



HAL
open science

Work organization in social enterprises: A source of job satisfaction?

Xavier Joutard, Francesca Petrella, Nadine Richez-Battesti

► **To cite this version:**

Xavier Joutard, Francesca Petrella, Nadine Richez-Battesti. Work organization in social enterprises: A source of job satisfaction?. *Kyklos*, 2024, 10.1111/kykl.12411 . hal-04708606

HAL Id: hal-04708606

<https://hal.science/hal-04708606v1>

Submitted on 10 Dec 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution - NonCommercial - NoDerivatives 4.0 International License

Work organization in social enterprises: A source of job satisfaction?

Xavier Joutard^{1,2,3} | Francesca Petrella¹  | Nadine Richez-Battesti¹

¹Aix Marseille Univ, CNRS, LEST, Aix-en-Provence, France

²OFCE, Sciences Po Paris, Paris, France

³Aix-Marseille Univ, CNRS, AMSE, Marseille, France

Correspondence

Francesca Petrella, Aix-Marseille Univ, CNRS, LEST, Aix-en-Provence, France.

Email: francesca.petrella@univ-amu.fr

Abstract

Many studies suggest that employees of social enterprises experience greater job satisfaction than employees of for-profit organizations, although their pay and employment contracts are usually less favorable. Based on linked employer–employee data from a French survey on employment characteristics and industrial relations and using a decomposition method developed by Gelbach (2016), this paper aims to explain this somewhat paradoxical result. Focusing on work organization variables, we show that the specific work organization of social enterprises explains a large part of the observed job satisfaction differential both in general and more specifically, in terms of satisfaction with access to training and working conditions. By detailing the components of work organization, the higher job satisfaction reported by employees in social enterprises stems from their greater autonomy and better access to information. In contrast to earlier studies, however, our results show that these work organization variables do not have more value for social enterprise employees than for for-profit organization employees in the case of overall job satisfaction. This result casts doubt on the widespread hypothesis that social enterprise employees attach more weight to the nonmonetary advantages of their work than their counterparts in for-profit organizations.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2024 The Author(s). *Kyklos* published by John Wiley & Sons Ltd.

1 | INTRODUCTION

The aim of this paper is to understand the somewhat paradoxical finding that social enterprise employees experience greater job satisfaction than their counterparts in for-profit organizations (FPOs), even though their pay and employment contracts are usually less favorable. Several previous studies have helped to identify the determinants of job satisfaction in general. In parallel, there is growing interest in the literature on social enterprises and a drive to better understand their hybrid nature and the challenges this generates regarding human resources management. This paper contributes to bridging the literature on the determinants of job satisfaction with the growing research on social enterprises.

Building upon the literature, our study investigates whether the positive differential in job satisfaction observed within social enterprises compared with FPOs can be explained by work organization and management by objective variables. By “job satisfaction” we mean a global measure of workplace wellbeing based on subjective and declarative data. Work organization (WO) variables, as first defined by Borzaga and Tortia (2006), cover the characteristics of the job itself (such as task variety and significance, degree of autonomy, control, meaningfulness of the work) and those of the (physical and relational) work environment (such as relations with colleagues, access to information, participation in decisions). In addition to WO variables, based on the work of Askenazy and Forth (2016), we also measure the role of various management by objective (MO) practices in determining job satisfaction, as they influence the perception of job insecurity, itself an important variable of job satisfaction. MO variables include variables related to incentives and performance evaluation (such as performance-related schemes, profit sharing, and collective bonuses) and target setting (when goals are set for different variables: profit, sales, labor costs, total costs, and quality).

Our research question has relevance insofar as human resource management systems within social enterprises have received little attention in the literature (Dorado et al., 2022; Lee et al., 2019), even though they are essential to these organizations. Only a few papers deal with human resource management within social enterprises as a way of examining which specific systems are best suited to their hybrid nature (Battilana & Dorado, 2010; Borzaga & Tortia, 2006). More recently, Dorado et al. (2022) have inquired into whether human resource management systems are able to cultivate mission identification while supporting employee retention. Lee et al. (2019) analyze internal conflict management within social enterprises in light of their hybrid nature. Some studies have shown that job satisfaction in social enterprises is greater than job satisfaction in FPOs, both in France (Maisonasse et al., 2010; Melnik et al., 2013) and in other countries (Benz, 2005; Mosca et al., 2007). This article contributes to this literature by delving deeper into the understanding of the determinants of job satisfaction in social enterprises, in comparison to FPOs.

In France, the field of social enterprises corresponds to the social and solidarity economy (SSE), as most social enterprises are rooted in the long tradition and institutionalization process of the SSE (Petrella et al., 2021). The SSE is made up of associations, cooperatives, mutual societies, and foundations with at least one employee, as defined by INSEE, the French national statistics institute. This is the category used in the survey on which our analysis draws (which only includes firms with more than 10 employees). As the concept of a “social enterprise” has expanded over the past 20 years (Defourny & Nyssens, 2021), the first studies in the literature on job satisfaction focused on non-profit organizations (NPOs). As detailed below, most of these findings can now be applied (to a large extent) to social enterprises. In France, the SSE accounts for more than 10% of all employment in 2021. Since 2010, the job creation rate within SSE has been positive (Observatoire de l'ESS, 2023). It has indeed shown a certain dynamism and resilience in the face of different crises (in particular the 2008 crisis but also more recently, during the COVID pandemic) and is now part of an EU strategy for tackling unmet social and environmental needs (e.g., the Social Business Initiative launched in 2011 (COM(2011)682) and the Social Economy Action plan adopted in December 2021), as the EU recognizes its contribution to social innovation.

These organizations are distinguished from others by their prioritization of social purpose over capital, their reinvestment of surpluses for the benefit of their activities or members, and their democratic governance, which is linked to greater transparency, greater participation by employees and stakeholders, and decision-making that is not tied to

capital held by the organization. Given these specificities, do social and solidarity economy organizations (SSEOs) offer WO and MO practices that are more conducive to employee job satisfaction than FPOs?

