The "Price" of Breaking the Glass Ceiling*

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Abstract

How do career advancements affect workers, and do they have spillovers? Using detailed Norwegian administrative data and a matched difference-in-differences design, this paper examines how promotions affect the worker's health, their partnership status and their coworkers. We distinguish between promotions to middle and top management. Promotions substantially raise earnings for both men and women, with proportionally larger gains for women. Working hours also rise, particularly among women. Health effects, however, diverge by gender and hierarchy: both men and women reduce general-practitioner visits immediately after promotion, but women promoted to top management later increase healthcare use, experience deteriorations in mental health, and take more sick leave. These adverse effects are concentrated among women with young children, in smaller firms, or who were secondary earners, pointing to persistent work–family trade-offs at senior levels. Promotions to top management also raise relationship dissolution for women and generate workplace spillovers—boosting coworkers' earnings when women are promoted but increasing absence after men's promotions.

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1 Introduction

Despite substantial progress in gender equality over recent decades, women remain markedly underrepresented in top jobs. Across OECD countries, fewer than one in three senior managers are women, and the share of women among CEOs of large firms remains below ten percent (OECD 2025). This persistent under-representation, often referred to as the glass ceiling, reflects barriers that prevent women and other minorities from advancing to the highest levels of the labor market. Among explanations for this phenomenon are the social and cultural norms that shape women's career aspirations (Beaman et al. 2009), women's more limited access to influential networks (Cullen and Perez-Truglia 2023), or differences in personality traits such as willingness to compete (Buser et al. 2014; Cortes et al. 2021; Wiswall and Zafar 2017). Clearly another important factor is the family-career trade-off: the demands associated with being in top management, which include longer working hours, less flexibility and greater responsibility. These demands may weigh disproportionately on women, given evidence that women do the larger share of childcare and household management.[1] In this paper we ask: when women do overcome these barriers and achieve promotion, what are the consequences for their health? We investigate multiple measures of health, including mental health. We also study impacts of promotion on marital dissolution, and on the health of coworkers. We independently study promotions of men and women.

Promotions could improve health on account of raising incomes and social status (Marmot 2005; Lavetti et al. 2025), earlier work having shown that these factors are associated with better health (Cutler et al. 2008; Chetty et al. 2016). On the other hand, promotion can create stress on account of longer hours and greater responsibility. Chronic stress has been shown to harm health, contributing to depression, hypertension, digestive disorders, reduced resistance to infections, cognitive decline, and accelerated cellular aging (McEwen 1998; Epel et al. 2004; Marmot et al. 2013). Thus the net impact of promotion on health is theoretically ambiguous. In addition to affecting actual health, promotions may also influence health seeking behavior by changing the time, effort or willingness individuals dedicate to seeking medical care, even when symptoms are present.

[1] Almar et al. (2025) show that family decisions, such as spousal labor supply, interact with firm promotion and training choices to shape gender gaps in career outcomes, highlighting a family–career trade-off. However, they do not focus on promotion.

In this paper, we use longitudinal individual data linked across administrative registers in Norway to illuminate this question. The primary challenge we face is that promotions are not assigned randomly. Promoted individuals tend to be positively selected–they are better educated, have better baseline health, and higher earnings than those who are not promoted, and these characteristics may also influence subsequent outcomes. To address this concern, we exploit the large and rich register data to identify, for each treated (promoted) individual, a matched control. We then implement stacked difference-in-differences design on the matched data. This approach allows us to compare promoted and non-promoted individuals with similar pre-promotion characteristics and to track their career trajectories, healthcare utilization, and also their *actual* health outcomes following promotion.

The data link demographic information, employment and tax records, and healthcare records for the entire population. The healthcare data are highly detailed, covering all GP, specialist, and hospital contacts, including diagnoses, treatments, and reimbursement values. This granularity allows us to distinguish utilization of healthcare from outcomes. Employment records with detailed occupational codes allow us to identify promotions at different levels. We define a worker as promoted if they transition into a managerial position. Unlike the handful of related studies that focus on top-level roles such as CEOs, political leaders, or specific occupational groups (Folke and Rickne 2020; Borgschulte and Vogler 2019; Fiva et al. 2025; Suandi 2021; Anderson and Marmot 2012), our occupation-based definition captures a broad spectrum of managerial roles. We distinguish between lower-level promotions to middle management, such as department managers, and transitions to top-level positions, including directors and CEOs, allowing us to examine how the consequences of promotions differ with levels of managerial responsibility.

We first confirm that promotions increase earnings for both men and women, with slightly larger proportional gains for women (6% vs. 8% in middle management and 9% vs. 12% in top management). Weekly working hours also increase, with women experiencing more than twice the rise observed for men, likely reflecting lower baseline hours that allow greater scope for increase. While this narrows the gender gap in hours worked, it does not fully close it.

We find that, for most workers, promotions are associated with improvements in health. The one exception is women promoted to top management: for this group, we observe a sharp increase in sick leave (about 21%) and an increase in the chances of a mental health diagnoses (about 10%). These negative health effects are concentrated among women with young children, women who were not the main earner in the household before promotion, and women in smaller firms in the private sector.

Examining spillovers to partners and co-workers we find that promotions do not affect partners' earnings, working hours, or health. However, women promoted to top positions are less likely to be cohabiting after. Among co-workers, we find no impact on health. We do see, though, that female co-workers experience modest earnings gains when a peer is promoted to top management is a woman. These effects are stronger in larger workplaces and among same-gender peers, though the differences are not statistically significant.

The results of this paper relates to several strands of literature. First, it contributes to a small but growing literature on the health effects of job promotions. While the health costs of job loss and unemployment have been extensively documented (e.g., Sullivan and Von Wachter 2009; Browning and Heinesen 2012; Ruhm 2000), much less is known about how positive career events, such as promotions, affect health. Few studies have examined the relationship between promotions and health, relying on survey data (Boyce and Oswald 2012; Johnston and Lee 2013) or specific occupational groups (Anderson and Marmot 2012; Fiva et al. 2025; Borgschulte and Vogler 2019; Suandi 2021; Borgschulte et al. 2021). For example, Anderson and Marmot (2012) exploit variation in promotion rates across British civil service departments and find that promotions reduce the probability of developing heart disease. Focusing on CEOs, Borgschulte et al. (2021) show that increased job demands and a more stressful work environment have lasting adverse health effects. In contrast, Johnston and Lee (2013) find that promotions have negligible effects on health and happiness, other than deterioration in mental health. More broadly, evidence on the health consequences of job promotions remains limited and yields mixed conclusions.

This paper contributes to this literature in three ways. First, by distinguishing between promotions to middle and top management, we show that the costs and benefits of career advancement vary along the career ladder, moving beyond the focus on elite roles that has characterized prior work, such as political leaders (Fiva et al. 2025; Borgschulte and Vogler 2019), CEOs (Borgschulte et al. 2021), US Navy submarine officers (Suandi 2021), or public sector managers

(Anderson and Marmot 2012). Second, we leverage comprehensive Norwegian administrative data that cover the entire population and provide rich, objective measures of health, including doctor and hospital visits, performed procedures, and detailed diagnoses. These data allow us to track health trajectories around the time of promotion with greater precision and to explicitly distinguish between changes in healthcare utilization and actual changes in health, thereby overcoming common limitations of survey-based research. Third, and most novel, we document spillover effects not only on partners but also on former co-workers.

Second, our paper relates to a literature examining how changes in job status, responsibilities, and work-related stress, key channels through which promotions may affect health and well-being, impact health. Research in psychology, medicine, and biology has shown that chronic stress is associated with changes in hormone levels, brain function, cardiovascular health, and DNA integrity, leading to various adverse health outcomes (Marmot et al. 2013; Epel et al. 2004; McEwen 1998). Despite this, causal evidence linking job demands to health remains limited. Hummels et al. (2023) use trade shocks to show that increased job stress leads to more injuries and illnesses. Conversely, reductions in working hours have been linked to improvements in health and well-being (Lepinteur 2019; Cygan-Rehm and Wunder 2018; Berniell 2012). Psychosocial stress from workplace hierarchies has been identified as a key mechanism driving socioeconomic health disparities (Marmot et al. 2013; Marmot 2005), with recent US evidence suggesting that much of the income-health gradient operates through workers' relative rank within firms (Lavetti et al. 2025).

Third, we examine gender differences in promotions and their spillover effects within households. Prior studies show that men are promoted at higher rates due to networking advantages, while women are less likely to apply for promotions, and childbirth further limits their advancement, contributing to the "motherhood gap" in promotions and wages (Cullen and Perez-Truglia 2023; Hospido et al. 2022; Haegele 2024; Healy and Heissel 2024; Bronson and Thoursie 2017; Lucifora et al. 2021). We extend this literature by analyzing how promotions affect family dynamics and partner health. Evidence suggests that women's promotions can influence households, being associated with higher divorce rates (Folke and Rickne 2020), reductions in the gender gap in childcare time (Hensvik et al. 2024), and, in other contexts, increased bargaining power (Uckat 2023). We complement this literature by providing novel evidence on intra-household spillovers in health after promotion, considering promotions of both men and women.

Finally, since we study job promotions, we relate our work to the literature on wage dynamics and career trajectories within firms (e.g., Lazear and Oyer 2004; Lazear and Rosen 1981; Waldman 1984; Baker et al. 1994; Baker and Holmstrom 1995; Gibbons and Waldman 1999; Huitfeldt et al. 2023). This literature focuses primarily on wage dynamics and employee turnover, but does not explicitly examine health or family outcomes.

The remainder of the paper is structured as follows. Section 2 describes the setting and discusses potential drivers of the effects of promotions on health. 3 describes the setting, data and analysis samples. Section 4 outlines the empirical strategies. Section 5 presents the results and section 6 concludes.

2 Background

2.1 Norwegian Healthcare System

The healthcare system in Norway is divided into two levels, primary care and specialist care. Healthcare is almost exclusively publicly funded through taxation, and hospitals are predominantly publicly owned and managed. Municipalities are responsible for providing primary care services, including general practitioners (GPs), urgent care, infant and child health care centers, school health services, and elderly care. Except in emergencies, GPs are the first point of contact between patients and the healthcare system. Most Norwegian citizens are registered with a specific GP, who is responsible for providing ongoing primary care. GPs diagnose medical issues, prescribe medications, certify sick leave, refer patients to specialist care when necessary, and follow-up after specialist treatment.

Specialist care is managed by four health regions and includes specialist medical services, psychiatric care, and private referral specialists contracted by the health regions. It can only be accessed through referrals from a GP. Specialist care, both somatic and psychiatric, is provided primarily through public hospitals and outpatient care clinics, but some services can also be provided by contracted private specialists.

2.2 Family Institutions and Relationship Patterns

Norway has a dual system of formal marriage and widespread cohabitation. About 70% of couples living together are married, while around 30% cohabit without marriage. Same-sex marriage has been legal since 2009. Marriage requires both partners to be at least 18 years old and have entered voluntarily. Spouses share financial responsibilities, and since January 2020, parents, regardless of marital status, have joint parental responsibility for children. Cohabiting couples have fewer automatic rights and duties, leading many to create private agreements on inheritance and asset division. Divorce typically requires a one-year separation period, but it can be granted immediately if the marriage was forced or involved violence (Samfunnskunnskap.no 2024).[2]

Family life in Norway reflects these institutional arrangements, with changing patterns of partnership and childrearing. The average age at first marriage is between 30 and 40 years for both men and women, fertility rates have fallen to about 1.4 children per woman (in 2023), the average household size is just over two people, and about three-quarters of children live with both parents. Approximately 40% of marriages end in divorce, and cohabitation without marriage has become increasingly common (Samfunnskunnskap.no 2024).

3 Data and Descriptive Statistics

3.1 Data

We use individual-level data from multiple administrative registers maintained by Statistics Norway, covering the entire population in Norway. These data sets include demographic information (e.g., date of birth, gender, immigration status, municipality), education, records[3] tax and employment registers, and healthcare records. All data sets are linked using a unique personal identification number, allowing us to track individuals (and their partners and relatives) over time.

[2]If there are common children under the age of 16, parents (married or cohabiting) must attend a mandatory mediation meeting at a family counseling office or approved counselor before separation or divorce, which aims to safeguard children's welfare and facilitate agreements on custody, residence and access (Norge.no 2024)

[3]The education records come from the National Education Database, available from 1970.

We obtain information on income, wealth, and various social benefits from tax registers, available between 1993 and 2020.[4] Employment records are available from 2003 onward and provide detailed information on contracted working hours, occupation, and workplace identifiers and characteristics such as industry and sector. Detailed occupation information allows us to identify promotions. Occupational codes are reported by employers and based on the actual tasks performed rather than the employee's education, contract type, salary or industry.[5]

Information on visits to general practitioners (GPs) and primary care ERs comes from the Control and Payment of Health Refunds database (acronym "*KUHR*" in Norwegian) and is available between 2006 and 2020. For reimbursement, GPs and ERs must report each consultation to the national claims database, including the main symptom or diagnosis, referrals, and any sick-leave certification. Specifically, KUHR includes the list of symptoms and diagnoses following the International Classification of Primary Care (ICPC-2).[6] Specialist care data, both somatic and psychiatric (except for contracted somatic specialists who report through KUHR), are obtained from the Norwegian Patient Registry (NPR), available between 2008 and 2020. This dataset allows us to study the impacts on hospitalizations (inpatient admissions) and consultations in outpatient clinics.[7] It also allows us to identify acute hospitalizations and the main medical condition diagnosed at admission, following the 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10). Combined, KUHR and NPR provide near-complete coverage of healthcare utilization for the Norwegian population.

Outcome Variables We use the tax and employment data to define our main outcome variables measuring career progression: annual labor earnings and contracted weekly working hours. Earnings are reported for all employment spells and capture both salary and other work-related income before taxes. Contracted working hours reflect the formal weekly workload agreed with the employer, but do not include overtime.

[4] Welfare benefits include taxable transfers such as disability benefits, unemployment benefits, sick pay, regular and early retirement pensions, and parental allowance; as well as tax-free transfers, including child benefits, housing benefits, study grants, dependent deductions, social assistance, and cash support. All monetary values are deflated to 2020 using the consumer price index (https://www.ssb.no/en/statbank/list/kpi).

[5] Occupational codes follow the International Standard Classification of Occupations (ISCO). Employees who perform the same tasks receive the same code, and individuals with multiple jobs receive separate codes for each position.

[6] See https://ehelse.no/kodeverk/icpc-2e--english-version.

[7] An inpatient admission includes both overnight stays and day treatments, such as less invasive surgical procedures.

To examine health outcomes, we first study healthcare utilization, measured by the number of GP visits. Although informative, the number of visits can be difficult to interpret. Individuals may change their healthcare-seeking behavior after a promotion, for example, due to time constraints or shifting priorities. We therefore distinguish between simple contacts – initial interactions such as phone calls or administrative inquiries where the GP determines whether further care is needed – and consultations, which involve direct medical examinations. While consultations are more likely to reflect actual health needs, changes in simple contacts may capture shifts in health-seeking behavior rather than underlying health.

We then examine additional measures that capture the intensity and purpose of treatment. Specifically, we analyze average reimbursement per visit, the number of days on sick leave, and the number of symptoms and actions recorded per consultation. These measures provide information on the severity and complexity of medical problems. Higher costs typically signal more intensive care and a greater need for medical investigation, suggesting worse underlying health. A higher number of symptoms and actions may indicate more complex consultations or multiple concerns discussed in a single visit.

Finally, detailed ICD-10 and ICPC-2 codes allow us to study changes in specific health conditions. To systematically capture diagnostic categories, we group the ICD-10 and ICPC-2 codes into broad chapters based on their first letter. For each category, we construct a dummy variable that indicates whether a diagnosis was reported.[8]

In addition to health outcomes, we examine family outcomes – such as the likelihood of cohabitation and relationship quality – as potential mechanisms through which promotions affect health. The ICPC-2 codes also allow us to identify consultations related to relationship or behavioral problems with a partner (codes Z12 and Z13), capturing cases where individuals explicitly report relationship difficulties during GP visits. This provides a measure of relationship strain that is rarely available in administrative health data.

[8]We differentiate between diagnoses reported at the GP level and those recorded in hospitals.

3.2 Identifying Promotions

Our data allow us to identify workers in managerial roles. Specifically, we define a worker as promoted if they transition into a managerial occupation code on the Norwegian Version Standard for Occupational Classification from 1998, STYRK-98.[9] These managerial positions span a range of managerial occupations, from sales department managers to CEOs, and do not necessarily correspond to top executive roles such as CEOs or political leaders. This broader definition distinguishes our approach from many previous studies, which primarily focus on high-level promotions, such as political leaders (Folke and Rickne 2020; Borgschulte and Vogler 2019; Fiva et al. 2025), CEOs (Borgschulte et al. 2021; Fiva et al. 2025), or specific occupational groups, such as US Navy submarine officers (Suandi 2021) or public sector managers (Anderson and Marmot 2012). Our occupation-based approach captures changes in job responsibilities, authority. Because we also examine the effects of promotions on workers' earnings, we avoid using earnings to define promotions. Since our promotion measure covers a wide set of career moves throughout the Norwegian population, it more closely captures the average promotion.[10]

The first three (of the seven) digits of the STYRK-98 classification allow us to distinguish between lower-level promotions to middle management, such as department managers, and transitions to top-level positions, that is, directors and CEOs (see appendix table A-2). Thus, "Directors and Chief Executive Officers" of workplaces with 10 or more employees are the top-level position, and receive code 121. We also consider managers below the top category include "Production and Operations Department managers" (coded as 122) and "Other department managers" (coded as 123) in workplaces with 10 or more employees, but also managers in organizations with less than 10 employees, that receive code 131. This distinction allows us to examine differences across levels of managerial responsibility.[11]

[9] Appendix table A-1 provides an overview of occupational codes and classifications, and table A-2 lists the different managerial roles.

[10] We include both within-firm and between-firm transitions into managerial positions.

[11] We exclude legislators and senior officials (code 11) because these positions are political or administrative appointments rather than promotions within the labor market. Their career paths, hiring processes, and compensation structures differ from those of managerial positions in firms, which makes them not directly comparable to our definition of promotion.

Analysis Samples In our analysis samples, we include all individuals born between 1920 and 1998 and focus on each person's first promotion.[12] We limit the sample to individuals whose first promotion occurs between 2010 and 2014, and who are 25 to 70 years old in the year before promotion ($t-1$).We construct separate, balanced samples by gender of the promoted individual and distinguish between promotions to top and middle management. The final sample consists of 7,259 men and 4,262 women with a first promotion to a top management position, and 45,699 men and 31,456 women promoted to middle management positions during this period.

3.3 Descriptive Statistics

Figure 1 presents descriptive statistics for promotions. Panels (a) and (b) show the 1-digit occupations held by men and women prior to their promotions. The most common originating occupations for both genders are professionals, technicians, and workers in service and sales occupations. However, men are more likely than women to have been employed in crafts-related jobs or in plant and machine operations prior to promotion - around 10% in crafts and 5% in plant and machine operation jobs, both for promotions to middle and top management.

