differentiated two aspects in responsibility: indirect care and process responsibility.

The former refers to the duties “done for the child”. Process responsibility refers to ensuring that all child needs in general are met – irrespective of the person who actually does the work or fulfils their needs (Pleck, 2010, p. 67). Also, others have emphasised the distinction between responsibility for children and performing tasks. For example, Leslie et al. (1991, p. 199) characterised responsibility as “ongoing perceptual state”, including thinking, feeling and behaviour. Doucet (2015) distinguishes gendered moral, emotional and community aspects in parental responsibility. The latter refers to maintaining relationships with other families and social institutions. In a similar way, as parental responsibilities, being responsible for housework can refer more widely to the monitoring and planning the duties. Although these responsibilities also have a time component, the focus of this study is in the subjective feeling of responsibility.

There are different theories on the division of paid and unpaid work among couples. According to the economic theory of human capital, women and men allocate their time and specialise in different tasks to maximize the advantage for the whole family; women to the home and men to paid work (Becker, 1981). Resource-bargaining and economic-dependence theories argue that the partner with the greatest power, e.g. higher income, has a better position when negotiating the division of household duties (see Brines, 1993). These theories are gender neutral – both women and men are expected to avoid housework – but as men usually have higher wages or a better position in the labour market, they generally have more decision-making power than women do. By contrast, according to different theories on gender, doing housework, or avoiding it, can be regarded as one way of displaying gender. Gender itself is the product of doing certain kinds of tasks that are culturally regarded as feminine or masculine (West and Zimmerman, 1987; South and Spitze, 1994; Brines, 1994). Gender theories are used to explain why household

tasks are not always divided according to relative resources, but even in an opposite way (Bittman et al., 2003; Brines, 1994).

More recent studies have taken macro-level factors into account, explaining the division of unpaid and paid work (see Lachance-Grzela et al., 2010 for a review; Bühlmann et al., 2010). For example, the availability of parental leaves for men is positively related to the father's time used for housework (Hook, 2006). Eventually, the division of unpaid and paid work in families reflects the ways in which gender relations are organised in certain cultural, economic and political contexts and time periods (Coltrane, 2010). As the sample of this study comes from a single country, conclusions on the effects of the certain context cannot be made. However, any results must be interpreted taking into account the characteristics of the contexts of the study. Therefore, the Finnish family policies and gender equality in the labour market are described in more detail in the following chapter.

Whatever the logic behind the division of domestic labour, having greater responsibilities for housework or children may relate to lower wages and weaker employment opportunities in many ways. As the division of unpaid work in general, these effects may also vary according to gender, cultural and institutional contexts, depending on the ways in which combining work and care is supported. It has been suggested that the responsibilities restrict the time and effort available for paid work and the range of jobs that can be combined with family life (Becker, 1985; Coverman, 1983). The partner taking greater responsibility may not have the option of working overtime, traveling or taking a job in a difficult location (Coverman, 1983). Similarly, it is possible that care and domestic roles suffer from the decisions made in favour of working life. Different organisational or national family policies, such as shortened working hours, help combining work and care but also can have negative effects on a career. Both mothers and

fathers may face “a flexibility stigma” and have lower wages or career opportunities, if they reduce employment for family reasons and act against the ideal worker norm (Williams et al., 2013; Coltrane, 2013). Some studies, but not all, have found that this stigma is stronger for men than for women, as taking caring roles is especially in conflict with men’s traditional breadwinning role (see Williams et al., 2013).

Finally, to some extent, personal preferences explain both taking domestic responsibility and orientations in working life (e.g. Halrynjo, 2009). These preferences can also change during the course of life, partly shaped by structural constraints and possibilities (Halrynjo and Lyng, 2009).

Previous research has analysed the family-related predictors of different kinds of employment patterns among men and women. Using German data, Biemann et al. (2012) showed that married women and women with children were less likely to follow a stable career path than married men and men with children. Another study, based on the US National Longitudinal Survey of Youth, showed that child-rearing was related to weaker labour market attachment among women but not among men (Huang et al., 2011). This study aims to expand on this body of empirical research by analysing the role of domestic responsibilities, which includes both housework and childcare, on the labour market attachment of fathers and mothers. When the long-term effects of the division of domestic responsibilities on later labour market attachment are examined, the purpose is not to underestimate the causal connections of employment on housework or the role of individual orientations or institutional and cultural factors. Instead, the purpose of this study is to empirically analyse the association in a certain context, when controlling for possible intervening factors related to prior employment and family. As the national context and institutional structures play a role in the division of unpaid

work in families and men's and women's opportunities in the labour market, we next characterise the context of the present study.

The Finnish Context

This study is based on data from Finland, a Nordic country with relatively generous and gender egalitarian policies that support the combination of work and family (Ray et al., 2010). For example, legislation includes the universal right to public childcare, the opportunity to take leave from work until the child is three years old, and the possibility to leave work to care for a sick child. In this context, the responsibilities for childcare in particular may not affect opportunities to engage in paid employment as much as in countries with less supportive institutions.

The availability and structure of family leave is especially a possible factor affecting the division of domestic responsibilities. In Finland, maternal leave is four months, parental leave is 6 months, and childcare leave is available until the child is three years old. Mothers take the majority of parental leave and child care leave that could be divided between the parents as they wish. Fathers typically take a short leave (1-18 days) allowed to them when the mother is also on leave (see e.g. Salmi and Lammi-Taskula, 2015). These basic components of family leave have remained somewhat the same during the 1990s and 2000s. The father's share of parental leave has been especially developed in the 2000s. Fathers were given their own quota in parental leave in 2003 (a father's month), and their quota has been gradually developed and lengthened to nine weeks in 2013 (and named paternity leave) (Saarikallio-Torp and Haataja, 2016). The share of fathers taking parental leave has increased accordingly from 4 % in 1998, 11% in 2004 and 31% in 2012, as in 2003-2012; the numbers also included those taking the father's month. In the 1990s and early

2000s, the average number of leave days among fathers taking parental leave was 64-65, while in 2012, it was only 18 days (see more details in Salmi and Lammi-Taskula, 2015; Social Insurance Institution, 2015).

