‘In sickness and in health’. Partners’ mutual receipt of sickness allowance and disability pension in present-day Finland

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Abstract

Studies on partners’ mutual take-up of benefits constitute a growing research field on aspects related to how individual health and health-related decisions depend on social relations. This paper provides the first study on mutual take-up of sickness allowance. We analyse married and cohabiting couples’ receipt of sickness allowance and disability pension by estimating discrete-time hazard models for individuals aged 40-65 years, using longitudinal register data from Finland. The data, which cover the period 1987-2011, allow us to explore socioeconomic and demographic variables at both the individual and couple level. We find strong and long-term interrelations in take-up behaviour, and there are strong dependencies across benefit types. The risk of receiving sickness allowance increases by 50 per cent in the first years after partner’s receipt of the same benefit, while the risk of receiving disability pension is twice as high even five years after the partner received this benefit. Women’s take-up tends to be more related to the male partner’s take-up than vice versa. This gender asymmetry hints that, even in a context with high levels of state support, gender equality and female labour force participation, women are more instrumental than men in the production of health within the couple. Mutual take-up of benefits may relate to collateral health effects, but also to shared preferences and assortative mating. We cannot separate between these mechanisms, but the results indicate that the associations may work via an increased caregiving burden, as correlations are particularly strong for couples with children in the household, for the highly educated, and for those with higher income. The results suggest that more effective policies are needed to reduce the individual burden of informal caregiving and household responsibilities when a partner becomes ill, or to carefully monitor potential misuse of the benefits.

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Research highlights

- Married and cohabiting individuals' mutual take-up of health benefits
- First study on mutual take-up of sickness allowance
- Register-based longitudinal analyses of Finnish couples aged 40-65
- Strong and long-term interrelations in take-up behaviour
- Results indicative of increased caregiving burden or misuse of benefits

Keywords

Benefit take-up, couples, collateral health, sickness allowance, disability pension, gender roles, register data, Finland

1. Introduction

Social relations are known to affect the life chances of individuals (Kobrin & Hendershot, 1977; House et al., 1988; Christakis, 2004). One of the most salient relationships is that of family and partnership. Many studies have documented that married partners affect each other's health (Hu & Goldman, 1990; Lillard & Waite, 1995; Shaw et al. 1997). For the elderly, poor health of a spouse in terms of hospitalisation or death, affects the partner who provides care through increased mortality or morbidity risks, and these associations appear to be both immediate and long-term (Martikainen & Valkonen, 1996; Schulz & Beach 1999; Christakis & Allison, 2006). The intimate relation of an individual's health to that of the partner endorses that one function of family and kinship is health production (Berman et al., 1994; Iwashyna & Christakis, 2003).

Apart from any direct effects, health dependencies may also be the result of coordinated decisions and shared norms among partners. Economists typically view health associations as related to labour supply decisions and resource allocation within the family, sociologists focus more on norms, roles, attitudes, and features of the partnership, while epidemiologists are generally concerned with psycho-physiological mechanisms (McEwen, 1998; Johnson & Favreault, 2001). Theory alone cannot give a comprehensive answer to the magnitude or the sign of any associations, partly because they are context-specific (Ashenfelter, 1980). Husbands and wives often coordinate their decisions and withdraw from the labour force simultaneously (Favreault & Johnson, 2002), but when it comes to retirement because of health problems, the empirical evidence is mixed. Findings from the United States suggest that individuals are less likely to retire if their spouse had retired because of poor health (Johnson & Favreault, 2001), while findings from Nordic contexts that feature more genereous social support systems, suggest the contrary (Hesselius, 2009; Johnsen & Vaage, 2015).

Most studies on health dependencies between spouses have studied mortality or hospitalisation, but there is also a growing literature concerned with old-age and disability

retirement. Studies on the take-up of other benefits that relate to poor health are uncommon, and so are studies on the interrelation between the take-up of different types of benefits. We provide some of the first empirical evidence on this matter.

The main aim of this paper is to investigate cross-spousal impacts of benefit uptake related to poor health in the working-age population. We analyse married and cohabiting partners' mutual receipt of sickness allowance and disability pension among persons aged 40-65 years in Finland, using register data for the period 1987-2011. Sickness allowance and disability pension are both related to reduced working capacity before statutory retirement age (Virtanen et al., 2006). Sickness allowance is received after ten days of sickness and reflects temporary illness, while receipt of disability pension is indicative of long-term poor health or permanent illness. Both benefits are conditional on a diagnosis statement of a general practitioner in medicine. Each benefit may mark the onset of severe health problems for some individuals, but overall it reflects a less grave health condition than those previously investigated and proxied by hospitalisation or death.

