



## **COUNTRY FRAMING REPORT**

### **Finland**

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# Review of existing literature in their countries relating to the gender and health implications of extending the working life

## 1. Introduction

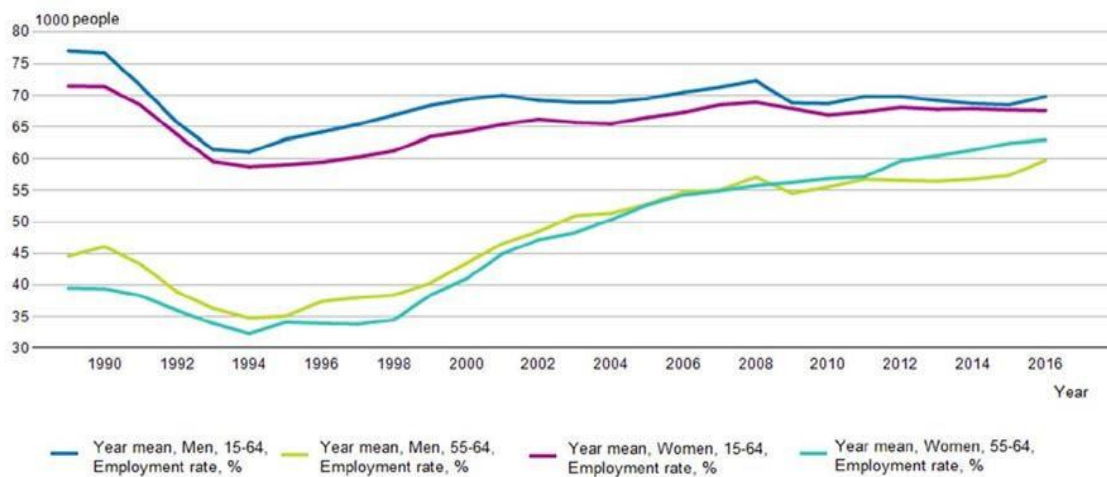
Finland is among the most rapidly ageing countries in Europe. Alongside the economic depression which hit the country hard after 2008, the ageing population sets substantial challenges for Finnish economy. As a response to unemployment and ageing population, the Finnish government aims to reach an employment rate of 72 per cent within the next two years. In 2015, the employment rate was 67.7% for women and 69.3% for men (Statistics Finland 2016). Another aim is to gradually heighten the retirement age from 63 to 65 years by 2027.

Currently, there is not much research carried out in Finland on which kinds of effects the policies aimed at extending working life have on genders and in terms of health. This reports reviews the existing knowledge and research themes about these issues in Finland.

## 2. Context

In Finland, the total labour force participation rate has remained rather stable since the early 1990s. The general labor force participation (of people aged 15–64) in 2017 is 67%, and for older workers (ages 55–64) 60%. During the period 1989–2017 the gap between these age groups has diminished by roughly 30 percent points. During the same period the differences in labor force participation rates of men and women have narrowed. Still, the in the working age population, men’s employment rate is somewhat higher. However, in women aged 55–64 have had a higher participation rate than men since 2009. (Figure 1.)

The population according to working status, gender and age



Source: Statistics Finland, labor force study

In general, Finland, among other Nordic countries, rates high on equality of genders. The availability of public services has played a major role in this, as it has enabled better work force participation for women. (Jokinen, 2017.) However, inequalities between the genders remain in many domains of working life and health, with some indicators favoring men, and some women.

Life expectancy at birth has increased continuously in Finland since the war years in the 1940's and was 83 years among women and 77 years among men in 2010 (Statistics Finland, StatFin database). The difference in life expectancy between women and men is one of the largest in Western Europe. Beyond the gender difference, also the socio-economic differences in life expectancy are large and further increasing. Calculated in a study by Tarkiainen et al. (2011; 2012), the difference between the lowest and highest quintile has increased remarkably since the 1980's: among women the difference increased from 3.9 years to 6.8 years, among men from 7.4 years to 12.5 years.

The welfare state in Finland has certainly helped women to enter into the labor market. However, the gender relations are perhaps not that equal, since women are predominantly working in the welfare sector, which leads to high degree of occupational segregation by gender. The occupational segregation has effects upon gender equality: women may be stacked in low-paid public sector occupations and their representation in the high-pay occupations may be lower than in countries with smaller public sectors.

