

Why Do Workers Leave? The Role of Job Amenities

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Abstract

Why do workers separate from their jobs? I study the role of a wide range of amenities in the decision of workers to separate from their firm. Using administrative data and a survey on amenities, I match similar workers and measure their separation response to differences in amenities. I show that amenities are quantitatively important: when additionally considering firm-level amenity differences, workers are up to 3.7 times less responsive to wages. I find that quit responses vary depending on the amenity: for example, whether a worker's supervisor listens or stimulates them to learn has a strong effect, while being able to work remotely and fixing one's own schedule is less important. These findings have important implications for market structure: if workers are not as reactive to wages as previously thought, firms could be playing a bigger role when setting wages. When decomposing amenities to understand if the differences come from between firms or within firms, I find most of the variation arise within firms, but there is a considerable firm-level component.

Keywords: Job amenities, Separation elasticities, Matched employer–employee data

JEL: J2, J31, J32, J42, M50

1 Introduction

Firms play a central role in determining worker wages, and in inequality (Abowd et al., 1999; Bonhomme et al., 2023). A growing literature uses matched employer-employee data to document that employers offer systematically different wages for similar work (for an overview, see Kline 2024). High-wage firms tend to be more productive, larger, more sought after by workers, and employ more credentialed workers. Recent evidence suggests these firms also provide better amenities, aligning with revealed preference evidence that high-wage firms are generally more desirable than low-wage ones (Sorkin, 2018; Audoly et al., 2024). Yet fundamental questions remain about how worker preferences for amenities shape mobility decisions and whether amenity differences arise primarily within or between firms.

This paper contributes to understanding the firm’s role in setting job value differences by addressing three key questions. First, is amenity provision primarily a firm-level phenomenon, or does it also vary substantially within firms? While recent research demonstrates that workers value amenities and that amenities differ across workers and occupations (Maestas et al., 2023), the extent to which amenity variation reflects firm-level policies versus within-firm heterogeneity remains unclear. A better idea of this can contribute to understand search and sorting patterns. If amenities have a strong firm level component then amenity provision can strengthen worker sorting patterns into firms.

Second, how important are amenities in workers’ revealed preference decisions to separate from their employer? Understanding this is crucial for measuring labor market competitiveness and firms’ wage-setting power (Manning, 2003). Separation decisions describe workers’ trade-offs between wages and amenities. These patterns can give rise to wage-setting power for firms even without search frictions (Card et al., 2018).

Third, how do amenities shape overall labor market inequality? When we consider workers’ utility from amenities the total compensation a worker gets from her job can be higher

or lower than just observed wages. If the valuation changes meaningfully then if workers at the top and the bottom of the wage distribution move in opposite directions we could see compression or broadening of the distribution.

To answer these questions, I match the Dutch National Survey of Working Conditions—which measures a wide range of job characteristics including supervisor quality, autonomy, work demands, and scheduling flexibility—to administrative employer-employee data covering the universe of Dutch workers. I analyze how amenities vary across occupations and demographics, decompose amenity variation into firm-level and within-firm components, and estimate the revealed preference weight workers place on different amenities through their separation decisions. To measure separation elasticities, I employ two complementary strategies: a within-firm design that compares similar workers at the same firm facing different amenity conditions. And a between-firm worker movers design that follows workers who separate from the same origin firm to different destinations, allowing me to isolate the firm-level effect of amenities on separations while controlling for worker heterogeneity.

The Dutch context offers a particularly useful setting for studying amenity effects. Unlike the United States, health insurance and pensions are provided through universal national systems rather than employer-based benefits. This means workers' job choices are less constrained by the need to access employer-provided benefits, making non-wage characteristics potentially more important determinants of job quality and worker mobility.

Three main findings emerge. First, amenity provision varies substantially across workers and the variation come mostly from within firm. Women report lower autonomy across all dimensions, and sizable and intuitive differences exist across occupations—for instance, software developers enjoy far more schedule flexibility than primary school teachers. Although firm-level differences remain economically meaningful. The share of total amenity variance explained by firm fixed effects ranges from roughly 10% for social amenities like supervisor quality to around 40% for remote work, suggesting firms exercise considerable discretion in

shaping working conditions.

Second, amenities strongly predict worker separations. Social amenities—particularly whether supervisors listen and stimulate learning—exhibit especially large effects. When accounting for amenity differences, workers become up to 3.7 times less responsive to wages, implying conventional separation elasticity estimates substantially overstate wage responsiveness when amenities are omitted.

Third, when I measure total compensation from a job including amenity prices labor market inequality increases. Workers at the top of the wage distribution seem to have a higher compensation when considering amenities together with wages while workers at the bottom are worse off. This means that the difference in pay when we consider total compensation between top earners and bottom earners increases.

These findings make several contributions. First, I provide comprehensive evidence on the structure of amenity provision in a representative labor market, documenting that firm effects capture a meaningful but not predominant share of amenity variation. This contrasts with the larger firm effects typically found for wages (Kline et al., 2020) and suggests that manager- or team-level factors may be important determinants of working conditions. Second, the revealed preference estimates demonstrate that amenities are quantitatively important for worker mobility. Recent research corroborates that high-wage firms tend to offer better amenities (Lamadon et al., 2022; Sockin, 2022; Lehmann, 2023; Caldwell et al., 2025a), while experimental evidence, as well as stated and revealed preference studies, show workers place substantial value on non-wage job characteristics (Mas & Pallais, 2017; Maestas et al., 2023). The strong effects of social amenities I find align with survey evidence on worker preferences (Caldwell et al., 2025b) and suggest that interpersonal workplace factors may be as important as compensation for worker retention. Third, the finding of high separation elasticity bias from omitted amenities suggests firms may have more wage-setting power than previously understood (Bassier et al., 2022), with implications for measuring labor market

competitiveness, and competition policy.

The paper proceeds as follows. Section 2 describes the administrative data and working conditions survey. Section 3 presents descriptive evidence on how amenities vary across workers and decomposes amenity variance into between-firm and within-firm components. Section 4 develops the empirical strategy for measuring amenity effects on separations and presents the main results. Section 6 concludes with implications for understanding firm wage-setting power and labor market inequality.

2 Data and context

2.1 Administrative data

I use Dutch administrative records of employer-employee matched data, which cover the universe of employees in the Netherlands on a monthly basis. I observe individuals' wages, hours worked, type of contract, and the exact dates when employment relationships begin and end. Since individuals may hold multiple jobs simultaneously, I retain only each individual's highest-income contract observation per quarter.

I aggregate the data to a quarterly basis through the following steps. First, I sum income and total hours worked over all months within each quarter. Second, I define total weeks worked at an employer per quarter by taking the start date from the first month the employment relationship exists in that quarter and the end date from the last month it exists. From these variables I calculate per quarter the log hourly wage and hours worked per week. For contract types, I create binary indicators for flexible, on-call, and fixed-term contracts, coded as one if the contract type appears in any month during the quarter. Descriptive statistics of this worker population data between 2014 and 2022 are reported in the first two columns of Table 1, resulting in over 401 million worker-by-quarter observations. The

average age in this population is 39.5 years old, with 48% being female, and 49% having a fixed term, on-call, or flexible contract. Average real hourly earnings are 17.4 euros, and average weekly hours are 28.9, reflecting a high part-time work incidence in the Netherlands.

2.2 Working conditions survey

The National Survey of Working Conditions (Nationale Enquête Arbeidsomstandigheden, NEA) survey is conducted annually by Statistics Netherlands (CBS) together with the Dutch Organization for Applied Scientific Research (TNO) and collects comprehensive information on working conditions, job content, labor relations, and employment terms. The survey reaches between 40,000 and 60,000 workers each year. I merge the employer-employee data with the NEA survey to get information on work amenities.

I use survey waves from 2014 to 2022, matching individual responses to the administrative records at the worker level. Since the survey is conducted in the last quarter of the year, I match to the main job of the individuals in the last quarter of the year that the survey was taken. To ensure reliable firm-level measures of working conditions, I retain observations where at least two coworkers respond to the survey in the same year. After dropping missing values for all the variables considered, the final matched sample contains 209,509 matched worker-year observations.

Columns (3) and (4) of Table 1 contain summary statistics of the matched survey sample which can be compared to the full population of workers in columns (1) and (2). On average, survey respondents are around 3.4 years older, have 3.3 years longer tenure at the firm, earn around 17% higher wages. Survey respondents are also more likely to have permanent contracts (as opposed to fixed term, flexible, or on-call contracts), and more likely to be female.

I apply several criteria to select survey questions for analysis. First, I remove questions

on occupational health, specific technologies and systems used at work, opinions on company policy, recent organizational changes, and personal career development within the company. Second, from sets of related questions, I select the item that under my criteria measures the underlying work amenity in the most general way. For example, among multiple questions about burnout symptoms, I use “I feel tired when I get up in the morning and face my work” because it is strongly correlated with other questions related to burnout symptoms but applies across occupations, unlike “I feel completely exhausted by my work”, which may disproportionately capture physically demanding occupations. Answers are given in a categorical values. For example, the question related to burnout symptoms could be answered between 1 “never”, or 2 “several times per year” to 7 “every day”. Table 2 provides a complete list of the working conditions variables used in the analysis, with all variables coded such that higher values represent more favorable conditions.

3 Variation in working conditions

3.1 Individual and occupational patterns

This section presents descriptive patterns in working conditions across the Dutch labor force, drawing on the matched survey data. I begin by examining the overall distribution of workplace amenities and how they vary by gender. I then explore heterogeneity across occupations, comparing the best and worst working environments and highlighting differences between specific occupation pairs. Finally, I analyze which occupations face the most demanding conditions in terms of overtime work, work intensity, autonomy, and supervisor support. Throughout, these patterns reveal substantial variation in working conditions that motivates the analysis of how these amenities affect worker mobility and wage determination.

Figure 1 shows the distribution of the working conditions survey variables for the entire

sample. The gray line indicates the domain of the answers. Working conditions exhibit substantial variation, indicating heterogeneous workplace experiences among Dutch workers. Several variables show relatively favorable average conditions: workers report that their supervisors listen to them and that colleagues are friendly, with means in the upper portion of their respective scales. Burnout symptoms, unwanted sexual attention, and physically demanding work all show high average values (indicating these problems occur infrequently), though unwanted sexual attention exhibits notably low variation, suggesting consistent low exposure across most respondents. Variables with more moderate averages relative to their domains—such as emotional involvement, work intensity (working hard, overtime), and some autonomy measures—display considerable standard deviations, indicating meaningful heterogeneity in worker experiences. Particularly noteworthy is the variation in being stimulated to learn, which shows a centered mean but wide dispersion across its domain. Working conditions related to irregular schedules (night work, Sunday work, on-call) also show substantial variation, reflecting diverse employment arrangements. Overall, all variables seem to have sizable variation in their responses, showing the heterogeneity of experiences of working conditions in the Dutch population.

Gender Figure 2 shows summary statistics of the working conditions variables separated by sex. For most variables, men and women report similar average exposure, with overlapping distributions across variables such as burnout symptoms, overtime work, friendly colleagues, and work-life balance measures. Still, several gender differences emerge. Most strikingly, while both genders report low average exposure to unwanted sexual attention (reflected in high values on the scale), female respondents show substantially greater variation in their experiences, indicating that some women face this issue considerably more than others, whereas male responses cluster tightly near the top of the scale. Other differences appear in autonomy measures: across all three dimensions—autonomy over tasks, hours, and leave—

female respondents consistently report lower autonomy than male respondents, with means shifted leftward and distributions showing less overlap. However, none of these differences are statistically distinct, suggesting that many working conditions are experienced similarly across genders.

Occupations Working conditions vary substantially between and within occupations. Figure 3 displays the 4-digit occupations with the highest and lowest average values for each working condition measure, highlighting stark differences between occupations.

The range between the best and worst occupation is considerable for nearly every dimension, demonstrating meaningful heterogeneity in workplace experiences across different types of work. However, the large standard deviations within occupations—often spanning a substantial portion of the response scale—reveal that within-occupation variation is just as large as between-occupation differences. Even at the granular 4-digit occupation level, workers in the same occupation report widely divergent experiences of their working conditions.

Some patterns reflect the inherent nature of occupational tasks. For burnout symptoms, Mixed Crop and Livestock Farm Labourers report the lowest levels (most favorable), while Glaziers report the highest, with notably large variation among Glaziers suggesting some workers in this occupation experience severe exhaustion. For unwanted sexual attention, House Builders report uniformly low exposure (zero standard deviation), while Nursing Associate Professionals face the highest reported levels. Physical demands also vary predictably: occupations involving manual labor show higher exposure to heavy physical work, while office-based professions score more favorably on this dimension. Overtime work appears at least moderately present across all occupations, with Heavy Truck and Lorry Drivers reporting the highest levels and Air Traffic Controllers the lowest—though even Air Traffic Controllers report moderate overtime on average. Weekend and night work similarly cluster by occupation type, with service and transportation workers facing the most irregular

schedules.

Beyond these specific comparisons, clear patterns emerge when examining working conditions across broader occupational groups (see Appendix Figures A1–A6 for detailed breakdowns). Managerial occupations consistently report the most favorable conditions across multiple dimensions: they face high overtime and work intensity, but compensate with substantially greater autonomy over both their tasks and schedules, and report feeling heard by their supervisors. This group includes Managing Directors and Chief Executives, Finance Managers, Policy and Planning Managers, and similar roles. Professional occupations—particularly in education, health, and finance—also experience relatively favorable conditions, especially regarding learning support from supervisors and task autonomy, though they too face high work intensity. Primary School Teachers stand out as an exception within professional occupations, reporting limited schedule autonomy despite their professional status.

At the other end of the spectrum, several occupational groups consistently experience less favorable working conditions. Machine operators and assemblers—including Metal Production Process Controllers, Plastic Products Machine Operators, and similar roles—report low autonomy over both tasks and schedules, and feel least heard by their supervisors. Transportation workers, particularly drivers (Bus and Tram Drivers, Car and Taxi Drivers, Locomotive Engine Drivers), report low work intensity, likely because their work pace is constrained by external factors rather than internal workplace demands. However, this lower intensity does not translate to better conditions overall: drivers also report minimal learning support from supervisors. Service workers and manual laborers show mixed patterns: while some report less demanding work intensity, they often face unfavorable schedule conditions such as weekend and night work, alongside limited autonomy. Clerical support workers similarly experience limited autonomy but face less extreme demands across other dimensions.