Consistent with previous studies (e.g., Almar et al. 2025; Benson et al. 2024; Azmat et al. 2024, 2025; Cullen and Perez-Truglia 2023; Haegele 2024; Kunze and Miller 2017), there is a gender gap in promotion rates. Panel (c) shows promotion rates across the different analysis samples–men and women promoted to top management and those promoted to middle management. Among promotions to top management, men are about twice as likely to be promoted than women, while the gender difference is only around 30% for promotions to middle management. Appendix Figure A-1 shows the age distribution at the time of promotion for men and women in the top and middle management. The distributions are broadly similar: promotions peak in the 40s, but women receive slightly fewer promotions in their 20s and more in their 30s, particularly for top-management positions. This pattern may reflect early career disruptions due to childbirth or increased childcare responsibilities (Healy and Heissel 2024; Bronson and Thoursie 2017; Lucifora et al. 2021).

[12] We impose the following restrictions: individuals must have entered Norway in 1993 or earlier and resided there continuously and we drop all individuals who worked in the military in our sample period.

Table 1 reports a rich set of variables for men and women in the year prior to promotion. Columns 1 to 4 present characteristics for promotions to top management, and columns 5 to 10 for promotions to middle management. Columns 1 and 2 show characteristics of promoted and non-promoted men and their partners (for cohabiting individuals), and columns 3 and 4 show the same for women. On average, promoted individuals are younger than their non-promoted counterparts. They are more likely to have higher education, especially promoted women. Average earnings of those promoted to top management are about 41% higher for women and 46% higher for men compared with non-promoted individuals.[13] For middle management, earnings are roughly 43% higher for women and 40% higher for men. Promoted individuals also tend to work in smaller firms and are less likely to be employed in the public sector, where promotion opportunities are more limited. They are more likely to be cohabiting, especially men, and if cohabiting, they have higher-earning and healthier partners, likely reflecting positive assortative mating.

In terms of baseline health, promoted men have about 1.5 annual GP visits less non-promoted men. Women have, on average, more GP visits than men and promoted women have around 2 visits less than non-promoted.[14] Promoted individuals not only have fewer visits, but also incur lower costs per visit and less days on sick leave, suggesting not only fewer healthcare visits but also better baseline health. This positive selection in health and socioeconomic characteristics highlights the importance of accounting for baseline differences. We address this by implementing a matched difference-in-differences (DiD) design, which we describe in the next section.

4 Empirical Strategy

Our analysis focuses on estimating the effect of a job promotion on subsequent outcomes of promoted individuals (and their partners and former co-workers). For example, we want to measure changes in workers' health after a job promotion. A key challenge is that promotions are not assigned randomly. As seen above, workers who are promoted differ from those who are

[13] Appendix Figure A-2 shows that management positions generally have much higher earnings than the overall population. Among managers, the earnings distribution exhibits a pronounced right tail, particularly for men.

[14] Appendix Figures A-4 and A-5 show that individuals in management positions generally have fewer sick leave days and a lower number of GP diagnoses. This pattern is particularly pronounced for women in top management.

not, both in observable and unobservable characteristics, such as education, motivation, ability, or baseline health, all of which can influence subsequent outcomes. For example, healthier individuals may be more likely to pursue or be selected for a promotion, potentially biasing estimated health effects.

To address this, we implement a matched (stacked) DiD design. This allows us to account for differences in observed and time-invariant unobserved characteristics. Specifically, we compare changes in outcomes around a promotion for promoted individuals with those of observationally similar individuals who are not promoted.[15]

4.1 Matching Procedure

The first step of our empirical strategy is to identify suitable control individuals who closely resemble promoted workers before the promotion occurs. We begin by creating samples of men and women promoted to top and middle management positions. Within each of the four samples, we identify individuals who are observationally similar to promoted individuals based on key demographic characteristics and pre-promotion trajectories.[16] We first perform exact matching in the year prior to the promotion ($t-1$) on the gender of the promoted individual, higher education, and promotion year ($t = [2010, 2014]$). We match exactly on gender and education, as these characteristics influence both promotion opportunities and health outcomes. Within these matched cells, we further perform a probabilistic matching on a broader set of covariates. We estimate the propensity score using a logistic regression in which the dependent variable equals one if the individual experiences a promotion.

The model includes controls for age (and its square), a set of indicator variables for working in the public sector, for being Norwegian-born, for having a child under the age of 18, and for detailed education levels (all measured in $t-1$). All these variables are important because they influence both promotion opportunities and health outcomes (see Table 1).[17] We also include

[15] The control group includes both individuals who are never promoted and those promoted at a later point in time, after our observation period ends ($t+4$). We include both never treated and later treated to ensure a larger pool of potential controls.

[16] For example, for men promoted to top management positions (treatment group), the control group consists of men who were not promoted to top management positions.

[17] Age captures differences in career stage and health risks. Public sector employment reflects sector-specific promotion rules and working conditions. Being Norwegian-born may affect both labor market and healthcare access. Family responsibilities are captured by having a child under 18, while education accounts for socioeconomic differences related to health and promotion opportunities.

earnings and the annual number of GP visits in years $t-4$ to $t-1$ before promotion. Matching on these variables and their trends in the years before the promotion accounts for the possibility that promotions influence earnings and healthcare use even before they officially occur, for example, through stress or increased workload. This ensures that promoted and non-promoted individuals have similar trajectories leading up to the event.

Using the estimated propensity score, we identify three non-promoted individuals for each promoted individual. Matching is done with replacement, allowing the same control to be used multiple times.[18] This leaves us with matches that are observationally similar to the promoted individuals in the years before the promotion but who do not experience a promotion in the same year.

Table A-4 and appendix table A-5 show that our matching procedure works well. Across our four samples, promoted and matched non-promoted workers are nearly identical in their observed pre-promotion characteristics, including several variables not directly used in the matching procedure, such as costs per visit and ICPC-2 codes. With these matched samples in hand, we proceed to estimate the effect of a promotion on subsequent outcomes, comparing promoted to similar non-promoted individuals.

4.2 Empirical Specification

Using the matched samples, we estimate a stacked DiD specification. Recent work on two-way fixed effects (TWFE) models shows that staggered DiD designs can yield biased estimates because already treated groups are used as controls. This is problematic when treatment effects are heterogeneous across groups or evolve over time (e.g., Callaway and Sant'Anna 2021; De Chaisemartin and d'Haultfoeuille 2020; Goodman-Bacon 2021; Sun and Abraham 2021; Wing et al. 2024).[19] In our setting, promoted individuals are compared to a control group consisting of never-treated and later-treated non-promoted individuals.

[18] Non-promoted individuals are weighted according to the number of times they are matched, and the weights are normalized so that the total weight of the non-promoted group equals the number of promoted individuals. The results are very similar when using only one match per promoted individual.

[19] In such cases, the standard TWFE estimator computes weighted averages of treatment effects with potentially negative weights, which can even flip the sign of the estimated effect.

Therefore, to account for potential heterogeneity in treatment effects across sub-groups and over time, we adopt the stacked estimator proposed by Wing et al. (2024), which avoids these biases and delivers consistent estimates. Specifically, we treat each treatment year ($c = [2010, 2014]$) as a separate sub-experiment. Within each sub-experiment, we construct an analysis sample that includes treated units and clean controls. The treated units are individuals promoted in that year, while clean controls are those not promoted in that year. We then combine all sub-experiment samples into a stacked dataset and estimate the model separately for promotions to top and middle management, as well as by gender:

$$Y^g_{itc} = \sum_{t=-4, t\neq -1}^{4} \alpha^g_j \times \mathbb{1}[j = t] \times \text{Treat}_{ic} + \sum_{t=-4, t\neq -1}^{4} \beta^g_j \times \mathbb{1}[j = t] + \gamma^g_{yc} + \delta^g_{ac} + \tau^g_{ic} + \varepsilon^g_{itc}, \quad (1)$$

where Y^g_{itc} is the outcome of interest, such as labor earnings or health of individual i of gender g in sub-experiment c and event time t. The sub-experiment index c denotes treatment cohorts defined by the year of promotion. Treat_{ic} is a dummy variable equal to one if the individual experiences a promotion in sub-experiment c, and zero otherwise. We measure coefficients relative to event time $t-1$ and include year (γ^g_{yc}), age (δ^g_{ac}) and individual fixed effects (τ^g_{ic}).

Relative to the standard TWFE model, the main differences are the change in the data structure and that, in specification (1), treatment indicators and fixed effects are defined within each sub-experiment, such that age, year and individual effects are saturated at that level. Standard errors are clustered at the individual level to allow dependence between repeated observations of the same individual.[20] The coefficients of interest are the α^g_j's, which measure the effect of promotion at event time j relative to $t-1$.

To simplify the presentation of results, we also include estimates from a static version of the model above:

$$Y^g_{itc} = \alpha^g \times \text{Post}_i \times \text{Treat}_{ic} + \beta^g \times \text{Post}_i + \gamma^g_{yc} + \delta^g_{ac} + \tau^g_{ic} + \varepsilon^g_{itc}, \quad (2)$$

[20] Clustering at the individual level also accounts for individuals who appear in multiple sub-experiments.

where Y^g_{itc} is the outcome of interest for individual i of gender g in sub-experiment c and event time t. Treat_{ic} is a dummy equal to one if the individual is promoted in sub-experiment c, and zero otherwise. Post_i is a dummy equal to one for event time zero and all years thereafter. The model includes year (γ^g_{yc}), age (δ^g_{ac}) and individual fixed effects (τ^g_{ic}). Standard errors are clustered at the individual level.

Identification Assumption The estimated effect captures the average difference in outcomes between promoted individuals and their matched controls, controlling for time-invariant individual characteristics, as well as age and calendar year fixed effects, which account for aging and common shocks, respectively. Causal identification relies on the parallel trends assumption: in the absence of promotion, the outcomes of promoted and matched non-promoted individuals would have followed similar trajectories. By including individual fixed effects and matching on observable pre-promotion characteristics, we address potential confounding from unobserved time-invariant factors and observed baseline differences. The event studies allow for a visual assessment of the plausibility of the parallel trends assumption. While this design accounts for time-invariant differences, it may still be sensitive to unobserved characteristics that evolve over time or other shocks (economic or health-related) coinciding with the first promotion.

Robustness – Later Treated as Counterfactual To address the concerns above we perform two sets of robustness checks. First, we restrict the control group to individuals who are promoted at a later point in time (event time $t+5$ or beyond) (Fadlon and Nielsen 2019). The idea is that later-promoted individuals are more likely than never-promoted individuals to share similar underlying trajectories with promoted individuals, making them more comparable in terms of unobserved, time-varying traits. We re-do the matching procedure using this restricted control group (later-treated individuals) and estimate specification (1) and (2).

Second, in section 5 we subject our main estimates to a battery of robustness checks to rule-out the possibility that our results are driven by other contemporaneous shocks.

5 Results

5.1 Effects of a Promotion on Earnings and Working Hours

We begin by examining how a job promotion affects a worker's earnings and contracted working hours, as these impacts provide insight into the potential pathways through which promotions influence health. Panels (a) and (b) of Figure 2 show that a promotion leads to substantial and persistent earnings gains. The estimates capture the change in earnings relative to similar non-promoted workers and thus represent the earnings gain from promotion net of the average earnings change among comparable non-promoted workers. Getting promoted to middle management increases earnings by around 6% for men and 8% for women, while advancing to top management yields increases of 9% and 12%, respectively. To put these estimates into perspective, Baker et al. (1994) report an average pay increase of about 6% following a promotion, with larger pay premiums at higher hierarchical levels, consistent with our estimates.[21] Promotions also lead to increases in contracted weekly hours, as shown in panels (c) and (d), with women experiencing more than twice the increase observed for men. This likely reflects women's lower baseline working hours, which provide greater scope for increase.[22] After a promotion, weekly hours converge somewhat, with men working roughly 36–37 hours and women about 34–35 hours. This suggests that promotions lead to longer working hours, particularly among women, which narrows but does not eliminate the gender gap in working hours.[23]

Translating these changes in earnings and working hours into wage effects, men promoted to middle management experience sizable increases (about 8%), while all other groups see smaller gains of 2.5–3.5%. These patterns suggest that earnings growth at the top is driven less by wage increases and more by longer hours, particularly for women.[24]

[21] They define promotions as upward changes in job title using personal data from a medium-sized US firm.

[22] In Norway, standard full-time employment is typically around 37.5 hours per week across most sectors, though some public-sector jobs may have slightly lower standard hours. Contracted weekly hours reported here do not include overtime.

[23] Appendix tables A-6 and A-7 report estimates based on specification 2.

[24] These wage effects are slightly smaller than existing estimates. For example, McCue (1996) estimates 6–12% wage growth after promotion using the PSID and self-reported promotions. Blau and DeVaro (2007) document wage gains of 7 and 8% for women and men after employer-reported promotions. Using an earnings-based measure and focusing on high-skilled workers (ie, with college education) in Sweden, Bronson and Thoursie (2017) report larger wage increases of approximately 19%.

5.2 Effects of a Promotion on Health

The changes in income and working hours documented above suggest two opposing effects on health. On the one hand, the well-documented positive relationship between socioeconomic status and health (Cutler et al. 2008; Chetty et al. 2016) implies that higher income following a promotion can improve health by reducing financial stress and improving living conditions. Reductions in psychosocial stress due to higher workplace status may further benefit health (Marmot 2005; Lavetti et al. 2025). On the other hand, longer working hours and increased job-related stress may harm health by affecting hormone regulation, cardiovascular function, and overall well-being (Marmot et al. 2013; McEwen 1998).

In addition to affecting *actual* health, job promotions can also influence *health seeking behavior* by changing the time, effort or willingness individuals dedicate to seeking medical care, even when symptoms are present.[25] To distinguish between these mechanisms, we examine a broad set of outcomes, capturing both actual health and healthcare utilization.

Utilization of Healthcare We begin by examining health-seeking behavior, measured by the yearly number of GP visits. In Norway, GPs serve as gatekeepers for the healthcare system, so changes in healthcare utilization are expected to appear primarily at this level. Figure 3 shows a decline in GP visits in the year of a promotion, larger for women in absolute terms but similar for men and women in proportional terms. This initial decline may reflect a temporary reduction in care seeking due to increased job demands or a desire to avoid signaling health problems at a pivotal career moment.

After the first year, healthcare use rises but remains below pre-promotion levels for all groups except women promoted to top management. Over the four years following promotion, the largest decrease in GP visits occurs for men promoted to middle management (about 6%), who experience only modest increases in working hours, whereas women promoted to top management, who face the largest increase in working hours, show almost no change (about -0.2%). This pattern suggests that time constraints are not the only driver of changes in healthcare utilization. We conduct a robustness check accounting for endogenous changes in GP visits, which may mechanically affect intensive-margin measures or recorded diagnoses.

[25] In Norway, access to healthcare benefits remains unchanged after promotion.

Treatment Intensity To assess whether the observed changes in healthcare utilization reflect actual health changes or are primarily driven by time constraints, we next examine different measures for treatment intensity and sick leave. Figure 4 shows a rise of between 5 to 10 days of sick leave for women promoted to top management (which represents about 21% relative to the pre-promotion mean of 18 days of sick leave per year), while changes are modest for other groups (about -3 to 2%).

Tables 2 and 3 present additional measures of treatment intensity. Overall, promotions lead to a significant decline in simple contacts, consultations, the number of diagnoses or symptoms recorded per year, and the total annual number of actions taken during GP visits for all groups except women promoted to top management. The decline in simple contacts and consultations suggests that promoted individuals not only seek medical care less frequently, but that GPs also see less need for active consultations. The reduction in recorded diagnoses and actions further indicates fewer health issues being reported or treated. These patterns are consistent with an improvement in actual health following promotion rather than merely reduced care-seeking behavior. For women promoted to top management, however, we find no significant change in these measures. Average reimbursement per visit remains unchanged across all groups.

Since the estimates presented in columns (2) to (5) and (7) of Tables 2 and 3 intrinsically depend on visits to the GPs, in Appendix Tables A-8 and A-9 we include results controlling for the number of annual GP visits (and its square) to understand the extent to which healthcare use mediate changes in the intensity of care provided. The results in Tables A-8 and A-9 show that the changes for men promoted to top managers (Panel A of Table 2) and for middle managers (Table 3) in simple contacts, consultations, the number of diagnoses or symptoms recorded per year, and the total annual number of actions taken during GP visits are driven by changes in the use of care. However, upon controlling for the number of GP visits, for all groups there is an increase in the use of sick leave, although economically small for all groups, except women promoted to top managers.[26] Taken together, the results point to modest improvements in overall health after promotion—except for women reaching top positions, for whom there is no effect on intensive health care measures, but a large increase in sick leave.

[26]It is possible to use self-certification for up to three calendar days at a time, and up to four times within one year. This is the minimum scheme, but employers can extend the right to self-certification up to 16 days, which is the employer liability period. In many companies, the employees have the right to use self-certification for up to eight calendar days at a time and up to 24 calendar days during a year, without a limit to the number of times self-certification can be used. See https://www.nav.no/egenmelding/en.

To examine this more directly, we next analyze diagnosed health conditions using ICPC-2 codes from GP records. We classify diagnoses into broad categories based on the first letter of the ICPC-2 code and construct binary indicators for whether any diagnosis within each category was recorded. Figure 5 presents the effects of promotions on these conditions. For middle managers, musculoskeletal and respiratory conditions decline, likely reflecting reduced physical strain or improved working conditions, along improvements in neurological conditions and women's mental health. In contrast, top managers show increased mental health diagnoses for both men and women, statistically significant only for women (about 10%), likely reflecting higher stress and longer working hours. At the same time, some physical health indicators improve: respiratory conditions decline for women, while cardiovascular-related diseases show a large and significant reduction for men. These differences across managerial levels may reflect the distinct nature of the work: middle managers may face lower physical demands after promotion, whereas top managers face higher cognitive and stress demands but benefit from greater autonomy and better access to resources.

5.3 Sensitivity Analyses

Later Treated as Counterfactual Our main empirical approach controls for observed characteristics before promotion, career and health trajectories, and unobserved time-invariant individual differences that do not change over time.[27] However, promoted and non-promoted individuals may still differ in time-varying unobserved characteristics. As a robustness check, we re-estimate specifications (1) and (2) using only later-treated individuals ($t+5$ or beyond) as controls (Fadlon and Nielsen 2019), who are likely more comparable in terms of these time-varying traits. [In progress]

Within-Firm Promotions In our baseline definition of promotion, we include all transitions to managerial positions to capture the full range of upward career moves. However, between-firm promotions often involve changes in firm culture, location, industry, or work environment, which could independently affect health and make it harder to isolate the effect of the promotion itself.

[27] In the main specification, the control group includes both never-treated and later-treated individuals, providing a large pool of potential matches.

As an additional robustness check, we therefore exclude individuals who change employers at the time of their promotion and re-estimate our main specifications. By focusing on within-firm promotions, we better isolate the health effects of promotion while keeping the workplace environment constant and reducing the likelihood of other simultaneous life changes, such as relocation. [In progress]

5.4 Spillover Effects to Partners

Beyond the effects on the promoted (focal) individual, promotions may also impact their partners. Increased responsibilities, longer hours, and greater stress can influence partners through changes in time allocation, emotional availability, and household responsibilities. For example, higher work demands may reduce the promoted partner's time for childcare or household tasks, increasing the partner's burden and potentially straining the quality of the relationship. At the same time, promotions often bring higher income and greater financial stability, which can benefit partners by improving household resources and reducing economic stress.