One of the factors which explains higher rates of labour force participation is the pension reforms conducted in Finland (Hietaniemi & Ritola, 2007; Kangas et al., 2010). Finnish pension provision consists mainly of the employment-based earnings-related pension and the residence-based national pensions and guarantee pensions, which provide a minimum income. The Finnish pension system has included financial incentives for older workers to work longer. So called super-accrual of pensions increased future pensions of employees by 4.5% every year worked after the age of 63 compared to the annual accumulation of pensions by 1,9% for 62-year-old and younger. After the pension reform of 2017, the annual accumulation is 1.5% for all employees but those continuing working after the retirement age receive a 0.4% additional increase of their pensions. In the future, the retirement age will be tied to life expectancy.

On average, men's pensions are higher than those of women. At the end of 2015, an average overall pension euro/month was 1,167 for women and 1,750 for men, totaling in a gender difference of more than 580 euros/ month (<https://www.thl.fi/fi/web/sukupuolten-tasa-arvo/tyo/palkat-ja-elakkeet>). Men's higher pensions are explained their longer work-careers and higher earnings.

### **3. Overview of Finnish research**

#### ***Demographic perspective***

Demographic research studies populations, with population ageing being a phenomenon of central interest. This perspective intrinsically ties it to questions of gender, health, and older workers. Finnish demographic research covers all of these questions. The research is concentrated in and shaped by three institutions: the Population Research Unit at the University of Helsinki, the Population Research Institute, and the Finnish Demographic Society.

The Population Research Unit is located at the Faculty of Social Sciences at Helsinki University.

It is run within the discipline of sociology, bringing together researchers from, for example, sociology, social policy, social psychology, public health, and criminology. As such, the Population Research Unit is focusing more on the phenomenon of populations than on any disciplinary perspective. The unit conducts several strands of research that relate to gender, health, and older workers. First, one focus of the research unit is to calculate indicators related to population ageing, such as mortality rates and life expectancies, for example by socio-economic status or by childhood circumstances (e.g. Tarkiainen et al., 2012, 2015, 2016).

Additionally, the researchers produce forecasts on indicators related to population ageing, such as the household structure of older Finns (Martikainen et al., 2016). Second, researchers at the unit explore health care services for old age. For example, they study influences on the use of institutional care in old age and estimate the of hospital and nursing home care by proximity to death (Martikainen et al., 2009, 2012). Third, researchers at the unit study older workers and retirement. Some investigate the health causes and consequences of retirement, exploring regular retirement, early retirement, and disability retirement (e.g., Leinonen et al., 2013, 2014, 2016). Others focus on social influences on older workers and retirees, for example on social inequalities among older workers and on influences of the 2008 economic crisis on retirement age (Komp, 2010, forthcoming).

The Population Research Institute is part of the Population Association (Väestöliitto), a federation of 34 organizations in the field of social affairs and health. The association provides services, advocacy and information, with the Population Research Institute producing the information necessary for the association's work. Two focus areas of the population research institute are migration and sexuality, which tie in with the topic of population ageing via the migration rate and the fertility rate. Another focus area is the family, which again covers the topic of fertility (e.g. Berg & Rotkirch, 2014; Tanskanen & Rotkirch, 2014), but also intergenerational relations (e.g. Tanskanen et al., 2014a, 2014b). The studies on intergenerational relations tackle questions of grandparental childcare and grandparent-grandchild relationships, among other things, which means that they render information on the situation of older Finns. As part of their work, the researchers at the Population Research Institute conducts an annual Family Barometer survey, dealing for example with questions of childbearing and marital satisfaction, and they publish the Finnish Yearbook of Population Research, which again deals with topics such as fertility and family issues (Väestöliitto, 2017).

The Finnish Demographic Society brings together Finnish scholars in population research and it shapes the course of demographic research in Finland. In doing so, it connects with the research done at the Population Research Unit at Helsinki University, at the Population Research Institute at the Population Association, and at other Finnish universities and institutes, for example at the University of Turku and at the National Institute for Health and Welfare. Also, the Society cooperates with the Population Research Institute in publishing the Finnish Yearbook of Population Research. The topics that the Finnish Demographic Society draws attention to vary widely, with a recent examples being the connection between demography and social inequalities – which is the theme of the 2017 Nordic Demographic Symposium that takes place in Finland (Finnish Demographic Society, 2017).

## *Economic and social policy perspective*

Finnish economic and social policy research on gender, age and working life is concentrated in and shaped by different research institutions or different research units of pension institutions. The most influential institutions and units are the Finnish Centre for Pensions, the Social Insurance Institution of Finland, Institute for Economic Research, Keva (Public sector pensions) and National Institute for Health and Welfare. Research topics on economic and social policy studies can be divided into six categories.