To illustrate how working conditions bundle differently across specific occupations, I com-

pare two occupation pairs: Shopkeepers versus Legal and Related Associate Professionals, and Secondary School Teachers versus Software Developers. Details can be found in Appendix Figures A7 and A8, where I present the averages of pairs of occupations. Shopkeepers face substantially more physically demanding work and are far more likely to work Sundays compared to Legal Associate Professionals, though the two occupations show smaller differences across most other dimensions. The contrast between Secondary School Teachers and Software Developers is particularly sharp in schedule autonomy: teachers report very limited ability to determine their working hours or take leave when desired, while Software Developers enjoy considerably more flexibility. Across most working conditions, Software Developers experience more favorable conditions than Secondary School Teachers.

3.2 Variance decomposition

I employ a variance decomposition to assess the relative importance of firm-level variation in workplace amenities. Specifically, I decompose the total variance of each outcome variable Y into the between-group component—the variance of the conditional expectation $\text{Var}(\mathbb{E}[Y | j])$ —and the within-group component—the expected conditional variance $\mathbb{E}[\text{Var}(Y | j)]$. Formally, this decomposition is expressed as:

$$\text{Var}(Y) = \text{Var}(\mathbb{E}[Y | j]) + \mathbb{E}[\text{Var}(Y | j)]. \quad (1)$$

Using a fixed effects model for the conditional expectation, this equation is equivalent to decomposing the total variance of the outcome variable in the variance of the fixed effects plus the variance of the residual. The variance of the fixed effects is the variance of the outcome variable that is explained by between group differences, the first term in Equation 1. The variance of the residual is the variance of the outcome variable that is explained by within group differences, the second term in Equation 1. Note that by using a linear fixed

effects model, the coefficient estimator will be the mean of the group. This is not ideal when the response variable has a categorical support, as is the case with survey responses. As such, the fixed effects will tend to capture less of the variation of the outcome than can be really attributed to the groups. This means that the within group differences will be overestimated, giving an upper bound.

I take each of the amenities as an outcome variable Y . In three separate models, I take the fixed effects j to be firms, industries or occupations of the survey respondents. I divide each component of the variance by the total variance of the outcome variable to obtain a proportion of explained variance.

Figure 4 presents the variance decomposition results, with working conditions ordered by the proportion of between-firm variance (increasing from left to right). The decomposition reveals that most variation in working conditions comes from within-firm differences rather than between-firm differences. Working conditions with the highest within-firm variation—such as burnout symptoms, friendly colleagues, leadership quality, work-life balance, and unwanted sexual attention—show firm-specific components accounting for only around 10% of total variance. This contrasts sharply with other observable characteristics: hourly wages show approximately 50% of variance explained by firm fixed effects, while weekly hours and job tenure show intermediate levels of firm-level variation. The high firm-level variance for wages in this sample diverges from typical findings in the literature, where firm fixed effects explain between 10% to 20% of wage variance (Card et al., 2018; Bonhomme et al., 2023; Ouimet & Tate, 2023). This difference potentially reflects sample composition: because the data includes only firms where at least two workers responded to the survey, the sample overrepresents larger firms, which tend to exhibit greater wage dispersion.

When comparing across different groupings, firm fixed effects generally capture more variation in working conditions than either industry or occupation fixed effects. This suggests that working conditions are more strongly tied to specific employer policies and practices

than to broader sectoral or occupational characteristics. However, important exceptions emerge for working conditions closely linked to job tasks. Heavy physical work shows relatively high explanatory power from occupation fixed effects, reflecting that physical demands are largely determined by the nature of tasks at the granular 4-digit occupation level. Similarly, the ability to work remotely shows comparable variation between firms and between occupations, which is unsurprising given that remote work feasibility depends heavily on task requirements—some jobs simply cannot be performed remotely regardless of firm policy. These exceptions aside, the predominance of firm-level variation indicates that employers exercise considerable discretion in shaping most dimensions of working conditions, even within the same industry or occupation.

3.3 Amenities and wages

Using a simple fixed effects regression I study whether amenity provision is positively correlated with wages. Table A1 shows a regression of average log hourly wage at the firm against average amenity response. Log hourly wage is measure on the universe of workers while amenity responses are measured on NEA responses. I focus on column 2. We can observe that most autonomy amenities are strongly positively correlated with average wages at the firm, except for autonomy in hours worked. On the other hand social amenities and job demands are mostly negatively correlated with average log wage. Table A2 shows an equivalent regresion on firm AKM fixed effect instead of average log wage. The patterns are very similar except for some amenities that change sign, autonomy tasks and coming up with their own solution become negative while autonomy in hours becomes positively correlated with AKM fixed effect. In job demand amenities work life-disbalance and working hard become positively correlated with AKM fixed effect. This speaks to the fact that even if AKM fixed effects and average wages are strongly correlated, firm AKM fixed effect capture sorting patterns that go beyond seeking better wages from workers.

I Table A3 I regress log wages of NEA respondents against their responses controlling for different sets of fixed effects. The pattern is similar; many amenities are strongly positively correlated with wages and some are negatively correlated with wages. In particular autonomy amenities are overall positively correlated with wages. While social amenities and job demands are negatively correlated with wages with some exceptions.

4 The role of job amenities for worker separations

4.1 Empirical designs

If worker i has worse amenity conditions than another worker i' at time t , I expect worker i to leave their firm in a shorter time than worker i' . Then preferences over amenities are reflected in job separation responses of workers. I take advantage of this to design my estimation strategies, where I take similar workers exposed to different amenities and compare their separation rates to the firm.

Amenity conditions can differ both within and between firms, as established above. To analyze the responsiveness of workers to differences in wages and in workplace amenities, I employ two complementary estimation strategies: between-firm analysis and within-firm analysis. Each approach is able to isolate the other variation for identification. These approaches allow for a nuanced examination of the role of between- and within-firm variation in shaping worker mobility.

4.1.1 Between firm amenity-separation estimation

To identify the response of workers to variations in amenities between firms I use a worker movers design. Following the identification strategy in Bassier et al. (2022), I match workers in an initial firm and then consider an event when they first move, in the same period, to

different firms. I then study how the number of periods movers stay in the second firm is related to differences in firm-level amenities.

First, I create a firm level measure of amenities by taking the average over firms of the amenities measured, considering only firms where more than 10 employees have answered the survey.

Next, I construct a database of firm movers starting from the worker population data. I define an employment spell as a continuous period in which a worker keeps the same employment relationship with a specific firm. Then, I select observations based on common criteria in the literature (Card et al., 2018): I remove entire employment spells with a minimum income below 2 euros, I remove spells with fewer than 100 hours worked on average per quarter, and I remove spells shorter than 3 quarters in duration.

I define a firm move as a change of employment relationship from one quarter to the next. Events are workers who separate at the same time from a common initial firm to a possibly different destination firm. I remove events in which more than 10 coworkers move together to the same destination firm, in order to prevent including firm mergers. I remove spells shorter than 4 quarters in the firm of origin, to be able to match workers based on their employment history. I also remove workers younger than 25 and older than 60 at the time of the move. Further, I discard firm moves in which the individual returned to the firm of origin in the next 17 quarters, and moves in which there is only one worker leaving a particular initial firm. I consider worker histories in the initial firm up to 10 quarters before the move.

The outcome variable s is a binary separation variable from the destination firm for every period up to the moment the worker separates (measured for up to 17 quarters after the event).

For the administrative data variables I construct coworker averages. These include wages, types of contract, and weekly hours worked. Furthermore, I construct 5-quarter moving

averages of these coworker variables. As such, in the period where a worker is observed moving firms, the associated moving averages for the destination firm include the mean of the variables at the firm for two periods prior the move, and the coworker mean for the current and two periods after the move.

I define t as the event quarter in which workers separate from firm j' . Worker i joins a destination firm j . The equation I estimate is

$$s_{ijt+k} = \eta \Delta w_{ijt} + \gamma' \Delta C_{ijt} + \nu' A_{jt} + \phi_{ijt} + \phi_k + \phi_{j't} + \varepsilon_{ijt+k}, \quad (2)$$

where s_{ijt+k} is the separation of workers that are employed at destination firm j at time $t+k-1$, Δw_{ijt} is the difference in wages of individual i when changing to destination firm j from initial firm j' at time t and ΔC_{ijt} is the difference in contract characteristics of individual i between firms j and j' . The variables A_{jt} are firm-level amenities at destination firm j . Note that since matched workers all originate from the same firm, their previous firm-level amenities were identical: the amenity level at the destination firm therefore captures the effect of the amenity value. The matching at initial firm is represented by $\phi_{j't}$ which controls for amenities in the initial firm. Since I do not necessarily observe the amenities in all initial firms this allows me to have a larger sample size. The coefficients ϕ_{ijt} are destination firm \times period \times worker history fixed effects, and ϕ_k are period since separation fixed effects.

To eliminate the bias due to worker-specific separation rates correlated with wages and contract characteristics I employ an IV strategy similar to Bassier et al. (2022). I instrument the variables Δw_{ijt} and ΔC_{ijt} by coworkers' 5-quarter-window averages $\Delta \bar{w}_{jt}$ and $\Delta \bar{C}_{jt}$. This implies that coefficients η and γ' are identified from leave-one-out firm-level variation in the variables.

My coefficients of interest ν' represent the separation elasticity of labor facing the firm relative to its firm-wide amenity provision.

4.1.2 Within firm amenity-separation estimation

The within-firm analysis focuses on the average marginal effects of wages and amenities on worker separations while controlling for firm-specific factors. This analysis is performed on the data of survey respondents. The estimation equation is as follows:

$$s_{it+4} = \eta w_{ijt} + \beta' A_{it} + \nu' X_{it} + \phi_{jto} + \varepsilon_{ijt+4}. \quad (3)$$

where i indexes workers, j indexes firms, and t indexes time in quarters. s_{it+4} is a dummy for worker i 's separation to another firm in the four quarters after taking the survey in period t (i.e. the subsequent year), w_{ijt} denotes log hourly wages, A_{it} captures standardized amenity survey responses, and X_{it} is a vector of standardized controls for workers' weekly hours and prior firm tenure. The specification includes firm \times period \times occupation (destination industry) fixed effects (ϕ_{jto}).

The coefficients of interest, β' , capture the difference in job separation responses for workers experiencing different amenities. When including fixed effects ϕ_{ijt} , this coefficient is identified from amenity differences in the same firm, occupation, and quarter, and conditional on wages, working hours, and tenure. Standard errors are clustered at the firm level.

This framework allows us to compute workers' willingness to pay for amenities as the ratio $\pi(\mathcal{A}) = \sum_{a \in \mathcal{A}} \beta_a / \eta$ for a set of amenities \mathcal{A} .

4.2 Results

4.2.1 Between firm

Table 3 shows results from the between-firm design. All coefficients and standard errors are multiplied by 100. The first two columns show the models typically used in the literature to estimate separation elasticities to wages. I find an estimate of -0.26 when only controlling

for the period since separation and firm by quarter fixed effects (column 1), and an estimate of -0.24 when adding controls for changes in contractual arrangements (weekly hours, and contract type) as well (column 2). To make this comparable to the literature on separation elasticities I need to divide them by the average separation rate. Then I get an implied wage separation elasticity of -9.38 (column 1) and -8.34 (column 2). These elasticities are around twice in magnitude as previously found in the literature (Bassier et al., 2022; Bezooijen & Sebastiaan, 2024). These estimates imply that workers' separation rates are relatively responsive to changes in hourly wages. Add discussion of why these elasticities change

A key finding is that, when including amenities in the destination firm, the separation coefficient to wages decreases substantially, from -0.24 to -0.08 , as shown in column 3. This 67% reduction in separation elasticity implies two things: first, separation elasticity estimates are biased when not considering amenities, and workers are considerably less reactive to wage changes. This results from amenities and wages being positively correlated at the firm level, on average: better amenities also reduce separation rates, making it appear as if effects operate solely through wages when amenities are not controlled for. This lower separation elasticity to wages allows firms to have greater wage setting power than accounted for without amenities (Bassier et al., 2022). Second, this could be a sign that firms are differentiating in amenities in order to lower offered wages (Card et al., 2018).

The analysis of social amenities in the between-firm context reveals distinct patterns compared to within-firm analysis. For instance, the effect of supervisors listening to workers changes sign, indicating that workers tend to stay for shorter periods at firms where supervisors actively listen. Moreover, being stimulated to learn and unwanted sexual attention from clients keep their significance while a friendly colleague environment does not. These findings suggest that the role of social amenities in influencing worker separations may be contingent upon specific worker-firm interactions and baseline characteristics.

Autonomy measures exhibit heterogeneous effects in the between-firm analysis. Autonomy in how workers perform their tasks enhances retention at the firm, underscoring its potential importance in influencing worker mobility. However, autonomy in taking leave whenever desired is associated with increased separation rates, indicating potential trade-offs between flexibility and retention. Furthermore, autonomy over deciding working hours and the ability to work remotely show mixed results: they are linked to lower separation rates in simpler movers matching (e.g., column 3) but lose significance under more granular specifications. This variability highlights the complexity of autonomy's role in worker retention across different firm contexts.

Finally, the demands placed on workers become more salient in the between-firm analysis. Factors such as Sunday work, which previously had limited significance, gain prominence. A one standard deviation improvement in demanding conditions—such as Sunday work, burnout symptoms, work-life imbalance, overtime, and heavy physical labor—is equivalent to a wage increase of approximately 20%. This underscores the substantial impact of workplace demands on worker mobility and their potential monetary equivalence in terms of worker preferences.

While individually, each of the amenities does not contribute a large effect on workers' separation rates, they matter jointly, and especially through their shared correlation with wages.

Tables A4 to A7 provide the first stage results of the IVs for each column. The F-stats are well above the standard 10 allowing to discard weak instrument issues. Moreover, the instruments are highly significant and positive for the variable their equivalent endogenous variable (diagonal in instruments). The R^2 values are also high. These points to the validity of the chosen instruments for the specification.

4.2.2 Within firm

Table 4 shows the results of estimating equation (3), relating separation rates in $t + 4$ to amenities. Each column considers a different set of fixed effects. For every set of fixed effects I drop the workers that do not share their exact set of matching fixed effects with anyone else, making sure to keep an individual for comparison. Occupation fixed effects represent the occupation at the initial firm, this allows us to compare similar workers within the firm. Amenities are ordered by topic, first what I consider to be social amenities, next autonomy amenities and last job demand amenities. As a final category, I consider other amenities, which includes worker representation, weekly hours: these are included as controls. Skill alignment is included as a fixed effect to control for workers who feel their skill are at a similar level relative to their job. Amenities are standardized over the data in each regression. All the coefficients and standard errors in the table are multiplied by 100.