Mothers take leave, on average, 20 months per one child (Haataja and Juutilanen, 2014). As mothers use the majority of family leaves, their employment rates are lower than fathers, especially when children are small. For example, in 2014, the employment rate of mothers with children under 3 years was 47%, with the youngest children aged 3-6 years, it was 82%, and 7-17 years 87%. The respective numbers for men were 90%, 89% and 91% (Statistics Finland, 2016; see also Statistics Finland, 2014).

In Finland, working part-time is relatively rare. In the 2000s, the proportion of women working part-time was 17-19%, and the proportion for men has varied between 7-9% (Statistics Finland, 2016). In 2010, 18% of employed mothers with children under school age and 15% of mothers with children of school age worked a maximum of 30 hours a week, whereas the same proportions for fathers were two and six percent (Miettinen and Rotkirch, 2012, p. 36).

Women are more commonly temporarily employed (19%) than men (13%), work more commonly in the public sector (40%) than men (15%), and their wages are, on average, 83% of men's wages (Statistics Finland, 2016). In 2014, 53% of upper-level white-collar workers and 68% of employees with managerial position were men (Ibid.)

A woman's share of time used on housework and the gender segregation of household tasks has decreased only slightly in recent decades (Pääkkönen and Hanifi, 2011, pp. 25-26). Nevertheless, the responsibility for childcare is more commonly equally divided between partners than the responsibility for household tasks (Kiianmaa, 2012, pp. 50-55). For example, in half of families with two parents, the responsibility for childcare is equally divided between mother and

father, whereas the responsibility for cooking is equally divided only in 22% of families (ibid., pp-53-54).

Aim of the study

Based on previous studies on housework and wages, our hypothesis is that the shouldering of greater family responsibilities would be related to weak labour market attachment among both men and women. Previous studies relating to our research question have not had separate indicators for housework and childcare responsibilities (e.g. Cunningham, 2008). Thus, we do not have separate hypothesis regarding the effects of childcare and housework responsibilities but expect them both to be related to weaker labour market attachment. Finland, like the other Nordic countries, can be regarded as an egalitarian society supporting the combination of work and childcare. Nevertheless, inequalities between men and women in the labour market and domestic sphere remain. This, together with the gender differences described above, gives reason to separate the analyses for men and women.

Data and methods

The data comes from the Health and Social Support study, which began in 1998 with a postal survey that was sent to four age groups (aged 20–24, 30–34, 40–44, and 50–54 years old). In 1998, the survey achieved 25,901 accepted responses, which was 40% of the original sample (Korkeila et al., 2001). In total, 19,629 people (80%) participated in the 2003 follow-up survey, which was posted to the respondents of the 1998 survey who were still living in Finland. Of

these recipients, 19,009 (97%) consented to the linking of their survey answers to the registers. One of the registers included starting and ending days of employment spells between 1998 and 2011 (see below).

Two age cohorts were chosen for the study; those in their 30s and 40s at the baseline in 1998, i.e. those who were likely to no longer be students but were likely to remain in the labour market for the following 10–15 years ($n = 8,989$, 47.3%). From this group, those who reported living with a partner and having children in their household in both survey years (1998 and 2003) were selected, thus obtaining a total of 4,418 respondents (49.1%). From the remaining sample, those with data missing from the National Pension Register ($n = 34$, 0.8%) and those who died during the follow-up prior to 2011 ($n = 30$, 0.7%) were excluded. Also, those who reported receiving a disability pension in 1998 or 2003 ($n = 45$, 1%) were excluded. The final sample consisted of 2,691 women and 1,618 men. The sample of women is 37% of the female respondents in their 30s and 40s from the original cohort, and the proportion for men is 32%, respectively.

According to the non-response analysis, women responded more actively to the baseline survey in 1998 than men did (Korkeila et al., 2001). Among women, the response rate was highest among the youngest age group; whereas for men, the rate was highest among the oldest age group.

Dependent variables

The measure of labour market attachment is based on the recordings of the National Pension Register. This register is compiled and maintained by the Finnish Centre for Pensions,

and it includes information on all work that has been insured according to earnings-related pension acts, i.e. periods of employment in the public and private sector, and periods of self-employment.

Information on employment periods from 2004 to 2011 was calculated into variables indicating the number of months in employment during each calendar year. The values range from 0 to 12 per year, and the number of time points (i.e. calendar years) is eight. These data were linked with the survey data. This longitudinal information was categorised into different developmental groups using latent class growth analyses (see below). These latent groups were used as the dependent variables.

Independent variables

The independent variables were measured with surveys in 1998 and 2003. In both years, responsibility for housework and childcare was asked with the question “How is the responsibility for children, other relatives, and household tasks divided in your home?” The respondents were asked to separately rate the division of responsibilities for children at preschool age, children at school age, adult children, and housework. The options were *1 = all of the responsibility is on someone else*, *2 = most of the responsibility is on someone else*, *3 = the responsibility is evenly divided*, *4 = most of the responsibility is on me*, *5 = all of the responsibility is on me*, and *6 = this does not concern me*. The last option was recoded as a missing value.

First, the mean of responsibility for childcare at different ages (preschool-age, school-age, adult) was calculated separately for the years 1998 and 2003, so that the values given were

added up and divided by the number of items answered. Next, the mean responsibility for childcare for both time points together was calculated. Also, the mean responsibility for housework in 1998 and 2003 together was calculated. Only responses with answers in both survey years were accepted for the means. The mean value of responsibilities at the two time points may be considered to reflect the responsibilities in a more reliable manner than a single reply, which could be affected by the specific circumstances of that occasion. The mean values range from 1 to 5, a higher score meaning greater responsibilities.

Control variables

Control variables were mainly based on the surveys of 1998 and 2003. Prior labour market attachment was expected to be the most important factor to take into account when analysing the association between domestic responsibilities and later labour market attachment. The self-reported employment status in both 1998 and 2003 was categorised as a dichotomous variable (employed full-time vs. not). The register data on employment spells was also used to control for the respondents' prior labour market attachment. This was measured as the number of months employed in 1998–2003 (ranging from 0 to 72 months). Having a full-time job and higher number of employment months was expected to predict a stronger labour market attachment in the follow-up.