**A First** topic concerns retirement intentions. The attitudes towards lengthening own working career as well the predictors of early retirement intentions seem to be widely studied in Finland, but gender has not on the focus of these studies. For example Edge, Cooper and Coffey (2017) did not find any studies from Finland in their systematic review about the barriers and facilitators to extended working lives in Europe, and with a particular focus on gender. Results concerning the gender are, however often reported separately. For example, Forma and Väänänen (2003) explored the views of employees in the local government sector towards the upcoming system of flexible retirement that was introduced to lengthen the work careers in Finland. Approximately 10% intended to postpone their retirement, men more willingly than women did. Since, employees' willingness to extend working career after the retirement age has slightly increased, among both women and men (Lehto & Sutela, 2010). In their 11-year follow-up study, Von Bonsdorff et al. (2009) found that negative perceptions about work were stable predictor of early retirement intentions among both men and women. Low work and life satisfaction predicted early retirement intentions among women while good self-rated work ability and perceived good health were negatively associated with early retirement intentions among men consistently through the follow-up.

In addition, concerning gender differences in retirement intentions it has been found that the intent to retire early and work long are both more common with men than with women. On the other hand women consider "regular" retirement ages more often than men. (Forma et al., 2006.) Women are less likely to pursue a career past age 63 (Karisalmi et al., 2008). For both men and women, pensions are roughly 60 % of the income they earned a few years back (Rantala & Suoniemi, 2010). Still, men's pensions are higher than women's as the wage differences between genders have persisted (Karisalmi & Tuominen, 2011).

In 2000–2002 the Academy of Finland, the Social Insurance Institution of Finland and the Finnish Work Environment Fund funded a research project called "Age, work, gender – the management of aging in the last working years", which utilized an interview data collected from ten organizations, including managers and older workers. (Julkunen & Pärnänen, 2005.) The data has been used in studies about midlife women's irritation and resistance in waged work (Irni, 2009) and age politics in organizations (Pärnänen, 2011).

Pärnänen (2011) concludes in her study that her findings dispel the idea that employees could freely choose whether to stay on or exit from work based. Pärnänen (2011) studied the aim of extending working careers on the organisation level by interviewing employers, employees and representatives from the local trade unions in Finland. The results show that organisations' age policy choices were integrated as part of their strategic planning. That is, long working careers were supported and aged people were hired if it was strategically sound, e.g. it fit with the current economic situation or the age structure of the organisation's personnel. Organisations had, however, age-discriminating practices in recruitment. The study demonstrated that organisations'

age policies emphasis on young people's right and duty to gainful employment. Pärnänen (2011) concluded that "flexibility on the labour market is tied rather to age than to gender". That is, the gender did not show a noteworthy part when organisations aim to extend working careers. On contrary, Viitasalo (2011) found in her survey study that age discrimination concerned particularly women aged 55 and older comparing to men and younger women. Age discrimination among women was associated with older age, single by the relationship status, perceived low health, lower salary and managerial or senior officer status.

Occupational status has a substantial effect on to what extent the employees can choose of whether to retire or continue working. Particularly in rapidly automatising industries, that are often male-dominated occupations, such as metal industry, the number of workers is declining. When companies reduce personnel, older workers are often asked to consider voluntarily retiring before reaching full retirement age. The older workers are often less competitive among others due to their expected lower motivation and ability to learn to use new technologies (Calasanti, Pietilä, Ojala & King 2013).

Gender, health and aging are themes present in the case of social and health service personnel, which is female dominant and rapidly aging (Ailasmaa, 2015; Kokkinen & Saarinen, 2015). Lack of control over working times or intensity, the physical and mental stress of work and comparatively high sickness absence rates characterize health care work, especially in the lower educated personnel (Kokkinen & Saarinen, 2015). Women also use public and private health services more than men, and their share of health care expenditure is also larger. (Hujanen et al., 2004; Suominen-Taipale et al., 2006). Women are also more represented in older age groups due to their longer life expectancy. These facts combined with a health and social care system going through major changes calls for further investigation.

**A Second** topic concerns pension reforms and the sustainability of the Finnish pension system. The sustainability of the pension system has been under study in light of the growing life expectancy and decreasing birth rates, which result in an ageing population. The baby boomers will retire approximately in the period 2010–2020. The loss of personnel due to retirement will be highest in the municipalities during 2013–2017. (Halmeenmäki, 2010.)