The present study is important for a number of reasons. Partners' mutual take-up of health-related benefits has not been much studied, and to the best of our knowledge, this is the first study of partners' mutual take-up of sickness allowance. Furthermore, these transfers involve substantial costs for society and employers (Whitaker, 2001), and the overall impact on the individual's well-being is notable. Sickness absence affects economic and social resources, and it predicts take-up of disability pension (Gjesdal et al., 2004). Moreover, Finland provides a useful context, as it features a comprehensive welfare state with universal coverage of social and medical services, modest social disparities and income inequality, and a well-projected ageing process. In an international perspective, Finland also has high levels of gender equality and female labour force participation (World Economic Forum, 2017). Nevertheless, there is gender specialisation of household labour in Finland, with women performing more unpaid

work, including informal caregiving, than men. Thus, women are likely more instrumental than men in health production within the family. Previous findings from Sweden and Norway, which provide similar health and policy contexts as Finland, support this view (Hesselius, 2009; Johnson & Vaage, 2014). Women's responses to the male partner's poor health tend to be stronger than men's response to poor health in the female partner. This is presumably because of women's greater responsibilites for caregiving and housework. In a society where an ageing population puts pressure on the public pension system, health services and in-home care, reduced sickness absence and increased labor supply is needed, and for this reason it is essential to understand partners' mutual receipt of health-related benefits.

Consequently, there are reasons to expect dependencies of benefit take-up within the couples studied, with stronger associations for disability pension than for sickness allowance, because the former reflects a more permanent state of poor health. We also expect that women are more sensitive to the male partner's benefit take-up than vice versa, which would reflect more caregiving responsibiltites.

2. Mechanisms behind interdependent health outcomes

Two main explanations have been put forward as to why partners' health outcomes may be interrelated. One is that there are direct health effects, meaning that poorer health in one person affects the health status of his or her partner due to mental or physical reactions (Rostila et al., 2015). The other explanation is that partners share preferences and information, and/or coordinate their decisions, which are behaviours that may be the result of partnership sorting. In this study, we can quantify partner associations in a very reliable manner, but we cannot directly separate one explanation from the other, or assess causality in a strict sense.

Direct health effects imply that one person's morbidity contributes to the partner's morbidity, for example via a caregiving burden (Schulz & Beach, 1999; Christakis, 2004).

Partnership implies social integration and resources (Kobrin & Hendershot 1977), which are positively associated with health in that they provide a sense of belonging, mutual support, and reduce stress (Pearlin & Johnson, 1977; Litwak et al., 1989; Carr et al., 2000). Having a partner may also be health beneficial in terms of more economic resources through income pooling and specialisation. Traditionally, married women benefit more than married men from their partner's income, while married men benefit more than married women from their partners' health-promoting unpaid activities, including caregiving (Becker, 1981). Thus, men tend to gain more health from their wives' unpaid labour, while women are to a higher extent protected by their partner's income, especially when there is more room for household specialisation (Elwert & Christakis, 2006). Having a partner also encourages a healthy lifestyle and discourage risky behaviours via social control, and particularly so for men (Umberson, 1987; 1992). When a spouse falls ill, many health benefits of having a partner decrease or disappear. Health monitoring from the partner is reduced, and the caregiver burden may increase, especially for women. Generally, men lose access to the primary caregiver, the closest confident, and access to her social networks (Umberson et al., 1992), while women typically lose economic resources (Lillard & Waite 1995).

Many studies on health determinants related to exits from the labour market in working ages have focused on characteristics, outcomes and behaviour at the individual level. Most persons are nevertheless part of social networks, where the partnership is the most salient. Studies have shown that couples' retirement decisions are strongly interrelated. In the United States, at least a quarter of all couples exit the labour force within one or two years of each other, and a significant percentage even in the same month (Blau, 1998; Hurd, 1988; Favreault & Johnson 2002). The increasing share of dual-working couples has probably strengthened this association.

Joint behaviour in spouses may be driven by the widespread preference of husbands and wives to spend leisure time together. In addition, individuals may find a partner who share similar preferences and norms about work and leisure. Healthy individuals are more attractive partners than persons with chronic conditions or unhealthy lifestyles, due to among other things, higher income, physical appearance, less risk-taking behaviour and higher relationship stability (Carter & Glick, 1976; Goldman, 1993). Thus, spouses' joint behaviour may arise also due to assortative mating and similarities in financial and other incentives they face.