More specifically, in this article, in order to explain the job satisfaction gap between employees from SSEOs and FPOs, we use data from both employee and management representatives, available from the 2011 French REPNSE¹ survey. This is the only survey available that considers a broad range of social enterprises.

The first section of this paper reviews the main findings of studies that compare job satisfaction in SSEOs and in FPOs. The second section presents the data and our empirical analysis, setting out our methodology and research hypotheses. The third section presents and discusses our results. In this last section, we first examine whether there is a satisfaction differential between SSEOs and FPOs, even after controlling for the characteristics of the establishments, employees' profiles, and the nature of their work. We then estimate the contribution of these WO and MO variables to explaining the general job satisfaction reported by employees and the different aspects of job satisfaction taken separately, as defined in the French REPNSE survey (working conditions, training, remuneration, workplace atmosphere). In other words, we examine how the different indicators influence job satisfaction by comparing SSEOs and FPOs. Finally, we compare our results with the effective presence of these variables in both SSEOs and FPOs in order to establish whether the job satisfaction differential is also related to a higher frequency of certain variables.

2 | JOB SATISFACTION, WORK ORGANIZATION, AND HUMAN RESOURCE MANAGEMENT: LITERATURE REVIEW

In this paper, we focus on the role of management systems (WO and MO) in job satisfaction. We therefore omit variables related to individuals, which distinguishes our study from earlier studies on the concern to offer high-quality services (Hansmann, 1980), “labor donations” (Preston, 1989), altruistic motivations (Andreoni, 1990), and pro-social motivations (Kjeldsen & Anderson, 2013), which included such variables when distinguishing NPOs from FPOs. Since these early studies, the literature has refined our understanding of the elements that contribute to workplace motivation (see esp. De Cooman et al., 2011). It is now acknowledged that individual motivations (in particular pro-social ones) and organizational variables both influence job satisfaction (Judge et al., 2017). The literature has demonstrated that organizations can take account of these influences and set up adequate incentive structures in order to align their employees' motivations with the objectives of the organization, thereby taking advantage of job satisfaction (Borzaga & Tortia, 2006). Building on this line of research, we adopt an organizational approach.

2.1 | Job satisfaction: The importance of job design

Job satisfaction is a complex construct that has been studied for some time and within different schools of thought and disciplines (Judge et al., 2017). In economics, job satisfaction initially represented an approximate way of measuring utility in work (Benz, 2005; Clark & Oswald, 1996). In this context, many studies take Locke's (1976) approach, according to which satisfaction is a function of individuals' expectations or aspirations and the convergence of (or gap between) these expectations and their actual work experience (see esp. Clark & Oswald, 1996; Walk et al., 2013).² As an example, the finding that satisfaction declines as education level rises is no doubt due to the fact

¹*Relations professionnelles et négociations d'entreprises* (Industrial relations and firm-level bargaining). This survey, limited to France, allows for a deep analysis (centered on the theme of industrial relations) of the links between staff management policies and modes of work organization. The 2011 survey was the first to include social enterprises. Various actors—including management and employee representatives from the same establishments—were surveyed.

²According to Locke (1976), job satisfaction is defined as “an agreeable or positive emotional state derived from an evaluation made by a person about his work or his work experience” (p. 1300).

that aspirations rise with education level (Clark & Oswald, 1996). Job satisfaction also varies with age, with younger employees reporting lower satisfaction than older ones (Clark, 1996). Differences in satisfaction along the axis of gender have also been shown (Bender et al., 2005; Clark, 1997). Lower job satisfaction has also been observed among unionized employees compared with non-unionized ones (Bender & Sloane, 1998; Heywood et al., 2002), although the negative correlation between unionization and job satisfaction is currently a matter of debate (Artz, 2010; Bryson & White, 2016).

Job satisfaction has therefore been shown to depend on the correspondence between an employee's values and expectations and the actual features of the job in question. Previous studies are based on subjective and declarative data on levels of satisfaction and workplace wellbeing from which employees' preferences vis-à-vis the job dimensions and the weight they give to each of those dimensions can be inferred (Hamermesh, 2001). Job satisfaction is thus considered a more global measure of wellbeing at work (Hamermesh, 2001) or of the utility that employees derive from their work (Clark & Oswald, 1996) than wage level alone.

From a "content perspective" (Judge et al., 2017), studies have shown that job satisfaction is related to the characteristics of the job itself. In particular, the model developed by Hackman and Oldham (1975) identifies five core job characteristics: skill variety, task identity, task significance, autonomy, and job-based feedback (i.e., direct feedback on the results of one's work). The authors have since added two additional characteristics related to individual differences: "growth need strength (i.e., the degree to which an individual values opportunities for personal growth and development at work) and job-relevant knowledge and skill" (Oldham & Hackman, 2010, p. 464).

In addition to job characteristics, the social features of work are now considered important variables when evaluating job satisfaction. As Grant (2007) observes, many previous studies overlooked the impact of what he calls the "relational architecture of jobs" on employee motivation, particularly in the case of pro-socially motivated workers who want to make a pro-social difference, that is, a positive difference in other people's lives. The relational architecture of jobs, as defined by Grant (2007, p. 396), consists of the "structural properties of work that shape employees' opportunities to connect and interact with other people." He identifies two main components of relational architectures: job impact on beneficiaries and contact with beneficiaries. The role of workplace social relations and interactions—between colleagues, line managers, and clients—has also been highlighted (Borzaga & Depedri, 2005; Ducharme et al., 2007; Morgeson & Humphrey, 2006). Humphrey et al. (2007) have shown that interdependence, feedback from others, and social support related to job attitudes are as important as job characteristics. In line with this perspective, many studies no longer focus solely on the characteristics of the job in question, instead relating them to a broader set of variables linked to the work environment and organization (Walk et al., 2013, p. 134).