Other control variables consist of demographic and family-related factors and values. Age cohort was used as a dichotomous variable (30–34 years vs. 40–44 years old in 1998). Those in the younger age cohort may be more likely to have small children, while those in the older cohort have a more stable attachment to the labour market in the baseline. Socioeconomic

background was measured by education and classified into three categories based on the 2003 survey: basic, vocational and higher education (including college and university degrees). It was expected that higher education relates to a more stable labour market attachment. To some extent, education is a proxy to wage level, as the data does not include actual wages. Educational level, as well as working time, may also affect the ways in which domestic responsibilities are divided between partners. A variable indicating day work was included from the 2003 survey so that value 1 means regular day work (in respondents' present or latest job), and 0 means all other kinds of working times (shift work, night work, day work with night shifts, and other working times). The partner's employment status was dichotomised into full-time employed vs. not in both 1998 and 2003. The partner's full-time job may be related to both the share of domestic responsibilities and the respondent's employment status. The actual burden caused by domestic responsibilities may vary according to the partners' employment situation. In addition, the respondent's pressure to work may depend on the fact whether their partner is working full-time or not. The age of the children in 1998 was recorded as a dichotomous variable, indicating whether there were children under 3 years old in the household or not. The number of children living in the household in 2003 was recorded in one of three categories (1 child, 2 children, 3 or more children). The nature and division of responsibility for the children was expected to change as the children grew, and to be related to the parents' labour market attachment. The responsibility for children and housework was expected to be more unequally divided (i.e. with women taking more responsibility) in families with small children and a higher number of children. Also, personal preferences or orientation to work may affect both time used on housework and status on the labour market. In the present study, a variable indicating the importance of work to people in general was available and used as a covariate. It was based on

the question: “It is said that because work is so important to the individual, people should work for as long as possible. What do you think about this claim?” The alternatives were dichotomised into a variable in which “1” means that work is important (*definitely agree, somewhat agree*) and “0” means not important (*neither disagree nor agree, somewhat disagree, definitely disagree*).

Analysis

The data on labour market attachment for 2004–2011 was first examined with latent class growth analysis (Nagin, 2005). The distribution of the labour market attachment was skewed, as the majority of respondents were employed for a full 12/12 months of every year. Among women, the proportion of full attachment varied between 83% and 89%, and among men between 89% and 92% per year. The data was analysed assuming negative binomial distribution, which is suitable for a skewed count variable. A quadratic growth factor was included in all models. Bayesian information criteria (BIC), a Lo, Mendell, and Rubin (LMR) (2001) likelihood ratio test (Nylund et al., 2007), and substantive criteria were used in choosing the best-fitting solution and the number of latent groups. In the latent class growth analysis, Mplus version 7 was used (Muthén and Muthén, 1998–2012). Men and women were analysed separately.

The associations between the independent variables and labour market attachment trajectories were analysed using the Chi-squared test, one-way analysis of variance, the Kruskal–Wallis test, and multinomial logistic regression. In latent class growth analyses, individuals’ assignment to latent groups is based on probabilities. The most likely latent class was used because the entropies and average posterior probabilities turned out to be high (over 0.9; see below), indicating good class separation in the models.

First, the unconditioned association of the independent variables on the trajectories is presented. Then, the control variables are included in two phases. At first, previous status in the labour market is controlled for, as it can be regarded as the most important factor explaining the respondent's later labour market trajectory. Second, all other covariates described above that could intervene with the possible association between responsibilities and labour market attachment are included in the analyses.

Results

Women's labour market trajectories

Using latent class growth analysis, four relevant trajectories for labour market attachment were identified among women. The four-class model was supported by better BIC values compared to models with one to three classes, and by a significant LMR likelihood ratio test. The average posterior probabilities (0.96 and above) and entropy (0.96) were high, indicating good class separation. In the four-class model, the trajectories of labour market attachment were *strong attachment* (72.2%), *strengthening attachment* (9.2%), *weakening attachment* (5.8%), and *weak attachment* (12.7%) (Figure 1).

FIGURE 1 HERE

The characteristics of trajectories among women

Those with a strong attachment were most commonly employed full-time in both 1998 and 2003; whereas, prior full-time employment was least common among those with a weak attachment (Table 1). Those with strong and weakening attachments were most commonly continuously employed between 1998 and 2003 when measured as the number of months employed.

Those with the trajectory of a strengthening or weak attachment more commonly belonged to the younger age cohort and had small children at the baseline in 1998 than those assigned to the strong and weakening trajectories. In addition, having three or more children in 2003 was more common for those with a strengthening or weak attachment.

Educational level was highest among those with strong and strengthening attachments and lowest among those with a weak attachment. Women with a weak attachment were least commonly in regular day work in 2003 and had least commonly a partner working full-time in 1998.

Women with a weak labour market attachment in 2004–2011 reported having more responsibility for housework on average during the preceding years in 1998–2003 than women assigned to all other trajectories. Women with strong and weakening attachments had less responsibility for childcare than women assigned to the other two trajectories.

TABLE 1 HERE

The results of multinomial logistic regression analyses among women

In multinomial logistic regression analysis, the strongest trajectories were chosen as the reference categories. The results show the risk of being assigned to weaker trajectories rather than to the stronger ones when having greater responsibility for housework or childcare.

Compared to strong attachment, greater responsibility for housework was related to weak attachment in the multinomial logistic regression analysis (Table 2, Model 1), but the association was not statistically significant after adjusting for prior labour market attachment, measured as employment months and full-time employment (Model 2), and other control variables (Model 3). After adjusting for the control variables, greater responsibility for housework reduced the probability of membership in the strengthening labour market attachment group compared to the strong trajectory (Models 2 and 3). In comparison to strong attachment, having greater responsibility for childcare was related to strengthening and weak attachment (Model 1), but these associations were no longer significant when adjusting for prior labour market attachment and other control variables (Models 2 and 3).