Economists model labour supply decisions by assuming that individuals strike an optimal balance between the cost of foregone leisure and the benefits of increased income with paid employment. If married couples place greater value on leisure time when they can spend it together, withdrawals from the labour market will increase when the spouse is not working. Individuals then view their own leisure time and the leisure time of the spouse as complements (Gustman & Steinmeier, 2000; Hurd, 1998). When workers retire voluntarily - often because of generous pension benefits - their spouses may follow them into retirement, but if retirement is involuntary and due to health problems, financial considerations may force the spouses to remain in the labour force (Johnson & Favreault, 2001).

The generous transfer systems in the Nordic countries provide a notably different context than the US. Joint spousal behaviour also seems to differ. Studies from the Nordic countries typically find that, in spite of high levels of gender equality and female labour force participation, wifes respond stronger to the husband's benefit take-up than vice versa.

Studies from Norway and Sweden, for instance, show that, although disability pension is provided on an individual basis, in which the medical decision must not consider the health status of the partner, non-health related motives influence benefit take-up (Hesselius, 2009; Johnson & Vaage 2014). This is supported by other studies, which find that the take-up of

disability insurance is influenced by other factors than health, such as norms (Bratsberg et al., 2013; Dahl et al., 2014; Kostol & Mogstad, 2014).

Although not identical, the benefit systems in Sweden and Finland are highly similar in practice. A study by Hesselius (2009) on Sweden finds that husband's disability retirement yields an average increase in the wife's sickness absence of two weeks per year, while wife's disability retirement results in an approximately one-week increase in the husband's sickness absence. Unlike what we will do here, he did not study couples' mutual take-up of sickness allowance, or if take-up of sickness allowance affects partner's take-up of disability pension. In addition, the follow-up period in that study was short, or only two years. In our setting, the couples are followed much longer, or on average for more than ten years.

3. Data and methods

We use a large longitudinal dataset of married and cohabiting individuals in Finland, covering the years 1987-2011. The data, used with permission number TK-53-768-12, come from various administrative records maintained by Statistics Finland. A random sample of five per cent of all Finnish speakers, who amount to approximately 90 per cent of the total population in Finland, consitute the study population. We observe individuals in heterosexual couples, where both partners are 40-54 years old. Individuals are observed on an annual basis, and followed over time for at most 20 years or until age 65. Our study population is thus past core family-formation years, but may have children at home, and eligible for both sickness allowance and disability pension. We exclude individuals who received sickness allowance or disability pension in the five years before entering the study window. Individuals are right-censored at separation, at emigration, or when either partner turn 65 or dies. The analytical sample includes 27,630 couples with individuals born 1937-1961.

The outcome variables of interest are receipt of sickness allowance and receipt of disability pension. The Social Insurance Institution of Finland (KELA) compensates sickness allowance to non-retired residents aged 16-67 years in case of work incapacity due to illness. The sickness allowance is available after a waiting period of ten days. The full benefit can be received for a maximum period of approximately one calendar year (300 working days) per illness within two years. The level of compensation depends on previous earnings and benefits. The maximum level is 70 per cent of previous earnings up to a threshold. If work incapacity remains after 300 days, one may apply for disability pension, which generally means a permanent withdrawal from the labour market. Sickness allowance consequently reflects temporary illness more than just a flu, or a first stage of a more permanent condition, while receipt of disability pension indicates permanent illness or long-term poor health. A medical certificate of a general practitioner in medicine is a precondition for eligbility of either benefit. Generally, the share of disability pensioners increases notably after age 50, while the share of sickness allowance recipients starts to drop after age 55 (Reini & Saarela, 2017).

For each calendar year, we know if a person recieved any sickness allowance or if (s)he retired due to disability. There is no information about the medical reason for sickness allowance or for disability pension in the data. We identify the first calendar year in which a person (ego) received sickness allowance or disability pension, and relate it to time since partner's first benefit receipt, using discrete-time hazard models with time-varying control variables. Because all information is available at the calendar-year level, we cannot sequence same-year occurrences (that is, when both partners received a benefit in the same calendar year). The main explanatory variable is time since partner's (first) receipt of sickness allowance or disability pension, which is measured in the same way as that of the ego. In order to avoid statistical complications from potential interspousal dependence (cf. Elwert & Christakis, 2006), we estimate separate models for men and women.