The results highlight the importance of social amenities for workers. For an average worker, whether her supervisor listens to her, whether her supervisor stimulates her to learn, and whether she is confronted with unwanted sexual attention from clients have a very strong effect on separation rates in all specifications. Whether colleagues are friendly has a significant effect when matched at the most granular occupational level but no significant effect on most specifications. Taking the specification that matches workers at the most granular occupational level (column 4), a worker is 2.76 percentage points more likely to separate from the firm within a year when faced with one standard deviation less of these amenities than the mean (obtained by summing the coefficients on these individual social amenities). Comparing to wages, where separation decreases by 5.6% for a doubling of wages, workers are willing to pay 49.3% of their wage for a one standard deviation increase in these four social amenities.

Measures of worker autonomy do not have conclusive effects on separations. Table 4

shows that differences in autonomy have heterogeneous effects on retention rates at the firm. For example, a worker being able to set their own working hours results in higher separation rates on most specifications. Having to come up one's own solutions does not have statistically significant effects across specifications. Being able to work remotely has a negative effect on retention in the baseline estimates in column 2, which disappears in the more granular matching specifications of subsequent columns. Autonomy on when to take leave have a negative effect on separation rates. For example, when matching on granular occupations (column 4), a worker is willing to give up 7.2% of her wage to have one standard deviation higher autonomy in taking leave.

Workers separate more frequently from jobs with highly demanding environments. Working hard, at night, on Sunday, and being tired in the morning when having to face work (a burnout symptom) make workers more likely to separate from their firms. Workers are willing to pay 37.6% of their wage for a one standard deviation increase in each of these amenities—including Sunday work, which is not statistically significant. Having work-life disbalance, overtime work, being on standby, being emotionally involved, and performing heavy physical work do not individually contribute to separations from the firm.

Some amenities lose the significance when matching at the most granular occupational level; work-life disbalance, emotionally involved, heavy physical work and autonomy in hours. This suggests that these amenities variation is mostly differences between occupations.

Controlling for other amenities is important as they matter for job separations. For example, having worker representation reduces separations by 0.69% (column 4). This translates into a worker's willingness to pay of 12.4% of her wage to have worker representation at the firm.

The separation elasticity to wages decreases in magnitude when we control for amenities, comparing columns 1 and 2. This means that workers are less responsive to wages when we consider amenities. Looking at the change in R^2 between these two columns we can see

it is minimal. The opposite is true when we compare more closely workers within granular occupations, they are more mobile relative to wages when we consider amenities.

All in all, the findings highlight that worker separations are responsive to within-firm differences in amenities, with social amenities playing an especially important role. The important role of social factors is consistent with survey evidence in [Caldwell et al. \(2025b\)](#).

5 Overall inequality

5.1 Measuring total compensation of workers

I estimate overall amenity prices using the proxy-based approach developed by [Bell \(2022\)](#), which addresses the ability bias problem in wage-amenity estimation. The classical approach of regressing wages on amenities with controls for observed ability yields biased estimates because higher-ability workers tend to obtain both higher wages and better amenities, generating a spurious positive correlation. The key insight of the proxy approach is that if total compensation can be summarized by a single vertical index η , and if an observed proxy h (such as education) satisfies the conditional independence assumption $(w, A) \perp h | \eta$, then amenity prices can be identified even when η is only partially observed. This assumption requires that the proxy be informative about workers' positions on the compensation frontier while remaining independent of how they allocate their compensation between wages and amenities. Level of education serves as a natural candidate because it reflects general human capital investments that shift the entire offer set rather than preferences for particular wage-amenity bundles.

The estimation proceeds by regressing the education proxy on wages and amenities in a first-stage equation: $E^*[h_i | w_i, A_i] = \hat{\delta}_w w_i + \hat{\delta}'_A A_i$. The coefficients $\hat{\delta}_w$ and $\hat{\delta}'_A$ reveal the direction in which total compensation increases in wage-amenity space. The amenity price—

representing the wage sacrifice required to obtain one additional unit of the amenity—is then recovered as the ratio $\hat{\beta}_a = -\hat{\delta}_{A_a}/\hat{\delta}_w$. This ratio-of-coefficients estimator is numerically equivalent to regressing wages on amenities while controlling for the predicted values $\hat{h} = \hat{\delta}_w w_i + \hat{\delta}'_A A_i$, which serve as an empirical proxy for the unobserved compensation frontier.

For inference, I compute standard errors using the Delta Method. Since the amenity price $\hat{\beta}_a = -\hat{\delta}_{A_a}/\hat{\delta}_w$ is a ratio of estimated coefficients, its standard error is given by:

$$\text{SE}(\hat{\beta}_a) = \sqrt{\left(\frac{\text{SE}(\hat{\delta}_{A_a})}{\hat{\delta}_w}\right)^2 + \left(\frac{\hat{\delta}_{A_a} \cdot \text{SE}(\hat{\delta}_w)}{(\hat{\delta}_w)^2}\right)^2}$$

where $\text{SE}(\hat{\delta}_{A_a})$ and $\text{SE}(\hat{\delta}_w)$ are the standard errors of the first-stage coefficients, and for simplicity the formula assumes $\text{Cov}(\hat{\delta}_{A_a}, \hat{\delta}_w) = 0$.

With consistent price estimates in hand, I construct a measure of total compensation that accounts for both monetary and non-monetary returns to work. For worker i , total log compensation is defined as $TC_i = w_i + \sum_{a \in \mathcal{A}} \hat{\beta}_a A_{ia}$, where w_i denotes wages (or log wages) and A_{ia} represents the quantity of amenity a consumed. This formulation values each amenity at its estimated market price rather than at individual-specific willingness to pay, capturing the opportunity cost workers face when trading off wages for amenities.

5.2 Distribution of total compensation

In Figure 5 I plot a histogram of total log compensation over the histogram of wages to understand how the distribution changes when we consider amenities. The figure shows that total log compensation has a wider support than log wage. This means that when we consider amenities some workers at the bottom of the income distribution are doing worse, they not only have a low income but their conditions at work are priced negatively. On the other side of the distribution, some high earners are better off when we also consider amenities. This

means that top to bottom inequality in the labor market is really higher when we account for amenities.

Table A8 I present the coefficients used for measuring total log compensation. Column 1 shows the first-stage regression of the proxy method. Column 2 shows the coefficient on amenities divided by the coefficient on log hourly wage. This represents the amenity market price as a proportion of the wage. For example, a worker would pay 1.78% of her wage for her boss to listen to her one standard deviation more. In this table the pattern on social amenities is similar to before, where most have a positive valuation. Autonomy amenities are also positively valued, while job demand amenities are mostly negatively valued.

6 Conclusion

I leverage a comprehensive survey on job amenities combined with Dutch administrative employer-employee data to show that job amenities vary substantially across occupations, and both within and across workplaces. Such differences in amenities are quantitatively important determinants of worker separations. Within-firm estimates reveal strong preferences for social amenities—particularly supervisor support and learning opportunities—and aversion to demanding work conditions. Between-firm estimates, building on Bassier et al. (2022)'s mover design, yield a striking result: including firm-level amenities reduces the estimated separation elasticity to wages by approximately 70%, from -0.27 to -0.08 . This implies that conventional wage elasticity estimates are substantially upward biased when amenities are omitted, and that workers are far less responsive to wage differences than previously understood. Lower separation elasticities grant firms greater wage-setting power, suggesting that amenities function as an important source of workplace differentiation. When workers face heterogeneous amenity bundles across employers, wage competition alone provides an incomplete picture of labor market outcomes. A descriptive variance decomposition

reinforces this point: while most variation in working conditions occurs within firms, firm-specific components remain economically meaningful, particularly relative to industry or occupation.

These findings raise important questions for future research. First, the mechanisms linking specific amenities to mobility warrant deeper investigation. Social amenities exhibit different effects in within-firm versus between-firm contexts, suggesting complex interactions between worker sorting and amenity provision. Understanding whether amenities operate primarily through compensating differentials, workplace differentiation, or search frictions remains unresolved. Second, the high within-firm variation in working conditions—even conditional on occupation—points to manager-level or team-level determinants of amenity provision which could be an important understudied component of managerial quality. Third, the substantial difference in wage responsiveness when controlling for amenities has implications for measuring monopsony power and evaluating policies designed to increase labor market competition. Finally, extending this analysis beyond the Netherlands to labor markets with different institutional structures, particularly where health insurance and benefits are tied to employment, would illuminate how institutional context shapes the relative importance of various job amenities.

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Table 1: Descriptives

	Population		NEA Survey Sample		Firm Movers Sample	
	Mean	Std. dev.	Mean	Std. dev.	Mean	Std. dev.
Age	39.52	13.97	42.91	13.68	35.60	11.01
Female	0.48	0.50	0.53	0.50	0.63	0.48
Fixed term contract	0.34	0.47	0.23	0.42	0.78	0.41
Flexible contract	0.07	0.25	0.04	0.19	0.01	0.12
On call contract	0.08	0.28	0.05	0.21	0.05	0.21
Real hourly income	17.39	9.21	20.38	9.36	19.60	8.00
Tenure (years)	4.46	7.15	7.77	9.08	3.43	4.49
Weekly hours	28.88	11.50	29.89	9.96	30.13	8.33
Observations	401,265,366		209,509		365,364	

Notes: Binary variables (Female, Fixed Term, Flexible, On Call) report proportions. Within statistics are calculated over matched NEA respondents. Between statistics are calculated over matched firm movers.

Table 2: Selected variables from the National Survey of Working Conditions

Variable	Coding	Description of measure
Social amenities		
Leadership listens	+	My supervisor pays attention to what I say.
Stimulated to learn	+	Does your supervisor encourage the development of your knowledge and skills?
Friendly colleagues	+	My colleagues are friendly.
Unwanted sexual attention	-	Unwanted sexual attention from clients (or patients, students or passengers).
Autonomy amenities		
Autonomy tasks	+	Are you able to determine for yourself how you will perform your work?
Own solutions	+	In your work, do you have to come up with your own solutions for doing certain things?
Autonomy leave	+	Are you able to take leave whenever you would like?
Autonomy hours	+	Are you able to determine for yourself the hours that you will work?
Remote work	+	Do you also work from home for your employer.
Job demands amenities		
Night Work	-	Do you ever work at night, that is, between 12 a.m. and 6 a.m.
Sunday Work	-	Do you ever work on Sundays.
Work hard	-	Do you have to work especially hard?
Burnout symptoms	-	I feel tired when I get up in the morning and face my work.
Work-life disbalance	-	Do you miss or neglect family or household activities because of your work.
Overtime work	-	Do you work regularly or sometimes over.
On-standby	-	Do you ever have shifts that require you to be available, or on-call.
Emotionally involved	-	Do you get emotionally involved in your work?
Heavy physical work	-	Do you perform work in which you must exert a great deal of force, e.g. lifting, pushing, pulling or carrying?
Other amenities		
Worker representation	+	Does your company have a Workers Council, or other employee representation?
Skill alignment	+	How do your knowledge and skills align with your current work.
Attachment	+	I would continue to work for my current employer even if I could do the same job somewhere else for the same salary.

Table 3: Between firm results

	Dependent variable: s_{ijt+k}			
	(1)	(2)	(3)	(4)
Δ Log hourly wage	-26.65*** (0.9177)	-24.03*** (0.8684)	-8.150*** (0.6794)	-5.615*** (0.7972)
Social amenities				
Leadership listens		0.1236*** (0.0254)	0.0898* (0.0444)	
Stimulated to learn		-0.1749*** (0.0272)	-0.2300*** (0.0503)	
Friendly colleagues		-0.0377 (0.0230)	-0.0021 (0.0384)	
Unwanted sexual attention (-)		-0.2915*** (0.0365)	-0.1185. (0.0633)	
Autonomy amenities				
Autonomy tasks		-0.1681*** (0.0439)	-0.2087** (0.0761)	
Own solutions		0.0311 (0.0386)	0.0348 (0.0699)	
Autonomy leave		0.4915*** (0.0578)	0.2538** (0.0935)	
Autonomy hours		-0.0065 (0.0541)	0.0101 (0.0894)	
Remote work		-0.2686*** (0.0517)	-0.1042 (0.0905)	
Job demands amenities				
Night Work (-)		0.3167*** (0.0411)	0.2804*** (0.0749)	
Sunday Work (-)		-0.1628** (0.0517)	-0.2625** (0.0846)	
Work hard (-)		-0.0343 (0.0305)	0.0023 (0.0530)	
Burnout symptoms (-)		-0.2086*** (0.0248)	-0.2614*** (0.0440)	
Work-life disbalance (-)		-0.1294*** (0.0289)	-0.0546 (0.0507)	
Overtime work (-)		-0.0872** (0.0291)	-0.0093 (0.0476)	
On standby (-)		0.2443*** (0.0302)	0.2817*** (0.0487)	
Emotionally involved (-)		0.2204*** (0.0402)	0.1778* (0.0735)	
Heavy physical work (-)		-0.2800*** (0.0511)	-0.2509** (0.0878)	
Other amenities				
Worker representation		-0.6351*** (0.0341)	-0.5182*** (0.0612)	
Δ Weekly hours	-0.3069*** (0.0234)	-0.0332 (0.0265)	-0.0447 (0.0394)	
Δ Fixed-term contract	6.394*** (0.5376)	4.921*** (0.3506)	2.835*** (0.5030)	
Δ Flexible contract	7.141*** (0.3767)	3.700*** (0.3527)	3.759*** (0.6190)	
Δ On-call	1.626*** (0.3845)	-1.408*** (0.2938)	-1.314** (0.4182)	
Period since separation (k)	X	X	X	X
Firm \times period	X	X	X	X
\times first wage octile \times tenure octile				X
Observations	2,382,760	2,382,760	2,382,760	849,419
Number of moves	269,101	269,101	269,101	101,961
Number of events	52,189	52,189	52,189	37,550
Number of initial firms	11,6629	11,663	11,663	5,066
Number of destination firms	1,874	1,874	1,874	1,860
Average separation rate	0.0284	0.0284	0.0284	0.0274

Notes: Standard errors clustered by initial firm in parentheses.