2.2 | The impact of organizations on job satisfaction

In evaluating worker satisfaction according to type of organization, we know that both personal motivations and organization-based variables play a role, but we also know that organizations have the capacity to act on those motivations (Borzaga & Tortia, 2006). Leete (2000), for instance, explains that organizations that attract employees with very strong intrinsic motivations should set up specific types of WO, such as models that avoid status differentiation among employees and that offer a more equitable wage policy. Both Benz (2005) and Mosca et al. (2007) show that jobs at NPOs offer more non-pecuniary advantages than those in FPOs. Mirvis and Hackett (1983) show that nonprofit-sector employees have jobs with greater autonomy, more varied tasks, and more influence over their work—variables that, as Ryan and Deci (2000) have shown, play an important role in nurturing intrinsic motivations. They show that there is a compensating differential at work: these characteristics can more than offset any dissatisfaction associated with the lower wages and less favorable employment contracts offered by SSEOs. Some authors highlight the meaningfulness of the work in NPOs, which compensates for the lower pay in this sector. More specifically, Wang and Seifert (2022) distinguish between work that is meaningful due to its nature and work that is meaningful due to its line manager support, emphasizing the role of managers in giving meaning to work and reducing job

stress. They examine whether the motivational effect of meaningful work on paid staff in charities in the United Kingdom is still operative and whether it influences job satisfaction, given the business-like evolution of many NPOs (Maier et al., 2016), a trend that is also observed in Europe and in France in particular (Petrella et al., 2021). Some WO practices used in the for-profit private sector were considered as not being applicable to the nonprofit sector insofar as they undermine intrinsic motivations (Frey, 1994) or would be associated with fraud or wastefulness in that context (Leete, 2006). This concerns any reward or compensation contingent on worker performance (such as promotion, pay level, or prizes), linked to a MO system. Although these practices are more common in FPOs, they tend to appear in some SSEOs as well (Maier et al., 2016).

Building upon this literature, our study investigates whether the positive differential in job satisfaction observed within social enterprises compared with FPOs can be explained by WO and MO variables.

3 | DATA AND METHODOLOGY

In line with this literature, our research hypothesis is that *the observed job satisfaction differential between employees from SSEOs and their counterparts in FPOs can be partially explained by the specific WO and MO practices adopted by social enterprises.*

Building on Locke's (1976) approach and following Hamermesh (2001), we consider job satisfaction as a global measure of wellbeing at work, based on subjective and declarative data. In the REPOSE survey, job satisfaction is measured by subjective and declarative data both on an overall measure of wellbeing at work and on separate aspects of job satisfaction (satisfaction with working conditions, opportunity to receive training, remuneration, and workplace atmosphere).

Since several works have shown a significant and positive relation between work organization and job satisfaction, as noted by Raziq and Maulabakhsh (2015), our study investigates whether differences in WO characteristics and MO practices can explain the observed differences in job satisfaction between SSEOs and FPOs. In other words, we seek to identify the variables of WO and MO that affect job satisfaction and to determine whether they explain the observed job satisfaction differential by controlling for the objective characteristics of the individual, the organization, and its area of activity. In doing so, our model can provide a deeper understanding of the role played by WO and MO variables in both overall job satisfaction and specific dimensions of job satisfaction in a cross-sector comparative analysis.

3.1 | Data and empirical analysis

The 2011 REPOSE survey was the first to distinguish SSEOs from other organizations based on their legal status (associations, cooperatives, mutual, and foundations). It covers 4023 firms with more than 10 employees. Of these, 15% (601) are SSEOs, and the rest are FPOs (or establishments belonging to FPOs).³ Among SSEOs, 84% are associations (504). The other categories (COOP, and especially FOND and MUTU) are too small within the sample to draw statistically significant conclusions regarding their legal status. The sample of SSEOs is therefore largely dominated by NPOs, which corresponds to the reality in France (see Table 1).⁴

³Variables NAF2 (new French activity nomenclature to identify the main activity of each firm) and CJ (legal code or status). The criteria used here to define a SSE structure are as follows: The organization must not have an activity code (NAF) beginning with 84 (public administrations category, not included in the REPOSE survey), 94.1 (economic, employers' and industry organizations), 94.2 (trade unions), 94.91 (political organizations), or 94.92 (religious organizations); it must have the legal status of an association, a mutual society, a cooperative or a foundation.

⁴This proportion is consistent with the data generally published by INSEE and observers of the sector, who include almost 189,000 associations among the 223,000 SSE employers (CNCRES, 2014). Of those SSEOs that employ more than 10 people (84% of the respondents), 89% are ASSOs.

TABLE 1 The breakdown of SSEOs by legal structure.

Total number of SSEO	ASSO	%SSEO	COOP	%SSEO	Mutuals	%SSEO	Foundations	%SSEO
601	504	83.9	47	7.8	28	4.6	22	3.7

Source: REPONSE, 2011, our estimate.

The REPONSE survey is partly based on a postal survey covering three groups of respondents: 4023 executive officers representing establishments in the commercial and associative sectors (excluding agriculture) in metropolitan France; 18,536 employees in establishments with 11 or more employees, in the private and semi-public sectors (excluding administration and agriculture), with at least 12 months' seniority in the firm; and 2433 trade union representatives on the majority list at the most recent professional elections (whether unionized or not). Although the employees included in the survey are representative of the 9,340,000 employees in non-agricultural sectors who have been employed for at least 12 months in firms with 11 or more employees, the fact that the sample only includes those who have been employed for at least 1 year introduces certain biases into the analysis. In particular, it over-represents employees on a permanent contract.

We mainly base our analysis on employee data and job satisfaction responses. We complete this data by using another dataset from executive officers, and we have access to detailed information on the characteristics of the relevant establishments. We therefore have a sample of 11,378 employees, which corresponds to workers employed in establishments where the executive officers responded to the survey. In this sample, 1745 (15.3%) work for an SSEO. In addition to satisfaction responses, information on the characteristics of the employees, their function in their organization, their job description, the relevant WO, and industrial relations is also available. The reduction in the number of establishments included in our final sample is explained by the decision to match employee files with management files (executive officers) and to include only establishments with at least one employee who answered the survey. Our final sample therefore consists of 3680 establishments (see Table 2).