Compared to those with a strengthening attachment, those with greater responsibility for housework were more likely to have a weak attachment to the labour market (Model 1). This association remained significant when controlling for prior employment months, full-time employment (Model 2) and other background variables (Model 3). Having greater responsibility for childcare was not related to a weak attachment when compared to a strengthening attachment.

TABLE 2 HERE

Men's labour market trajectories

For the men, four relevant trajectories of the labour market attachment were also identified. In this analysis, the means of the slope and quadratic term were fixed to zero for one latent group, namely those having a full attachment to the labour market during the whole follow-up. A four-class model was supported by a better BIC value compared to models with fewer classes. Although the LMR likelihood ratio test did not support the four-class model, the model was chosen based on substantive criteria. The average posterior probabilities (0.95 and above) and entropy (0.94) were high. As in the case of women, the trajectories identified were characterised by *strong attachment* (74.1%), *strengthening attachment* (10.2%), *weakening attachment* (6.2%), and *weak attachment* (9.5%) (Figure 2).

FIGURE 2 HERE

The characteristics of trajectories among men

Men with strong and weakening attachments were previously most commonly employed full-time (Table 3). They were also more often continuously employed, when measured as the number of prior employment months, compared to those with strengthening and weak attachments. Men assigned to the strong trajectory were also most often highly educated.

Men with strong and strengthening attachments most commonly belonged to the younger age cohort. Those with a weakening attachment were the least likely to have small children in

1998. Among men with a strengthening attachment, the partner was least commonly employed full-time in 2003.

In all trajectories, the mean rate of responsibilities for childcare and housework remained below three, which means that men, on average, took less than half of the responsibility. In each trajectory, the mean responsibility for childcare was greater than for housework. The mean for childcare and housework responsibilities in 1998–2003 was greatest among those with a weak attachment.

TABLE 3 HERE

The results of multinomial logistic regression analyses among men

Compared to strong attachment, greater responsibility for housework was related to a weak labour market attachment (Table 4, Model 1). The association remained when prior employment months and prior full-time employment (Model 2) and other control variables were adjusted for (Model 3). Compared to strong attachment, greater responsibility for childcare was also related to a weak labour market attachment (Model 1). This association was no longer statistically significant after adjusting for covariates (Models 2 and 3). However, the p-value remained below 0.10 ($p=0.061$), suggesting an association.

Those with greater responsibility for housework and childcare were more likely to be assigned to the trajectory of weak attachment rather than strengthening attachment (Model 1). Only with respect to the responsibility for housework, the association remained significant after

adjusting for all control variables. With respect to childcare responsibilities, the p-value remained below 0.10 ($p=0.068$).

TABLE 4 HERE

Discussion

This study analysed how the divisions of housework and childcare responsibilities in midlife relate to men's and women's later labour market attachment. The study was based on longitudinal survey data on the division of these domestic responsibilities and other family-related factors at two time points, 1998 and 2003, which were linked with register-based data on employment spells for the following eight years. The sample consisted of men and women in their 30s or 40s at the baseline, who were living with a partner and had children in their household.

To our knowledge, there is only one previous study analysing the effect of domestic work on later labour market attachment, focusing only on women (Cunningham, 2008). In addition to replicating that study in different societal conditions, this study brings novel knowledge on the effects of domestic responsibilities on men's labour market attachment.

Four trajectories for labour market attachment – namely strong, strengthening, weakening and weak – were identified for both women and men using a latent class growth analysis. Greater responsibility for housework measured in 1998-2003 was related to weak labour market attachment – compared to the trajectory of strong attachment - for both genders during the

subsequent eight-year period (2004-2011). When adjusted for prior labour market attachment and other control variables, this association remained statistically significant only among men. When compared to those with the trajectory of strengthening attachment, a high responsibility for housework was related to weak attachment in both genders. Greater responsibility for childcare was also related to weak attachment – compared to strong attachment – among both genders, but not after controlling for background variables. However, in men, the p-value remained below 0.10, which gives reason to suggest further, more detailed, studies.

According to the previous study by Cunningham (2008), men's relative share of housework was positively related to women's employment status eight years later and employment hours 16 years later. The result of the present study also suggests similar association, which, however, became non-significant when prior full-time employment and employment months were also taken into account in the model that compared the group with weak attachment to the strong attachment group. With the strengthening attachment group as a reference, the association of high responsibility for housework to weak attachment remained significant even in the fully adjusted model. This finding indicates that high responsibility for housework is reflected in differential late employment outcomes among those with an originally low level of attachment.

Among women, those with greater responsibility for housework were less likely to have strengthening than a strong attachment to the labour market, when full-time employment status and employment months in the baseline were taken into account. It must be noted that both of these trajectories led to strong attachment sooner or later. Thus, the negative association between high responsibility for housework and a strengthening attachment – compared to strong attachment – may be explained by some life stage differences among the women in these two

tracks. This finding would need a more detailed analysis on possible interactions between variables that is not in the scope of this article.

Culturally, the responsibility for children and housework is strongly associated with mothers. This was also evident in this study, as women in all trajectories took more responsibility for housework and children than men. However, compared to women, it is possible that fathers having or taking relatively greater responsibility for the family is more in conflict with the expectations of them in working life. As separate analyses were conducted for men and women, we cannot say whether the differences between the associations found among men and women are statistically significant.

The possibilities to combine work and family varies across countries with different institutional and cultural contexts, as well as with individuals' social backgrounds (e.g. Nieuwenhuis et al., 2012). Prior studies have found different employment patterns for men and women (e.g. Huang et al., 2011), which was also one of the reasons why we analysed the genders separately. The trajectories turned out to be quite similar for men and women. The reason for this may be the fact that, in Finland, it is also common for mothers to be employed and work full-time, especially after the youngest child turns three years old and access to child home care leave ends. Remaining a housewife is uncommon.