To examine spillover effects on partners' labor market and health outcomes, we link each individual to their current partner using unique identifiers.[28] Each partner of a promoted individual is then matched to three similar partners of non-promoted individuals using the same procedure as in the main analysis (see section (4.1)). Using this matched partner sample, we estimate specifications (1) and (2), defining treatment as the focal individual's promotion. Unlike the main regressions, we control for partner characteristics, including age and individual fixed effects.

Figure 6 shows that, overall, promotions have no spillover effects on partners' earnings or working hours.[29] Regarding health, there are similarly no significant spillovers on partners, except for small improvements in cardiovascular and mental health outcomes for women whose partners are promoted to middle management (see tables 4 and 5). Taken together, these results suggest that while promotions do not affect partners' economic or health outcomes, they may still change dynamics within the relationship. To explore this dimension more directly, we next examine potential effects on relationship quality and cohabitation.

[28] We include both cohabiting and married couples.

[29] Appendix tables A-10 and A-11 show estimates using specification (2).

Effects on Relationship Quality and Cohabitation Promotions can influence both the quality of the relationship and the likelihood of cohabitation. Higher earnings and greater economic stability may strengthen relationships, whereas increased work demands and stress can strain them. Figure 7 shows that women's promotions to top jobs are associated with lower likelihood of cohabitation, whereas no such effect is observed for men. This pattern may reflect either a higher likelihood of ending an existing partnership, as also found by Folke and Rickne (2020) for political leaders and CEOs of large firms, or a lower likelihood of forming a new one. Beyond cohabitation, we examine more subtle changes in relationship quality using GP records documenting consultations related to relationship problems.[30] Appendix figure A-6 shows little effect on relationship quality.

5.5 Spillover Effects to Co-workers

Motivated by evidence of peer effects in the workplace (e.g., Mas and Moretti 2009; Cornelissen et al. 2017), we next examine whether co-workers of promoted individuals are affected by a promotion. Non-promoted co-workers may experience changes in earnings, workload, and well-being. Missing a promotion may generate stress, disappointment, or perceptions of unfairness. At the same time, the promoted individual may take on new responsibilities that influence peers' workloads or stress levels, although it is not always clear whether the promoted peer becomes their direct supervisor. Changes in team composition, such as when the promoted individual moves to a different role, can also disrupt or enhance collaboration, potentially affecting co-workers' outcomes.

To analyze spillover effects on co-workers, we follow Cornelissen et al. (2017) and define co-workers as employees in the same firm and 3-digit occupation group. The 3-digit codes provide detailed job definitions, such as (i) cooks, (ii) waiters and bartenders, and (iii) hairdressers, beauticians, and related workers. This level of detail captures individuals who are likely to interact closely, perform similar tasks, and plausibly compete for the same promotion opportunities. In contrast, 2-digit occupation codes are broader, grouping together all of the above three-digit occupations. We focus on the first promotion event within each peer group, as subsequent promotions may be influenced by the initial one. We then compare changes in outcomes for co-workers exposed to a focal individual's promotion to middle or top management with those of

[30] Relationship problems are identified using the following ICPC-2 codes: Z12/Z13/Z63.

otherwise similar workers without (or with later) exposure, estimating specification (2) for our co-worker sample. Since promotions may be influenced by firm-level shocks, such as a sudden profit increase that may generate multiple promotion opportunities, we include firm-year fixed effects in specification (2) for this analysis. Appendix table A-12 provides descriptive statistics for co-workers experiencing a peer's promotion.

Tables 6 and 7 show the estimated spillover effects of a focal individual's promotion on earnings and working hours of co-workers. For male co-workers, promotions do not lead to significant changes in earnings or hours. In contrast, female co-workers experience a significant increase in earnings (about 12–18,000 NOK), particularly when a peer is promoted to top management. This effect is more pronounced in larger workplaces (more than 10 employees) and among same-gender co-workers, although differences across groups are not statistically significant. Regarding health outcomes, no significant effects are observed for either male or female co-workers (see tables 8 and 9).

5.6 Mechanisms

To shed light on potential mechanisms, we examine whether the effects of promotions differ between subgroups. To do so, we re-estimate specification (2) allowing the coefficients α^g to vary along several dimensions. In particular, we assess whether the estimated effects differ by family responsibilities, intra-household income allocation, gender norms, and workplace characteristics. In addition, we examine the effects of promotions on family structure, including break-up, domestic violence and characteristics of new partners (after break-up).

Children and Intra-HH Income Allocation We first investigate how family responsibilities and household income distribution shape the effects of promotions. Small children, who require time and care, can amplify the time pressures and stress associated with a promotion.[31] Table 10 shows that both men and women promoted to top management with small children experi-

[31] We define people with small children as those having a child below the age of six in $t-1$.

ence larger increases in earnings and working hours than those without. For all measures, the negative health effects are driven by women with small children, highlighting the work–family trade-off they face when advancing to top positions. Similarly, the reduction in cohabitation is concentrated among women with small children.[32]

Next, we examine how the effects of promotions vary by pre-promotion income distribution within the household. Prior research shows that increases in women's earnings, particularly when they surpass their partner's income, can heighten marital tension and the risk of divorce (Weiss and Willis 1997; Bertrand et al. 2015). We split the sample by whether the promoted individual was already the main earner and assess whether promotions that make it more likely for women to become the main earner have different effects. Table 11 shows that women promoted to top jobs who were not the main earner before promotion tend to experience worse health outcomes and are less likely to be cohabiting after promotion. This suggests that assuming a primary earner role or substantially increasing one's share of household income introduces additional stress, potentially due to shifts in intra-household bargaining, gender norms, or expectations, which may negatively affect health and relationship stability.

Workplace Characteristics After examining how family context influences the effect of promotions, we next explore whether these effects vary by workplace characteristics, specifically sector (public vs. private) and firm size (above vs. below the median). Promotions in the private sector may involve higher performance pressures, longer working hours, and greater job demands, potentially increasing stress and negatively affecting health compared to the public sector. Similarly, promotions in smaller firms may entail greater workload concentration and fewer support structures, which could also contribute to relatively higher stress and worse health outcomes.

Table 12 shows that for men, the effects on earnings and working hours are similar across sectors, and promotions are generally associated with improvements in health. For women, however, promotions in the private sector lead to larger increases in workload and sick leave, suggesting higher stress or strain relative to the public sector.[33]

[32] Appendix figure A-7 shows that the negative health effects are driven by increases in mental health–related diagnoses among women with small children who are promoted to top management.

[33] Appendix figure A-8 shows the effect on diagnoses.

When examining differences by workplace size (table 13), we find that both men and women experience larger increases in working hours in smaller firms, possibly reflecting greater individual responsibility and fewer opportunities to delegate tasks. Health improvements are weaker in smaller workplaces for both genders, and for women, health effects are close to zero in small firms, suggesting that limited organizational support and heavier workloads may offset the potential benefits of promotion.[34]

6 Conclusion

In this paper, we provide new evidence on the consequences of job promotions for both men and women, using comprehensive Norwegian administrative data linking employment, income, and detailed health records for the entire population. Promotions generally increase earnings and working hours for both genders, with women experiencing slightly larger proportional income gains and greater increases in hours. While most workers benefit in terms of health—reflected in fewer symptoms, reduced medical actions, and lower healthcare utilization—women promoted to top management do not experience these improvements. Instead, they exhibit higher sick leave and increased rates of mental health diagnoses, highlighting the work–family and work–stress trade-offs associated with reaching the top. These negative effects are particularly pronounced among women with small children and are amplified in high-demand workplaces, including the private sector and smaller firms with concentrated workloads and limited support structures.

We also examine spillover effects on partners and co-workers. Promotions have limited economic or health effects on partners. Among co-workers, male peers are largely unaffected, whereas female peers experience modest earnings gains, particularly when a peer reaches top management. Overall, the results suggest that the direct benefits of promotion accrue primarily to the promoted individual, while spillovers to others are limited.

[34] Appendix figure A-9 shows the effect on diagnoses.

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Tables

Table 1: Descriptive Statistics - Before Matching

	Top Manager				Middle Manager			
	Men		Women		Men		Women	
	Promoted	Non-Promoted	Promoted	Non-Promoted	Promoted	Non-Promoted	Promoted	Non-Promoted
Panel A: promoted individual								
Age	42.32	45.08	39.10	45.42	43.09	44.87	41.82	45.41
	(9.69)	(11.49)	(9.07)	(11.48)	(9.64)	(11.65)	(9.25)	(11.60)
Higher education	0.44	0.30	0.49	0.40	0.46	0.29	0.63	0.38
	(0.50)	(0.46)	(0.50)	(0.49)	(0.50)	(0.45)	(0.48)	(0.49)
Employed	1.00	0.85	1.00	0.84	1.00	0.84	1.00	0.83
	(0.02)	(0.36)	(0.02)	(0.37)	(0.01)	(0.37)	(0.01)	(0.37)
Labor earnings	938.44	506.38	599.33	352.46	786.12	475.50	585.25	334.77
(in 1000s)	(743.80)	(433.19)	(388.42)	(266.31)	(478.88)	(428.71)	(286.84)	(252.48)
Firm size	138.18	325.53	101.24	289.06	298.03	338.95	287.91	293.79
	(875.19)	(1448.06)	(496.76)	(1007.32)	(1039.98)	(1521.50)	(887.00)	(1026.19)
Public sector	0.06	0.19	0.13	0.52	0.17	0.19	0.45	0.53
	(0.24)	(0.39)	(0.34)	(0.50)	(0.38)	(0.39)	(0.50)	(0.50)
Norwegian	0.91	0.91	0.91	0.91	0.92	0.91	0.92	0.91
	(0.29)	(0.29)	(0.28)	(0.28)	(0.27)	(0.29)	(0.28)	(0.28)
Child below age 18	0.58	0.42	0.61	0.40	0.57	0.41	0.57	0.40
	(0.49)	(0.49)	(0.49)	(0.49)	(0.49)	(0.49)	(0.50)	(0.49)
Cohabiting	0.73	0.62	0.67	0.68	0.73	0.61	0.70	0.68
	(0.44)	(0.48)	(0.47)	(0.47)	(0.44)	(0.49)	(0.46)	(0.47)
# GP visits	2.49	3.97	4.41	6.36	2.68	4.07	4.23	6.47
	(3.78)	(6.44)	(5.15)	(7.66)	(4.12)	(6.61)	(5.04)	(7.77)
Costs per visit	118.53	136.81	140.50	164.40	119.06	137.48	142.58	165.19
	(196.93)	(230.66)	(154.32)	(189.63)	(198.86)	(232.63)	(172.05)	(190.30)
# sick leave	8.63	13.35	18.13	21.92	9.94	13.65	16.95	22.05
	(43.10)	(55.13)	(60.21)	(68.84)	(45.66)	(55.82)	(56.73)	(69.13)
Panel B: partner of promoted individual								
Age	41.93	45.18	42.77	49.09	42.34	45.08	45.02	49.14
	(9.20)	(10.94)	(9.22)	(11.47)	(9.37)	(11.12)	(9.43)	(11.57)
Higher education	0.39	0.25	0.24	0.22	0.39	0.24	0.31	0.21
	(0.49)	(0.43)	(0.42)	(0.41)	(0.49)	(0.43)	(0.46)	(0.41)
Employed	0.95	0.92	0.96	0.90	0.95	0.92	0.95	0.89
	(0.23)	(0.27)	(0.20)	(0.31)	(0.22)	(0.28)	(0.22)	(0.31)
Labor earnings	442.32	370.43	659.06	549.52	438.48	360.87	689.03	539.83
(in 1000s)	(296.32)	(264.89)	(449.99)	(504.54)	(283.81)	(258.73)	(538.67)	(497.05)
Firm size	262.14	274.11	264.80	320.86	317.86	270.32	355.38	319.79
	(876.01)	(974.11)	(1267.98)	(1414.37)	(1007.21)	(978.90)	(1500.01)	(1415.34)
Norwegian	0.93	0.92	0.92	0.92	0.93	0.92	0.92	0.92
	(0.26)	(0.27)	(0.27)	(0.27)	(0.26)	(0.27)	(0.26)	(0.27)
# GP visits	5.21	6.11	2.99	4.04	5.45	6.21	3.07	4.09
	(6.12)	(7.23)	(4.73)	(6.07)	(6.31)	(7.34)	(4.87)	(6.12)
Costs per visit	157.87	162.21	118.68	143.99	159.90	162.63	127.98	144.47
	(166.54)	(188.98)	(178.95)	(243.75)	(191.55)	(187.54)	(230.83)	(243.49)
# days on sick leave	18.95	22.63	10.48	13.19	22.05	22.87	10.82	13.33
	(62.30)	(69.28)	(46.14)	(54.69)	(67.60)	(69.61)	(48.02)	(55.01)
Observations	7259	5599269	4262	5543333	45699	5041438	31456	5191981

Notes: This table shows descriptive statistics for men and women (before matching) in the year before the promotion to top or middle management ($t-1$).

Table 2: Impact of Promotion to Top Management on Healthcare Intensity

	(1) # GP visits	(2) Simple contact	(3) Consultation	(4) # Symptoms/ Diagnoses	(5) # Actions	(6) Sick Leave Days	(7) Cost per visit
				Panel A: Men			
Post	-0.124**	-0.068*	-0.106***	-0.239***	-0.473***	0.426	-0.563
	(0.055)	(0.039)	(0.032)	(0.071)	(0.165)	(0.566)	(2.462)
Control Mean	2.275	1.053	1.587	2.968	7.410	8.280	105.191
N	122589	122589	122589	122589	122589	122589	122589
				Panel B: Women			
Post	-0.060	-0.043	-0.012	-0.010	-0.155	3.925***	-1.064
	(0.096)	(0.064)	(0.055)	(0.120)	(0.282)	(1.006)	(2.816)
Control Mean	4.401	2.026	2.832	5.573	14.286	18.686	139.059
N	73717	73717	73717	73717	73717	73717	73717

Notes: This table displays point estimates and standard errors (in parentheses) for the effect of a job promotion on different outcomes for promoted workers relative to matched control workers. Coefficients are estimated using specification (2). Standard errors clustered at the individual level.

Table 3: Impact of Promotion to Middle Management on Healthcare Intensity

	(1) # GP visits	(2) Simple contact	(3) Consultation	(4) # Symptoms/ Diagnoses	(5) # Actions	(6) Sick Leave Days	(7) Cost per visit
				Panel A: Men			
Post	-0.170***	-0.071***	-0.090***	-0.204***	-0.419***	-0.261	-0.529
	(0.021)	(0.015)	(0.013)	(0.026)	(0.065)	(0.196)	(1.062)
Control Mean	2.322	1.077	1.604	3.035	7.652	8.907	107.784
N	881082	881082	881082	881082	881082	881082	881082
				Panel B: Women			
Post	-0.185***	-0.087***	-0.074***	-0.194***	-0.479***	-0.516	-0.416
	(0.032)	(0.021)	(0.018)	(0.040)	(0.096)	(0.329)	(1.057)
Control Mean	4.038	1.872	2.603	5.145	13.385	17.965	140.200
N	623592	623592	623592	623592	623592	623592	623592

Notes: This table displays point estimates and standard errors (in parentheses) for the effect of a job promotion on different outcomes for promoted workers relative to matched control workers. Coefficients are estimated using specification (2). Standard errors clustered at the individual level.

Table 4: Spillover Effects to Partners - Impact of Promotion to Top Management

	(1) # GP visit	(2) Sick Leave Days	(3) Cost per visit	(4) # Symptoms/ Diagnoses	(5) Pr(CVD)	(6) Pr(MH)
Panel A: Partner of Promoted Men						
Post	0.046	-0.670	-1.480	-0.003	-0.007	-0.009
	(0.095)	(0.999)	(2.613)	(0.059)	(0.005)	(0.006)
Control Mean	5.123	21.201	153.855	2.181	0.093	0.153
N	102287	102287	102287	102287	102287	102287
Panel B: Partner of Promoted Women						
Post	-0.040	1.045	3.010	-0.069	0.003	-0.000
	(0.100)	(1.065)	(3.869)	(0.053)	(0.007)	(0.006)
Control Mean	3.003	11.517	123.580	1.113	0.114	0.091
N	52898	52898	52898	52898	52898	52898

Notes: This table displays point estimates and standard errors (in parentheses) for the effect of a job promotion on different outcomes for the partner of the promoted workers relative to matched control partners. Coefficients are estimated using specification (2). Standard errors clustered at the individual level.

Table 5: Spillover Effects to Partners - Impact of Promotion to Middle Management

	(1) # GP visit	(2) Sick Leave Days	(3) Cost per visit	(4) # Symptoms/ Diagnoses	(5) Pr(CVD)	(6) Pr(MH)
Panel A: Partner of Promoted Men						
Post	-0.041	-0.127	-0.172	-0.005	-0.003*	-0.004*
	(0.037)	(0.381)	(1.093)	(0.022)	(0.002)	(0.002)
Mean	5.268	21.718	154.545	2.149	0.097	0.158
N	653211	653211	653211	653211	653211	653211
Panel B: Partner of Promoted Women						
Post	-0.001	-0.262	1.202	0.001	0.002	-0.001
	(0.035)	(0.342)	(1.758)	(0.019)	(0.002)	(0.002)
Mean	3.077	11.105	128.083	1.075	0.131	0.090
N	438829	438829	438829	438829	438829	438829

Notes: This table displays point estimates and standard errors (in parentheses) for the effect of a job promotion on different outcomes for the partner of the promoted workers relative to matched control partners. Coefficients are estimated using specification (2). Standard errors clustered at the individual level.