In this study, we carry out a descriptive comparison of the main characteristics of SSEOs and FPOs and of the employees of these two types of organization (see Appendix A for broad statistics for each organization). The SSEOs are smaller—almost 2/3 of them have fewer than 100 employees, compared with only 50% of the FPOs—and the majority (over 60%) are in the health and social work sector, whereas the FPOs are mainly in the manufacturing, commerce, automobile repair, and transport sectors. The vast majority of SSEOs are independent establishments (more than 70%, as opposed to only 35% of FPOs). They are subject to collective agreements that govern more than 90% of wage changes, regardless of employee category (for executives, there is a differential of 16 points over those in FPOs). Finally, the rate of unionization is also higher in SSEOs. The profiles of the SSEO management representatives also differ from those of FPOs: SSEOs employ more women in management positions and more people with a higher education degree.

SSEOs differ from FPOs in terms of the predominance of women employees (with women making up more than 70% of employees in the former, and only 40% in the latter) and in terms of the proportion of employees educated beyond the *baccalauréat* (46% have a higher qualification in SSEOs, compared with only 37% in FPOs). Their jobs mainly fall under the categories “clerical” and “other qualification.” Although fewer SSEO employees were unemployed in the previous 3 years, SSEO positions are characterized by greater instability and lower remuneration: SSEO employees have fewer open-ended contracts (9 points lower), are more likely to work part-time (34% vs 11%), work fewer hours (−15%), and are paid less (−27%). Finally, a greater proportion of SSEO employees are unionized.

We seek to analyze empirically the determinants of job satisfaction. First, we look at the issue of employees' overall job satisfaction. In addition, we focus on specific dimensions of job satisfaction identified in the survey: satisfaction with working conditions, with the possibility to receive training, with remuneration, and with the atmosphere

TABLE 2 Presentation of our sample.

		Number of organizations	% of the sample
Initial sample	FPOs	3422	85
	SSEOs	601	15
Final sample	FPOs	3142	85.4
	SSEOs	538	14.6

Source: REPONSE, 2011, our estimate.

at work. Descriptive statistics and correlations for these job satisfaction indices—sharing the same Likert scale—are presented in Appendix B (Tables B1 and B2).

We then concentrate on factors that fall under the category of WO, in order to estimate whether they can explain the greater satisfaction reported by SSEO employees compared with FPO employees in our data (Benz, 2005; Borzaga & Tortia, 2006; Frey, 1997; Lanfranchi & Narcy, 2008; Leete, 2000). In what follows, building on the classification of WO variables that may influence job satisfaction proposed by Borzaga and Tortia (2006)—and followed by Lanfranchi and Narcy (2008) and by Brolis (2015)—the notion of “work organization” covers the characteristics of the job itself (such as task variety and significance, degree of autonomy, control, meaningfulness of the work) and those of the (physical and relational) work environment (such as relations with colleagues, access to information, participation in decisions). Based on this literature, to represent the different dimensions of WO, we extract a series of variables from the “employees” section of the REPONSE survey. Of these variables, we build six indices composed of several variables that are conceptually related and positively correlated (see Appendix C; Tables C1, C2, C3, C4, C5, C6, and C7):

- skills and learning: the work makes it possible to make full use of one's skills, to learn new skills, and to receive training.
- autonomy in work: the capacity to strike a work–life balance, the freedom to decide how to do one's work, no obligation to hurry, and no obligation to do things one disapproves of.
- valuation of the work: not being bored, having the means to do high-quality work, adequate recognition of the value of the work, and assurance that the work will not endanger one's health.
- quality of interpersonal relations: quality of relations with superiors, proper evaluation of the employee by the line manager, turnover, help from co-workers, and presence of manager in a year.
- access to information: on wages, bonuses, and classification; on working hours, terms of employment, working conditions, and training opportunities.
- participation in negotiations: on pay, working hours, and on working conditions.

To complete our WO index, we also measure the role of various MO practices in determining job satisfaction, including variables related to incentives and performance evaluation (such as performance-related schemes, profit sharing, and collective bonuses) and target setting (when goals are set for different variables: profit, sales, labor costs, total costs, and quality). Based on the results of Askenazy and Forth (2016), and more recently Moullet and Salibekyan (2019), we know that these variables have an impact on the perception of job insecurity. As perceived job insecurity is recognized as a significant element that is negatively associated with job satisfaction (see for instance Artz & Kaya, 2014), including these variables in our analysis may strengthen it. Therefore, we include three MO indices, extracted from the “executive officers” section of the REPONSE survey, that are composed of several variables conceptually related and positively correlated (see Appendix D; Tables D1, D2, D3, and D4):

- objectives (target-setting management): employees have precise and quantitative objectives in five domains—quality, budget compliance, increase market power, profitability, and wage costs.
- profits: incentive practices in terms of shared profits for senior managers and employees (share ownership schemes, collective bonuses, individual bonuses).
- incentives: incentives based on the relationship between the results of the employee's periodical evaluation and wage levels, training, promotion, and job security.