Significance levels: · $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 4: Within firm results

	Dependent variable: s_{ijt+4}				
	(1)	(2)	(3)	(4)	(5)
Log hourly wage	-4.489*** (0.4586)	-3.381*** (0.4894)	-4.767*** (0.6548)	-5.589*** (0.9605)	-0.8748* (0.4079)
Social amenities					
Leadership listens		-0.9818*** (0.1050)	-0.9307*** (0.1270)	-0.9372*** (0.1479)	-0.2002* (0.0847)
Stimulated to learn		-0.9886*** (0.1014)	-1.056*** (0.1248)	-1.001*** (0.1672)	-0.4154*** (0.0977)
Friendly colleagues		0.0039 (0.0911)	-0.1101 (0.1104)	-0.3358* (0.1472)	-0.1080 (0.0701)
Unwanted sexual attention (-)		-0.4406*** (0.1052)	-0.4190*** (0.1267)	-0.4839** (0.1869)	-0.1393. (0.0803)
Autonomy amenities					
Own solutions		0.1781 (0.1125)	0.1656 (0.1381)	0.0858 (0.1767)	-0.0578 (0.0799)
Autonomy leave		-0.5110*** (0.1155)	-0.5556*** (0.1431)	-0.4022* (0.2043)	-0.0681 (0.1348)
Autonomy hours		0.4854*** (0.1126)	0.3341* (0.1408)	0.1543 (0.1980)	-0.1574 (0.1029)
Remote work		0.5181*** (0.1068)	0.1851 (0.1359)	-0.1213 (0.1669)	0.0871 (0.0998)
Job demands amenities					
Night Work (-)		-0.2945* (0.1256)	-0.3651* (0.1519)	-0.3507. (0.1890)	0.0254 (0.0921)
Sunday Work (-)		-0.0770 (0.1314)	-0.1261 (0.1654)	0.0484 (0.2207)	0.1633 (0.1286)
Work hard (-)		-0.3981*** (0.0988)	-0.4371*** (0.1151)	-0.6830*** (0.1630)	-0.1751* (0.0789)
Burnout symptoms (-)		-1.248*** (0.1003)	-1.133*** (0.1254)	-1.116*** (0.1554)	-0.2031* (0.0831)
Work-life disbalance (-)		-0.2687** (0.0888)	-0.2451* (0.1077)	-0.1472 (0.1366)	-0.0169 (0.0761)
Overtime work (-)		-0.0045 (0.0920)	0.0759 (0.1097)	0.2304. (0.1329)	0.0108 (0.0825)
On standby (-)		-0.0482 (0.0972)	-0.0211 (0.1216)	0.0266 (0.1767)	-0.1413 (0.1005)
Emotionally involved (-)		0.1434 (0.1001)	0.2724* (0.1234)	0.2990. (0.1581)	-0.0332 (0.0882)
Heavy physical work (-)		0.4861*** (0.1335)	0.3582* (0.1438)	-0.0965 (0.1905)	0.0039 (0.0941)
Other amenities					
Worker representation		-0.9725*** (0.1877)	-0.9046*** (0.2354)	-0.6940* (0.3156)	-0.2971 (0.2181)
Weekly hours		-2.244*** (0.2859)	-2.405*** (0.3686)	-3.037*** (0.4595)	-0.3839** (0.1279)
Skill alignment	X	X	X	X	X
Firm \times year	X	X	X	X	X
\times tenure quartile	X	X	X	X	X
\times occup. 1 dig.			X		
\times occup. 4 dig.				X	X
\times destination industry					X
Observations	163,262	163,262	115,267	70,828	61,448
Number of events	38,762	38,762	31,965	22,476	20,016
Number of initial firms	9,235	9,235	5,940	3,988	3,569
R^2	0.481	0.487	0.516	0.536	0.736

Notes: Standard errors clustered by firm in parentheses.
 Significance levels: · $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Figure 1: Descriptive statistics of amenity variables.

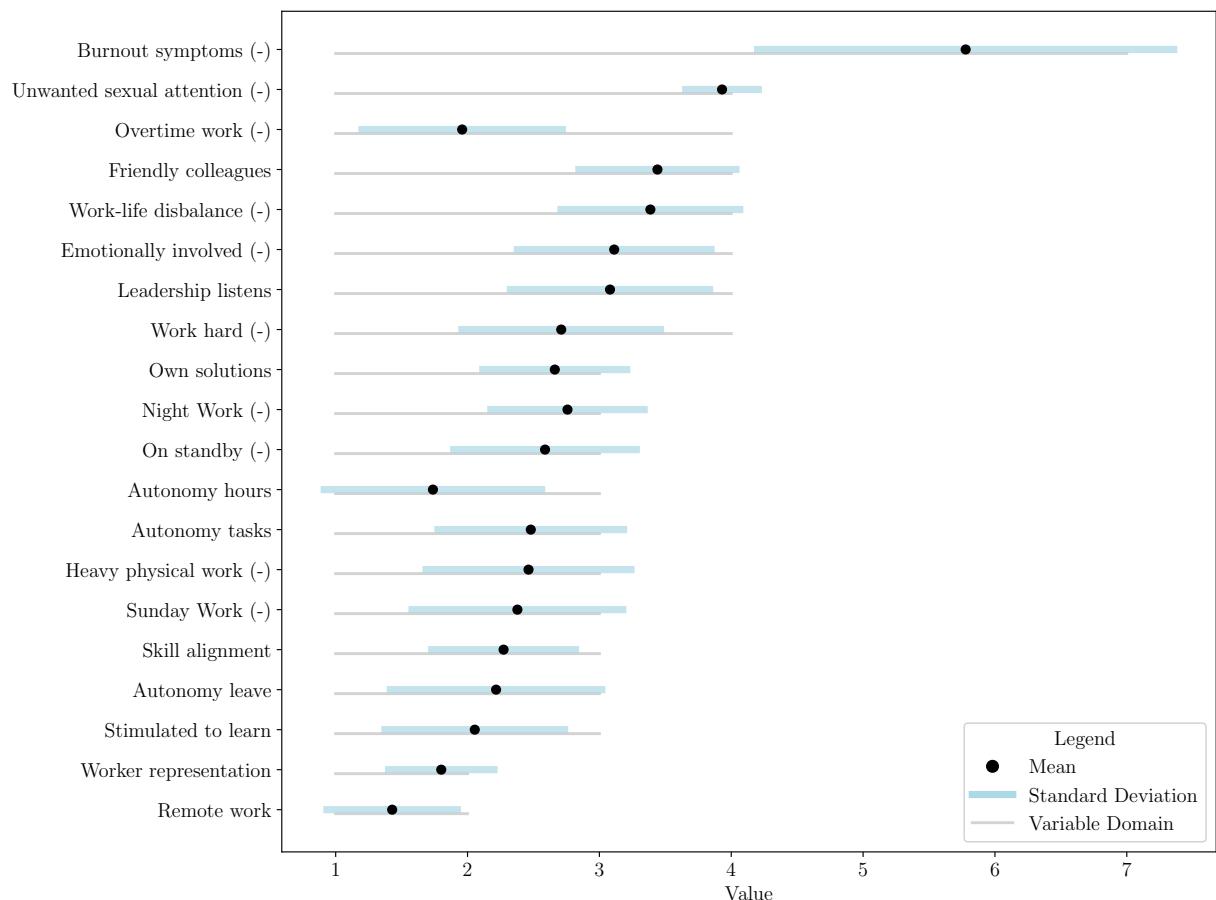


Figure 2: Descriptive statistics of amenity variables separated by sex.

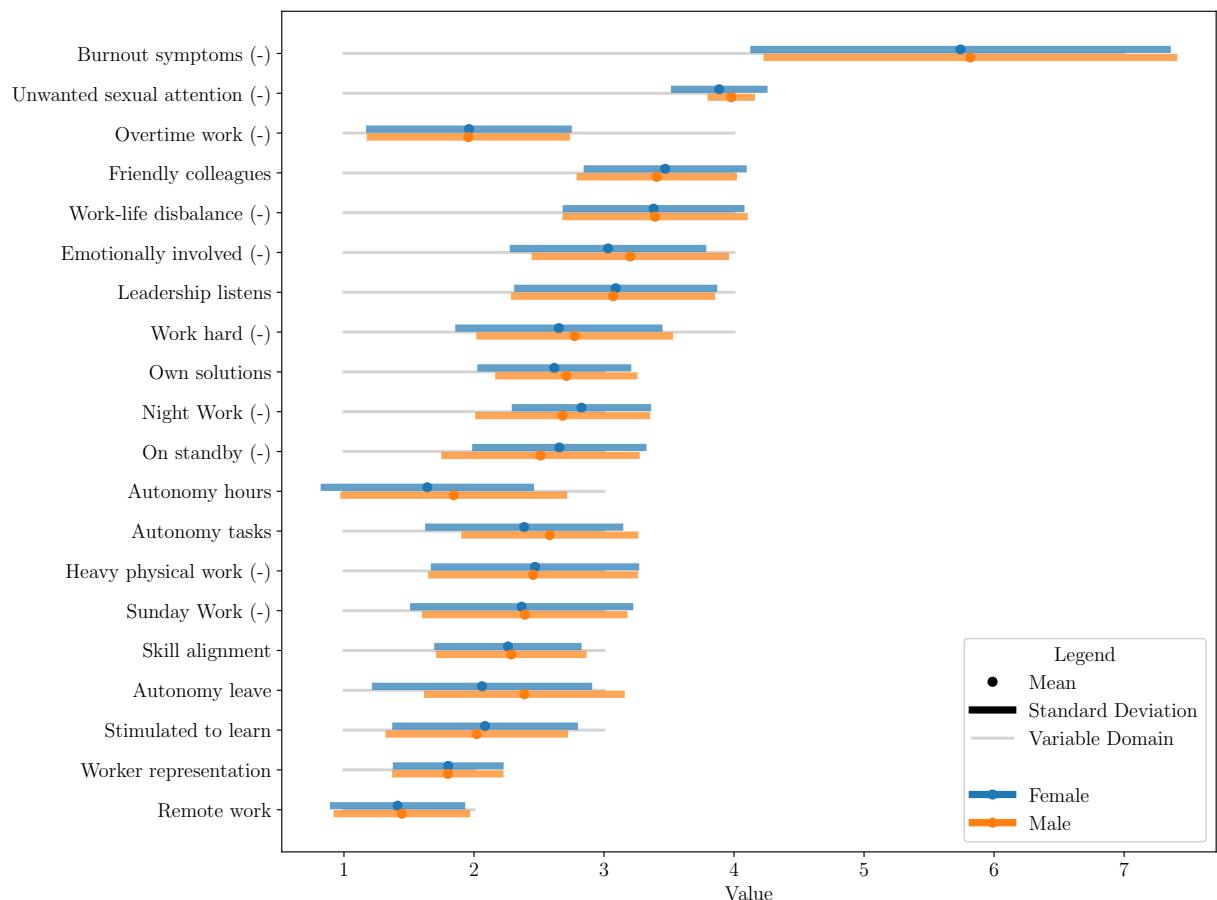


Figure 3: Descriptive statistics of amenities minimum and maximum averages by 4 digit ISCO 08 occupation.

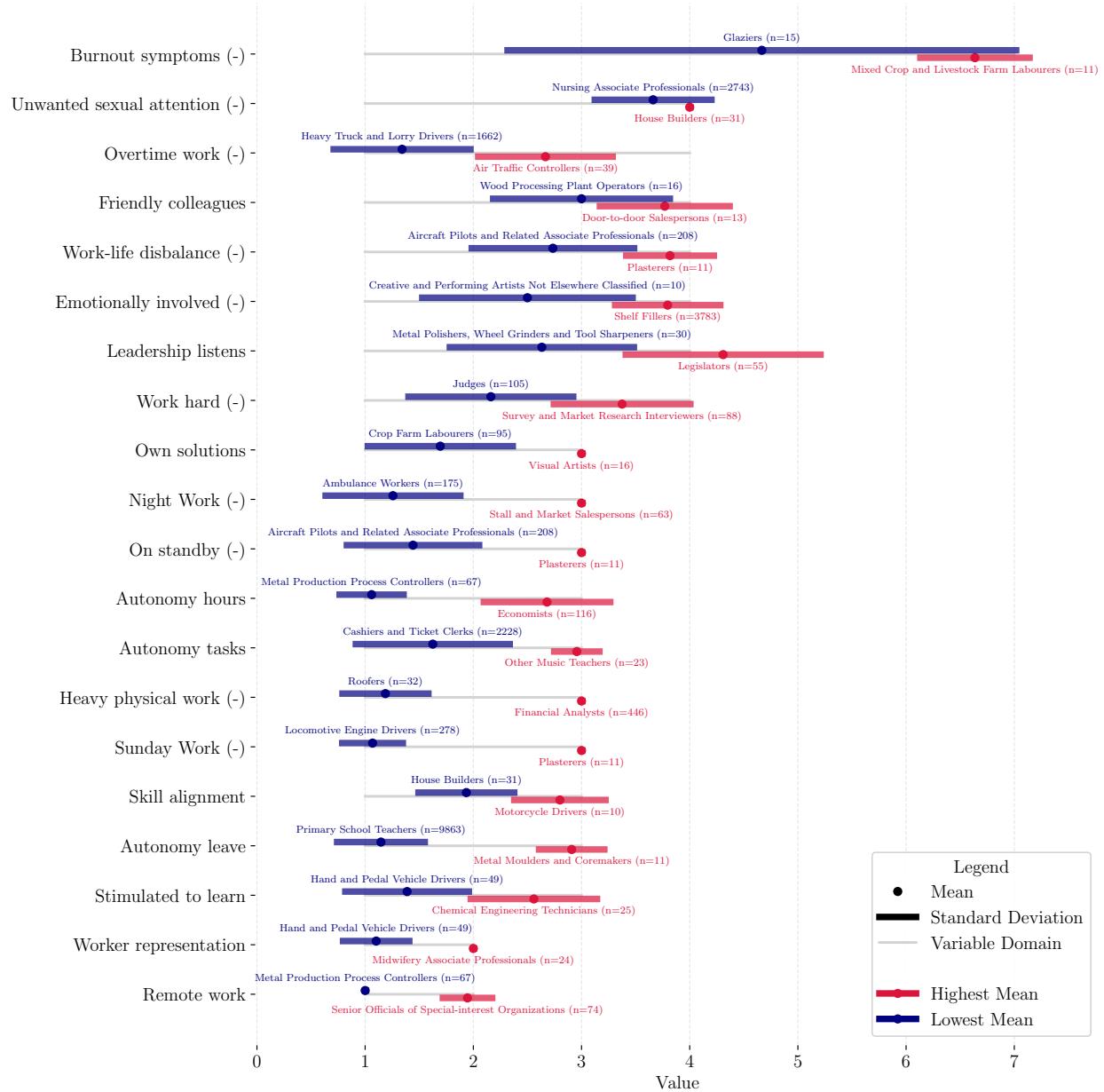


Figure 4: Variance decomposition.