Table 6: Spillover Effects to Co-workers - Impact of Promotion to Top Management

	Baseline		By Group Size		By Same-Gender	
	(1) Labor Earnings	(2) Working Hours	(3) Labor Earnings	(4) Working Hours	(5) Labor Earnings	(6) Working Hours
Panel A: Male Co-workers of Promoted Individual						
Post (α_1)	8.948	-0.048	16.663*	-0.146	5.384	0.002
	(6.580)	(0.142)	(8.644)	(0.187)	(31.264)	(0.872)
Post$\times \leq$ 10 Peers (α_3)			-13.313	0.376		
			(13.165)	(0.283)		
Post$\times$Same Gender (α_3)					3.628	-0.050
					(31.978)	(0.883)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$			0.148	0.409	0.401	0.945
Control mean	655.946	36.458	655.946	36.458	655.946	36.458
N	7,668,248	7,565,346	7,668,248	7,565,346	7,668,248	7,565,346
Panel B: Female Co-workers of Promoted Individual						
Post (α_1)	18.149***	0.107	30.338***	0.547	8.414	0.088
	(6.657)	(0.314)	(9.138)	(0.394)	(12.040)	(0.439)
Post$\times \leq$ 10 Peers (α_3)			-27.449**	-1.079*		
			(12.965)	(0.654)		
Post$\times$Same Gender (α_3)					17.521	0.035
					(14.046)	(0.624)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$			0.004	0.227	0.001	0.943
Control mean	473.804	31.636	473.804	31.636	473.804	31.636
N	6,656,594	6,535,452	6,656,594	6,535,452	6,656,594	6,535,452

Notes: This table displays point estimates and standard errors (in parentheses) for the impact of a job promotion of the focal individual on different outcomes of coworkers controlling for age, year, individual and workplace$\times$year FE. Each cell is an estimate for α_1 and α_3 from a separate regression model of the following form:

$$Y^g_{itc} = \alpha^g_1 \times Post_{ic} \times Treated_{ic} + \alpha^g_2 \times Post_{ic} + \alpha^g_3 \times Post_{ic} \times Treated_{ic} \times Hetero_{ic} + \gamma^g_{yc} + \delta^g_{ac} + \rho^g_{ic} + \beta^g_{fc} + \varepsilon^g_{itc}$$

Table 7: Spillover Effects to Co-workers - Impact of Promotion to Middle Management

	Baseline		By Group Size		By Same-Gender	
	(1) Labor Earnings	(2) Working Hours	(3) Labor Earnings	(4) Working Hours	(5) Labor Earnings	(6) Working Hours
Panel A: Male Co-worker of Promoted Individual						
Post (α_1)	4.757	-0.340**	-7.063	-0.393*	-4.505	-0.962*
	(5.826)	(0.158)	(7.647)	(0.212)	(13.637)	(0.564)
Post$\times \leq$ 10 Peers (α_3)			26.730**	0.133		
			(11.502)	(0.317)		
Post$\times$Same Gender (α_3)					10.339	0.692
					(15.021)	(0.587)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$			0.048	0.098	0.617	0.060
Control Mean	608.173	36.513	608.173	36.513	608.173	36.513
N	3,145,908	3,102,063	3,145,908	3,102,063	3,145,908	3,102,063
Panel B: Female Co-worker of Promoted Individual						
Promotion$\times$Post	12.318**	0.279	18.028**	0.442	-4.128	-0.256
	(5.219)	(0.281)	(7.629)	(0.391)	(10.563)	(0.571)
Post$\times \leq$ 10 Peers (α_3)			-10.065	-0.303		
			(10.304)	(0.561)		
Post$\times$Same Gender (α_3)					23.021*	0.741
					(12.112)	(0.653)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$			0.497	0.006	0.279	
Control Mean	425.403	30.674	425.403	30.674	425.403	30.674
N	3,016,201	2,954,987	3,016,201	2,954,987	3,016,201	2,954,987

Notes: This table displays point estimates and standard errors (in parentheses) for the impact of a job promotion of the focal individual on different outcomes of coworkers controlling for age, year, individual and workplace$\times$year FE. Each cell is an estimate for α_1 and α_3 from a separate regression model of the following form:

$$Y^g_{itc} = \alpha^g_1 \times Post_{ic} \times Treated_{ic} + \alpha^g_2 \times Post_{ic} + \alpha^g_3 \times Post_{ic} \times Treated_{ic} \times Hetero_{ic} + \gamma^g_{yc} + \delta^g_{ac} + \rho^g_{ic} + \beta^g_{fc} + \varepsilon^g_{itc}$$

Table 8: Spillover Effects to Co-workers - Impact of Promotion to Top Management

	Baseline		By Group Size		By Same-Gender	
	(1) # GP visits	(2) Sick leave days	(3) # GP visits	(4) Sick leave days	(5) # GP visits	(6) Sick leave days
Panel A: Male Co-worker of Promoted Individual						
Post (α_1)	0.048	1.979	0.154	4.128*	-0.114	4.137
	(0.164)	(1.637)	(0.224)	(2.149)	(0.561)	(4.735)
Post$\times \leq$ 10 Peers (α_3)			-0.315	-5.957*		
			(0.313)	(3.248)		
Post$\times$Same Gender (α_3)					0.183	-2.180
					(0.586)	(5.033)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$			0.603	0.119	0.902	0.353
Control Mean	3.284	12.712	3.284	12.712	3.284	12.712
N	7,668,248	7,668,248	7,668,248	7,668,248	7,668,248	7,668,248
Panel B: Female Co-worker of Promoted Individual						
Post (α_1)	-0.343	-3.344	-0.339	-0.426	-0.483	3.701
	(0.342)	(3.149)	(0.513)	(4.071)	(0.593)	(4.346)
Post$\times \leq$ 10 Peers (α_3)			0.002	-7.393		
			(0.620)	(6.365)		
Post$\times$Same Gender (α_3)					0.241	-12.550**
					(0.713)	(6.222)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$			0.501	0.277	0.594	0.097
Control Mean	5.375	25.179	5.375	25.179	5.375	25.179
N	6,656,594	6,656,594	6,656,594	6,656,594	6,656,594	6,656,594

Notes: This table displays point estimates and standard errors (in parentheses) for the impact of a job promotion of the focal individual on different outcomes of coworkers controlling for age, year, individual and workplace$\times$year FE. Each cell is an estimate for α_1 and α_3 from a separate regression model of the following form:

$$Y^g_{itc} = \alpha^g_1 \times Post_{ic} \times Treated_{ic} + \alpha^g_2 \times Post_{ic} + \alpha^g_3 \times Post_{ic} \times Treated_{ic} \times Hetero_{ic} + \gamma^g_{yc} + \delta^g_{ac} + \rho^g_{ic} + \beta^g_{fc} + \varepsilon^g_{itc}$$

Table 9: Spillover Effects to Co-workers - Impact of Promotion to Middle Management

	Baseline		By Group Size		By Same-Gender	
	(1) # GP visits	(2) Sick leave days	(3) # GP visits	(4) Sick leave days	(5) # GP visits	(6) Sick leave days
Panel A: Male Co-worker of Promoted Individual						
Post (α_1)	0.025	2.525	-0.004	2.625	-0.245	-1.326
	(0.185)	(2.048)	(0.297)	(3.325)	(0.518)	(6.413)
Post$\times \leq$ 10 Peers (α_3)			0.076	-0.093		
			(0.370)	(4.093)		
Post$\times$Same Gender (α_3)					0.302	4.293
					(0.554)	(6.768)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$			0.948	0.417	0.858	0.382
Control Mean	3.329	13.981	3.329	13.981	3.329	13.981
N	3,145,908	3,145,908	3,145,908	3,145,908	3,145,908	3,145,908
Panel B: Female Co-worker of Promoted Individual						
Post (α_1)	-0.030	1.271	-0.105	5.782	-0.664	-3.135
	(0.255)	(2.858)	(0.357)	(3.563)	(0.488)	(5.381)
Post$\times \leq$ 10 Peers (α_3)			0.149	-9.741*		
			(0.511)	(5.792)		
Post$\times$Same Gender (α_3)					0.888	6.146
					(0.572)	(6.345)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$			0.951	0.184	0.299	0.565
Control Mean	5.568	26.371	5.568	26.371	5.568	26.371
N	3,016,201	3,016,201	3,016,201	3,016,201	3,016,201	3,016,201

Notes: This table displays point estimates and standard errors (in parentheses) for the impact of a job promotion of the focal individual on different outcomes of coworkers controlling for age, year, individual and workplace$\times$year FE. Each cell is an estimate for α_1 and α_3 from a separate regression model of the following form:

$$Y^g_{itc} = \alpha^g_1 \times Post_{ic} \times Treated_{ic} + \alpha^g_2 \times Post_{ic} + \alpha^g_3 \times Post_{ic} \times Treated_{ic} \times Hetero_{ic} + \gamma^g_{yc} + \delta^g_{ac} + \rho^g_{ic} + \beta^g_{fc} + \varepsilon^g_{itc}$$

Table 10: Mechanisms - Impact of Promotion to Top Management (by Small Children)

	(1) Earnings) (1000s NOK)	(2) Working hours	(3) # GP visits	(4) # Symptoms/ Diagnoses	(5) # Actions	(6) Sick Leave Days	(7) Cost per visit	(8) Cohabitation
				Panel A: Men				
Post (α_1)	45.787**	0.815***	-0.102	-0.251***	-0.407*	0.771	-0.545	0.012
	(22.009)	(0.118)	(0.074)	(0.097)	(0.225)	(0.764)	(3.283)	(0.008)
Post×Any Child ≤ 6 (α_3)	39.923	0.301	-0.055	0.028	-0.167	-0.875	-0.033	-0.005
	(26.090)	(0.189)	(0.110)	(0.139)	(0.326)	(1.122)	(4.967)	(0.010)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$	0.000	0.000	0.059	0.003	0.010	0.595	0.975	0.153
N	122589	110691	122589	122589	122589	122589	122589	122589
				Panel B: Women				
Post (α_1)	62.600***	1.445***	-0.109	-0.104	-0.634*	2.872**	-7.960**	-0.003
	(8.073)	(0.187)	(0.118)	(0.149)	(0.332)	(1.257)	(3.475)	(0.012)
Post×Any Child ≤ 6 (α_3)	3.331	0.446	0.099	0.213	1.234**	2.906	18.259***	-0.033**
	(11.253)	(0.349)	(0.205)	(0.251)	(0.614)	(2.093)	(5.921)	(0.015)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$	0.000	0.000	0.651	0.678	0.083	0.000	0.007	0.000
N	73717	65095	73717	73717	73717	73717	73717	73717

Notes: This table displays point estimates and standard errors (in parentheses) for the impact of a job promotion of the focal individual on different outcomes of coworkers controlling for age, year, individual and workplace×year FE. Each cell is an estimate for α_1 and α_3 from a separate regression model of the following form:

$$Y^g_{itc} = \alpha^g_1 \times Post_{ic} \times Treated_{ic} + \alpha^g_2 \times Post_{ic} + \alpha^g_3 \times Post_{ic} \times Treated_{ic} \times Hetero_{ic} + \gamma^g_{yc} + \delta^g_{ac} + \rho^g_{ic} + \beta^g_{fc} + \varepsilon^g_{itc}$$

Table 11: Mechanisms - Impact of Promotion to Top Management (by Main Earner Status)

	(1) Earnings) (1000s NOK)	(2) Working hours	(3) # GP visits	(4) # Symptoms/ Diagnoses	(5) # Actions	(6) Sick Leave Days	(7) Cost per visit	(8) Cohabitation
				Panel A: Men				
Post (α_1)	56.373***	1.457***	-0.118	-0.266***	-0.617**	0.918	-1.180	0.021**
	(8.537)	(0.159)	(0.081)	(0.102)	(0.241)	(0.872)	(3.561)	(0.009)
Post × Main Earner (α_3)	5.909	-0.941***	-0.009	0.061	0.294	-1.033	1.271	-0.016
	(27.687)	(0.190)	(0.110)	(0.141)	(0.329)	(1.135)	(4.954)	(0.010)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$	0.000	0.000	0.084	0.004	0.013	0.567	0.946	0.041
N	122589	110691	122589	122589	122589	122589	122589	122589
				Panel B: Women				
Post (α_1)	61.871***	1.683***	-0.028	0.066	-0.054	4.648***	-2.030	-0.027***
	(6.186)	(0.176)	(0.105)	(0.131)	(0.307)	(1.093)	(3.003)	(0.007)
Post × Main Earner (α_3)	9.070	-0.563	-0.230	-0.537	-0.718	-5.196*	6.626	0.003
	(20.088)	(0.399)	(0.266)	(0.326)	(0.759)	(2.762)	(8.548)	(0.018)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$	0.000	0.000	0.552	0.255	0.532	0.000	0.675	0.001
N	73717	65095	73717	73717	73717	73717	73717	73717

Notes: This table displays point estimates and standard errors (in parentheses) for the impact of a job promotion of the focal individual on different outcomes of coworkers controlling for age, year, individual and workplace×year FE. Each cell is an estimate for α_1 and α_3 from a separate regression model of the following form:

$$Y^g_{itc} = \alpha^g_1 \times Post_{ic} \times Treated_{ic} + \alpha^g_2 \times Post_{ic} + \alpha^g_3 \times Post_{ic} \times Treated_{ic} \times Hetero_{ic} + \gamma^g_{yc} + \delta^g_{ac} + \rho^g_{ic} + \beta^g_{fc} + \varepsilon^g_{itc}$$

Table 12: Mechanisms - Impact of Promotion to Top Management (by Public vs. Private)

	(1) Earnings) (1000s NOK)	(2) Working hours	(3) # GP visits	(4) # Symptoms/ Diagnoses	(5) # Actions	(6) Sick Leave Days	(7) Cost per visit	(8) Cohabitation
				Panel A: Men				
Post (α_1)	59.932***	0.902***	-0.127**	-0.240***	-0.476***	0.537	-0.788	0.009*
	(15.172)	(0.093)	(0.057)	(0.073)	(0.170)	(0.585)	(2.441)	(0.005)
Post × Public (α_3)	28.474	0.640	0.049	0.022	0.070	-1.874	4.683	0.005
	(27.672)	(0.474)	(0.232)	(0.289)	(0.661)	(2.353)	(15.560)	(0.017)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$	0.000	0.000	0.077	0.003	0.016	0.553	0.919	0.166
N	122589	110691	122589	122589	122589	122589	122589	122589
				Panel B: Women				
Post (α_1)	59.663***	1.695***	-0.017	0.043	-0.026	4.142***	-2.402	-0.031***
	(6.434)	(0.173)	(0.105)	(0.130)	(0.305)	(1.087)	(2.994)	(0.007)
Post × Public (α_3)	27.975	-0.681	-0.328	-0.404	-0.971	-1.594	9.938	0.032*
	(17.052)	(0.448)	(0.264)	(0.322)	(0.775)	(2.884)	(8.495)	(0.017)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$	0.000	0.000	0.362	0.446	0.375	0.000	0.460	0.000
N	73717	65095	73717	73717	73717	73717	73717	73717

Notes: This table displays point estimates and standard errors (in parentheses) for the impact of a job promotion of the focal individual on different outcomes of coworkers controlling for age, year, individual and workplace×year FE. Each cell is an estimate for α_1 and α_3 from a separate regression model of the following form:

$$Y^g_{itc} = \alpha^g_1 \times Post_{ic} \times Treated_{ic} + \alpha^g_2 \times Post_{ic} + \alpha^g_3 \times Post_{ic} \times Treated_{ic} \times Hetero_{ic} + \gamma^g_{yc} + \delta^g_{ac} + \rho^g_{ic} + \beta^g_{fc} + \varepsilon^g_{itc}$$

Table 13: Mechanisms - Impact of Promotion to Top Management (by Workplace Size)

	(1) Earnings) (1000s NOK)	(2) Working hours	(3) # GP visits	(4) # Symptoms/ Diagnoses	(5) # Actions	(6) Sick Leave Days	(7) Cost per visit	(8) Cohabitation
				Panel A: Men				
Post (α_1)	52.656	0.715***	-0.099	-0.149	-0.539**	-0.397	-7.792*	0.020**
	(44.975)	(0.140)	(0.091)	(0.120)	(0.272)	(0.788)	(4.432)	(0.009)
Post × Small Wp (α_3)	18.631	0.329*	-0.035	-0.162	0.076	0.999	11.341**	-0.015
	(46.494)	(0.184)	(0.116)	(0.152)	(0.345)	(1.090)	(5.475)	(0.011)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$	0.000	0.000	0.092	0.002	0.013	0.640	0.116	0.057
N	122589	110691	122589	122589	122589	122589	122589	122589
				Panel B: Women				
Post (α_1)	128.596***	0.863***	-0.219	-0.412*	-1.040*	2.261	-7.216	-0.020
	(23.229)	(0.274)	(0.177)	(0.222)	(0.549)	(1.922)	(6.521)	(0.013)
Post × Small Wp (α_3)	-75.852***	0.899***	0.120	0.397	0.935	1.510	7.369	-0.005
	(23.500)	(0.335)	(0.214)	(0.267)	(0.645)	(2.267)	(7.244)	(0.015)
P-value: $H_0 : \alpha_1 + \alpha_3 = 0$	0.000	0.000	0.322	0.179	0.159	0.004	0.541	0.003
N	73717	65095	73717	73717	73717	73717	73717	73717

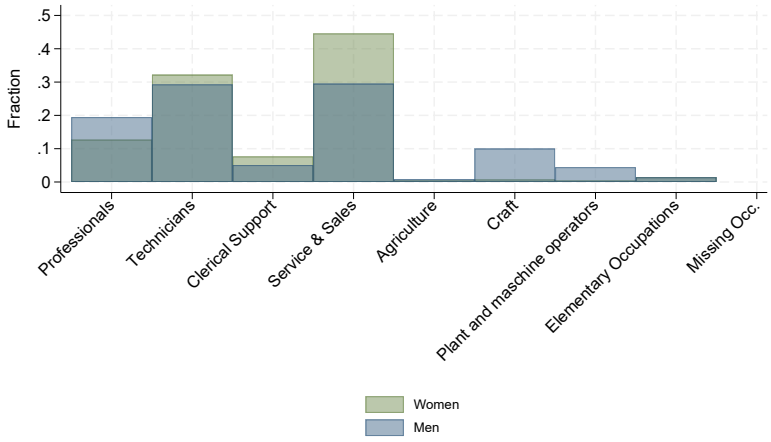
Notes: This table displays point estimates and standard errors (in parentheses) for the impact of a job promotion of the focal individual on different outcomes of coworkers controlling for age, year, individual and workplace×year FE. Each cell is an estimate for α_1 and α_3 from a separate regression model of the following form:

$$Y^g_{itc} = \alpha^g_1 \times Post_{ic} \times Treated_{ic} + \alpha^g_2 \times Post_{ic} + \alpha^g_3 \times Post_{ic} \times Treated_{ic} \times Hetero_{ic} + \gamma^g_{yc} + \delta^g_{ac} + \rho^g_{ic} + \beta^g_{fc} + \varepsilon^g_{itc}$$

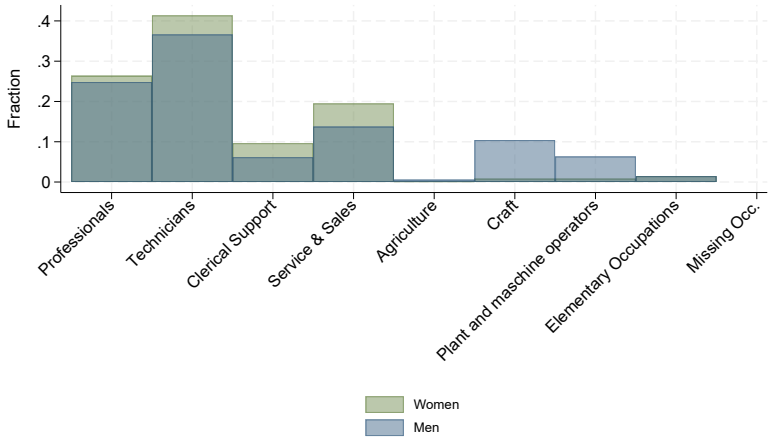
Figures

Figure 1: Descriptive Statistics for Promotions

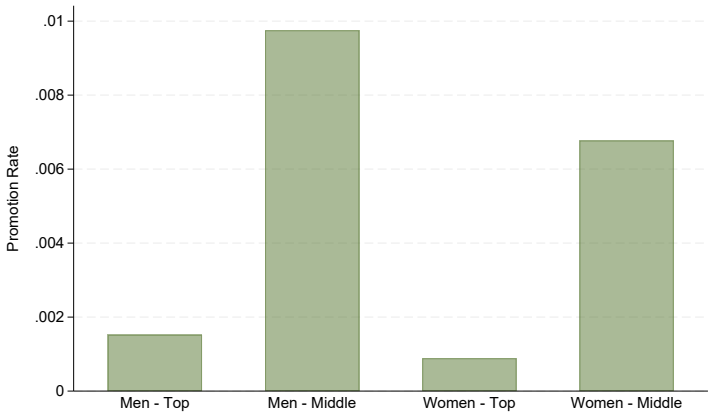
(a) Occupation before Promotion to Top Management



(b) Occupation before Promotion to Middle Management



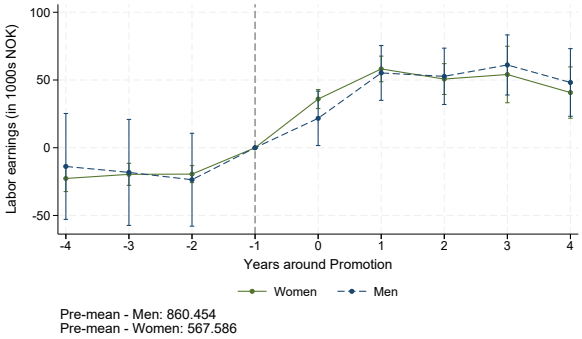
(c) Promotion Rates



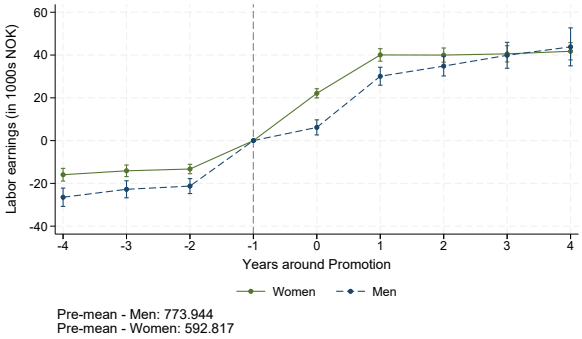
Notes: Panels (a) and (b) show the share of individuals in each occupation group among men and women before promotions to top and middle management. Panel (c) displays promotion rates to top and middle management by gender.