We have to construct the WO indices by solving the problems of coherence and missing values: each of the WO indices is based on a different number of qualitative questions, each of which is either a sequence of a four-level Likert scale, from 1 (i.e., “always [agree]”) to 4 (i.e., “never [agree]”) (the case of learning, autonomy, valuation and relation indices) or a sequence of dummy variables (the case of information and negotiation indices). In addition, we have missing individual responses for some of these questions (this is the case for the relationship and information indices). For this purpose, we apply a transformation method (Terza, 1987; van Praag et al., 2003) that allows us to obtain, for each employee, work organization indices as continuous final scores defined on a single scale and therefore comparable. In a first step, for each WO aspect, we add the employee's ordinal answers to the multiple qualitative questions attached to that dimension. We then obtain categorical variables numbered from 0 to a maximum of 20.⁵ In a second step, we assign numerical continuous values to each index, provided the transformation into numbers retains the order of the initial categorical values. The new indices y_k , which will be used as covariates in the econometric models, are defined by setting for each category l :

$$y_{kl} = E(y_k^* | \mu_{l-1} < y_k^* \leq \mu_l) = \frac{\phi(\mu_{l-1}) - \phi(\mu_l)}{\Phi(\mu_l) - \Phi(\mu_{l-1})}$$

where y_k^* represents a normally distributed continuous latent index (as is usual in ordered probit models), where the values μ_l are the normal quantile values of the sample fractions of all response categories and where ϕ and Φ are the density and the cumulative function of the standard normal distribution, respectively. By using this method, we can also deal with missing responses from certain employees for some of the questions that form the WO indices without having to eliminate these respondents. In the case of missing responses, the same WO indices are defined relative to fewer categories but always by applying the same transformation.⁶

Finally, to circumvent the fact that these WO scores are based on responses reported by the workers themselves, we proceed to an aggregation of these individual scores at the establishment level. Two alternatives are adopted. First, we consider the average score (the between score) specific to the establishment. Second, we introduce an average score calculated only among other workers, excluding the score for the current worker. This allows us to avoid the endogeneity problem in the satisfaction equation, but we inevitably lose the establishments represented by only a single worker who answered the survey.

The same method is applied to the MO indices. It should be noted that these latter indices are already defined at the establishment level: they are provided by a senior executive of the establishment and not by the employees.

Finally, note that we did not need to implement the same transformation on the satisfaction items because the satisfaction indicators are immediately available and are all comparable with the same Likert scale.

⁵“To a maximum of 20” since the maximum number of questions related to the WO dimensions is 5 and the ordinal answers are defined on a Likert scale from 1 to 4.

⁶For example, to build an “access to information” score, a majority sample of employees answered five ordinal questions on four levels. Consequently, the new index is based on the normal quantile values of the sample fractions of the 20 response categories. For the rest of the employees (10%), however, one of these five questions is missing, so we can use for them the transformation based on the normal quantile values of the fractions of only the 16 response categories evaluated in this complementary sample.

3.2 | Econometric modeling

We now proceed to analyze empirically the job satisfaction gap between SSEO and FPO employees and its origins by using the decomposition method developed by Gelbach (2016). We have data on several employees in the same establishment: Consequently, we use hierarchical models (models with several levels or clusters). The different indices of job satisfaction, that is, the outcomes of these regressions, are then related to and explained by a set of factors pertaining to the individual and factors pertaining to the establishment:

$$s_{Gij} = x_{ij}\theta_G^B + z_j\mu_G^B + SSE_j\varphi_G^B + \rho_{Gj}^B + \varepsilon_{Gij}^B \tag{1}$$

The indices of satisfaction are designated by s_G , where $G = 1, 2, \dots, 5$. The double subscript represents the two-level structure of the estimated models, where subscript i designates the employee (Level 1) and subscript j designates the establishment (Level 2). The covariates at the individual level (x_{ij}) group three series of factors: sociodemographic factors related to the employee, his or her role in union activity (member, staff representative), and the characteristics of his or her job (for instance, wages, working hours, schedule, nature of the contract). The set of factors measured at the level of the firm (z_j) comprises the main characteristics of the chief executive, those of the establishment (such as size, sector, and degree of independence), and the presence of trade unions and structures for staff representation (works committee or health and safety committee [HSC]). From this series of factors, we define a dummy variable SSE_j —belonging to an SSEO (1) or not (0)—which will be our focus. An alternative specification will also interact SSE_j with indicators of sector and size in order to bring out possible behaviors specific to SSEOs in the health and social work sector and size effects within the SSE. Finally, we also specify ρ_{Gj}^B , which represents an establishment-level random effect linking the employees of the same structure.

Here, the coefficient on the SSEO indicator (φ_G^B) should account for the mean differential satisfaction in percentage terms for SSEO employees compared with FPO employees, *ceteris paribus*. We consider this first regression as our baseline model, where the superscript B denotes the coefficients of this model.

The following second regression is taken as the full specification model. We include the set of indicators measuring the multiple aspects of the firm's WO and MO (designated by y_k , which concerns a total of 9 indices; see above):

$$s_{Gij} = x_{ij}\theta_G^F + z_j\mu_G^F + SSE_j\varphi_G^F + \sum_{K=1}^9 y_{Kj}\gamma_{KG}^F + \rho_{Gj}^F + \varepsilon_{Gij}^F \tag{2}$$

where the superscript F denotes what we refer to as our full specification model. By using Gelbach's conditional decomposition, we can assess the extent to which the organizational factors added in Equation (2) help to explain the SSEO satisfaction gap estimated in Equation (1).

If Equation (2) represents the “true model,” then Equation (1) is just a model with the omitted set of organization and management indicators. Under these conditions, the well-known OLS omitted variable bias formula applies: we can deduce the exact relationship between the SSEO coefficient estimates in the base and in the full model (Gelbach, 2016):

$$\hat{\varphi}_G^B = \hat{\varphi}_G^F + \sum_{K=1}^9 \hat{\Gamma}_{KSSE} \hat{\gamma}_{KG}^F \tag{3}$$

where the last term of Equation (3) is the SSEO part of the omitted variable bias. We find in this bias formula the “ $\hat{\Gamma}_{KSSE}$ ”s which are the OLS estimates of the SSEO coefficient in the auxiliary regressions defined at firm level:

$$y_{Kj} = W_j' \Gamma_K + u_{Kj} = \bar{x}_j' \Gamma_{Kx} + z_j' \Gamma_{Kz} + SSE_j \Gamma_{KSSE} + u_{Kj} \tag{4}$$

where the vector W_j represents the covariates at the firm level j found in the baseline Equation (1).