The differences in the proportions of men and women assigned to the four trajectories were also very small. A majority of both men (74%) and women (72%) had a strong attachment to the labour market, while only 13% of women and 10% of men had a weak attachment. It can be expected that both overly strict and overly liberal parental leave policies may weaken women's attachment. In this respect, the Finnish policy is relatively liberal. Well-organised public childcare may increase the proportion of women with strong attachment. On the other

hand, according to a previous study, liberal family leave in combination with temporary employment seems to delay mothers' labour market attachment (Peutere et al., 2015). Overall, in the Finnish context, the family policies seem to balance the unequal share of domestic responsibilities among genders.

In Finland, mothers take the majority of family leave that is available for both parents. Extending leave available only for fathers could improve a more equal share of domestic responsibilities between partners. It could also make men's roles as fathers more visible in working life and take away a stigma related to their caring roles.

The strength of this study relates to the long follow-up time; we used survey data at two time points and register data on employment spells over eight years. Another advantage of this study, compared to previous studies, is in the modelling of the level and form of labour market attachment over a longer period of time rather than at only a few time points. With this approach, an employment situation in a single year is not as important as the trend of attachment over many years. The latent class growth analysis fits the study of labour market attachment especially well, as many directions and pathways in the development of employment are possible. It is also the most suitable method for the data available, as survey data was available from two time points and employment data from several years.

Assuming that reporting major or minor responsibility in a single survey may be due to occasional factors, domestic responsibilities were measured as the mean for two survey years (1998 and 2003). The majority of both men and women reported their housework (men 58%, women 59%) and childcare responsibilities (men 65%, women 57%) were the same in both survey years. It is possible that there have been changes in the respondents' lives between the two surveys – the respondents may have acquired a different partner, for example. As these

changes in the family composition could not fully be taken into account, the mean of the responsibilities from the two time points was used.

Both the responsibility of domestic work as well as attachment to the labour market evidently depend on personal orientations. To some extent, such orientations could be taken into account by controlling for prior full-time employment, previous labour market attachment and educational level. Also, a survey question on the respondents' views of the importance of work for people in general was used as a control variable. In the analysis, we controlled for the number of months employed during the survey years and whether the work was full-time or not. Especially among women, these controls weakened the effect of domestic responsibilities on later labour market trajectories. On one hand, this can be seen as an over-adjustment, reducing the real effect of domestic responsibilities. On the other hand, it is known that previous labour market attachment strongly predicts later employment outcomes. Controlling for prior attachment, it was possible to see whether domestic responsibilities have any independent effect on later attachment.

Finally, some limitations of the study need to be elaborated. First, it was not possible to distinguish the different aspects of responsibility, other than responsibilities related to childcare and housework. The relative proportion of responsibility does not indicate the absolute amount of burden, or whether the person responsible also does the work needed to be done themselves. In addition, the measures of housework and childcare responsibilities did not take into account the fact that the responsibilities can be divided differently according to the task. The division of responsibilities may be regarded as evenly divided if a male partner takes chief responsibility for maintenance and repair work and a female partner takes chief responsibility for the daily housework, the latter of which is more likely in conflict with paid work. The association between

a high responsibility for housework and a weak attachment to the labour market among women could have been stronger if the question of domestic responsibility had referred to daily housework (cooking, cleaning, and laundry) rather than housework in general. Also, our measures possibly better capture the division of housework than childcare responsibilities, which is reflected in a stronger association to labour market trajectories. Although men and women may include different things in these responsibilities with a different logic, common for both genders is the subjective feeling of responsibility. This can be regarded as an important potential factor affecting employment outcomes. However, it must also be noted that the measures of domestic responsibilities did not indicate whether parents were experiencing conflict in combining work and family. Therefore, having greater responsibility for housework and childcare does not necessarily mean that it is a burden for the individual or that it results in conflict with paid employment.

Another limitation relates to the information on respondents' employment careers and family situations. The register data on employment spells does not include information on working hours or periods of unemployment. However, working part-time is rare in Finland, even for parents (Miettinen and Rotkirch, 2012). During the follow-up, those with weak attachment were unemployed or out of the labour market for some other reason. In addition, the study did not include information on the relative wages of the partners. Only the partners' full-time status at baseline could be controlled for. Also, information on the gender of the respondents' partners was not available; it was thus not possible to determine whether the respondents were living in heterosexual relationships or not. Nevertheless, it is probable that this information would not have considerably changed the main results.

There may also be differences between those two age cohorts chosen for the study. For example, it is possible that the cohorts have somewhat different views on division of domestic responsibilities or working life. It is also possible, that those in the older age cohort already have more stabilised roles in family and working life than those in the younger age cohort. For these reasons, we controlled for age cohort in the analysis.

As the last point, the data did not include information on possible new children born to the families during the follow-up. At the start of the follow-up in 2004, the respondents were 35–49 years old, meaning that it was still possible for some of them to have more children. The births of new children may have changed the division of family responsibilities or had effects on individuals' labour market attachment. It is also possible that those with greater domestic responsibilities had more children during the follow-up and a weaker labour market attachment as a result of being more family-oriented from the beginning. Those with greater responsibilities during survey years may also have anticipated poorer opportunities in the labour market based on experiences earlier in life.

Conclusion

The present study showed that greater responsibilities for housework predict weak labour market attachment – compared to strong attachment – among both genders. However, after controlling for prior employment and other demographic factors, this association remained significant only for men. Among women, high responsibility predicted a weak labour market only compared to those with a strengthening attachment. It seems that working life has not been able to

adapt to changes in the roles of men in the family, even in the Finnish context. It remains to be seen whether recent and current institutional adjustments aiming to improve the possibilities for men to stay attached to the labour market with greater family responsibilities also improve gender equality in this respect. For women, it seems that, in a Finnish type of welfare state, domestic responsibilities do not have corresponding long term effects on labour market attachment, at least when labour market attachment is measured as the number of months in employment. More research is needed to assess the importance of the national cultural and institutional contexts for these results. Future studies should also take into account the quality of employment, i.e. working part-time vs. full-time and on temporary vs. permanent contracts in the follow-up.