A subject that has recently been under the scope of mainly the Finnish Centre for Pensions has been the pension reform of 2017. The main motivations for the reform have been stated to be the lengthening of careers, improving the age dependency ratio and balancing the public economy. In 2017, Finland implemented a pension reform program as a response to the growing life expectancy and economic demands. A simulation study has been conducted on the distributional effects of the reform, taking gender into account (Tikanmäki et al., 2015).

As a consequence, the age requirements for entering the old age pension will gradually increase for successive cohorts. For cohorts born after 1965 the limit will be tied to life expectancy. It is estimated that for the cohort born in 1970 the limit will be 65 years and 11 months, 68 years and 1 month for the 1995 cohort. (Kautto et al., 2015.) In Finland the average life expectancy for females born in 2015 was 84,1 years and 78,5 years for males. This means that the pension reform will decrease the pension time of women less than that of men, relatively speaking (Kautto et al. 2015). Citizens' opinions of the reform have also been studied (Tenhunen et al., 2017).

**A Third** topic concerns disability pensions. Health economists have studied the economic burden of work disabilities and certain diseases prevalent in Finland. The most central health challenges in the working population are musculoskeletal diseases, mental health issues (especially depression), cardiovascular disease and type 2 diabetes (Rautio & Husman, 2010). A large share of health expenditures is related to the costs of medicines, health care and disability pensions. Regarding medicines, the prevalence of depressive symptoms has been stable over the period 2000–2011, there is some evidence suggesting increasing usage and costs of antidepressants (Vilhelmsson, 2013).

The StopDia-project explores new ways to curb the continuous spreading of type 2 diabetes (StopDia, 2017). The risk of type 2 diabetes rises with age, so this is a concern especially when considering older workers. Obesity, which is a major risk factor for type 2 diabetes, is also more prevalent in older people and with men. In the 1998–2007 the amount of diabetics rose by 4,7 % and the costs of diabetics health care rose at the rate of 6,2 % a year (Jarvala et al., 2010).

The inability to participate in the labor market has decreased in light of the disability pension figures. Men enter disability pensions more often than women. On the other hand women have more difficulties with physical work tasks as they get older. (Koskinen & Martelin 2013, 61.) The costs of disability pensions were 2,2 billion euros in 2014 (Nyman & Kiviniemi 2015, 15). The types of disability retirement vary among genders. In the case of disability pensions due to spinal disorders, it has been found that during 1990-2010 they cost 9,4 million euros, of which 63% were due to males (Asklöf et al 2016).

**A fourth** research topic concerns health care costs. Research around the theme of health care costs has for example explored the increasing costs of care caused by a growing elderly population (Kehusmaa, 2014). In addition, Häkkinen et al. (2008) modeled health care costs and their relation to age and found that non-long term care patients have a positive relationship between age and health center / psychiatric inpatient care costs. They conclude that in the future health care costs will be more determined by social policy decisions and the propensity to end up in long-term care than the composition of the population. Also, the economic implications of different care arrangements of older people have been studied in health economics (Lumio, 2015; Linna et al., 2017).

**A fifth** topic concerns demographic and socio-economic differences in health and longevity. Gender differences in health and longevity in Finland follow a pattern where women report more psychical and physical illness than men, but men have a shorter average life expectancy. However, socioeconomic health disparities are more significant among men than women. Subjective health is negatively associated with age. (Kallio, 2006.) Subjective health is worse in men than in women (Rahkonen et al., 2004). It has been found that excess of male ill health is likely to be found in older people and in more severe domains of ill health (Lahelma et al., 1999).

Comparative research has been conducted on the associations between state characteristics and gender differences in health (Bambra et al., 2009) and different social care systems in relation to young and old people (Anttonen et al., 2003; Anttonen & Sointu, 2006). The ongoing change in the nature of Finnish social policy from universalism to a more market friendly approach has been studied in the context of elderly care work (Anttonen & Häikiö, 2011; Karsio & Anttonen, 2013).

Social policy research has also been focused on the effects of various measures to increase labor force participation and wellbeing of the unemployed. For example, it was found that the majority of participants in a rehabilitative work program were 45–54 aged males (Karjalainen & Karjalainen, 2010).

**Finally, and sixth**, the opinions and attitudes of citizens have also been of interest in social policy research in the Finnish Centre for Pensions and universities. Concerning the trust of citizens in the sufficiency of services and subsistence in old age, it has been found that skepticism about the sufficiency of services and pensions is associated with women, middle-age and poor subjective health (Palomäki, 2013). Other studies have also observed the link between gender and trust in the adequacy of services (Muuri, 2008). Research in social policy has also shed light on citizens' attitudes towards changing welfare services (Kallio, 2010).