Figure 2: Impact of Promotion on Earnings and Working Hours

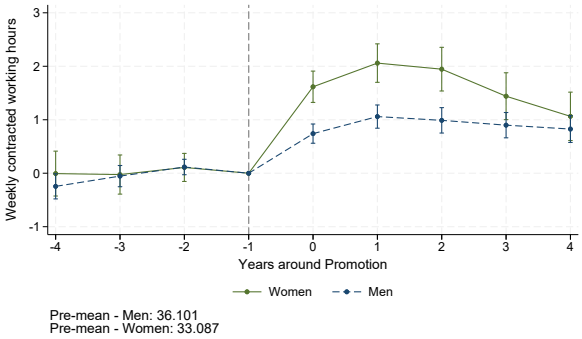
(a) Top Manager - Labor Earnings



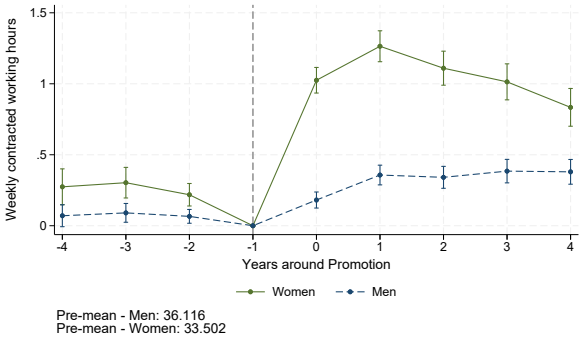
(b) Middle Manager - Labor Earnings



(c) Top Manager - Contracted Working Hours



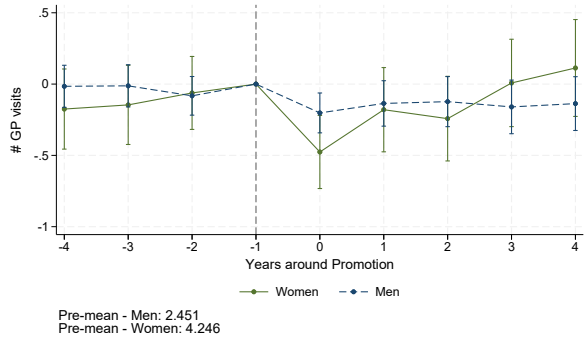
(d) Middle Manager - Contracted Working Hours



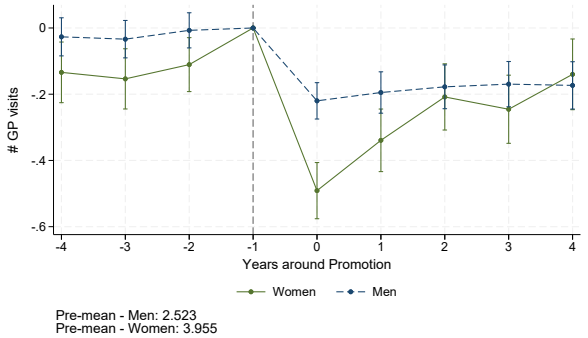
Notes: This figure shows the effect of a job promotion on different outcomes for promoted workers relative to matched control workers. Coefficients are estimated using specification (1). 95% confidence intervals are derived from standard errors clustered at the individual level. The pre-period mean of the outcome is reported in the lower left corner.

Figure 3: Impact of Promotion on Healthcare Utilization

(a) Top Manager: # GP Visits



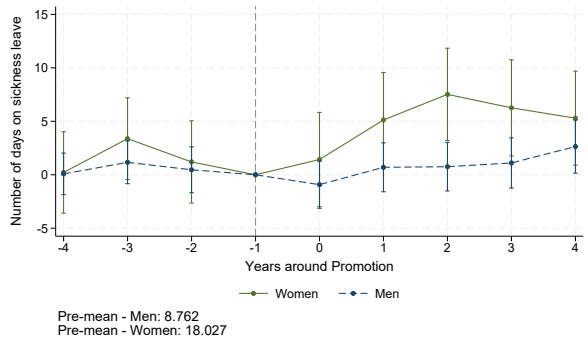
(b) Middle Manager: # GP Visits



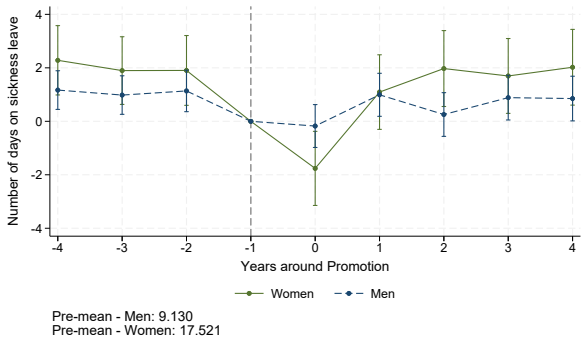
Notes: This figure shows the effect of a job promotion on the number of GP visits for promoted workers relative to matched control workers. Coefficients are estimated using specification (1). 95% confidence intervals are derived from standard errors clustered at the individual level. The pre-period mean of the outcome is reported in the lower left corner.

Figure 4: Impact of Promotion on Sick Leave

(a) Top Manager: Days of Sick Leave



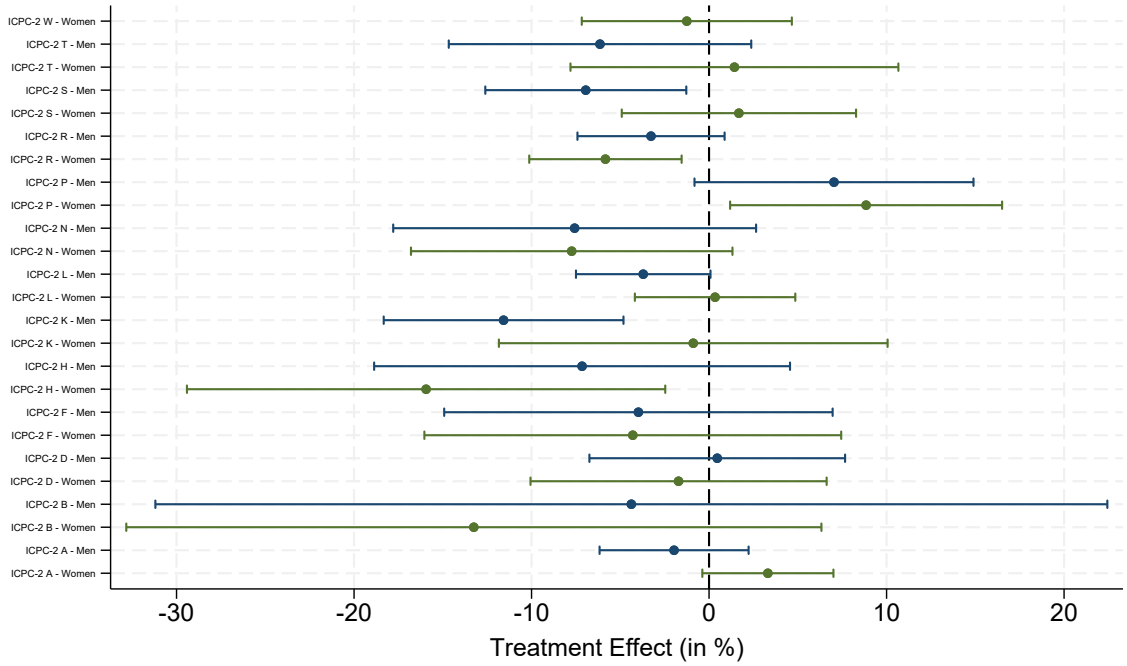
(b) Middle Manager: Days of Sick Leave



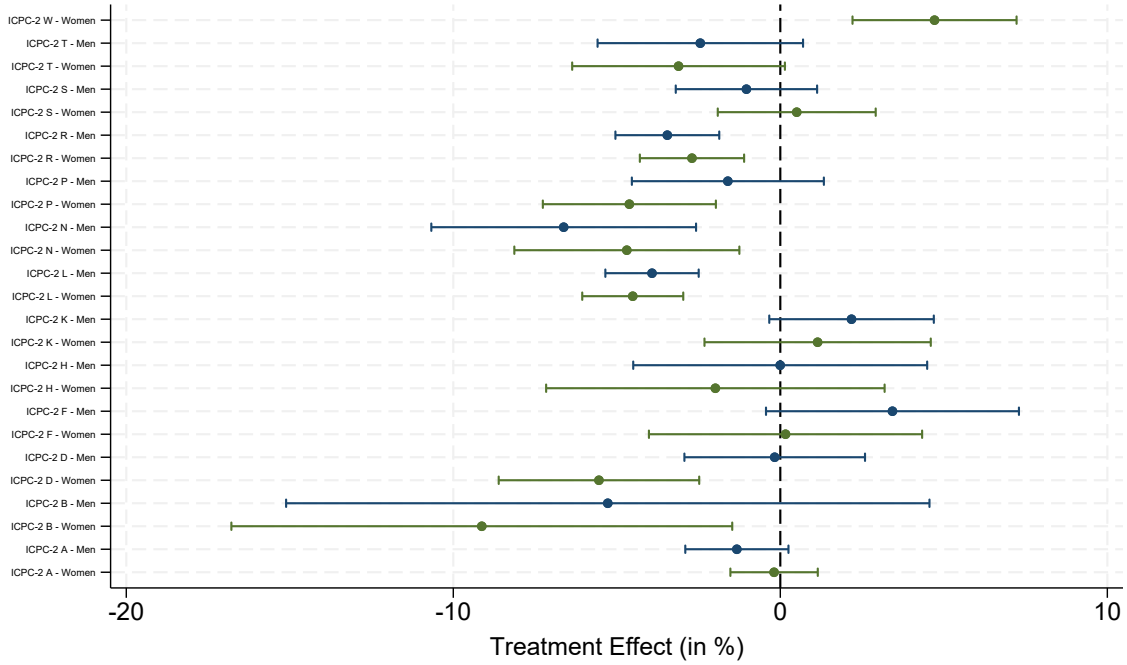
Notes: This figure shows the effect of a job promotion on the number of sick leave days for promoted workers relative to matched control workers. Coefficients are estimated using specification (1). 95% confidence intervals are derived from standard errors clustered at the individual level. The pre-period mean of the outcome is reported in the lower left corner.

Figure 5: Impact of Promotion on ICPC-2 Diagnoses

(a) Top Manager: ICPC-2 Diagnoses



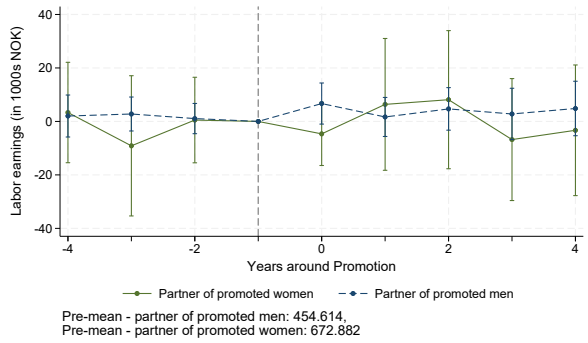
(b) Middle Manager: ICPC-2 Diagnoses



Notes: This figure shows the proportional effect of a job promotion on different outcomes for promoted workers relative to matched control workers. Coefficients are estimated using specification (2). 90% confidence intervals are derived from standard errors clustered at the individual level.

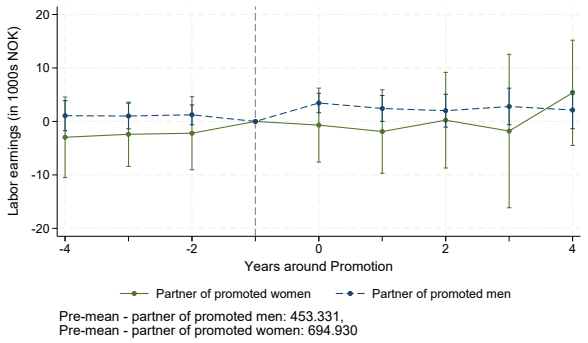
Figure 6: Spillovers to Partner - Impact of Promotion on Partner's Earnings and Working Hours

(a) Partner of Top Manager - Labor Earnings



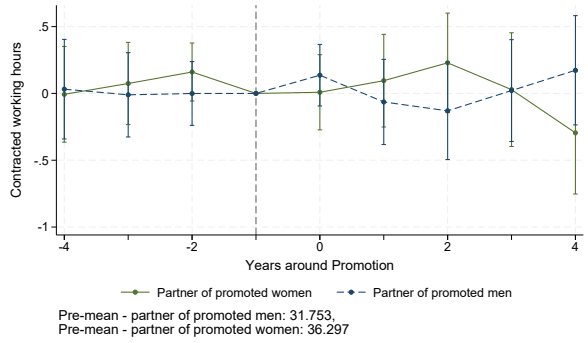
Pre-mean - partner of promoted men: 454.614,
Pre-mean - partner of promoted women: 672.882

(b) Partner of Middle Manager - Labor Earnings



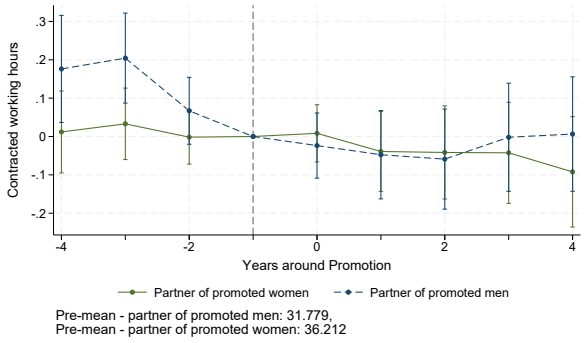
Pre-mean - partner of promoted men: 453.331,
Pre-mean - partner of promoted women: 694.930

(c) Partner of Top Manager - Contracted Working Hours



Pre-mean - partner of promoted men: 31.753,
Pre-mean - partner of promoted women: 36.297

(d) Partner of Middle Manager - Contracted Working Hours

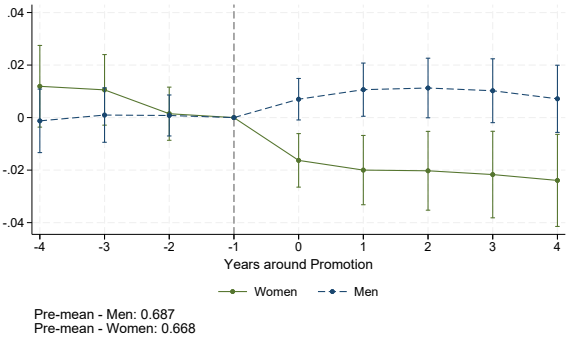


Pre-mean - partner of promoted men: 31.779,
Pre-mean - partner of promoted women: 36.212

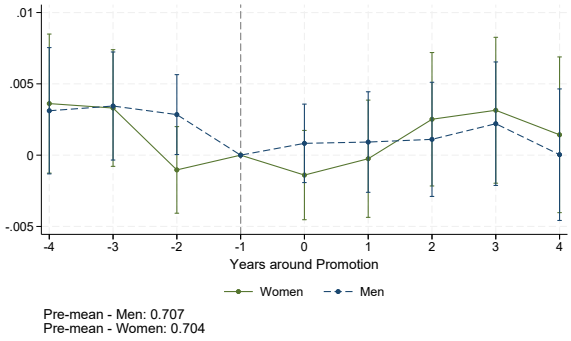
Notes: This figure shows the effect of a job promotion of the focal individual on different outcomes for partners of promoted individuals relative to matched controls. Coefficients are estimated using specification (1). 95% confidence intervals are derived from standard errors clustered at the individual level. The pre-period mean of the outcome is reported in the lower left corner.

Figure 7: Impact of Promotion on Cohabitation

(a) Top Manager - Pr(Cohabiting)



(b) Middle Manager - Pr(Cohabiting)



Notes: This figure shows the effect of a job promotion on cohabitation for promoted workers relative to matched control workers. Coefficients are estimated using specification (1). 95% confidence intervals are derived from standard errors clustered at the individual level. The pre-period mean of the outcome is reported in the lower left corner.

A Appendix: Additional Tables and Figures

Table A-1: Overview of Occupational Codes and Classification (STYRK-98)

Definition	The occupational catalogue is an overview of titles that employers use to report seven-digit occupational codes for their employees. Codes are determined by *actual work tasks* rather than education, contract type, salary or industry.
Coding Rules	Employees performing the same tasks should have the same occupational code. If a person has different work tasks under one contract, the code reflects the task they spend most time on. If a person has two employment relationships with different tasks, each is reported with its own occupational code.
Main Groups (1st Digit)	1 Administrative managers and politicians 2 Academic occupations 3 Higher education occupations (college-level) 4 Office and customer service occupations 5 Sales, service, and care occupations 6 Agriculture, forestry, and fishing occupations 7 Craft workers and related occupations 8 Process and machine operators, transport workers, etc. 9 Occupations with no education requirements 0 Military occupations
Competence Level (1st Digit)	2 $\geq$4 years university or college 3 1–3 years university or college 4–8 Upper secondary education 0, 1, 9 No specific competence level

Notes: Based on Statistics Norway's Standard for Occupational Classification (STYRK-98), employer-reported occupational codes in the A-melding (2010–2014).