In the end of the eight-year follow-up of this study, the individuals were 43-57 years old. With a longer follow-up time, the labour market trajectories would have, to a larger extent, indicated retirement; thus, the length of the follow-up can be regarded as sufficient. However, regarding the effects of domestic responsibilities on later career, the timing also matters. In future studies, it would be interesting to focus on more homogeneous group(s) of parents with respect to their age and family stage. Also, the interactions of age and gender in domestic responsibilities and later labour market attachment could be analysed.

The results of studies of this kind must always be interpreted in relation to the time and context, which limits the generalisation of the results to other societies. Finland represents western societies, but is also a special case as a national context, with its specific features: relatively long parental and childcare leave, public childcare, and a high rate of employment among women. It would be important to analyse the associations with international comparative datasets or at least with national studies from other countries.

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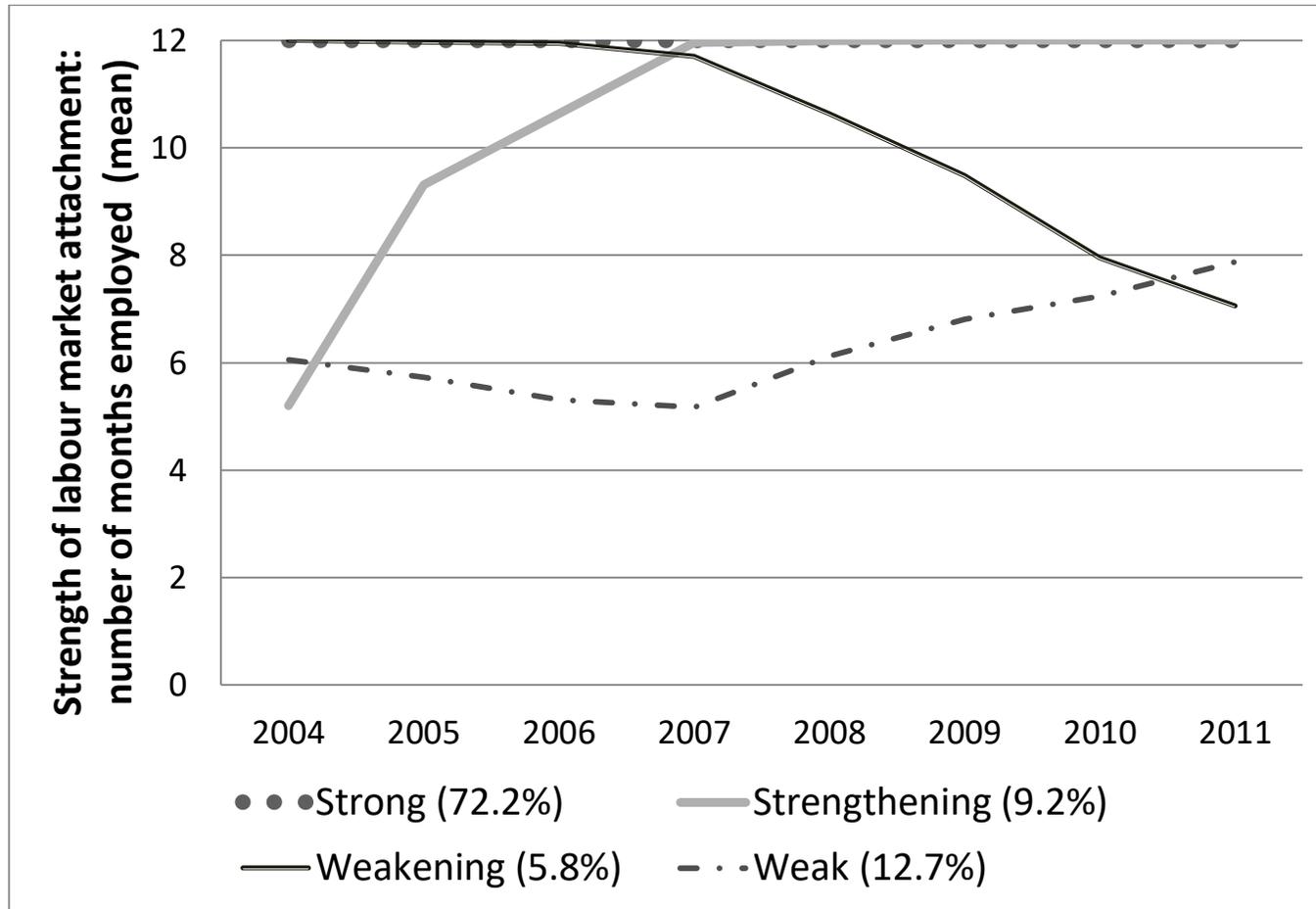


Figure 1. Trajectories for labour market attachment among women (n=2,691)