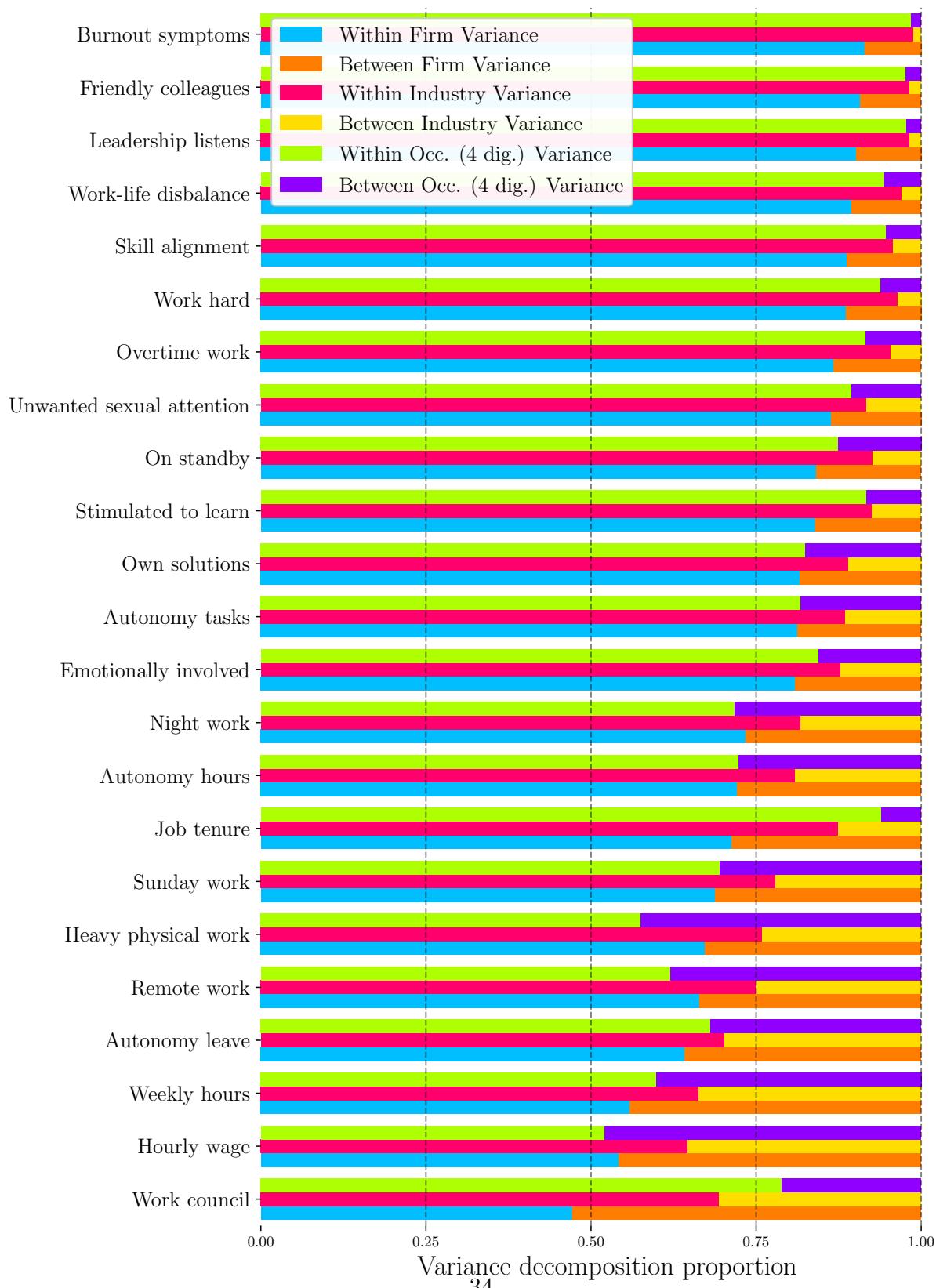
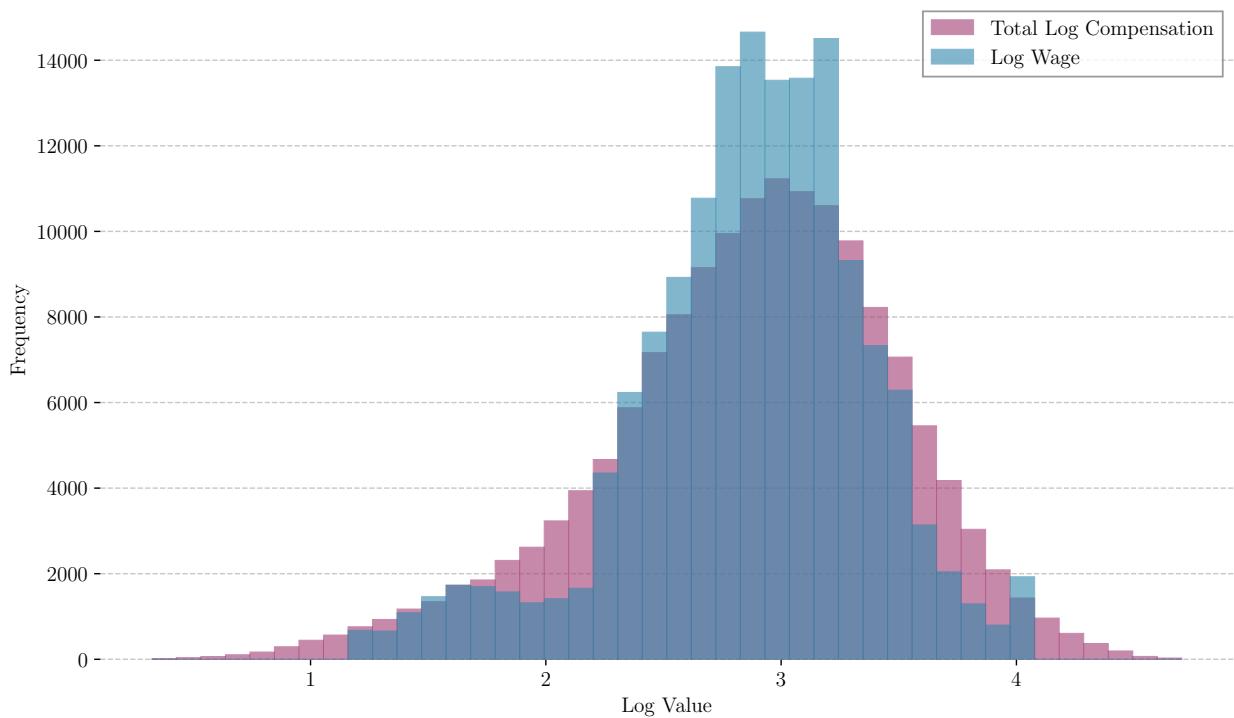


Figure 5: Histogram of distribution of log wage and total log compensation.



Appendix

Table A1: Average log wage against amenities patterns

	Dependent variable: Avg. log hourly wage		
	(1)	(2)	(3)
Social amenities			
Leadership listens	-0.0206*** (0.0019)	-0.0195*** (0.0042)	0.0040 (0.0073)
Stimulated to learn	0.1038*** (0.0016)	0.0881*** (0.0038)	0.0292** (0.0092)
Friendly colleagues	-0.1459*** (0.0024)	-0.1085*** (0.0060)	-0.0060 (0.0142)
Unwanted sexual attention (-)	-0.0043 (0.0032)	-0.0312*** (0.0078)	0.0189 (0.0205)
Autonomy amenities			
Autonomy tasks	0.1446*** (0.0021)	0.1131*** (0.0063)	0.0305** (0.0112)
Own solutions	0.1103*** (0.0029)	0.1045*** (0.0069)	0.0779*** (0.0188)
Autonomy leave	0.0528*** (0.0012)	0.0250*** (0.0026)	-0.0423*** (0.0102)
Autonomy hours	-0.0400*** (0.0014)	-0.0329*** (0.0032)	-0.0123 (0.0102)
Remote work	0.3641*** (0.0023)	0.3458*** (0.0059)	0.1950*** (0.0132)
Job demands amenities			
Night Work (-)	-0.2979*** (0.0014)	-0.2589*** (0.0071)	-0.0283. (0.0153)
Sunday Work (-)	0.0500*** (0.0011)	0.0498*** (0.0036)	-0.0108 (0.0087)
Work hard (-)	-0.1706*** (0.0018)	-0.1477*** (0.0051)	-0.0264* (0.0105)
Burnout symptoms (-)	0.0220*** (0.0010)	0.0236*** (0.0025)	-0.0001 (0.0048)
Work-life disbalance (-)	-0.0252*** (0.0024)	-0.0241*** (0.0065)	-0.0924*** (0.0124)
Overtime work (-)	0.1070*** (0.0015)	0.0961*** (0.0040)	0.0108 (0.0094)
On standby (-)	0.0062*** (0.0013)	0.0027 (0.0033)	0.0197. (0.0106)
Emotionally involved (-)	-0.0691*** (0.0017)	-0.0728*** (0.0081)	-0.0405** (0.0140)
Heavy physical work (-)	0.1217*** (0.0011)	0.1186*** (0.0033)	0.0536*** (0.0097)
Other amenities			
Worker representation	0.4573*** (0.0017)	0.4310*** (0.0059)	0.2458*** (0.0311)
Period since separation (<i>k</i>)		X	X
Firm \times period		X	X
\times first wage octile \times tenure octile			X
\times industry			X
Observations	340,754	269,101	35,581
R ²	0.756	0.847	0.978

Notes: Robust standard errors in parentheses.
 Significance levels: · $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table A2: AKM firm fixed effects against amenities patterns

	Dependent variable: AKM firm fixed effect		
	(1)	(2)	(3)
Social amenities			
Leadership listens	-0.0098*** (0.0007)	-0.0131*** (0.0014)	-0.0278*** (0.0035)
Stimulated to learn	-0.0011. (0.0006)	-0.0024 (0.0018)	0.0147*** (0.0035)
Friendly colleagues	-0.0299*** (0.0009)	-0.0340*** (0.0027)	-0.0002 (0.0056)
Unwanted sexual attention (-)	-0.0917*** (0.0011)	-0.0853*** (0.0025)	-0.0112 (0.0068)
Autonomy amenities			
Autonomy tasks	-0.0116*** (0.0007)	-0.0197*** (0.0019)	-0.0081. (0.0048)
Own solutions	-0.0201*** (0.0011)	-0.0143*** (0.0024)	-0.0021 (0.0061)
Autonomy leave	0.0181*** (0.0004)	0.0149*** (0.0011)	-0.0024 (0.0043)
Autonomy hours	0.0037*** (0.0005)	0.0044** (0.0014)	-0.0052 (0.0047)
Remote work	0.0043*** (0.0008)	0.0068*** (0.0019)	-0.0097. (0.0054)
Job demands amenities			
Night Work (-)	-0.0192*** (0.0005)	-0.0141*** (0.0021)	-0.0126** (0.0045)
Sunday Work (-)	0.0048*** (0.0004)	0.0038* (0.0018)	0.0017 (0.0047)
Work hard (-)	0.0231*** (0.0006)	0.0225*** (0.0018)	0.0151*** (0.0043)
Burnout symptoms (-)	-0.0084*** (0.0003)	-0.0085*** (0.0008)	-0.0044* (0.0020)
Work-life disbalance (-)	0.0174*** (0.0008)	0.0190*** (0.0022)	-0.0081 (0.0050)
Overtime work (-)	-0.0031*** (0.0005)	0.0057** (0.0018)	-0.0162*** (0.0039)
On standby (-)	0.0213*** (0.0004)	0.0228*** (0.0013)	0.0016 (0.0038)
Emotionally involved (-)	-0.0152*** (0.0006)	-0.0148*** (0.0017)	0.0017 (0.0043)
Heavy physical work (-)	-0.0461*** (0.0004)	-0.0431*** (0.0012)	-0.0172*** (0.0043)
Other amenities			
Worker representation	0.0191*** (0.0007)	0.0216*** (0.0019)	-0.0004 (0.0074)
Prop. flexible contract	0.0372*** (0.0009)	0.0327*** (0.0032)	0.0184 (0.0118)
Prop. fixed-term contract	-0.0167*** (0.0007)	-0.0241*** (0.0025)	0.0046 (0.0066)
Prop. on-call	0.0250*** (0.0009)	0.0219*** (0.0039)	-0.0077 (0.0130)
Avg. weekly hours	-0.1388*** (0.0007)	-0.1443*** (0.0033)	-0.1044*** (0.0100)
Avg. log hourly wage	0.3918*** (0.0007)	0.3900*** (0.0030)	0.3382*** (0.0102)
Period since separation (<i>k</i>)		X	X
Firm \times period		X	X
\times first wage octile \times tenure octile		X	
\times industry		X	
Observations	340,754	269,101	35,581
R ²	0.743	0.816	0.950

Notes: Robust standard errors in parentheses.
Significance levels: · $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table A3: Log wage against amenities patterns