We control for several variables at individual, partner, and couple level. Controls include age, education (level and field), labour market status, and income (quintile) for ego as well as for partner. For the couple, we use partnership status (married or cohabiting), union duration, the age difference with the couple, presence of children in the household, and homeownership. The character of the place of residence (region and degree of urbanisation of the municipality) was included to capture general differences between geographical areas in labour market opportunities. All models include controls for observation year. Table 1 summarises the descriptive statistics of the data by sex. Since all data concern couples, distributions of the variables for male and female egos mirror each other. In total, there are 8,810 male and 8,730 female (first-time) sickness allowance recipients and 3,349 male and 2,883 female (first-time) disability pension recipients.

(Table 1 here)

4. Results

The main findings are summarised in Figure 1, which illustrates the risk of receiving a health-related benefit for an individual according to time since partner's benefit receipt. Partners with no benefit take-up serve as the reference category (1.00). Year 0 means benefit take-up in the same calendar year. The estimates come from models that include all the control variables. Unadjusted and partially adjusted estimates are not displayed (but available upon request), as the overall patterns were highly similar as the ones reported here, though their standard errors were generally larger. In most cases, there was only a slight level adjustment downwards in the estimated associations when the control variables were included. Graphs A (men) and B (women) refer to mutual take-up of sickness allowance, C and D to mutual take-up of disability pension, E and F to mutual take-up of either sickness allowance or disability pension, G and H

to cross-dependence of sickness allowance versus disability pension, and I and J to cross-dependence of disability pension versus sickness allowance.

(Figure 1 here)

Our results show a marked risk for benefit receipt in the same year as that of the partner, and that this association persisted several years after the partner's first receipt. A person whose partner received sickness allowance was approximately 80 per cent more likely to receive sickness allowance him- or herself in the same calendar year, as compared to a person whose partner had not received sickness allowance (Graphs A and B). This association diminished over time, but even up to four years after partner's first receipt, there was an elevated risk of about 25 percent for both sexes. The estimates did not differ substantially across sexes, but at least in the first five years, women were in general more affected by their partner's benefit take-up than vice versa.

With regard to disability pension (Graphs C and D), couples' mutual take-up was even stronger. Men's risk of receiving disability pension was almost 100 per cent higher in the first three years after partner's receipt, as compared to men with a partner who did not receive disability pension. For women, the corresponding cross-spousal impact was even larger, or around 150 per cent, and after five years it was almost twice as high compared to that of women with a partner without disability pension. Results for take-up of either benefit (Graphs E and F) were similar to those for sickness allowance (Graphs A and B), which is because most disability pensioners receive sickness allowance before disability pension.

There were also notable associations across benefit types. For men, the risk of receiving sickness allowance increased with almost 50 per cent in the first two years after partner's receipt of disability pension (Graph G). For women, the increase was slightly higher (Graph H). Similarly, men's risk of receiving disability pension increased with around 50 per cent in the first four years after partner's receipt (Graph I), and that of women somewhat more (Graph J).

The data do not contain information on the length of sickness spells. However, the total amount of sickness allowance received as part of taxable income of each individual per calendar year is known. Because sickness allowance has a close to constant ratio to income (about 70 per cent of taxed income in the previous year for most recipients), we may approximate total time on sickness allowance and roughly differentiate between short-term and long-term sickness allowance recipients. Almost 80 per cent of the recipients received the benefit for at most two months. We evaluated whether the patterns reported above were sensitive for spell length. These findings are summarised in Figure 2. Since most take-up of sickness allowance is of a short-term nature, the results for the short-term recipients (Graphs A and B) mimicked those of all sickness allowance recipients (Figure 1). The estimated associations for long-term take-up, on the other hand, largely resembled those for disability pension, implying that long-term sickness allowance receipt is generally a prerequisite for disability pension.

(Figure 2 here)

As further robustness checks, we estimated several other models. The most important findings from the sensitivity analysis are presented in Table 2. These estimates are from fully adjusted models that stratify couples by marital status, presence of children in the household, educational level, income quintile, and homeownership, respectively. Of note, married and cohabiting couples did not differ in any meaningful way regarding the associations studied. Associations were, however, stronger for people with children in the household in comparison to those with no children present in the household. Couples in which both the man and the woman had tertiary-level education displayed much stronger interdependence than less educated couples, at least within the same calendar year. Similar conclusions applied to couples in which both the man and the woman belonged to the fourth or fifth income quintiles, as compared to couples with lower income. There was no difference between homeowners and

others with regard to mutual take-up the benefits, though homeownership is an important proxy for wealth in Finland.