It is useful to note that these auxiliary regressions are themselves of interest: they inform us about how WO and MO are applied in the firm according to firm type (SSE or FPO) and according to the main characteristics of the firm and its employees.

These relations yield a natural and precise decomposition of the estimated job satisfaction gap between SSEO and FPO employees from the base model (1) into each component of WO:

$$\hat{\varphi}_G^B - \hat{\varphi}_G^F = \sum_{K=1}^9 \hat{\Gamma}_{KSSE} \hat{\gamma}_{KG}^F \quad (5)$$

Note that we can assess the contribution of each factor and thus identify which dimensions of WO and MO matter most.

4 | RESULTS: GREATER JOB SATISFACTION IN SSEOS THAN IN FPOS

All results are reported in the tables of Appendices E and F. We begin by commenting on the results from an estimation of the global satisfaction equations where WO and MO indicators are systematically missing. This corresponds to the first column of Table E1, where the only estimated job satisfaction gap for different specifications is reproduced. In the first part of Table E1 (called the “simple model”), we find the results without a control variable, which show that SSEO employees report being more satisfied—by more than 4.4%—than FPO employees.

Controlling step by step for the influence of multiple dimensions, we confirm the greater satisfaction in SSEOs and the relatively stable level—at more than four percentage points—of the estimated effect of the SSE segment. In the second part of the table, a set of factors is added to the model and includes the individual characteristics of the employees, including sociodemographic factors (gender, socio-occupational category [SOC], qualifications) and their role in union activity (member, staff representative), as well as the characteristics of the firms (size, sector, collective agreement or not, information about the chief executive, the presence of trade unions, and structures for staff representation, i.e., works committee or HSC).

In the last part of the table, we find the “standard model,” defined as our baseline model (Equation 1), where a second set of factors representing observable job characteristics (wage, working hours and type of schedule, training opportunities) is added. In this way, we control for the structural differences between the two segments in order to eliminate the portion of expressed satisfaction that comes from extrinsic motivations (e.g., those linked to pay). This last addition does not modify (at least not significantly, with the gap being 4.2%) the estimation of the effects of being employed in the SSE on overall job satisfaction.

In the second column of Table E1, when the models are systemically re-estimated by integrating work organization and human resource indicators, the estimated job satisfaction gap is no longer statistically significant. This loss of significance is founded regardless of whether we control for sociodemographic factors and other factors that characterize the firm. This is indeed the case in the last part of the table (the “standard model”), which corresponds to the full specification defined by Equation (2).

Finally, the third column shows the results of the Gelbach decomposition method. It shows the global contribution of WO and MO indicators to the change in the estimated job satisfaction gap. A two-way interpretation of the results is possible: Considering the standard model, the WO indicators are responsible for 2.2 points of the 4.2-point job satisfaction gap (i.e., 53%). We can also consider the difference between the job satisfaction gap estimates—here 2.8 points—and calculate that the WO indicators represent 83 percentage points of this difference. The asterisks in the last column denote the level of significance of the joint test that WO and MO variables contribute to explaining the difference between the job satisfaction estimates. In any case, this confirms the important role played by the WO variables (see Table E1).

The REPONSE survey also enables us to identify employees' satisfaction with the specific dimensions of the job—satisfaction with working conditions, work atmosphere, training opportunities, and pay. SSE employees are more satisfied with their working conditions (+5.2%) and their training opportunities than FPO employees (+4.6%) (see the results in the standard model in Tables E3 and E4, respectively). SSE employees are also more satisfied with their workplace atmosphere and their pay, but the results are not statistically significant (Tables E2 and E5). For both dimensions (working conditions and training opportunities), given the Gelbach decomposition, we can clearly see that the positive satisfaction differential mainly comes from WO variables.

Tables F1, F2, F3, F4, and F5 highlight the criteria among the WO and MO variables that contribute the most and significantly to the job satisfaction gap in the standard model. More specifically, *job autonomy*, *access to information* and (to a lesser extent) *incentive practices* are the variables that chiefly explain this differential in favor of SSEOs: The significance of these factors in the third column of Table F1 results from both the importance of these factors for satisfaction levels and the fact that SSEOs rely on them more (or less, depending on the sign of the coefficient). This allows us to conclude that job autonomy (30%), access to information (13%), and incentive practices (8%) contribute the most to explaining the change in the estimated job satisfaction gap.⁷

Concerning the model for satisfaction with working conditions, the same criteria are found, but they are even more crucial (Table F3): autonomy at work is even more of a central factor behind the difference in the estimated satisfaction gap (43%), with access to information (23%) and incentive practices (10%) also contributing more. When it comes to training opportunities (Table F4), access to information almost exclusively explains the difference in the estimated satisfaction gap (80%). These results are in line with the literature, as it is well known that, from a “content perspective,” the characteristics of the job itself (including autonomy at work) are major determinants of job satisfaction (Oldham & Hackman, 2010). In particular, in the case of SSEOs, our results confirm Mirvis and Hackett's (1983) findings as well as those of Borzaga and Tortia (2006), who show that SSEOs have an advantage in job satisfaction, as far as aspects of the work are concerned, such as decision autonomy or variety and creativity at work. Note also that work environment factors, including access to information, are crucial as well (Walk et al., 2013).

As far as MO variables are concerned, the contribution of the index we created based on the literature is not sufficiently statistically significant to explain either the global job satisfaction differential or any difference concerning the abovementioned specific dimensions of job satisfaction. The only variable that plays a significant role when estimating the global job satisfaction differential and specific dimensions (workplace atmosphere, working conditions, and pay) is incentive practices. No significant effect is linked to training opportunities. This lack of influence on job satisfaction can be explained by the fact that these practices are less developed in SSEOs (Devaro & Brookshire, 2007). Quantitative target objectives, individual bonuses, and relating wage levels to employee evaluations are not often defined. Although their presence is growing in some SSEOs, such practices, inspired from FPOs, may play a negative role in employees' motivation in SSEOs as they undermine intrinsic motivations (Frey, 1994).