	Dependent variable: log hourly wage				
	(1)	(2)	(3)	(4)	(5)
Social amenities					
Leadership listens	0.3798*** (0.0983)	0.7654*** (0.0877)	0.4583*** (0.0949)	0.1936. (0.1122)	0.1532 (0.1182)
Stimulated to learn	-1.221*** (0.1389)	-1.305*** (0.1261)	-1.477*** (0.1399)	-1.100*** (0.1637)	-0.9196*** (0.1883)
Friendly colleagues	-0.9035*** (0.0921)	-0.3792*** (0.0955)	-0.6406*** (0.1021)	-0.6272*** (0.1042)	-0.5133*** (0.1099)
Unwanted sexual attention (-)	1.441*** (0.1115)	0.8659*** (0.0922)	0.8949*** (0.1005)	0.7136*** (0.1093)	0.7283*** (0.0966)
Autonomy amenities					
Own solutions	5.791*** (0.1534)	3.096*** (0.1278)	2.031*** (0.1352)	1.366*** (0.2193)	1.322*** (0.1933)
Autonomy leave	0.2133 (0.1959)	0.8892*** (0.1985)	0.9969*** (0.1817)	0.9144*** (0.2165)	0.7813*** (0.2367)
Autonomy hours	1.998*** (0.3347)	2.713*** (0.2119)	1.458*** (0.2529)	0.7573* (0.3751)	0.9413* (0.4312)
Remote work	11.95*** (0.2871)	8.622*** (0.2229)	5.260*** (0.2205)	3.880*** (0.2510)	3.798*** (0.2654)
Job demands amenities					
Night Work (-)	-4.376*** (0.3958)	-1.653*** (0.3353)	-1.414*** (0.3979)	-0.8816 (0.5985)	-0.7786 (0.6373)
Sunday Work (-)	-0.7441** (0.2705)	-2.830*** (0.2450)	-2.670*** (0.3266)	-2.782*** (0.5489)	-2.749*** (0.4652)
Work hard (-)	-1.645*** (0.1222)	-1.404*** (0.1305)	-1.063*** (0.1456)	-1.090*** (0.1794)	-1.098*** (0.1919)
Burnout symptoms (-)	1.859*** (0.1204)	1.150*** (0.1226)	1.097*** (0.1353)	0.8064*** (0.1632)	0.7479*** (0.1557)
Work-life disbalance (-)	-2.909*** (0.1099)	-2.596*** (0.1077)	-1.876*** (0.1096)	-1.287*** (0.1547)	-1.335*** (0.1504)
Overtime work (-)	-0.4346* (0.1851)	-1.521*** (0.1612)	-0.8991*** (0.1533)	-0.4093* (0.1655)	-0.3756* (0.1795)
On standby (-)	0.1933 (0.1936)	-0.1872 (0.1779)	0.1504 (0.2071)	0.3781* (0.1890)	0.2998 (0.2002)
Emotionally involved (-)	-3.989*** (0.2518)	-1.735*** (0.1122)	-0.7810*** (0.1278)	-0.2710. (0.1422)	-0.1757 (0.1397)
Heavy physical work (-)	7.665*** (0.2204)	4.810*** (0.1846)	2.287*** (0.2581)	1.409*** (0.3038)	1.562*** (0.3216)
Other amenities					
Worker representation	12.08*** (0.3342)	4.352*** (0.2211)	3.778*** (0.2369)	3.226*** (0.2680)	2.936*** (0.2758)
Weekly hours	12.37*** (0.6128)	7.161*** (0.4525)	4.775*** (0.5206)	3.630*** (0.6685)	2.787*** (0.6869)
Skill alignment	X	X	X	X	X
Firm \times year		X	X	X	X
\times tenure quartile		X	X	X	X
\times occup. 1 dig.			X		
\times occup. 4 dig.				X	X
\times destination industry					X
Observations	209,509	163,262	115,267	70,828	61,448
Number of events	1	38,762	31,965	22,476	20,016
Number of initial firms	14,218	9,235	5,940	3,988	3,569
R ²	0.529	0.793	0.851	0.894	0.892
Within R ²		0.265	0.126	0.080	0.079

Notes: Standard errors clustered by firm in parentheses.
 Significance levels: · $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table A4: Between firm first stage regression for model in Column (1)

	First stage and second stage regressions	
	Δ Log wage	Separation
Instruments		
Δ Avg. log wage	0.1553*** (0.0045)	
Endogenous variables		
Δ Log hourly wage		-0.2665*** (0.0092)
Period since separation (k)	X	X
Firm \times period	X	X
Observations	2,382,760	2,382,760
R^2	0.36	-0.04
F-statistic (first stage)	41,732	3,584

Notes: Standard errors clustered by initial firm in parentheses.

Significance levels: · $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table A5: Between firm first stage regression for model in Column (2)

	First stage and second stage regressions					
	$\Delta \text{ Log wage}$	$\Delta \text{ Hours}$	$\Delta \text{ Fixed-term}$	$\Delta \text{ Flexible}$	$\Delta \text{ On-call}$	Separation
Instruments						
$\Delta \text{ Avg. log wage}$	0.2441*** (0.0073)	-2.1800*** (0.1803)	0.3091*** (0.0168)	0.0060* (0.0026)	0.0292*** (0.0055)	
$\Delta \text{ Avg. weekly hours}$	-0.1576*** (0.0072)	9.5880*** (0.1905)	-0.0704*** (0.0148)	0.0009 (0.0026)	0.0450*** (0.0056)	
$\Delta \text{ Avg. fixed-term rate}$	-0.0527*** (0.0067)	0.6274** (0.1969)	0.3831*** (0.0220)	0.0003 (0.0024)	-0.0348*** (0.0054)	
$\Delta \text{ Avg. flexible rate}$	0.0985*** (0.0091)	1.6670*** (0.2884)	-0.1538*** (0.0227)	0.9657*** (0.0118)	-0.0082 (0.0098)	
$\Delta \text{ Avg. on-call rate}$	0.0439*** (0.0088)	1.3210*** (0.2980)	-0.1298*** (0.0214)	0.0054 (0.0034)	0.8865*** (0.0163)	
Endogenous variables						
$\Delta \text{ Log hourly wage}$						-0.2403*** (0.0087)
$\Delta \text{ Weekly hours}$						-0.0031*** (0.0002)
$\Delta \text{ Fixed-term contract}$						0.0639*** (0.0054)
$\Delta \text{ Flexible contract}$						0.0714*** (0.0038)
$\Delta \text{ On-call}$						0.0163*** (0.0038)
Period since separation (k)	X	X	X	X	X	X
Firm \times period	X	X	X	X	X	X
Observations	2,382,760	2,382,760	2,382,760	2,382,760	2,382,760	2,382,760
R^2	0.37	0.33	0.37	0.85	0.44	-0.07
F-statistic (first stage)	13,998	15,921	4,254	295,338	36,623	1,072

Notes: Standard errors clustered by initial firm in parentheses.

Significance levels: · $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table A6: Between firm first stage regression for model in Column (3)

	First stage and second stage regressions					
	$\Delta \text{ Log wage}$	$\Delta \text{ Hours}$	$\Delta \text{ Fixed-term}$	$\Delta \text{ Flexible}$	$\Delta \text{ On-call}$	Separation
Instruments						
$\Delta \text{ Avg. log wage}$	0.3099*** (0.0097)	-2.6750*** (0.2178)	0.1263*** (0.0195)	-0.0005 (0.0041)	0.0369*** (0.0066)	
$\Delta \text{ Avg. weekly hours}$	-0.1350*** (0.0073)	8.4350*** (0.2343)	-0.0080 (0.0173)	-0.0002 (0.0028)	0.0563*** (0.0069)	
$\Delta \text{ Avg. fixed-term rate}$	-0.0190** (0.0065)	0.0394 (0.2169)	0.5492*** (0.0208)	0.0013 (0.0030)	-0.0269*** (0.0064)	
$\Delta \text{ Avg. flexible rate}$	0.0828*** (0.0091)	1.4850*** (0.2944)	-0.1023*** (0.0224)	0.9686*** (0.0119)	-0.0053 (0.0100)	
$\Delta \text{ Avg. on-call rate}$	0.0324*** (0.0089)	0.9270** (0.3065)	-0.0101 (0.0211)	0.0080* (0.0037)	0.8964*** (0.0168)	
Endogenous variables						
$\Delta \text{ Log hourly wage}$						-0.0815*** (0.0068)
$\Delta \text{ Weekly hours}$						-0.0003 (0.0003)
$\Delta \text{ Fixed-term contract}$						0.0492*** (0.0035)
$\Delta \text{ Flexible contract}$						0.0370*** (0.0035)
$\Delta \text{ On-call}$						-0.0141*** (0.0029)
Amenities	X	X	X	X	X	X
Period since separation (k)	X	X	X	X	X	X
Firm \times period	X	X	X	X	X	X
Observations	2,382,760	2,382,760	2,382,760	2,382,760	2,382,760	2,382,760
R^2	0.37	0.34	0.38	0.85	0.44	0.01
F-statistic (first stage)	11,399	6,172	4,698	267,209	31,564	255.2

Notes: Standard errors clustered by initial firm in parentheses.

Significance levels: · $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table A7: Between firm first stage regression for model in Column (4)

	First stage and second stage regressions					
	$\Delta \text{ Log wage}$	$\Delta \text{ Hours}$	$\Delta \text{ Fixed-term}$	$\Delta \text{ Flexible}$	$\Delta \text{ On-call}$	Separation
Instruments						
$\Delta \text{ Avg. log wage}$	0.4087*** (0.0202)	-2.3790*** (0.3933)	0.0681* (0.0285)	-0.0067 (0.0063)	0.0420*** (0.0121)	
$\Delta \text{ Avg. weekly hours}$	-0.1691*** (0.0129)	8.9280*** (0.4042)	0.0420. (0.0232)	-0.0005 (0.0040)	0.0562*** (0.0123)	
$\Delta \text{ Avg. fixed-term rate}$	-0.0224* (0.0102)	-0.6263 (0.3859)	0.6880*** (0.0300)	0.0008 (0.0046)	-0.0372** (0.0129)	
$\Delta \text{ Avg. flexible rate}$	0.0811*** (0.0152)	1.8780*** (0.4575)	-0.1975*** (0.0297)	0.9809*** (0.0175)	0.0090 (0.0170)	
$\Delta \text{ Avg. on-call rate}$	0.0215 (0.0144)	1.0050* (0.4374)	-0.0277 (0.0260)	0.0089. (0.0050)	1.0420*** (0.0246)	
Endogenous variables						
$\Delta \text{ Log hourly wage}$						-0.0561*** (0.0080)
$\Delta \text{ Weekly hours}$						-0.0004 (0.0004)
$\Delta \text{ Fixed-term contract}$						0.0284*** (0.0050)
$\Delta \text{ Flexible contract}$						0.0376*** (0.0062)
$\Delta \text{ On-call}$						-0.0131** (0.0042)
Amenities	X	X	X	X	X	X
Period since separation (k)	X	X	X	X	X	X
Firm \times period	X	X	X	X	X	X
\times first wage octile	X	X	X	X	X	X
\times tenure octile	X	X	X	X	X	X
Observations	849,419	849,419	849,419	849,419	849,419	849,419
R^2	0.57	0.53	0.68	0.92	0.64	0.07
F-statistic (first stage)	7,610	2,684	3,546	124,825	21,108	66.0

Notes: Standard errors clustered by initial firm in parentheses.

Significance levels: · $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table A8: Overall willingness to pay for amenities regression

	Dependent variable: Education level	
	(1) Coefficient	(2) Wage equivalent
Log hourly wage	7.7820*** (0.0546)	1
Social amenities		
Leadership listens	0.1385*** (0.0210)	0.0178*** (0.0027)
Stimulated to learn	0.2382*** (0.0205)	0.0306*** (0.0026)
Friendly colleagues	0.5545*** (0.0196)	0.0713*** (0.0026)
Unwanted sexual attention (-)	-0.2332*** (0.0194)	-0.0300*** (0.0025)
Autonomy amenities		
Own solutions	0.3281*** (0.0210)	0.0422*** (0.0027)
Autonomy leave	-0.6218*** (0.0227)	-0.0799*** (0.0030)
Autonomy hours	0.3980*** (0.0230)	0.0511*** (0.0030)
Remote work	1.2950*** (0.0243)	0.1664*** (0.0033)
Job demands amenities		
Night Work (-)	0.2712*** (0.0222)	0.0348*** (0.0029)
Sunday Work (-)	0.2897*** (0.0223)	0.0372*** (0.0029)
Work hard (-)	-0.1243*** (0.0216)	-0.0160*** (0.0028)
Burnout symptoms (-)	-0.3720*** (0.0208)	-0.0478*** (0.0027)
Work-life disbalance (-)	-0.1586*** (0.0212)	-0.0204*** (0.0027)
Overtime work (-)	-0.2520*** (0.0208)	-0.0324*** (0.0027)
On standby (-)	0.4349*** (0.0197)	0.0559*** (0.0026)
Emotionally involved (-)	-0.4486*** (0.0213)	-0.0576*** (0.0028)
Heavy physical work (-)	1.4280*** (0.0224)	0.1835*** (0.0032)
Other amenities		
Worker representation	0.0518* (0.0219)	0.0067* (0.0028)
Controls		
Weekly hours	-0.1204*** (0.0228)	-0.0155*** (0.0029)
Observations	153,487	
R ²	0.419	

Notes: Robust standard errors in parentheses.
 Significance levels: · $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Figure A1: Top 15 and bottom 15 occupation average of overtime work.