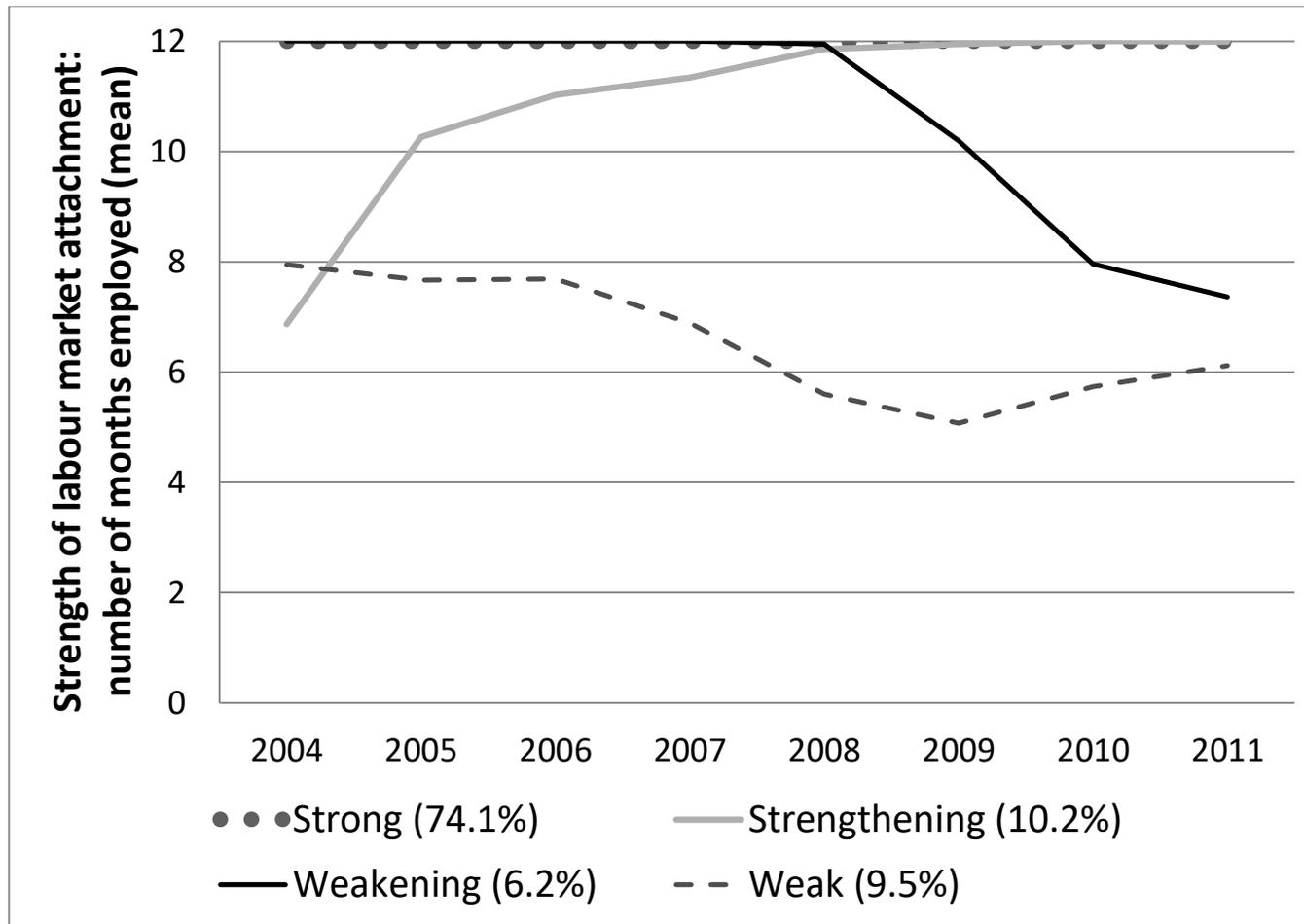


Figure 2. Trajectories for labour market attachment among men (n=1,618)

Table 1. Independent variables according to women's labour market attachment trajectory in 2004–2011.

	<i>n</i>	Strong (<i>n</i> = 1,944)		Strengthening (<i>n</i> = 248)		Weakening (<i>n</i> = 157)		Weak (<i>n</i> = 342)		<i>p</i> -value ¹
		<i>M, % or Mdn</i>	<i>S.D.</i>	<i>M, % or Mdn</i>	<i>S.D.</i>	<i>M, % or Mdn</i>	<i>S.D.</i>	<i>M, % or Mdn</i>	<i>S.D.</i>	
Control variables										
Employed full-time in 1998 (%)	2,679	70.0		50.4		53.5		33.5		0.000
Employed full-time in 2003 (%)	2,645	86.6		48.4		80.4		38.5		0.000
Number of months employed in 1998–2003 (Mdn)	2,691	72		48		72		37		0.000
Younger age cohort (born 1964– 1968 vs. 1954–58) (%)	2,691	47.1		61.7		48.4		60.5		0.000
Education in 2003 (%)	2,678									
Basic		5.8		7.3		11.0		13.6		
Vocational		23.4		25.8		27.1		33.4		0.000
College or more		70.8		66.9		61.9		53.0		
Day work (vs. other working times) (%)	2,635	74.4		70.5		72.9		63.8		0.001
Partner employed full-time 1998 (%)	2,689	89.8		86.7		93.6		84.2		0.003
Partner employed full-time 2003 (%)	2,677	90.0		90.3		92.9		88.5		0.496
Children under 3 years in 1998 (%)	2,672	27.9		41.1		29.9		39.2		0.000
Number of children in 2003 (%)	2,683									
one child		11.4		7.3		12.1		10.6		
two children		49.9		44.0		50.3		37.5		0.000
three or more		38.7		48.8		37.6		51.9		
Work is important ² (%)	2,666	47.3		48.6		51.9		51.2		0.448
Independent variables										
Responsibility for housework (M) ³	2,414	3.68	0.52	3.68	0.57	3.65	0.52	3.82	0.55	0.000

Responsibility for children (M) ³	2,589	3.40	0.47	3.49	0.48	3.36	0.43	3.54	0.53	0.000
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M = mean, Mdn= median, S.D. = standard deviation. ¹Categorical variables were analysed with the Chi-squared test, means with one-way ANOVA, and medians with the Kruskal–Wallis test. ²“People should work as long as possible” (percentage of those who definitely or somewhat agree). ³Mean score for years 1998 and 2003 (range 1 = all of the responsibility is on someone else to 5 = all of the responsibility is on me).

Table 2. Summary of multinomial logistic regression analysis for variables relating to women's labour market attachment trajectories in 2004–2011.