(Table 2 here)

5. Summary

Studies on partners' mutual take-up of benefits constitute a growing field within a broader area of research that attempts to understand how individual health and health-related decisions relate to social relations. We contribute to the literature by studying partners' mutual receipt of sickness allowance and disability pension in present-day Finland. In many countries, these benefits are part of the same transfer system and important in both a societal and individual perspective. However, they have been sparsely studied in terms of how coupled individuals affect each other with respect to benefit take-up. This is typically the case for sickness allowance and its interrelation with disability pension. The case of Finland is instructive in that it is a context that, like the other Nordic countries, features both a generous transfer system that support individuals with health problems in a gender-neutral way, and high levels of gender equality and female labour force participation.

We used high-quality population register data linked to information from the Social Insurance Institution. Take-up of both sickness allowance and disability pension is conditional on a statement of a general practicioner in medicine. Consequently, our setup implies that there are no problems with data coverage, selective participation into the study population, misclassification, or self-assessment of health.

Our study of native Finnish speakers cover the period 1987-2011, including married as well as cohabiting individuals aged 40-65 years. Using discrete-time hazard models, we estimated the risk of receiving sickness allowance or disability pension by time since partner's take-up of each benefit. We found substantial evidence of interrelations between partners. The risk of

receiving sickness allowance was approximately 50 per cent higher in the first years after partner's receipt of the same benefit, while the corresponding number for disability pension was more than 100 per cent higher. There were also strong dependencies across the two benefit types.

Women's risk of receiving either benefit tended to be more strongly related to the male partner's take-up than vice versa. These gender differences are not substantial, but they indicate a caregiving effect, governed by women's higher responsibility for informal caregiving and housework, even in Finland. Thus, the findings support the common argument from less gender egalitarian contexts, that the household has an important role in the production of health, and that women are more instrumental than men in this respect. However, it needs to be stressed that, with the data at hand, we could not separate the potential mechanisms involved, and neither could make any inference about causality. Our results may be explained by collateral health effects, meaning that poor health in one person affects the health status of his or her partner, but they might be attributed also to shared partner preferences and assortative mating.

It nevertheless seems that health effects that work via an increased caregiving burden are difficult to dismiss, as the interdependence was stronger for couples with children in the household, higher-educated couples, and those with higher income, as compared to others. It seems reasonable that, due to a higher presumable work load at home and at the job, partner's sickness may result in a particularly elevated caregiving and household burden within these groups. However, these couples might perhaps also be better informed of the institutional setting, and have greater economic and social potentials to use it, which would result in better opportunities for making joint decisions for the take-up of the benefits.

Irrespective of whether the explanation lies in collateral health effects, in shared preferences, or in both, the findings signal that more effective policies are needed, either to support informal caregiving and duties within households when the partner becomes ill, or to carefully monitor

potential misuse of the benefits. Replication of these findings for other countries, with similar or different institutional settings and welfare contexts, therefore seems necessary. In the current Finnish context, we think that more precise data on sickness spells, the specific medical diagnoses that underlie the take-up of the benefits, and linkages to other individuals, beyond the partner, may be helpful in exploring the latent mechanisms.

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Table 1. Descriptive statistics of the analytic data

	Men	Women
Age in years (%)		
40-44	10.2	15.5
45-49	21.8	24.9
50-54	26.8	27.0
55-59	24.7	21.9
60-64	16.5	10.6
Educational level (%)		
Primary	30.3	28.6
Secondary	32.5	36.7
Tertiary	37.2	34.7
Educational field (%)		
Science	52.9	31.3
Welfare	8.3	32.4
General	38.8	36.3
Labour market status (%)		
Employed	77.2	79.3
Unemployed	8.1	8.4
Outside the labour force	14.7	12.2
Income quintile (%)		
First	17.1	23.2
Second	14.8	24.7
Third	13.9	26.1
Fourth	24.2	16.2
Fifth	30.0	9.7
Age difference vs. partner (%)		
At most two years	60.0	60.0
At least three years older	32.5	7.6
At least three years younger	7.6	32.5
Partner's educational level (%)		
Primary	28.6	30.3
Secondary	36.7	32.5
Tertiary	34.7	37.2
Partner's educational field (%)		
Science	31.3	52.9
Welfare	32.4	8.3
General	36.3	38.8
Partner's labour market status (%)		
Employed	79.3	77.2
Unemployed	8.4	8.1
Outside the labour market	12.2	14.7
Partner's income quintile (%)		
First	23.2	17.1
Second	24.7	14.8
Third	26.1	13.9
Fourth	16.2	24.2
Fifth	9.7	30.0
Marital status (%)		
Married	93.2	93.2
Cohabitants	6.8	6.8