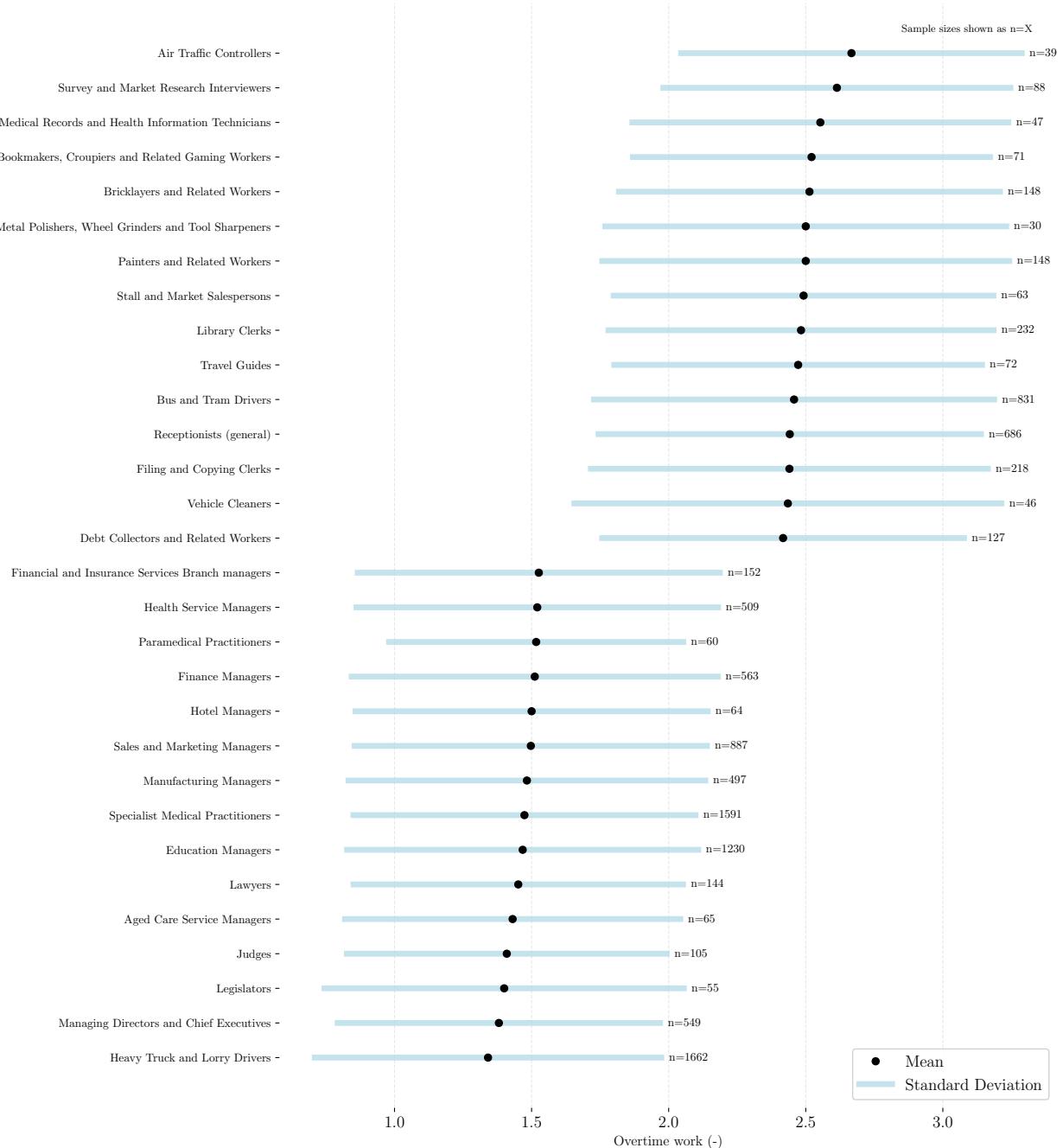


Figure A2: Top 15 and bottom 15 occupation average of work hard.

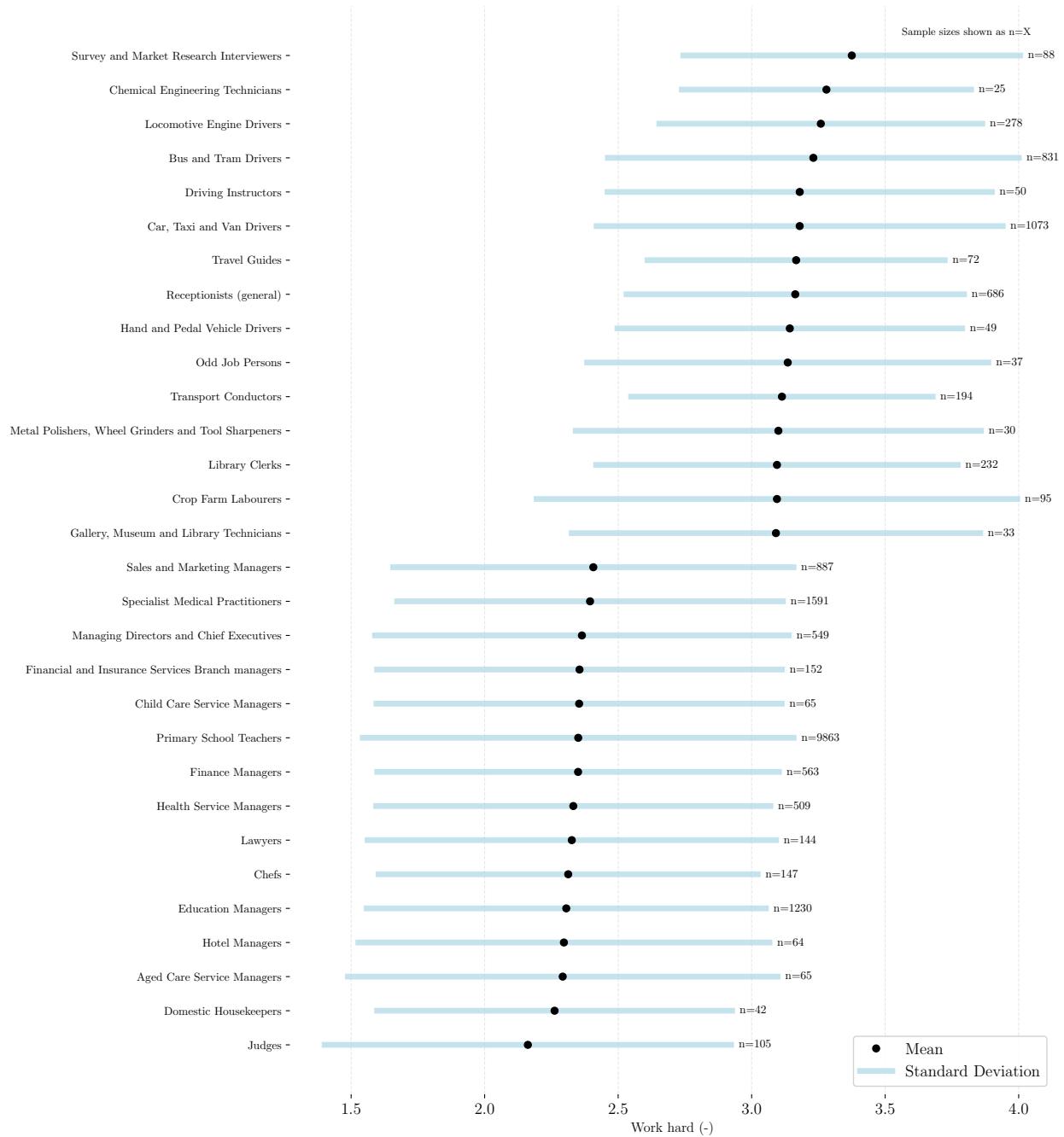


Figure A3: Top 15 and bottom 15 occupation average of being able to determine how they perform their job.

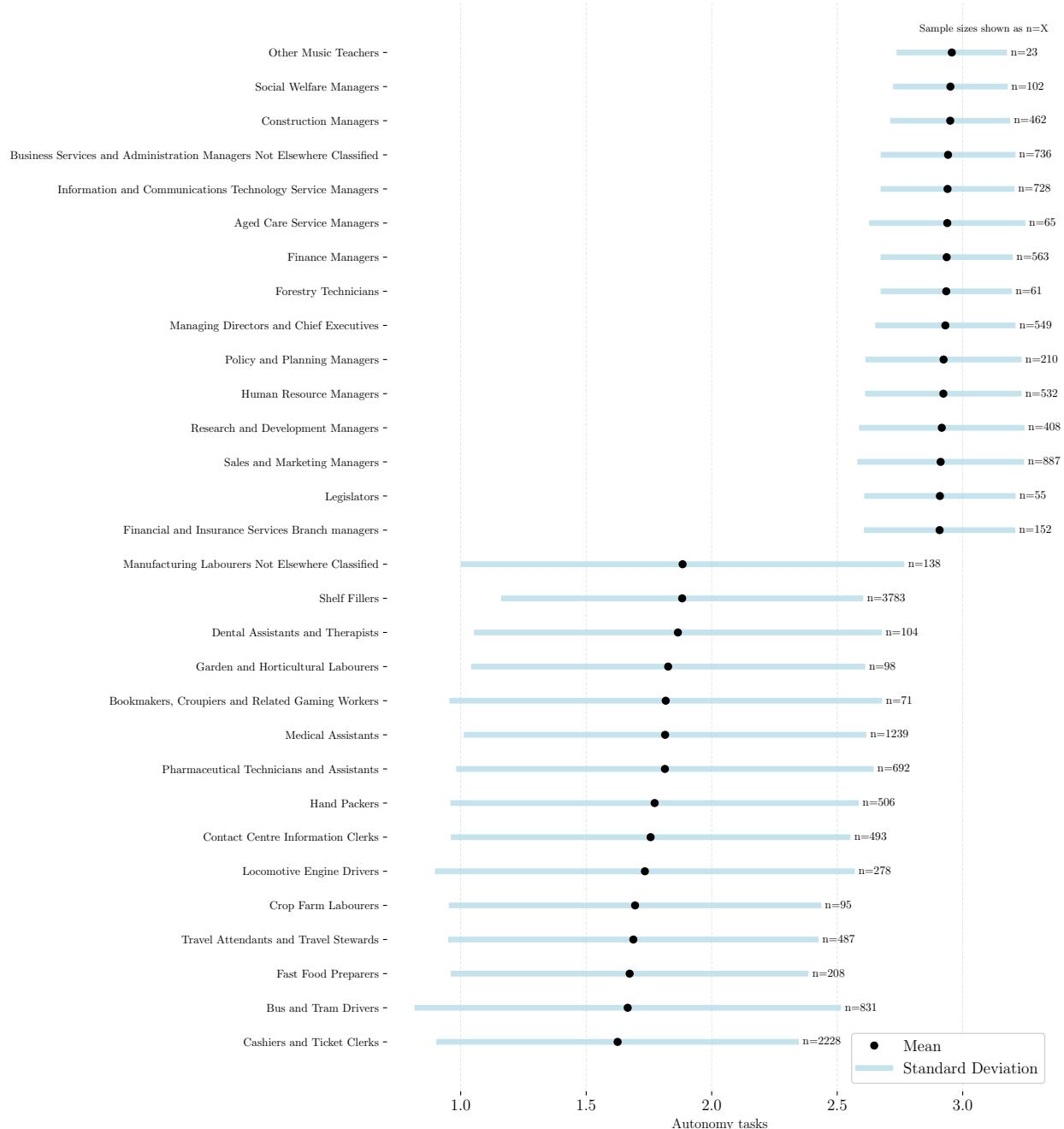


Figure A4: Top 15 and bottom 15 occupation average of being able to decide which hours they do their work.

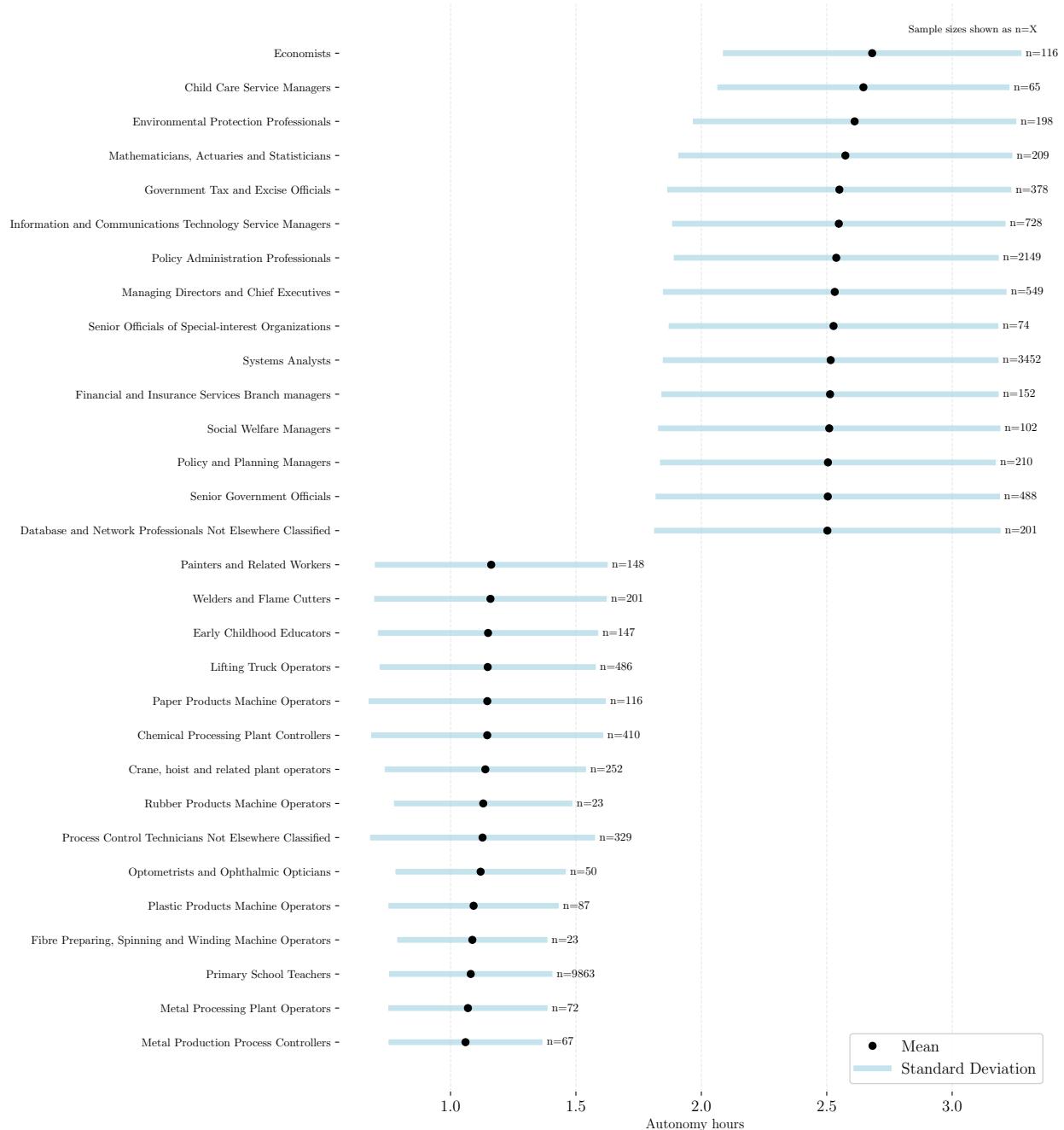


Figure A5: Top 15 and bottom 15 occupation average of being stimulated to learn.