#### **4. Conclusions**

Extending working life has been a central topic in the Finnish social policy. The goals articulated in the EU Lissabon strategy regarding the better utilization of the potential work force have served as a base for the Finnish policies. The participation of women and older workers has been seen as needing improvement, but on the Finnish level the emphasis has been more on older workers, since the labor force participation of women is already quite high. (Pärnänen 2011, 24–27.)

Finland was efficient in increasing the employment levels of people aged 55–63 in the late 1990s and early 2000s. One policy measure this development can be attributed to was the tightening of early exit possibilities. The pension reform of 2005 also utilized an economic incentive, where working years after the age of 63 have a highly increased accrual rate. (Ilmakunnas & Takala 2005.) This incentive has proved useful according to a 2008 analysis (Karisalmi et al. 2008). Finland is further tackling the issue of extending working careers in its pension reform of 2017.

Finland is currently preparing an extensive reform of social and health services, for which the main motivations are to decrease the health disparities and manage costs and savings (Jokinen, 2017). The reform aims to integrate social and health services and to base the services on larger population groups, resulting in fewer operational units (Kokko, 2015). The implications of this reform on the gender equality have been considered in an expert statement (Elomäki et al., 2017), which among other publications (Jokinen, 2017) criticize the lack of attention paid to the gender specific implications of the reform. A report considering the reform, public economy and gender has been published by the National Institute for Health and Welfare (Siukkola et al., 2017).



## References

- Ailasmaa, R. (2015). *Terveys- ja sosiaalipalvelujen henkilöstö 2013*. THL: Helsinki.
- Anttonen, A., Baldock, J. & Sipilä, J. (2003). *The Young, the Old, and the State: Social Care Systems in Five Industrial Nations*. Edward Elgar: Cheltenham.
- Anttonen, A. & Häikiö, L. (2011). Care 'going Market': Finnish Elderly-Care Policies in Transition. *Nordic Journal of Social Research* 2.  
<https://boap.uib.no/index.php/njsr/article/view/111> Accessed on April 19, 2017.
- Anttonen, A. & Sointu, L. (2006). *Hoivapolitiikka muutoksessa: Julkinen vastuu pienten lasten ja ikääntyneiden hoivasta 12: ssa Euroopan maassa*. Stakes : Helsinki.
- Asklöf, T., Martikainen, J., Kautiainen, H., Haanpää, M., Kiviranta, I. & Pohjolainen, T. (2016). Paid Expenditures and Productivity Costs Associated with Permanent Disability Pensions in Patients with Spinal Disorders: Nationwide Finnish Register-Based Study, 1990–2010. *European Spine Journal* 25 (1): 275–81.
- Bambra, C., Pope, D., Swami, V., Stanistreet, D., Roskam, A., Kunst, A. & Scott-Samuel, A. (2009). Gender, Health Inequalities and Welfare State Regimes: A Cross-National Study of 13 European Countries. *Journal of Epidemiology & Community Health* 63 (1): 38–44.
- Berg, V., & Rotkirch, A. (2014). Faster transition to the second child in late 20th century Finland: a study of birth intervals. *Finnish Yearbook of Population Research*, 49, 73–86.
- von Bonsdorff, M.E., Huhtanen, P., Tuomi, K. & Seitsamo, J. (2009). Predictors of employees' early retirement intentions: An 11-year longitudinal study. *Occupational Medicine*, 60: 2: 94–100.
- Calasanti, T., Pietilä, I., Ojala, H. & King, N. (2013). Men, bodily control, and health behaviors: the importance of age. *Health Psychology*, 32(1),15–23.
- Edge, C.E., Cooper, A.M. & Coffey, M. (2017). Barriers and facilitators to extended working lives in Europe: a gender focus. *Public Health Reviews* 38:2.
- Elomäki, A., Ylöstalo, H., Hoppania, H-K., Koskinen Sandberg, H., Sointu, L. & Zechner, M. (2017). Kirjallinen lausunto hallituksen esityksestä eduskunnalle maakuntien perustamista ja sosiaali- ja terveydenhuollon järjestämisen uudistusta koskevaiksi lainsäädännöksi sekä Euroopan paikallisen itsehallinnon peruskirjan 12 ja 13 artiklan mukaisen ilmoituksen antamiseksi (HE 15/2017 vp)".  
<http://www.tasaarvovaje.fi/?p=1557> Accessed on April 19, 2017.
- Finnish Demographic Society (2017). Nordic Demographic Symposium 2017.  
<http://blogit.utu.fi/nds2017/> Accessed on March 14, 2017.