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Union duration (%)		
At least five years	94.9	94.9
Less than five years	5.1	5.1
Children in the household (%)		
Yes	51.6	51.6
No	48.4	48.4
Homeowners (%)		
Yes	89.5	89.5
No	10.5	10.5
Region of residence (%)		
Helsinki area	16.7	16.7
Rest of Southern Finland	17.2	17.2
Western Finland	35.4	35.4
Eastern Finland	18.2	18.2
Northern Finland	12.5	12.5
Degree of urbanisation (%)		
Urban	42.1	42.1
Semi-urban	36.0	36.0
Rural	21.9	21.9
Period (%)		
1992-1996	26.4	26.4
1997-2001	29.8	29.8
2002-2006	26.1	26.1
2007-2011	17.7	17.7
Number of sickness allowance recipients	8,810	8,730
Number of disability pension recipients	3,349	2,883
Number of partners who receive sickness allowance	8,730	8,810
Number of partners who receive disability pension	2,883	3,349
Number of individuals	27,630	27,630
Number of person-years	382,998	382,998

The description is for the complete observation period, that is, irrespective of the outcome studied.
For Educational field,'Science' refers to social sciences, business and law, science, and engineering, manufacturning and construction, 'Welfare' to education, health and welfare, and services, and 'General' to general programmes, humanities and arts, agriculture, and unknown.
Degree of urbanisation is for the municipality of residence, and follows Statistics Finland's classification.

Table 2. Man's and woman's risk of receiving sickness allowance and disability pension, respectively, according to time since partner's receipt of the same benefit, results of fully adjusted models that stratify by marital status, children in the household, educational level, income quintile, and homeownership, respectively (95% CIs within parentheses)

	Sickness allowance		Disability pension	
	Married	Cohabitants	Married	Cohabitants
Men, by years since partner's receipt				
0 (same year)	1.74 (1.56-1.95)	1.67 (1.18-2.36)	2.08 (1.56-2.76)	2.23 (0.88-5.63)
1	1.32 (1.15-1.51)	1.38 (0.90-2.09)	1.92 (1.40-2.63)	2.07 (0.64-6.69)
2	1.35 (1.17-1.55)	1.01 (0.59-1.73)	1.80 (1.30-2.51)	0.62 (0.09-4.51)
Women, by time since parent's receipt				
0 (same year)	1.75 (1.57-1.96)	1.70 (1.20-2.41)	2.44 (1.83-3.24)	2.66 (1.04-6.78)
1	1.43 (1.26-1.63)	1.90 (1.32-2.74)	2.60 (1.96-3.44)	2.96 (1.02-8.59)