Table A-2: Managerial Positions

Code	Manager Occupation
11	**Legislators and senior officials in public administration and interest organizations**
1110	Legislators
1120	Senior government officials
1141	Senior officials of political party organizations
1142	Senior officials of employers, workers and other economic organizations
1143	Senior officials of humanitarian and other interest organizations
12	**Corporate managers of large and medium-sized enterprises**
1210	Directors and chief executives
1220	Production and operations department managers in unspecified industries
1221	Production and operations department managers in agricultural, forestry and fishing
1222	Production and operations department managers in manufacturing, mining and quarrying, electricity, gas and water supply
1223	Production and operations department managers in construction
1224	Production and operations department managers in whole-sale and retail trade hotels and restaurants
1225	Production and operations department managers in transport and communications
1226	Production and operations department managers in business services
1227	Production and operations department managers in public administration
1228	Production and operations department managers in education, health and social security
1229	Production and operations department managers in personal care, cleaning and related services
1231	Finance and administration department managers
1232	Personal department managers
1233	Sales department managers
1234	Advertising and public relations department managers
1235	Supply and distribution department managers
1236	Computing services department managers
1237	Research and development department managers
1239	Other department managers not elsewhere classified
13	**General managers of small enterprises**
1310	General managers in unspecified industries
1311	General managers in agricultural, forestry and fishing
1312	General managers in manufacturing, mining and quarrying, electricity, gas and water supply
1313	General managers in construction
1314	General managers in whole-sale and retail trade
1315	General managers in restaurants and hotels
1316	General managers in transport and communications
1317	General managers in business services
1318	General managers in personal care, cleaning and related services
1319	General managers not elsewhere classified

Notes: This table displays the occupation codes (1998 Version) associated with promotions to managerial positions.

Table A-3: Descriptive Statistics ICPC Codes - Before Matching

	Top Manager				Middle Manager			
	Men		Women		Men		Women	
	Promoted	Non-Promoted	Promoted	Non-Promoted	Promoted	Non-Promoted	Promoted	Non-Promoted
Promoted individual								
ICPC A	0.24	0.27	0.38	0.41	0.24	0.27	0.37	0.41
	(0.42)	(0.44)	(0.48)	(0.49)	(0.43)	(0.45)	(0.48)	(0.49)
ICPC B	0.01	0.01	0.02	0.03	0.01	0.01	0.02	0.03
	(0.10)	(0.11)	(0.13)	(0.17)	(0.10)	(0.12)	(0.15)	(0.17)
ICPC D	0.09	0.11	0.11	0.15	0.09	0.11	0.11	0.15
	(0.29)	(0.31)	(0.32)	(0.36)	(0.29)	(0.31)	(0.32)	(0.36)
ICPC F	0.04	0.05	0.06	0.07	0.05	0.05	0.06	0.07
	(0.21)	(0.22)	(0.24)	(0.25)	(0.21)	(0.22)	(0.24)	(0.25)
ICPC H	0.03	0.04	0.04	0.05	0.04	0.04	0.04	0.05
	(0.18)	(0.20)	(0.19)	(0.21)	(0.19)	(0.20)	(0.19)	(0.21)
ICPC K	0.11	0.15	0.07	0.13	0.11	0.15	0.08	0.14
	(0.31)	(0.35)	(0.25)	(0.34)	(0.31)	(0.35)	(0.28)	(0.34)
ICPC L	0.24	0.30	0.30	0.38	0.25	0.30	0.30	0.38
	(0.43)	(0.46)	(0.46)	(0.48)	(0.43)	(0.46)	(0.46)	(0.49)
ICPC N	0.04	0.06	0.10	0.11	0.04	0.06	0.09	0.11
	(0.20)	(0.24)	(0.29)	(0.31)	(0.20)	(0.24)	(0.28)	(0.31)
ICPC P	0.08	0.14	0.15	0.21	0.08	0.14	0.14	0.21
	(0.28)	(0.34)	(0.36)	(0.41)	(0.28)	(0.35)	(0.35)	(0.41)
ICPC R	0.20	0.21	0.30	0.30	0.21	0.22	0.28	0.30
	(0.40)	(0.41)	(0.46)	(0.46)	(0.41)	(0.41)	(0.45)	(0.46)
ICPC S	0.13	0.15	0.16	0.18	0.14	0.15	0.16	0.18
	(0.33)	(0.35)	(0.37)	(0.38)	(0.35)	(0.35)	(0.37)	(0.38)
ICPC T	0.07	0.10	0.10	0.14	0.08	0.10	0.10	0.14
	(0.25)	(0.30)	(0.29)	(0.35)	(0.26)	(0.30)	(0.30)	(0.35)
ICPC U	0.02	0.03	0.09	0.10	0.02	0.03	0.08	0.10
	(0.15)	(0.17)	(0.29)	(0.30)	(0.15)	(0.18)	(0.27)	(0.30)
ICPC W	0.00	0.00	0.19	0.14	0.00	0.00	0.15	0.14
	(0.04)	(0.04)	(0.39)	(0.35)	(0.04)	(0.04)	(0.36)	(0.35)
ICPC X	0.00	0.00	0.14	0.13	0.00	0.00	0.13	0.13
	(0.03)	(0.03)	(0.35)	(0.33)	(0.02)	(0.03)	(0.33)	(0.33)
ICPC Y	0.05	0.05	0.00	0.00	0.05	0.05	0.00	0.00
	(0.21)	(0.22)	(0.06)	(0.04)	(0.21)	(0.22)	(0.05)	(0.04)
ICPC Z	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	(0.07)	(0.09)	(0.11)	(0.12)	(0.08)	(0.09)	(0.11)	(0.12)
Observations	7259	5599269	4262	5543333	45699	5041438	31456	5191981

Notes: This table shows ICPC-2 codes for men and women (before matching) in the year before promotion to top or middle management ($t-1$). Each variable is a dummy equal to one if the individual experiences the respective code.

Table A-4: Descriptive Statistics - After Matching

	Top Manager				Middle Manager			
	Men		Women		Men		Women	
	Promoted	Non-Promoted	Promoted	Non-Promoted	Promoted	Non-Promoted	Promoted	Non-Promoted
Panel A: promoted individual								
Age	41.62	41.30	39.58	39.42	43.05	42.84	42.71	42.55
	(9.51)	(9.30)	(9.04)	(8.84)	(9.53)	(9.25)	(9.11)	(8.71)
Higher education	0.43	0.43	0.50	0.50	0.48	0.48	0.67	0.67
	(0.49)	(0.49)	(0.50)	(0.50)	(0.50)	(0.50)	(0.47)	(0.47)
Employed	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Labor earnings (in 1000s)	922.05	826.21	591.08	553.10	824.05	752.76	617.15	583.10
	(643.80)	(1093.05)	(307.67)	(317.81)	(423.98)	(449.84)	(263.80)	(288.18)
Firm size	137.55	271.24	102.22	222.29	297.97	365.77	288.32	364.81
	(882.17)	(932.78)	(501.76)	(650.51)	(1045.95)	(1465.55)	(888.81)	(1089.89)
Public sector	0.06	0.06	0.13	0.13	0.17	0.17	0.45	0.43
	(0.24)	(0.23)	(0.34)	(0.33)	(0.38)	(0.38)	(0.50)	(0.49)
Norwegian	0.91	0.91	0.92	0.93	0.93	0.93	0.92	0.93
	(0.28)	(0.28)	(0.27)	(0.26)	(0.26)	(0.26)	(0.27)	(0.26)
Child below age 18	0.60	0.63	0.59	0.60	0.58	0.61	0.54	0.55
	(0.49)	(0.48)	(0.49)	(0.49)	(0.49)	(0.49)	(0.50)	(0.50)
Cohabiting	0.74	0.67	0.69	0.66	0.75	0.70	0.71	0.70
	(0.44)	(0.47)	(0.46)	(0.47)	(0.43)	(0.46)	(0.45)	(0.46)
# GP visits	2.54	2.43	4.30	4.18	2.60	2.49	4.11	3.85
	(3.93)	(3.81)	(5.06)	(4.97)	(3.98)	(3.84)	(4.89)	(4.62)
Costs per visit	113.77	117.00	139.31	142.53	117.24	117.01	140.01	145.02
	(176.09)	(255.13)	(158.08)	(156.43)	(196.82)	(229.29)	(175.46)	(184.85)
# sick leave	8.33	9.27	16.58	18.69	7.95	9.85	15.78	17.82
	(41.25)	(43.91)	(56.32)	(60.67)	(38.91)	(45.55)	(53.37)	(59.79)
Panel B: partner of promoted individual								
Age	41.32	40.71	43.37	43.07	42.21	41.83	45.90	45.62
	(9.12)	(9.14)	(9.21)	(9.16)	(9.28)	(9.21)	(9.26)	(9.02)
Higher education	0.39	0.34	0.24	0.25	0.41	0.37	0.32	0.31
	(0.49)	(0.47)	(0.43)	(0.43)	(0.49)	(0.48)	(0.47)	(0.46)
Employed	0.95	0.94	0.96	0.95	0.95	0.94	0.95	0.95
	(0.22)	(0.23)	(0.19)	(0.21)	(0.22)	(0.23)	(0.23)	(0.22)
Labor earnings (in 1000s)	441.21	416.83	658.87	673.42	444.53	420.67	690.73	682.69
	(277.21)	(268.31)	(443.92)	(490.04)	(276.00)	(265.96)	(549.13)	(496.63)
Firm size	260.46	320.50	230.37	299.94	322.07	317.51	359.49	364.82
	(879.28)	(1107.72)	(1050.86)	(1340.80)	(1012.79)	(1045.22)	(1529.03)	(1509.09)
Norwegian	0.93	0.93	0.92	0.92	0.93	0.92	0.93	0.92
	(0.25)	(0.26)	(0.26)	(0.27)	(0.26)	(0.26)	(0.26)	(0.27)
GP visits	5.29	5.64	3.08	3.04	5.38	5.58	3.09	3.08
	(6.39)	(6.46)	(4.61)	(4.83)	(6.31)	(6.57)	(4.93)	(4.82)
Costs per visit	156.92	161.47	119.01	123.12	158.88	158.75	129.06	131.03
	(167.60)	(194.56)	(185.93)	(183.74)	(196.38)	(195.70)	(249.77)	(283.65)
# sick leave	19.47	22.47	10.69	11.63	21.68	22.05	11.04	11.12
	(62.94)	(67.40)	(46.42)	(49.97)	(66.86)	(66.46)	(48.68)	(49.54)
Observations	3819	11431	2319	6939	27886	81767	19640	57722

Notes: This table shows descriptive statistics for men and women (after matching) in the year before the promotion to top or middle management ($t-1$).

Table A-5: Descriptive Statistics ICPC Codes - After Matching

	Top Manager				Middle Manager			
	Men		Women		Men		Women	
	Promoted	Non-Promoted	Promoted	Non-Promoted	Promoted	Non-Promoted	Promoted	Non-Promoted
Promoted individual								
ICPC A	0.24	0.22	0.38	0.36	0.23	0.23	0.37	0.35
	(0.42)	(0.42)	(0.48)	(0.48)	(0.42)	(0.42)	(0.48)	(0.48)
ICPC B	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.02
	(0.10)	(0.09)	(0.14)	(0.15)	(0.10)	(0.09)	(0.15)	(0.14)
ICPC D	0.09	0.09	0.12	0.11	0.09	0.09	0.11	0.11
	(0.29)	(0.29)	(0.32)	(0.31)	(0.29)	(0.28)	(0.31)	(0.31)
ICPC F	0.05	0.04	0.06	0.06	0.05	0.05	0.06	0.06
	(0.21)	(0.20)	(0.24)	(0.23)	(0.21)	(0.21)	(0.24)	(0.23)
ICPC H	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
	(0.18)	(0.18)	(0.19)	(0.20)	(0.19)	(0.18)	(0.19)	(0.19)
ICPC K	0.11	0.09	0.06	0.08	0.11	0.10	0.09	0.08
	(0.31)	(0.29)	(0.25)	(0.26)	(0.31)	(0.30)	(0.28)	(0.27)
ICPC L	0.24	0.26	0.30	0.28	0.25	0.25	0.30	0.29
	(0.43)	(0.44)	(0.46)	(0.45)	(0.43)	(0.44)	(0.46)	(0.45)
ICPC N	0.05	0.05	0.09	0.09	0.04	0.04	0.09	0.08
	(0.21)	(0.21)	(0.29)	(0.29)	(0.21)	(0.21)	(0.28)	(0.27)
ICPC P	0.08	0.08	0.14	0.14	0.07	0.08	0.13	0.14
	(0.26)	(0.27)	(0.35)	(0.34)	(0.26)	(0.27)	(0.34)	(0.34)
ICPC R	0.21	0.21	0.30	0.28	0.22	0.20	0.27	0.26
	(0.41)	(0.41)	(0.46)	(0.45)	(0.41)	(0.40)	(0.44)	(0.44)
ICPC S	0.13	0.13	0.16	0.16	0.14	0.13	0.16	0.15
	(0.34)	(0.34)	(0.37)	(0.37)	(0.34)	(0.34)	(0.36)	(0.36)
ICPC T	0.07	0.06	0.10	0.09	0.07	0.07	0.10	0.09
	(0.25)	(0.24)	(0.29)	(0.28)	(0.26)	(0.25)	(0.30)	(0.28)
ICPC U	0.02	0.02	0.09	0.08	0.02	0.02	0.08	0.07
	(0.15)	(0.15)	(0.28)	(0.27)	(0.15)	(0.15)	(0.27)	(0.26)
ICPC W	0.00	0.00	0.18	0.20	0.00	0.00	0.13	0.14
	(0.04)	(0.04)	(0.38)	(0.40)	(0.04)	(0.04)	(0.34)	(0.35)
ICPC X	0.00	0.00	0.14	0.13	0.00	0.00	0.13	0.12
	(0.04)	(0.03)	(0.34)	(0.33)	(0.02)	(0.02)	(0.33)	(0.32)
ICPC Y	0.05	0.05	0.00	0.00	0.05	0.04	0.00	0.00
	(0.21)	(0.21)	(0.05)	(0.06)	(0.21)	(0.21)	(0.04)	(0.04)
ICPC Z	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	(0.06)	(0.08)	(0.11)	(0.11)	(0.08)	(0.08)	(0.11)	(0.11)
Observations	3819	11431	2319	6939	27886	81767	19640	57722

Notes: This table shows ICPC-2 codes for men and women (after matching) in the year before promotion to top or middle management ($t-1$). Each variable is a dummy equal to one if the individual experiences the respective code.

Table A-6: Impact of Promotion to Top Management on Earnings and Working Hours

	(1) Earnings (1000s NOK)	(2) Contracted weekly hours
	Panel A: Men	
Post	61.685***	0.940***
	(14.287)	(0.092)
Control Mean	777.640	36.187
N	122589	110691
	Panel B: Women	
Post	63.362***	1.602***
	(5.952)	(0.160)
Control Mean	510.406	32.759
N	73717	65095

Notes: This table displays point estimates and standard errors (in parentheses) for the effect of a job promotion on different outcomes for promoted workers relative to matched control workers. Coefficients are estimated using specification (2). Standard errors clustered at the individual level.

Table A-7: Impact of Promotion to Middle Management on Earnings and Working Hours

	(1) Earnings (1000s NOK)	(2) Contracted weekly hours
	Panel A: Men	
Post	48.580***	0.273***
	(2.198)	(0.030)
Control Mean	707.502	35.976
N	881082	795485
	Panel B: Women	
Post	47.724***	0.862***
	(1.401)	(0.048)
Control Mean	533.622	32.957
N	623592	557676

Notes: This table displays point estimates and standard errors (in parentheses) for the effect of a job promotion on different outcomes for promoted workers relative to matched control workers. Coefficients are estimated using specification (2). Standard errors clustered at the individual level.

Table A-8: Impact of Promotion to Top Management on Healthcare Intensity - controlling for number GP Visits

	Simple contact	Consultation	# Symptoms/ Diagnoses	# Actions	Sick Leave Days	Cost per visit
			Panel A: Men			
Post	-0.012	-0.046**	-0.094***	-0.165*	1.048**	0.216
	(0.028)	(0.021)	(0.029)	(0.099)	(0.497)	(2.436)
Control Mean	1.053	1.587	2.968	7.410	8.280	105.191
N	122589	122589	122589	122589	122589	122589
			Panel B: Women			
Post	-0.019	0.020	0.059	0.007	4.315***	-0.667
	(0.042)	(0.034)	(0.049)	(0.173)	(0.878)	(2.777)
Control Mean	2.026	2.832	5.573	14.286	18.686	139.059
N	73717	73717	73717	73717	73717	73717

Notes: This table displays point estimates and standard errors (in parentheses) for the effect of a job promotion on different outcomes for promoted workers relative to matched control workers controlling for the number of GP visits. Coefficients are estimated using specification (2). Standard errors clustered at the individual level.

Table A-9: Impact of Promotion to Middle Management on Healthcare Intensity - controlling for number GP Visits

	Simple contact	Consultation	# Symptoms/ Diagnoses	# Actions	Sick Leave Days	Cost per visit
			Panel A: Men			
Post	0.006	-0.005	-0.007	0.011	0.553***	0.578
	(0.010)	(0.008)	(0.011)	(0.040)	(0.176)	(1.053)
Control mean	1.077	1.604	3.035	7.652	8.907	107.784
N	881082	881082	881082	881082	881082	881082
			Panel B: Women			
Post	-0.007	0.017	0.018	-0.006	0.561*	0.492
	(0.014)	(0.012)	(0.016)	(0.058)	(0.290)	(1.045)
Control mean	1.872	2.603	5.145	13.385	17.965	140.200
N	623592	623592	623592	623592	623592	623592

Notes: This table displays point estimates and standard errors (in parentheses) for the effect of a job promotion on different outcomes for promoted workers relative to matched control workers controlling for the number of GP visits. Coefficients are estimated using specification (2). Standard errors clustered at the individual level.

Table A-10: Impact of Promotion to Top Management - Spillovers to Partner

	(1) Earnings (1000s NOK)	(2) Contracted weekly hours
Panel A: Partner of Promoted Men		
Post	2.687	0.023
	(3.655)	(0.145)
Control Mean	452.431	31.622
N	102287	80576
Panel B: Partner of Promoted Women		
Post	1.295	-0.042
	(9.515)	(0.150)
Control Mean	672.991	36.260
N	52898	42761

Notes: This table displays point estimates and standard errors (in parentheses) for the effect of a job promotion on different outcomes for promoted workers relative to matched control workers. Coefficients are estimated using specification (2). Standard errors clustered at the individual level.

Table A-11: Impact of Promotion to Middle Management - Spillovers to Partner

	(1) Earnings (1000s NOK)	(2) Contracted weekly hours
Panel A: Partner of Promoted Men		
Post	1.739	-0.134**
	(1.308)	(0.053)
Control Mean	452.792	31.801
N	653211	514079
Panel B: Partner of Promoted Women		
Post	2.088	-0.052
	(3.504)	(0.047)
Control Mean	698.626	36.205
N	438829	349370

Notes: This table displays point estimates and standard errors (in parentheses) for the effect of a job promotion on different outcomes for promoted workers relative to matched control workers. Coefficients are estimated using specification (2). Standard errors clustered at the individual level.