- Forma, P., Tuominen, E., Tuominen, K. & Väänänen-Tomppo, I. (2006). Sukupuoli ja aiottu eläkeikä. In Lehto, A-M., Sutela, H. & Miettinen, A. (eds.) *Kaikilla mausteilla – Artikkeleita työolotutkimuksesta*. Statistics Finland: Helsinki, 203–222.
- Forma P. & Väänänen J. (2003). Joustavasti vanhuuseläkkeelle. *Yhteiskuntapolitiikka* 68: 5: 443–453.
- Halmeenmäki, T. (2010). *Kunta-alan eläkepoistuman haasteet ja ratkaisumallit*. Kuntien eläkevakuutus. <http://tampub.uta.fi/handle/10024/66586> Accessed on March 14, 2017.
- Hietaniemi, M. & Ritola, S. (eds.) (2017). *The Finnish Pension System*. Finnish Centre for Pensions : Helsinki.
- Hujanen, T., Mikkola, H., Pekurinen, M., Häkkinen, U. & Teitto, E. (2004). *Terveystieteiden tutkimuskeskuksen ikä- ja sukupuoliryhmittäin vuonna 2002*. Stakes : Helsinki.
- Ilmakunnas, S., & Takala, M. (2005). Promoting Employment among Ageing Workers: Lessons from Successful Policy Changes in Finland. *The Geneva Papers on Risk and Insurance - Issues and Practice* 30 (4): 674–692.
- Irni, S. (2009). Cranky Old Women? Irritation, Resistance and Gendering Practices in Work Organizations. *Gender, Work & Organization* 16 (6): 667–83.
- Jarvala, T., Raitanen, J. & Rissanen, P. (2010). *Diabeteksen kustannukset Suomessa 1998–2007*. Diabetesliitto & Tampereen yliopisto: Tampere.
- Jokinen, E. (2017). Sote-seikan sukupuoli. In Eskelinen, T., Harjunen, H., Hirvonen, H. & Jokinen, E. (eds.) *Tehostamistalous*. SoPhi :Jyväskylä. <https://jyx.jyu.fi/dspace/bitstream/handle/123456789/53297/Tehostamistalous.pdf?sequence=1#page=53> Accessed on April 19, 2017.
- Kallio, J. (2006). Koettu terveys ja terveydellinen tasa-arvo kuudessa hyvinvointivaltiossa. *Sosiaalilääketieteellinen aikakauslehti* 43 (3), 218–230.
- Kallio, J. (2010). *Hyvinvointipalvelujärjestelmän muutos ja suomalaisten mielipiteet*. Kela: Helsinki.
- Kangas, O., Lundberg, U. & Ploug, N. (2010) Three Routes to Pension Reform : Politics and Institutions in Reforming Pensions in Denmark, Finland and Sweden. *Social Policy & Administration* 44 (3), 265-284.
- Karisalmi, S. & Tuominen, E. (2011). Palkkatyöstä eläkkeelle siirtyvien eläketaso yksityisaloilla: Laskelmia 2010–2020-luvuilla eläkkeelle siirtyvien työeläkkeestä ja siihen vaikuttavista tekijöistä. <http://www.julkari.fi/handle/10024/129063> Accessed on April 19, 2017.
- Karisalmi, S., Tuominen, E. & Kaliva, K. (2008). *Eläkeaikomukset ja eläkkeellesiirtyminen: seuranta tutkimus Joustava eläkeikä -tutkimuksen aineistosta*. Eläketurvakeskus: Helsinki.