	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE</i>	<i>RRR</i>	<i>B</i>	<i>SE</i>	<i>RRR</i>	<i>B</i>	<i>SE</i>	<i>RRR</i>
High responsibility for housework ¹									
Strengthening vs. Strong	0.02	0.14	1.02	-0.32*	0.16	0.73	-0.38*	0.16	0.68
Weakening vs. Strong	-0.11	0.17	0.90	-0.15	0.17	0.86	-0.18	0.18	0.84
Weak vs. Strong	0.50***	0.12	1.65	0.09	0.15	1.09	0.02	0.16	1.02
Weak vs. Strengthening	0.48**	0.17	1.62	0.41*	0.17	1.50	0.40*	0.18	1.49
	(n = 2,414)			(n = 2,362)			(n = 2,262)		
High responsibility for children ¹									
Strengthening vs. Strong	0.37**	0.14	1.45	-0.20	0.17	0.82	-0.24	0.18	0.79
Weakening vs. Strong	-0.19	0.18	0.83	-0.36†	0.19	0.70	-0.28	0.20	0.76
Weak vs. Strong	0.56***	0.12	1.75	-0.25	0.16	0.78	-0.17	0.17	0.84
Weak vs. Strengthening	0.19	0.17	1.21	-0.05	0.18	0.95	0.07	0.19	1.07
	(n = 2,589)			(n = 2,532)			(n = 2,432)		

Note: *RRR* = Relative Risk Ratio, † $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Model 1: Crude. Model 2: Controls for employment months in 1998–2003 and full-time employment in 1998 and 2003. Model 3: Controls for the number of employment months between 1998 and 2003, full-time employment in 1998 and 2003, education in 2003, day work (vs. other working times), children under 3 years in 1998, number of children in 2003 (one, two, three or more), the partner's full time job in 1998 and 2003, age cohort, and importance of work measured in 1998.

¹Mean score for 1998 and 2003 (range 1 = all of the responsibility is on someone else to 5 = all of the responsibility is on me).

Table 3. Independent variables according to men's labour market attachment trajectory in 2004–2011.

	<i>n</i>	Strong (<i>n</i> =1,199)		Strengthening (<i>n</i> =165)		Weakening (<i>n</i> =100)		Weak (<i>n</i> =154)		<i>p</i> -value ¹
		<i>M</i> , % or <i>Mdn</i>	<i>S.D.</i>	<i>M</i> , % or <i>Mdn</i>	<i>S.D.</i>	<i>M</i> , % or <i>Mdn</i>	<i>S.D.</i>	<i>M</i> , % or <i>Mdn</i>	<i>S.D.</i>	
Control variables										
Employed full-time 1998 (%)	1,615	93.8		84.8		92.9		74.5		0.000
Employed full-time 2003 (%)	1,610	96.7		81.1		94.9		71.5		0.000
Number of months employed in 1998–2003 (<i>Mdn</i>)	1,618	72		67		72		63		0.000
Younger age cohort (born 1964– 1968 vs. 1954–58) (%)	1,618	42.9		50.9		35.0		35.7		0.018
Education in 2003 (%)	1,613									
Basic		7.6		12.1		12.0		11.8		
Vocational		33.9		40.0		45.0		47.7		0.000
College or more		58.5		47.9		43.0		40.5		
Day work (vs. other working times) (%)	1,584	72.5		78.1		68.7		73.5		0.358
Partner employed full-time in 1998 (%)	1,613	62.1		56.1		63.0		52.6		0.076
Partner employed full-time in 2003 (%)	1,606	77.0		64.2		76.5		70.4		0.002
Children under 3 years in 1998 (%)	1,596	33.4		42.3		22.4		32.0		0.011
Number of children in 2003 (%)	1,606									
one child		10.1		8.6		15.3		13.2		
two children		48.2		42.3		45.9		43.4		0.268
three or more		41.7		49.1		38.8		43.4		
Work is important (%) ²	1,614	45.6		42.3		43.0		45.5		0.845
Independent variables										

Responsibility for housework (M) ³	1,324	2.65	0.47	2.63	0.50	2.63	0.42	2.82	0.52	0.003
Responsibility for children (M) ³	1,564	2.82	0.38	2.81	0.38	2.84	0.33	2.92	0.39	0.020

M = mean, Mdn= median, S.D. = standard deviation. ¹Categorical variables were analysed with the Chi-squared test, means with one-way ANOVA, and medians with the Kruskal–Wallis test. ²“People should work as long as possible” (percentage of those who definitely or somewhat agree). ³Mean score for years 1998 and 2003 (range 1 = all of the responsibility is on someone else to 5 = all of the responsibility is on me).

Table 4. Summary of multinomial logistic regression analysis for variables relating to men's labour market attachment trajectories in 2004–2011.

	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE</i>	<i>RRR</i>	<i>B</i>	<i>SE</i>	<i>RRR</i>	<i>B</i>	<i>SE</i>	<i>RRR</i>
High responsibility for housework ¹									
Strengthening vs. Strong	-0.11	0.19	0.90	-0.17	0.21	0.85	-0.06	0.23	0.94
Weakening vs. Strong	-0.08	0.23	0.92	-0.05	0.24	0.95	-0.08	0.25	0.93
Weak vs. Strong	0.77***	0.22	2.16	0.62*	0.24	1.85	0.86***	0.26	2.37
Weak vs. Strengthening	0.88**	0.28	2.42	0.78**	0.27	2.19	0.92**	0.30	2.51
	(n = 1,324)			(n = 1,316)			(n = 1,247)		
High responsibility for children ¹									
Strengthening vs. Strong	-0.04	0.22	0.96	-0.18	0.25	0.83	-0.08	0.28	0.93
Weakening vs. Strong	0.16	0.28	1.18	0.13	0.29	1.14	-0.00	0.31	1.00
Weak vs. Strong	0.72**	0.24	2.06	0.47†	0.27	1.59	0.55†	0.30	1.74
Weak vs. Strengthening	0.76*	0.30	2.14	0.65*	0.31	1.91	0.63†	0.35	1.88
	(n = 1,564)			(n = 1,554)			(n = 1,484)		

Note: *RRR* = Relative Risk Ratio, †*p*<0.10, **p*<0.05, ***p*<0.01, ****p*<0.001. Model 1: Crude. Model 2: Controls for employment months in 1998–2003 and full-time employment in 1998 and 2003. Model 3: Controls for the number of employment months between 1998 and 2003, full-time employment in 1998 and 2003, education in 2003, day work (vs. other working times), children under 3 years in 1998, number of children in 2003 (one, two, three or more), the partner's full time job in 1998 and 2003, age cohort, and importance of work measured in 1998.

¹Mean score for 1998 and 2003 (range 1 = all of the responsibility is on someone else to 5 = all of the responsibility is on me).

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Peutere Laura, Aho Simo, Vahtera Jussi, Virtanen Marianna, Pentti Jaana &
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