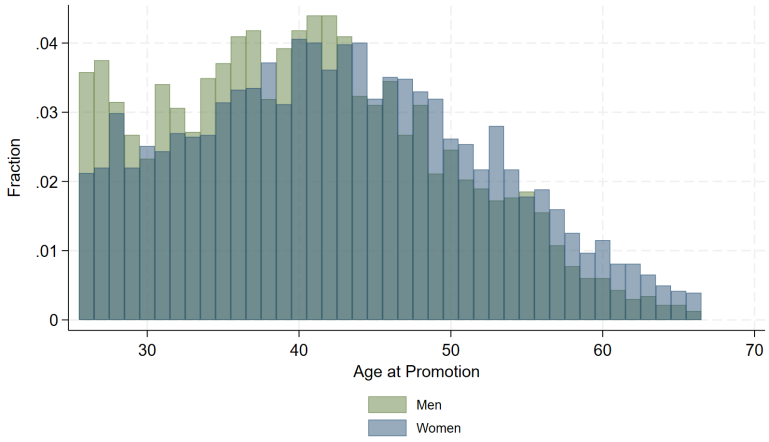
Table A-12: Descriptive Statistics - Co-worker Sample

	Top Manager				Middle Manager			
	Male co-worker		Female co-worker		Male co-worker		Female co-worker	
	Promoted	Non-Promoted	Promoted	Non-Promoted	Promoted	Non-Promoted	Promoted	Non-Promoted
Panel A: co-worker of promoted individual								
Age	43.76	45.63	44.70	47.99	44.61	45.71	47.57	48.56
	(10.58)	(10.22)	(10.24)	(9.45)	(10.48)	(10.32)	(9.76)	(9.44)
Higher education	0.26	0.25	0.45	0.38	0.14	0.16	0.29	0.23
	(0.44)	(0.43)	(0.50)	(0.48)	(0.34)	(0.37)	(0.45)	(0.42)
Employed	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)
Labor earnings	687.25	651.48	487.69	470.15	604.37	604.70	436.67	423.59
(in 1000s)	(287.94)	(299.44)	(197.73)	(185.84)	(211.52)	(286.29)	(163.78)	(158.52)
Firm size	78.37	68.03	54.63	60.85	36.30	38.87	41.64	39.76
	(115.43)	(91.93)	(77.46)	(80.43)	(55.96)	(62.93)	(54.43)	(55.79)
Public sector	0.04	0.13	0.27	0.53	0.04	0.09	0.28	0.47
	(0.20)	(0.34)	(0.44)	(0.50)	(0.19)	(0.28)	(0.45)	(0.50)
Norwegian	0.94	0.93	0.94	0.93	0.94	0.94	0.94	0.94
	(0.25)	(0.25)	(0.24)	(0.25)	(0.23)	(0.24)	(0.25)	(0.24)
Child below age 18	0.49	0.44	0.42	0.32	0.45	0.43	0.33	0.29
	(0.50)	(0.50)	(0.49)	(0.47)	(0.50)	(0.49)	(0.47)	(0.46)
Cohabiting	0.71	0.71	0.74	0.75	0.68	0.70	0.76	0.76
	(0.45)	(0.45)	(0.44)	(0.43)	(0.47)	(0.46)	(0.43)	(0.42)
# GP visits	3.15	3.27	5.12	5.34	3.17	3.29	5.24	5.50
	(4.67)	(4.82)	(5.88)	(6.12)	(4.62)	(4.91)	(5.93)	(6.26)
Costs per visit	121.61	124.34	150.55	147.15	118.13	124.37	138.95	146.72
	(162.20)	(203.26)	(369.71)	(171.84)	(167.80)	(212.47)	(144.40)	(176.89)
# sick leave	13.76	12.75	21.16	24.79	13.92	13.96	22.52	25.69
	(53.92)	(50.59)	(65.85)	(71.19)	(54.73)	(53.73)	(68.14)	(72.98)
Working hours	36.83	36.41	32.62	31.49	36.62	36.44	30.62	30.54
	(3.95)	(4.44)	(7.54)	(7.68)	(4.21)	(4.66)	(8.08)	(8.02)
# peer group	29.16	20.18	24.45	19.39	17.60	9.74	19.30	12.20
	(36.21)	(31.25)	(31.43)	(26.09)	(27.11)	(12.59)	(25.28)	(16.58)
Panel B: Partner of co-worker								
Age	42.84	44.57	48.11	50.93	43.73	44.63	50.48	51.53
	(10.48)	(10.05)	(10.30)	(9.63)	(10.18)	(10.12)	(10.25)	(9.61)
Higher education	0.28	0.27	0.22	0.22	0.21	0.23	0.18	0.18
	(0.45)	(0.44)	(0.41)	(0.41)	(0.41)	(0.42)	(0.38)	(0.38)
Employed	0.94	0.93	0.92	0.91	0.93	0.93	0.90	0.90
	(0.24)	(0.25)	(0.27)	(0.29)	(0.25)	(0.26)	(0.30)	(0.31)
Labor earnings	398.44	385.17	567.45	568.27	372.38	366.82	553.92	540.53
(in 1000s)	(249.07)	(240.57)	(373.43)	(434.87)	(231.99)	(231.70)	(412.70)	(412.64)
Firm size	205.82	229.28	316.30	279.38	287.81	191.95	292.97	263.62
	(849.34)	(847.97)	(1500.62)	(1340.48)	(1139.42)	(760.81)	(1417.12)	(1306.45)
Norwegian	0.94	0.93	0.94	0.93	0.95	0.94	0.94	0.94
	(0.24)	(0.25)	(0.24)	(0.25)	(0.23)	(0.24)	(0.24)	(0.24)
# GP visits	6.29	6.08	4.16	4.04	6.09	6.14	3.93	4.22
	(7.84)	(7.13)	(6.52)	(5.89)	(7.05)	(7.23)	(5.59)	(6.04)
Costs per visit	159.20	157.18	129.54	144.55	158.11	156.05	133.43	146.51
	(151.84)	(171.59)	(160.59)	(227.26)	(160.44)	(170.30)	(178.10)	(221.71)
# sick leave	21.18	23.46	14.50	13.88	25.48	23.78	11.64	14.76
	(66.29)	(70.34)	(58.61)	(55.83)	(76.16)	(71.18)	(47.77)	(57.68)
Working hours	30.42	30.73	36.14	35.88	30.26	30.18	35.92	35.87
	(8.69)	(8.31)	(4.82)	(5.53)	(8.58)	(8.55)	(5.66)	(5.58)
Observations	1634	981645	715	843812	2429	419843	1623	394278

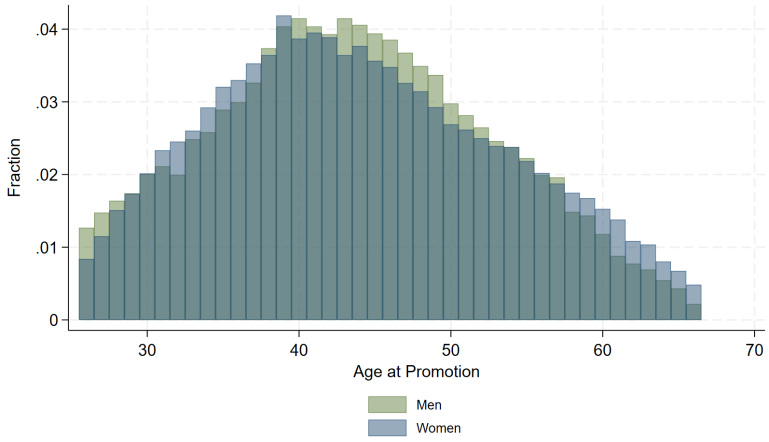
Notes: This table shows descriptive statistics for men and women in the year before the promotion of a co-worker to top or middle management.

Figure A-1: Age Distribution at Promotion

(a) Top Manager - Age at Promotion



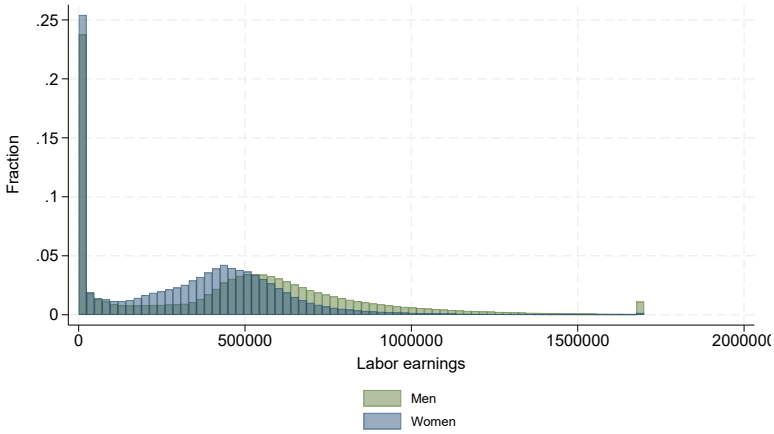
(b) Middle Manager - Age at Promotion



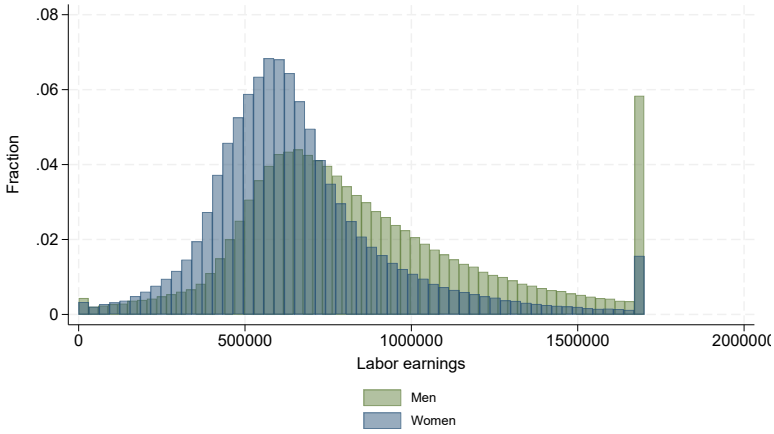
Notes: This figure shows the age distribution in the year of promotion for men and women. Panel a shows promotions to top management positions, and Panel b shows promotions to middle management positions.

Figure A-2: Descriptives Labor Earnings

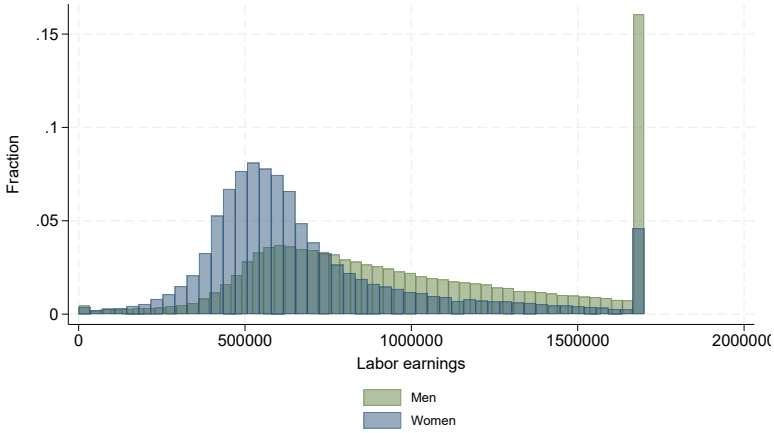
(a) Labor Earnings - Population



(b) Labor Earnings - Middle Managers



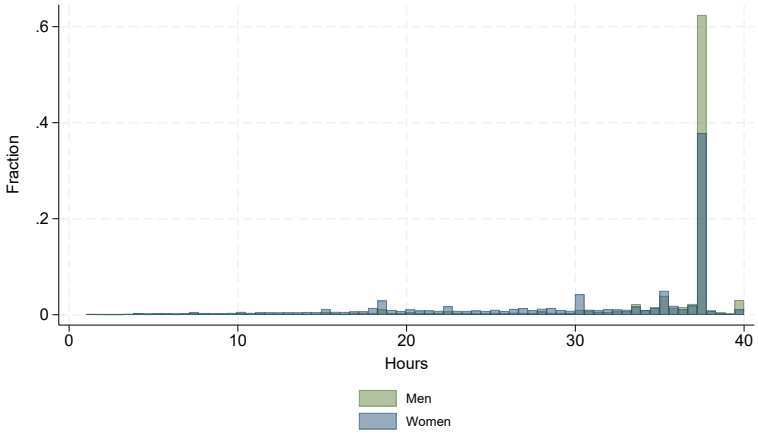
(c) Labor Earnings - Top Managers



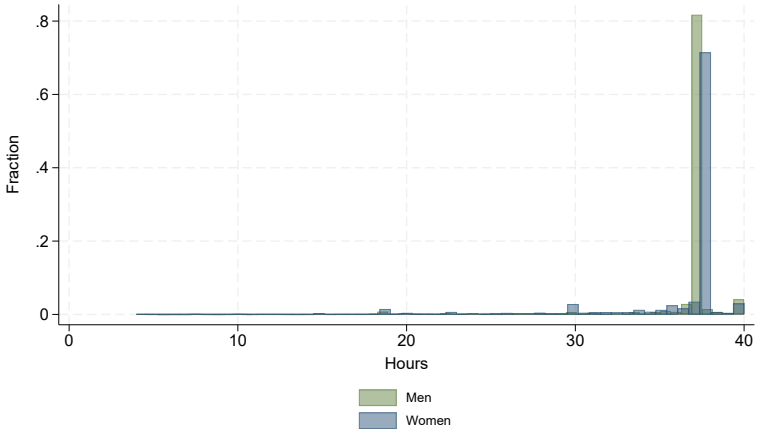
Notes: This figure shows the distribution of labor earnings for men and women in the population (panel a), middle managers (panel b), and top managers (panel c). Earnings are top-coded at 1.7 million, with the 99th percentile at 1.5 million.

Figure A-3: Descriptives Weekly Working Hours

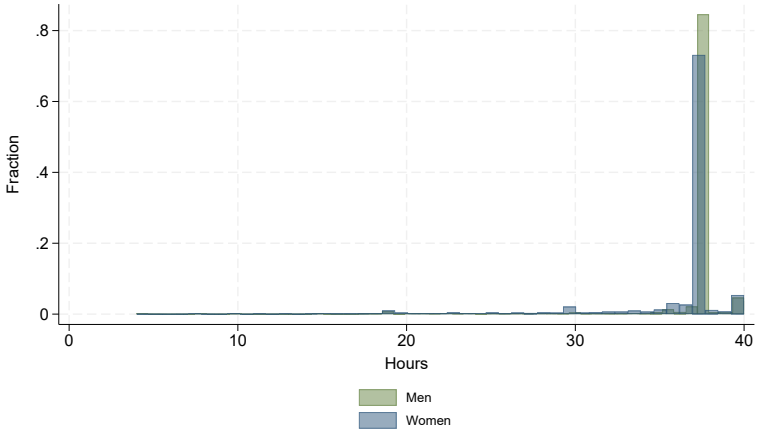
(a) Weekly Working Hours - Population



(b) Weekly Working Hours - Middle Managers



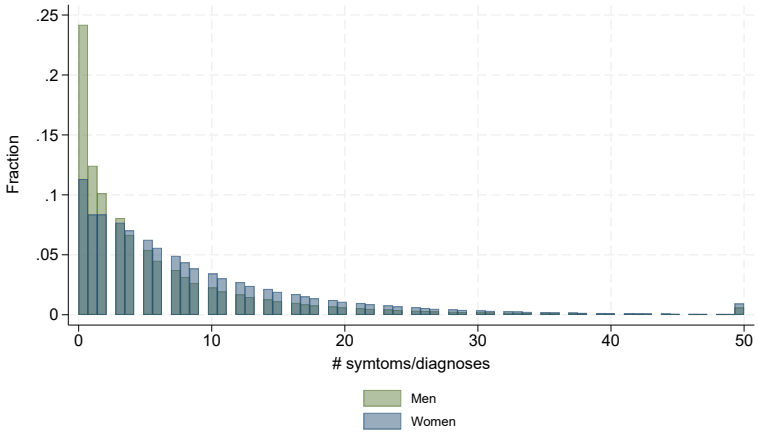
(c) Weekly Working Hours - Top Managers



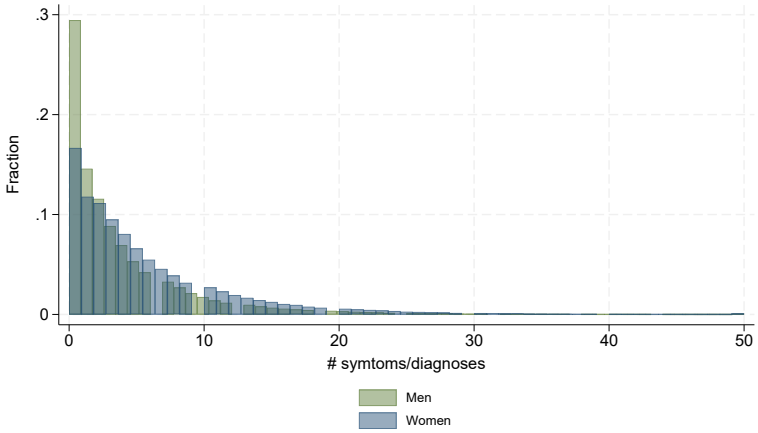
Notes: This figure shows the distribution of contracted weekly working hours for men and women in the population (panel a), middle managers (panel b), and top managers (panel c). Working hours are top-coded at 40 hours per week.