2	1.39 (1.21-1.59)	1.31 (0.81-2.13)	2.88 (2.20-3.77)	1.72 (0.41-7.29)
	Children	No children	Children	No children
Men, by years since partner's receipt				
0 (same year)	1.95 (1.70-2.24)	1.49 (1.27-1.76)	2.58 (1.58-4.21)	1.84 (1.33-2.54)
1	1.40 (1.18-1.67)	1.23 (1.02-1.48)	2.36 (1.34-4.16)	1.73 (1.20-2.47)
2	1.34 (1.10-1.63)	1.28 (1.06-1.55)	0.89 (0.33-2.41)	1.91 (1.35-2.69)
Women, by time since parent's receipt				
0 (same year)	1.97 (1.71-2.26)	1.50 (1.27-1.77)	3.46 (2.10-5.71)	2.04 (1.47-2.83)
1	1.41 (1.18-1.69)	1.52 (1.28-1.79)	2.91 (1.61-5.25)	2.49 (1.83-3.38)
2	1.35 (1.11-1.65)	1.38 (1.15-1.65)	2.82 (1.57-5.07)	2.67 (1.99-3.60)
	Both tertiary level	Other	Both tertiary level	Other
Men, by years since partner's receipt				
0 (same year)	3.17 (2.36-4.24)	1.64 (1.46-1.83)	4.97 (2.34-10.59)	1.94 (1.45-2.59)
1	1.34 (0.84-2.14)	1.33 (1.16-1.52)	n.a.	2.05 (1.51-2.78)
2	1.53 (0.97-2.42)	1.31 (1.13-1.51)	1.61 (0.40-6.55)	1.76 (1.26-2.46)
Women, by time since parent's receipt				
0 (same year)	3.16 (2.36-4.22)	1.64 (1.47-1.84)	6.91 (3.20-14.92)	2.23 (1.66-2.98)
1	1.30 (0.80-2.10)	1.50 (1.32-1.70)	7.10 (3.24-15.55)	2.42 (1.81-3.24)
2	1.09 (0.63-1.88)	1.41 (1.23-1.62)	4.43 (1.61-12.20)	2.75 (2.09-3.62)
	Both Q4-Q5	Other	Both Q4-Q5	Other
Men, by years since partner's receipt				
0 (same year)	2.62 (1.92-3.57)	1.67 (1.49-1.86)	4.53 (1.83-11.22)	1.94 (1.46-2.57)
1	1.54 (0.99-2.40)	1.31 (1.14-1.49)	n.a.	1.96 (1.45-2.65)
2	1.51 (0.95-2.38)	1.30 (1.13-1.50)	2.59 (0.62-10.80)	1.64 (1.18-2.30)
Women, by time since parent's receipt				
0 (same year)	2.67 (1.95-3.64)	1.67 (1.49-1.87)	6.76 (2.70-16.92)	2.23 (1.67-2.97)
1	1.97 (1.33-2.91)	1.44 (1.26-1.63)	4.25 (1.52-11.90)	2.44 (1.84-3.23)
2	1.42 (0.87-2.29)	1.38 (1.20-1.58)	4.73 (1.48-15.16)	2.66 (2.03-3.49)
	Homeowners	Other	Homeowners	Other
Men, by years since partner's receipt				
0 (same year)	1.74 (1.56-1.95)	1.68 (1.24-2.28)	2.02 (1.50-2.72)	2.28 (1.16-4.49)
1	1.30 (1.13-1.49)	1.49 (1.05-2.11)	1.95 (1.40-2.71)	1.75 (0.81-3.79)
2	1.29 (1.12-1.50)	1.47 (1.01-2.15)	1.69 (1.18-2.41)	1.75 (0.76-4.03)
Women, by time since parent's receipt				
0 (same year)	1.75 (1.57-1.96)	1.68 (1.23-2.28)	2.48 (1.84-3.33)	2.20 (1.11-4.38)
1	1.46 (1.28-1.67)	1.53 (1.09-2.15)	2.60 (1.94-3.50)	2.52 (1.26-5.04)
2	1.39 (1.21-1.60)	1.27 (0.85-1.90)	2.83 (2.12-3.76)	2.52 (1.26-5.05)