The fact that satisfaction with pay is never found to have a significant effect for SSEO employees, whatever the specification, is not in itself surprising, although one might have expected that the lower pay typical of SSEOs would have a negative effect on satisfaction in the first specifications, where the diversity of remuneration by type of establishment is not controlled for. We could explain this result by considering that, as pay expectations are lower for employees in SSEOs, there is not much difference between their expectation and their work experience. This result may also be related to the importance of relative pay. In an experimental study of university employees, Card et al. (2012) found interesting results: job satisfaction depends on relative salary comparisons, and this in a non-linear way (negative comparisons have more impacts than positive ones). Since wages in SSEOs are much less dispersed than in FPOs, the reasons for dissatisfaction due to negative comparisons between the wages of employees in the same company are de facto also more limited within the SSEOs.

⁷As before, these percentages are obtained by relating the—significant—coefficients (in percentage points, i.e., multiplying by 100) to the difference between the estimations of the job satisfaction gap (which is 2.8 percentage points) by multiplying this ratio by 100. For the criterion of job autonomy, for example, we divide 0.83 by 2.8 points, and we obtain 30 percentage points after multiplying by 100.

These results are in any case in line with earlier empirical studies (see, e.g., Handy & Katz, 1998; Mirvis & Hackett, 1983). There too, as soon as the measures related to WO are integrated into the determinants of these different levels of satisfaction, the generalized loss of significance of whether one works for an SSEO or for another type of organization is systematically verified.

This last finding confirms that the origin of SSEO employees' greater job satisfaction and their greater satisfaction with their working conditions and training opportunities mainly stems from the quality of the WO (job autonomy and access to information, in particular), which SSE employees report as being superior. As far as satisfaction with working conditions or training opportunities is concerned, incentive variables are found to be significant as well⁸.

5 | DISCUSSION

We have established a measure of the connection between the satisfaction premium of SSEO employees and factors related to WO and MO. Access to information and autonomy at work and incentive practices appear to be central to explaining this premium. Two mechanisms may explain these links: a structural difference (i.e., SSEOs' preference for certain WO measures) or a selection mechanism. In the first case, SSEOs tend to favor organizational modes based on greater autonomy at work and/or greater access to information. In the second case, given the comparable WO and MO patterns in the two sectors, SSEOs tend to attract and hire workers who value and give greater (or lesser, depending on the case) weight to certain WO and MO factors.

Without being able to fully discriminate between these two mechanisms, we first check the significance of the parameters for employees of both SSEOs and FPOs. Among the indices generated from the WO and MO variables, the index that has the greatest weight in overall job satisfaction is valuation and quality of work (see Appendix G): This represents more than 50 percentage points when it comes to explaining overall job satisfaction. The second parameter that emerges as determinant for job satisfaction is the use and acquisition of skills (this accounts for 1/4 of job satisfaction). The third most important determinant is autonomy at work, which accounts for 1/5 of job satisfaction. In each case, we find that the weight seems identical among SSEO and FPO employees given the statistical insignificance of the coefficients specific to the SSEO. The quality of interpersonal relations and access to information are significant but do not carry great weight, in contrast to the previous three scores (cf. Appendix G). Note that the index of participation in negotiations does not carry great weight either but has a negative impact on job satisfaction. Concerning MO variables, only incentive variables are significant (except for job satisfaction related to training), although they also play a (minor) negative role (cf. Appendix G).

We then check whether the different scores have a comparable weight in job satisfaction according to type of organization. To do this, we re-estimate Equation (2), augmented by the interactions of the scores with the SSEO indicator. If the parameters attached to these factors interacted with SSEOs are significant, this suggests that they play out differently for SSEO employees than they do for FPO employees. On the other hand, if they aren't significant, this will support the thesis that the factors play out in the same way for both types of employees. We can then identify those factors that, on average, contribute most to strengthening employees' overall job satisfaction and satisfaction in the different areas.

The results of the estimation of Equation (2) completed with the scores crossed with the SSEO indicator show that these WO and MO variables indeed explain a large part of job satisfaction. However, they also seem to have a similar impact on satisfaction across SSEOs and FPOs, confirming that none of the added parameters that correspond to a specific type of behavior on the part of SSEO workers are statistically significant.

⁸Please note that the detailed estimation of the full model is provided in Table F6 and allows the effects of other covariates to be examined.

From these first results, we conclude that SSE employees do not attach more weight than FPO employees to variables related to WO in their job satisfaction, even though these practices are more frequently observed in SSEOs. This puts into perspective the hypothesis of previous studies that SSEOs attract employees who attach greater importance to intrinsic motivations (Benz, 2005; Handy et al., 2007; Mirvis & Hackett, 1983; Preston, 1989).

Nevertheless, our results show that certain factors (job autonomy and access to information) that are more common in SSEOs are sources of greater job satisfaction. These results have implications for both types of organization: They suggest that social enterprises ought to maintain them and that FPOs ought to adopt them.

6 | CONCLUSION

These results, based on French data, confirm the greater job satisfaction reported by SSEO employees compared with FPO employees in general, but also regarding satisfaction with access to training and working conditions. It should be noted that satisfaction with pay is not lower in SSEOs, despite their lower average wages, which may be linked to the lower expectations of SSEO employees regarding their pay or to the lesser importance given to relative pay as wages are much less dispersed than in FPOs.

Our results also show that, among the many factors that explain this differential, variables related to WO play a significant role (accounting for more than half of such factors), *ceteris paribus*. WO variables such as greater autonomy and access to information are strongly linked to greater job satisfaction in SSEOs given the fact that they are more common in SSEOs than in FPOs. However, our results show that SSEO and FPO employees attach similar value to these work organization variables when overall job satisfaction is measured. This result casts doubt on the widespread hypothesis that social enterprise employees attach more weight to the non-monetary advantages of their work than their counterparts in FPOs. It is explained by the fact that social enterprises adopt these WO practices more frequently. Concerning MO variables, in contrast with the literature centered on FPOs, they play a (minor) negative role.