Figure A-4: Descriptives Number of GP Diagnoses

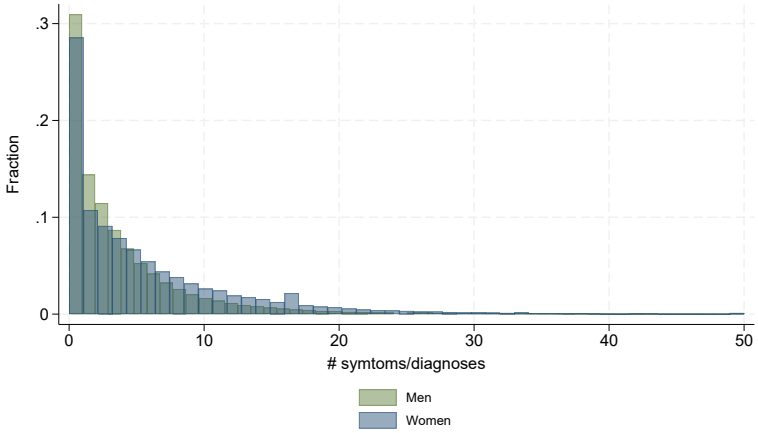
(a) Number of GP Diagnoses - Population



(b) Number of GP Diagnoses - Middle Managers



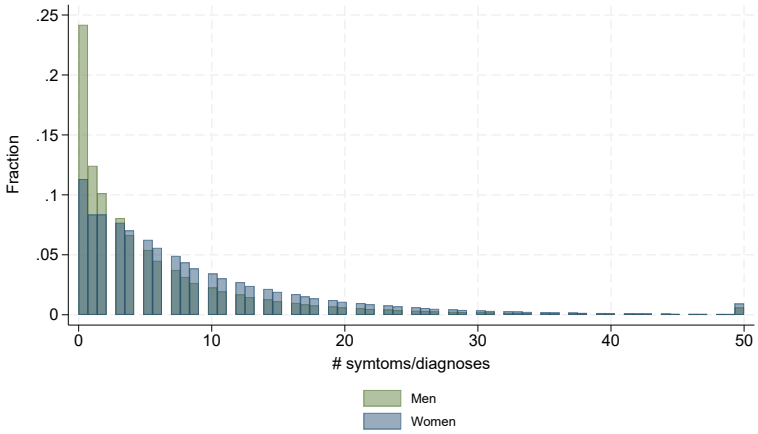
(c) Number of GP Diagnoses - Top Managers



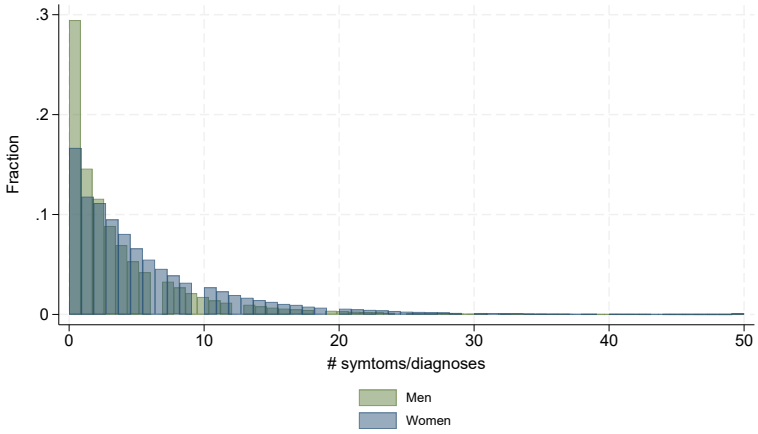
Notes: This figure shows the distribution of the number of GP diagnoses for men and women in the population (panel a), middle managers (panel b), and top managers (panel c). The number of GP diagnoses is top-coded at 50.

Figure A-5: Descriptives Sick Leave Days

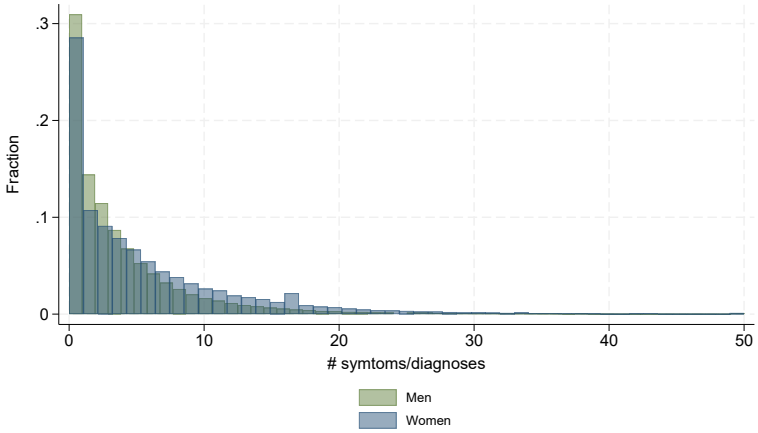
(a) Sick Leave Days - Population



(b) Sick Leave Days - Middle Managers



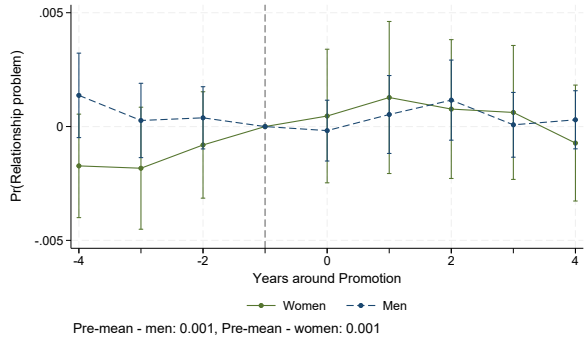
(c) Sick Leave Days - Top Managers



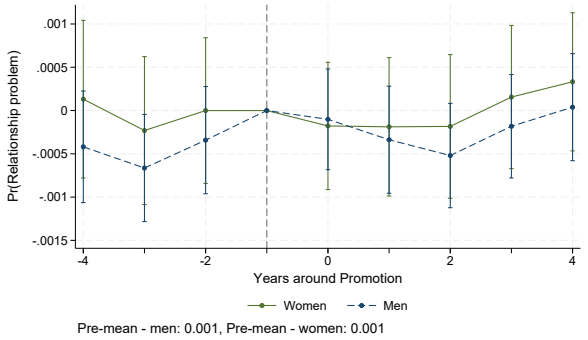
Notes: This figure shows the distribution of sick leave days for men and women in the population (panel a), middle managers (panel b), and top managers (panel c). The number of sick leave days is top-coded at 30 .

Figure A-6: Impact of Promotion on Complains about Relationship

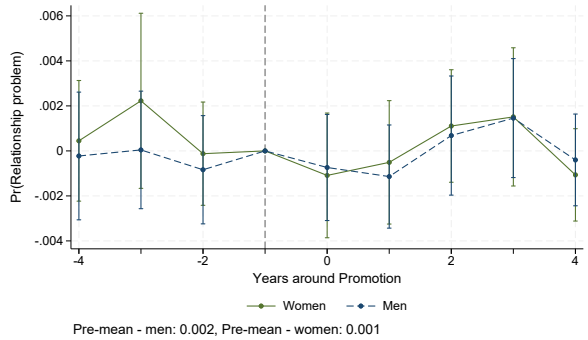
(a) Top Manager - Pr(Own Complain)



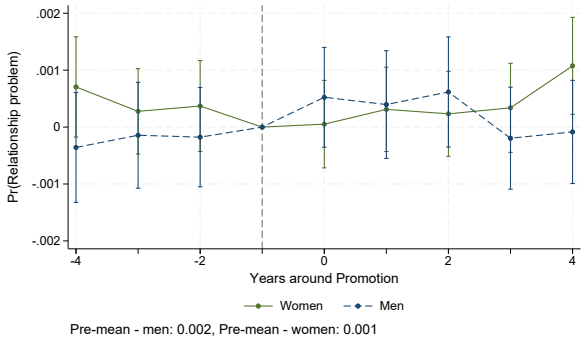
(b) Middle Manager - Pr(Own Complain)



(c) Top Manager - Pr(Partner Complain)



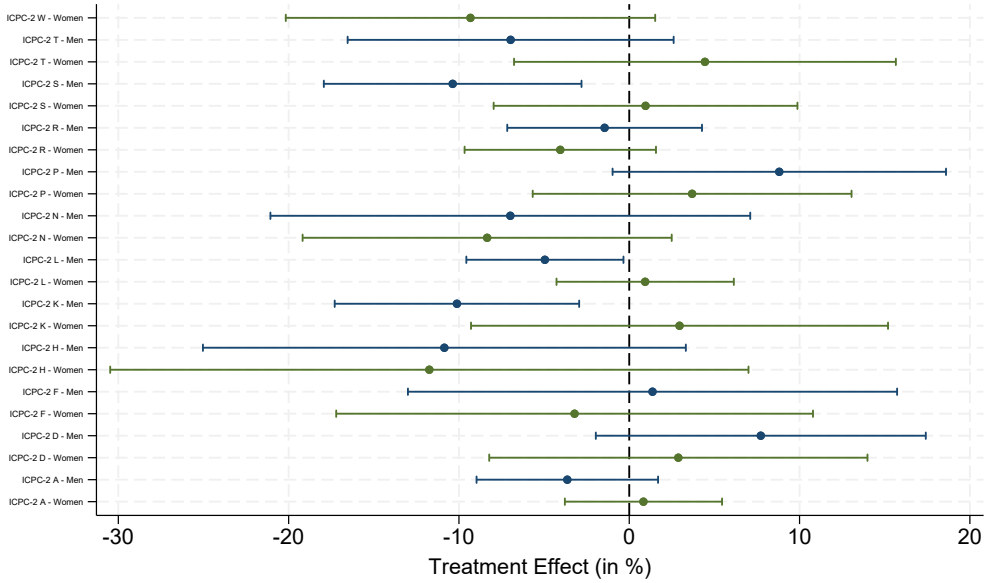
(d) Middle Manager - Pr(Partner Complain)



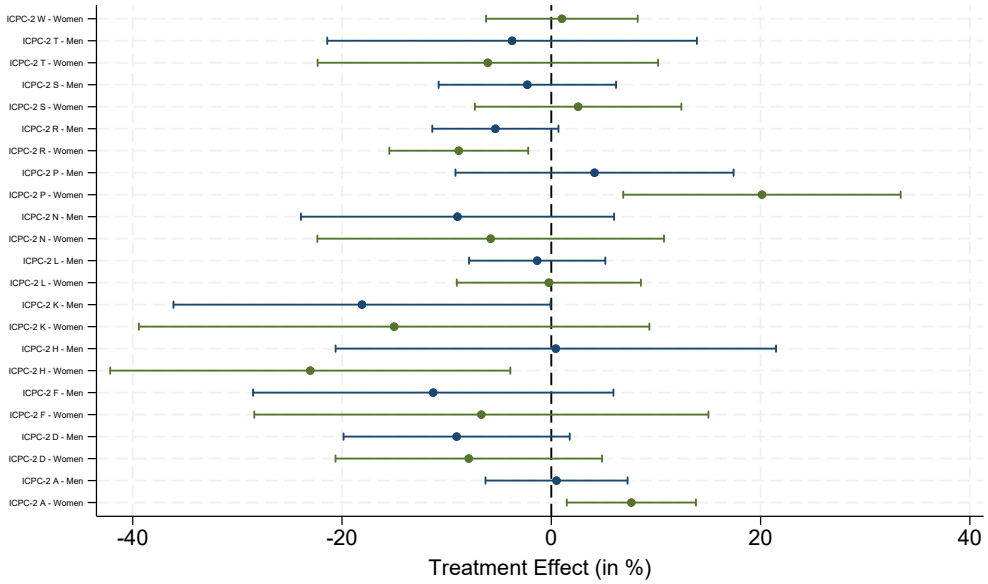
Notes: This figure shows the effect of a job promotion on different outcomes for promoted managers relative to matched control workers. Coefficients are estimated using specification (1). 95% confidence intervals are derived from standard errors clustered at the individual level. The pre-period mean of the outcome is reported in the lower left corner.

Figure A-7: Impact of Promotion to Top Management on ICPC-2 Diagnoses - by Small Children

(a) Top Manager - Without Children



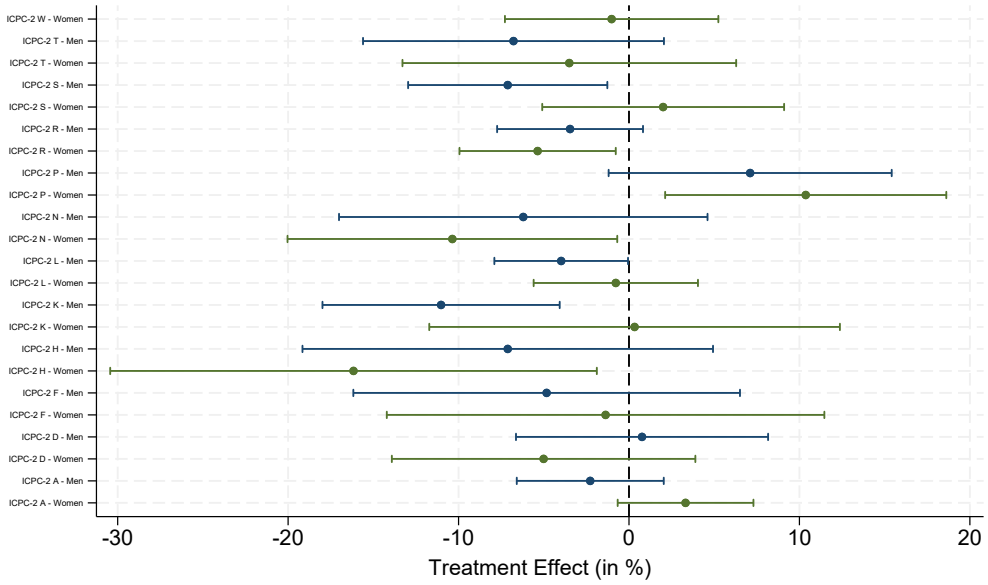
(b) Top Manager - With Children



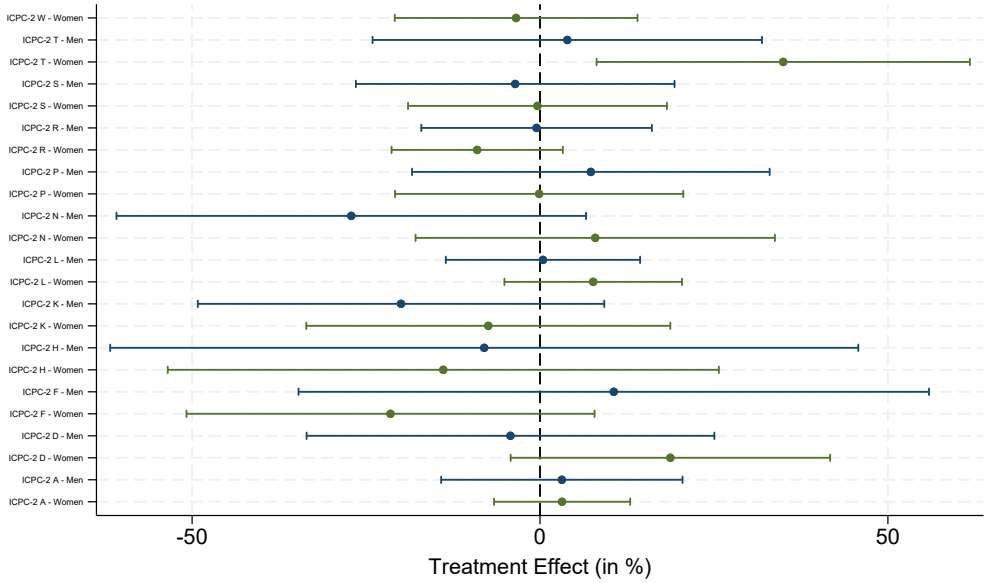
Notes: This figure shows the proportional effect of a job promotion on different outcomes for promoted workers relative to matched control workers. Coefficients are estimated using specification (2). 90% confidence intervals are derived from standard errors clustered at the individual level. Small children are defined as children below the age of 6.

Figure A-8: Impact of Promotion to Top Management on ICPC-2 Diagnoses - by Public vs. Private

(a) Top Manager - Without Children



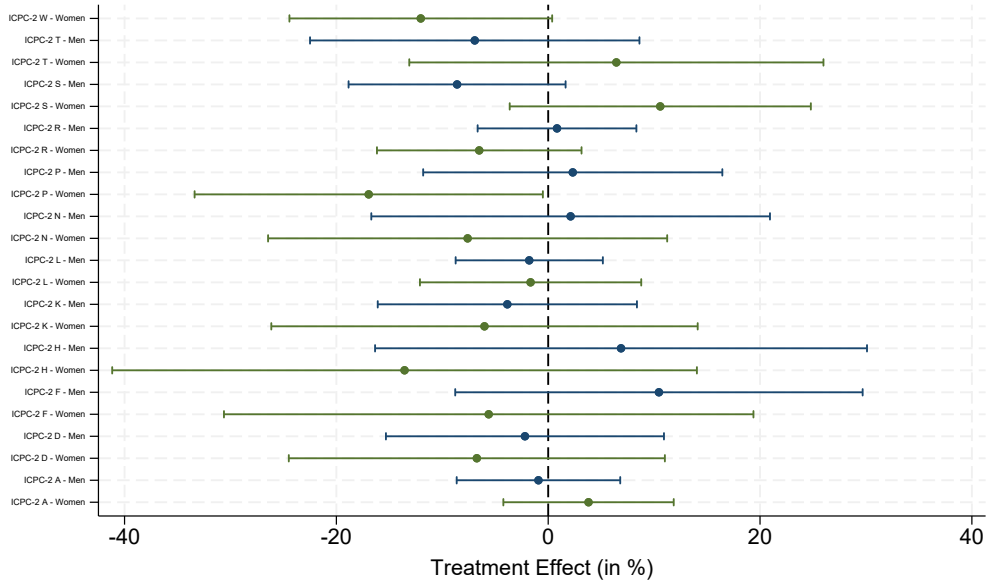
(b) Top Manager - With Children



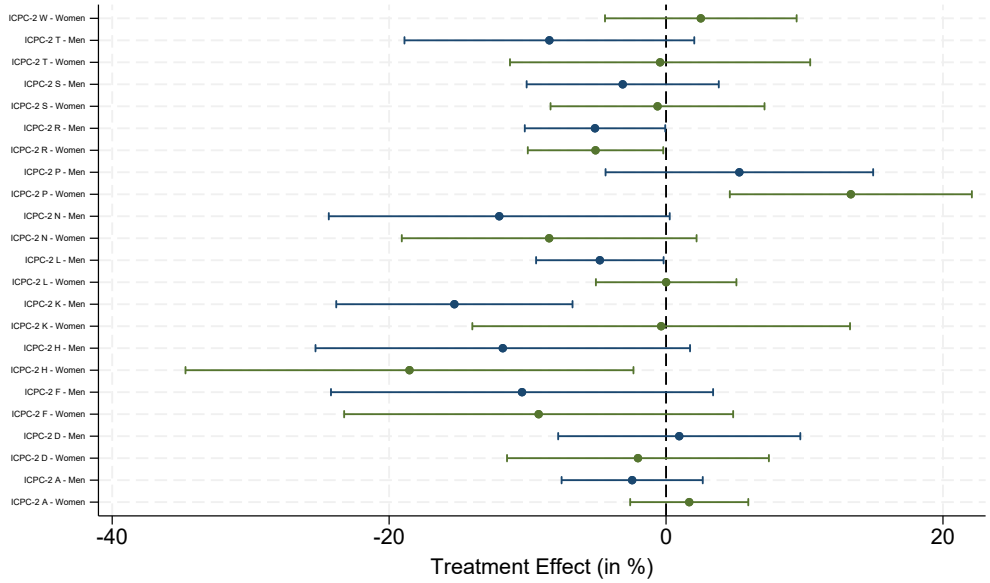
Notes: This figure shows the proportional effect of a job promotion on different outcomes for promoted workers relative to matched control workers. Coefficients are estimated using specification (2). 90% confidence intervals are derived from standard errors clustered at the individual level.

Figure A-9: Impact of Promotion to Top Management on ICPC-2 Diagnoses - by Workplace Size

(a) Top Manager - Without Children



(b) Top Manager - With Children



Notes: This figure shows the proportional effect of a job promotion on different outcomes for promoted workers relative to matched control workers. Coefficients are estimated using specification (2). 90% confidence intervals are derived from standard errors clustered at the individual level. Small workplaces are defined as workplaces with less than 10 employees.