- Karsio, O. & Anttonen, A. (2013). Marketisation of eldercare in Finland: legal frames, outsourcing practices and the rapid growth of for-profit services. In Meagher, G. & Szebehely, M. (eds.) *Marketisation in Nordic eldercare: a research report on legislation, oversight, extent and consequences*. Stockholm University: Stockholm, 85–125.
- Kautto, M. & Risku, I. (2015). *Laskelmia vuoden 2017 työeläkeuudistuksen vaikutuksista*. Eläketurvakeskus: Helsinki.
- Kehusmaa, S. (2014). *Hoidon menoja hillitsemässä. Heikkokuntoisten kotona asuvien ikäihmisten palvelujen käyttö, omaishoito ja kuntoutus*. Kela: Helsinki.
- Kokko, S. (2015). Perusterveydenhuolto ja erikoissairaanhoido. In Niemelä, M., Kokkinen, L., Pulkki, J., Saarinen, A. & Tynkkynen, L-K. (eds.) *Terveysthuollon muutokset*. Tampere University Press: Tampere.
- Komp, K. (forthcoming). Shifts in the realized retirement age: Europe in times of pension reform and economic crisis. *Journal of European Social Policy*.
- Komp, K., Van Tilburg, T.G., & Broese van Groenou, M. (2010). Paid work between age 60 and 70 years in Europe: a matter of socio-economic status? *International Journal of Ageing and Later Life* 5 (1), 45-75.
- Koskinen, S. & Martelin, T. (2013). Suomalaisten terveyst, toimintakyky ja terveysterot. In Sihto, M., Palosuo, H., Topo, P., Vuorenkoski, L. & Leppo K (eds) *Terveystpolitiikan perusta ja käytännöt*. THL: Helsinki.
- Koskinen, S., Lundqvist, A. & Ristiluoma, N. (2012). Terveyst, toimintakyky ja hyvinvointi Suomessa 2011. THL: Helsinki.
- Lahelma, E., Martikainen, P., Rahkonen, O. & Silventoinen, K. (1999). Gender differences in illhealth in Finland: patterns, magnitude and change. *Social Science & Medicine* 48 (1): 7–19.
- Lehto A-M. & Sutela H (2010). Ikääntyvien työpanos on vahvassa kasvussa. Tieto & trendit 2. [http://www.stat.fi/tup/tietotrendit/tt\\_02\\_10.html](http://www.stat.fi/tup/tietotrendit/tt_02_10.html)
- Leinonen, T., Laaksonen, M., Chandola, T., & Martikainen, P. (2016). Health as a predictor of early retirement before and after introduction of a flexible statutory pension age in Finland. *Social Science & Medicine*, 158, 149–157.
- Leinonen, T., Martikainen, P., Laaksonen, M., & Lahelma, E. (2014). Excess mortality after disability retirement due to mental disorders: variations by socio-demographic factors and causes of death. *Social Psychiatry and Psychiatric Epidemiology*, 49(4), 639–649.
- Leinonen, T., Lahelma, E., & Martikainen, P. (2013). Trajectories of antidepressant medication before and after retirement: the contribution of socio-demographic factors. *European Journal of Epidemiology*, 28(5), 417–426.
- Linna, M., Tyni, T., Mikkola, T. & Hörhammer, I. (2017). Tehostetun palveluasumisen sote-

kustannukset – Onko tehostetun palveluasumisen kustannuksissa eroja kunnittain ja yksityisen ja julkisen välillä? In *Terveystaloustiede* 2017.  
[http://www.julkari.fi/bitstream/handle/10024/131896/URN\\_ISBN\\_978-952-302-809-8.pdf?sequence=1#page=21](http://www.julkari.fi/bitstream/handle/10024/131896/URN_ISBN_978-952-302-809-8.pdf?sequence=1#page=21) Accessed on April 19, 2017.

Martikainen, P.T., Murphy, M., Moustgaard, H.L., & Mikkonen, J.M.K. (2016). Changes in the household structure of the Finnish elderly by age, sex and educational attainment in 1987-2035. Helsinki University: Helsinki.

Martikainen, P., Murphy, M., Metsä-Simola, N., Häkkinen, U., & Moustgaard, H. (2012). Seven-year hospital and nursing home care use according to age and proximity to death: variations by cause of death and socio-demographic position. *Journal of Epidemiology & Community Health* 66 (2), 1152–1158.

Martikainen, P., Moustgaard, H., Murphy, M., Einio, E. K., Koskinen, S., Martelin, T., & Noro, A. (2009). Gender, Living Arrangements, and Social Circumstances as Determinants of Entry Into and Exit From Long-Term Institutional Care at Older Ages: A 6-Year Follow-Up Study of Older Finns. *Gerontologist* 49 (1), 34–45.

Muuri, A. (2008). Sosiaalipalveluja kaikille ja kaiken ikää?: Tutkimus suomalaisten mielipiteistä ja kokemuksista sosiaalipalveluista sekä niiden suhteesta legitimitettiin. THL: Helsinki.

Nyman, H. & Kiviniemi, M. (2015). *Katsaus eläketurvaan vuonna 2014*. Eläketurvakeskus: Helsinki.

Palomäki, L-M. (2013). Suomalaisten mielipiteet eläkkeiden ja sosiaali- ja terveyspalvelujen riittävydestä eläkeaikana”. Eläketurvakeskus: Helsinki.