For the sake of brevity, we display only the estimates for years 0-2. All other estimates are available upon request.

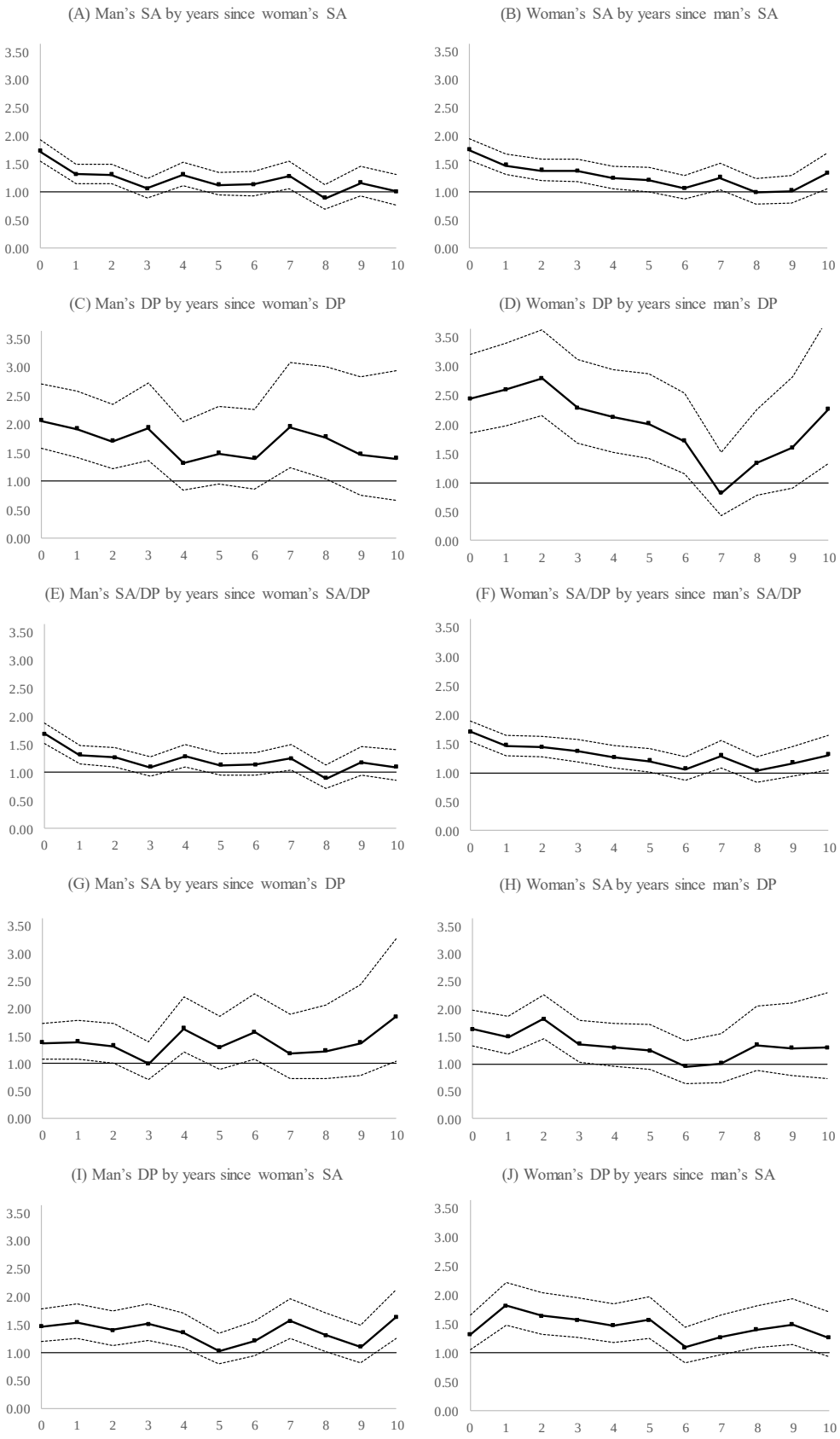

Figure 1. Man's and woman's risk of receiving sickness allowance (SA), disability pension (DP), and either benefit (SA/DP), according to time since partner's receipt. Estimates from fully adjusted models (with 95% CIs).

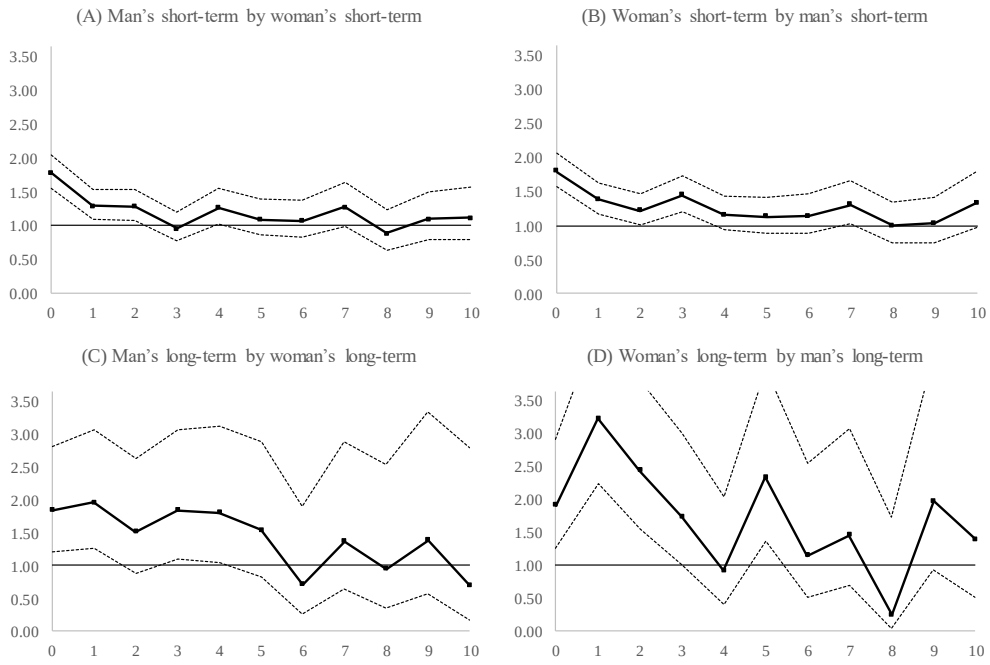

Figure 2. Man's and woman's risk of receiving short- and long-term sickness allowance, according to time since partner's receipt of short- and long-term sickness allowance. Estimates from fully adjusted models (with 95% CIs).