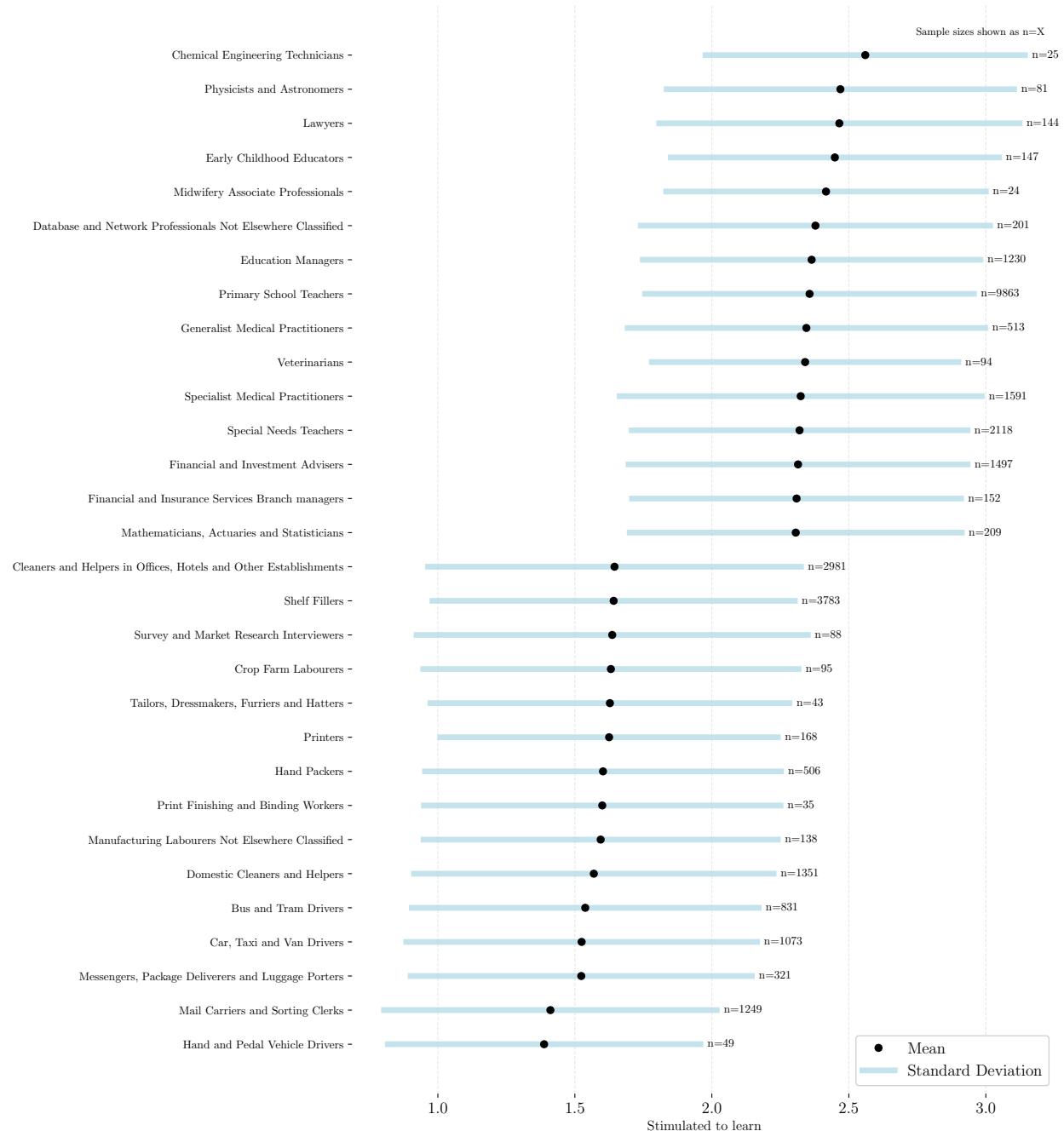


Figure A6: Top 15 and bottom 15 occupation average of whether they feel heard by their supervisors.

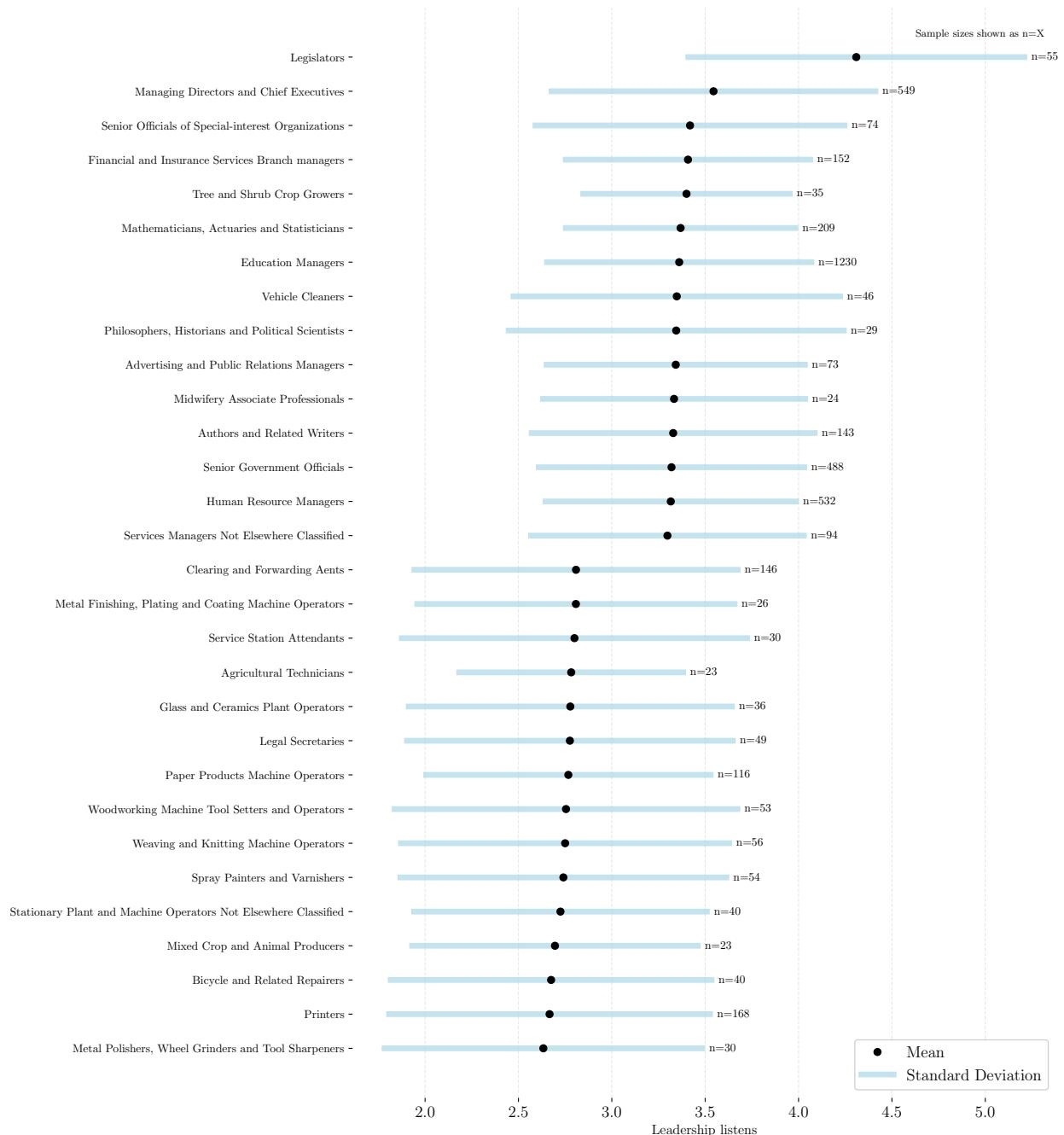


Figure A7: Descriptive statistics of amenities for shopkeepers against legal associate professionals.

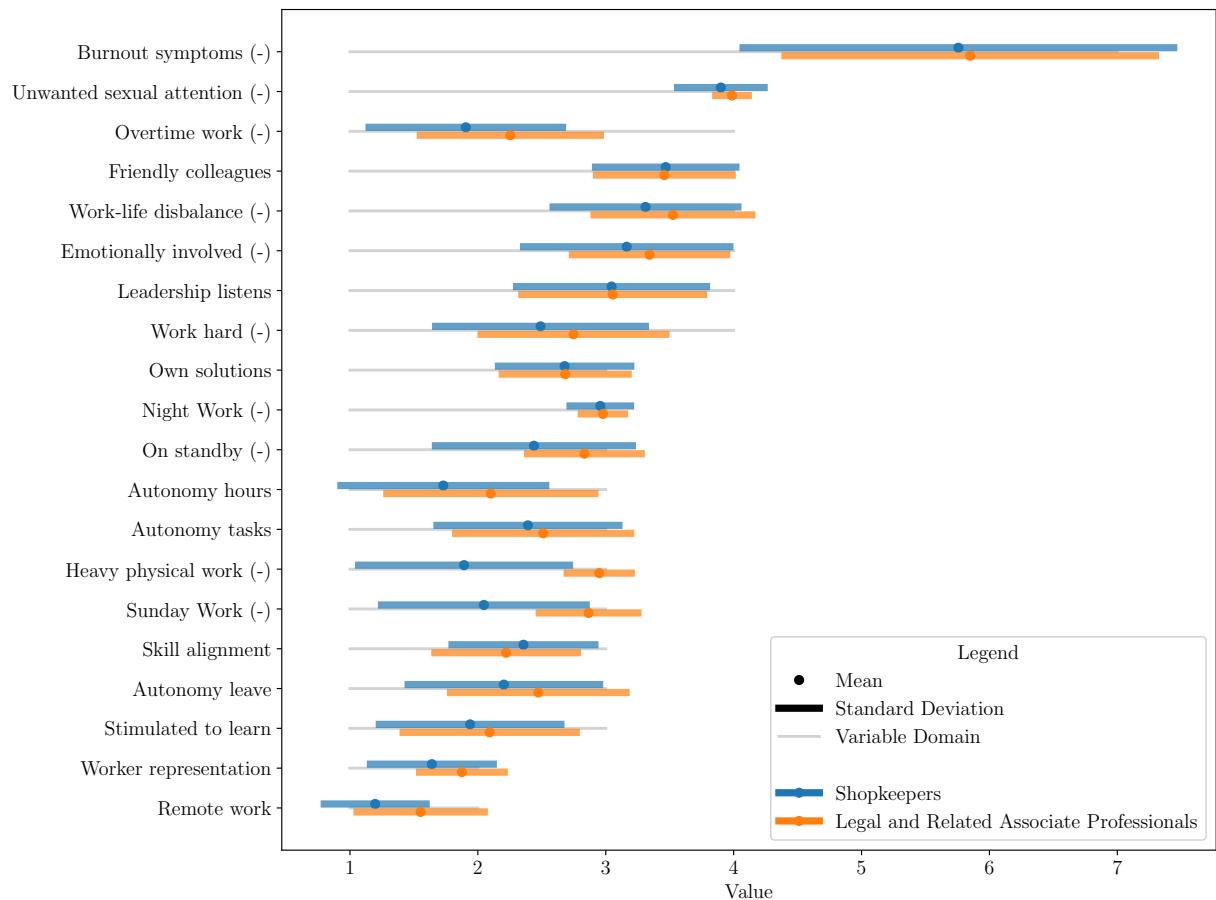


Figure A8: Descriptive statistics of amenities for secondary teachers and software developers.

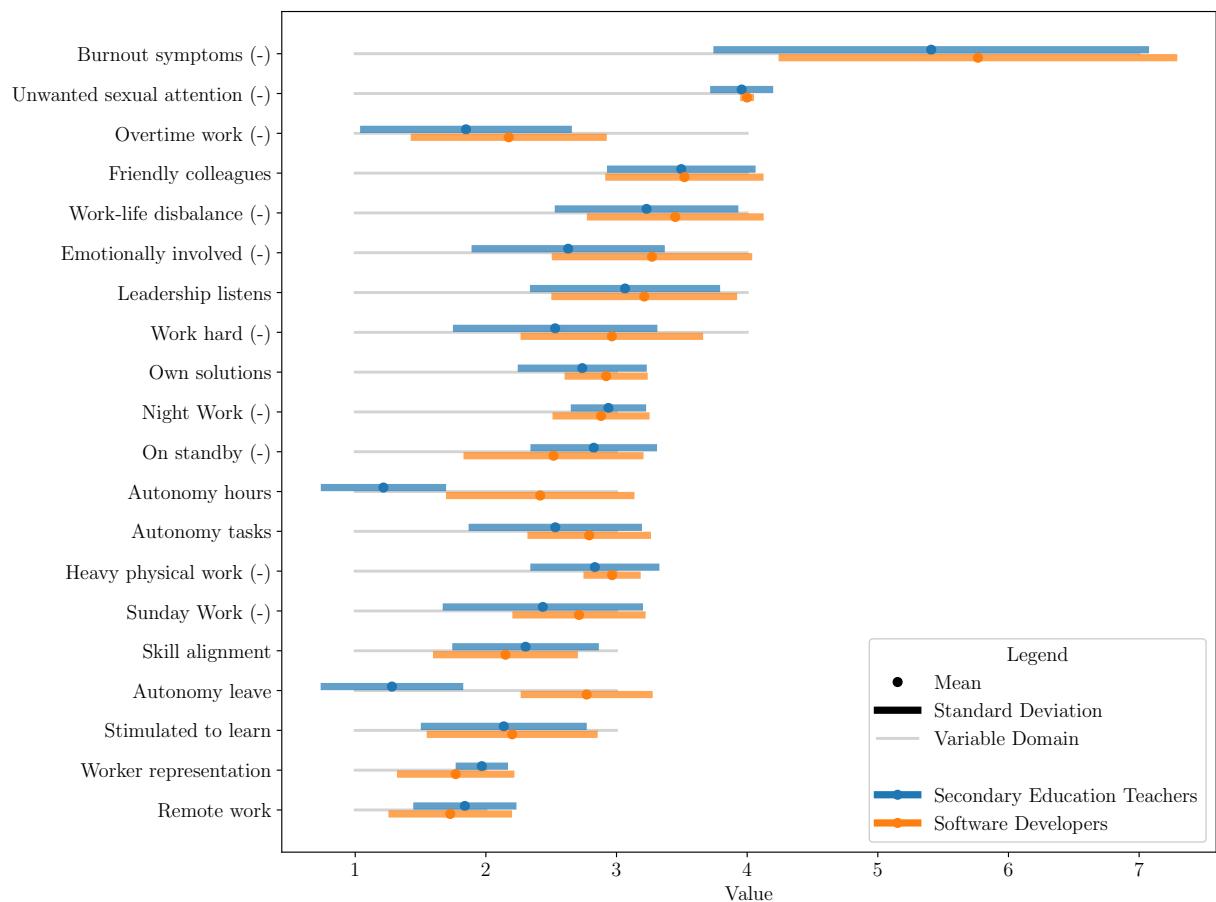


Figure A9: Gender separation differences from amenities.