Pärnänen, A. (2011). Organisaation ikäpolitiikat : strategiat, instituutiot ja moraali. Statistics Finland: Helsinki.

Rahkonen, O., Talala, K., Laaksonen, M., Lahelma, E., Prättälä, R., Uutela, A. & el. (2004). Suomalaisten koettu terveys parantunut, terveyden koulutuserot säilyneet 1979–2002. *Suomen Lääkärilehti* 59 (20), 2159–2163.

Rantala, J. & Suoniemi, I. (2010). *Työstä eläkkeelle: tulokehitys ja korvaussuhteet*. Eläketurvakeskus: Helsinki.

Rautio, M. & Husman, P. (2010). Työikäisten terveyden edistäminen—esimerkkejä työmenetelmistä ja toimintamalleista. In Pietilä, AM.(eds.) *Terveyden edistäminen—teorioista toimintaan*. Sanoma Pro: Helsinki, 165–190.

Siukola, R., Soronen, S. & Teräsaho, M. (2017). Kestävä kasvu, julkinen talous ja rakenteet: Sukupuolinäkökulman valtavirtaistaminen ministeriöissä-hanke. THL: Helsinki.

Statistics Finland (2017). Elinajanodote. <http://www.stat.fi/org/tilastokeskus/elinajanodote.html>. Accessed on April 19, 2017.

Statistics Finland (2016). Women and men in Finland 2016.

[http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yyti\\_womefi\\_201600\\_2016\\_16133\\_net.pdf](http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yyti_womefi_201600_2016_16133_net.pdf)

StopDia (2017). Briefly in English | UEF. <http://www.uef.fi/web/stopdia/briefly-in-english>. Accessed on April 19, 2017.

Suominen-Taipale, A-L., Martelin, T., Koskinen, S. Holmen, J. & Johnsen, R. (2006). Gender differences in health care use among the elderly population in areas of Norway and Finland. A cross-sectional analysis based on the HUNT study and the FINRISK Senior Survey. *BMC Health Services Research* 6: 110.

Tanskanen, A.O., Danielsbacka, M. & Rotkirch, A. (2014a). Multipartner fertility is associated with lower grandparental investment from in-laws in Finland. *Advances in Life Course Research* 22, 41–48.

Tanskanen, A.O., Jokela, M., Danielsbacka, M., & Rotkirch, A. (2014b). Grandparental effects on fertility vary by lineage in the United Kingdom. *Human Nature* 25 (2): 269–284.

Tanskanen, A., & Rotkirch, A. (2014). The impact of grandparental investment on mothers' fertility intentions in four European countries. *Demographic Research* 31 (1), 1–26.

Tarkiainen, L. H., Martikainen, P. T., & Laaksonen, M. T. (2016). The contribution of education, social class and economic activity to the income–mortality association in alcohol-related and other mortality in Finland in 1988–2012. *Addiction* 111 (3), 456–464.

Tarkiainen, L., Martikainen, P., Laaksonen, M., & Aaltonen, M. (2015). Childhood family background and mortality differences by income in adulthood: fixed-effects analysis of Finnish siblings. *European Journal of Public Health* 25 (2), 305–310.

Tarkiainen, L., Martikainen, P., Laaksonen, M., & Valkonen, T. (2012). Trends in life expectancy by income from 1988 to 2007: decomposition by age and cause of death. *Journal of Epidemiology & Community Health*, 66 (7), 573–578.

Tenhunen, S., Airio, I., Kangas, O., Koskenvuo, K. & Kuivalainen, S. (2017). Eläketiedon merkitys: suomalaisten mielipiteet vuoden 2017 eläkeuudistuksesta. Eläketurvakeskus: Helsinki.

Tikanmaki, H., Sihvonen, H., Salonen, J & al. (2015). Distributional Effects of the Forthcoming Finnish Pension Reform-a Dynamic Microsimulation Approach. *International Journal of Microsimulation* 8 (3): 75–98.

Vilhelmsson, A. (2013). Depression and Antidepressants: A Nordic Perspective. *Frontiers in Public Health*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3854846/> Accessed on April 19, 2017.

Viitasalo N. (2011) Ikääntyvien kokema syrjintä työssä, Ikäsyrjinnän yleisyys ja ennustajat. *Työelämän tutkimus* 9 (3), 256 –271.

Väestöliitto (2017). Population Research Institute.

[http://www.vaestoliitto.fi/in\\_english/population\\_research\\_institute/](http://www.vaestoliitto.fi/in_english/population_research_institute/). Accessed on March 14, 2017.