As regards the problem of the endogeneity of the SSE, it is nonetheless difficult to identify whether greater satisfaction in SSEOs is linked to the fact that such organizations better promote intrinsic or pro-social motivations (related to the social mission of SSEOs) or to the fact that their WO is more participative and fulfilling, which seems to be suggested by our results. This is a promising direction for future research, but it can only be implemented if panel data are available and individual mobilities between SSEOs and FPOs are observed. These results should also be compared with more recent data, which in fact has proven to be difficult given the perimeter of the SSE of the REPNSE survey and the fact that the main questions we build upon in our analysis have been changed in the next survey. Nevertheless, the questions addressed in this paper are still crucial and part of the policy agenda, in relation to the growing aspirations for all workers to have a better quality of life at work, along with more participative and sense-making work environments. As SSEOs more frequently adopt such WO practices, their experience may serve as an inspiration for the others.

DATA AVAILABILITY STATEMENT

Additional results and copies of the computer programs used to generate the results presented in the paper are available on request from the lead author at xavier.joutard@univ-amu.fr. The data come from the “Enquête REPNSE” produced by the agency of Labor Statistics of the French Government, DARES. They were made available as part of a research project (convention n°13/017). To access the data, all the details may be found at <https://dares.travail-emploi.gouv.fr/dares-etudes-et-statistiques/enquetes-de-a-a-z/article/revisions-professionnelles-et-negociations-d-entreprise-reponse-edition-2010>.

ORCID

Francesca Petrella  <https://orcid.org/0000-0003-0258-5084>

REFERENCES

- Andreoni, J. (1990). Impure altruism and donations to public goods: A theory of warm-glow giving. *Economic Journal*, 100, 464–477. <https://doi.org/10.2307/2234133>
- Artz, B. (2010). The impact of union experience on job satisfaction. *Industrial Relations: A Journal of Economy and Society*, 49, 387–405. <https://doi.org/10.1111/j.1468-232X.2010.00606.x>
- Artz, B., & Kaya, I. (2014). The impact of job security on job satisfaction in economic contractions versus expansions. *Applied Economics*, 46(24), 2873–2890. <https://doi.org/10.1080/00036846.2014.914148>
- Askenazy, P., & Forth, J. (2016). Work organisation and human resource management: Does context matter? In T. Amossé, A. Bryson, J. Forth, & H. Petit (Eds.), *Comparative workplace employment relations. An analysis of practice in Britain and France* (pp. 141–177). Palgrave Macmillan. https://doi.org/10.1057/978-1-137-57419-0_5
- Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organizations: The case of commercial microfinance organizations. *The Academy of Management Journal*, 53(6), 1419–1440. <https://doi.org/10.5465/amj.2010.57318391>
- Bender, K. A., & Sloane, P. J. (1998). Job satisfaction, trade unions, and exit-voice revisited. *Industrial and Labor Relations Review*, 51(2), 222–240. <https://doi.org/10.1177/001979399805100204>
- Bender, K. A., Donohue, S. M., & Heywood, J. S. (2005). Job satisfaction and gender segregation. *Oxford Economic Papers*, 57(3), 479–496. <https://doi.org/10.1093/oep/gpi015>
- Benz, M. (2005). Not for the profit but for the satisfaction? Evidence on worker well-being in non-profit firms. *Kyklos*, 58, 155–176. <https://doi.org/10.1111/j.0023-5962.2005.00283.x>
- Borzaga, C., & Depedri, S. (2005). Interpersonal relations and job satisfaction: Some empirical results in social and community care services. In B. Gui & R. Sugden (Eds.), *Economics and social interaction: Accounting for interpersonal relations* (pp. 125–149). Cambridge University Press. <https://doi.org/10.1017/CBO9780511522154.007>
- Borzaga, C., & Tortia, E. (2006). Worker motivations, job satisfaction, and loyalty in public and nonprofit social services. *Non-profit and Voluntary Sector Quarterly*, 35(2), 225–248. <https://doi.org/10.1177/0899764006287207>
- Brolis, O. (2015). Employment models in social enterprises. In PhD. Thesis. Université catholique de Louvain.
- Bryson, A., & White, M. (2016). Not so dissatisfied after all? The impact of union coverage on job satisfaction. *Oxford Economic Papers*, 68, 898–919. <https://doi.org/10.1093/oep/gpw018>
- Card, D., Mas, A., Moretti, E., & Saez, E. (2012). Inequality at work: The effect of peer salaries on job satisfaction. *American Economic Review*, 102(6), 2981–3003. <https://doi.org/10.1257/aer.102.6.2981>
- Clark, A. E. (1996). Job satisfaction in Britain. *British Journal of Industrial Relations*, 34(2), 189–217. <https://doi.org/10.1111/j.1467-8543.1996.tb00648.x>
- Clark, A. E. (1997). Job satisfaction and gender: Why are women so happy at work? *Labour Economics*, 4(4), 341–372. [https://doi.org/10.1016/S0927-5371\(97\)00010-9](https://doi.org/10.1016/S0927-5371(97)00010-9)
- Clark, A. E., & Oswald, A. J. (1996). Satisfaction and comparison income. *Journal of Public Economics*, 61(3), 359–381. [https://doi.org/10.1016/0047-2727\(95\)01564-7](https://doi.org/10.1016/0047-2727(95)01564-7)
- CNCRESS. (2014). *Atlas commenté de l'Economie sociale et solidaire*. CNCRESS.
- De Cooman, R., De Gieter, S., Pepermans, R., & Jegers, M. (2011). A cross-sector comparison of motivation-related concepts in for-profit and not-for-profit service organizations. *Nonprofit and Voluntary Sector Quarterly*, 40(2), 296–317. <https://doi.org/10.1177/0899764009342897>
- Defourny, J., & Nyssens, M. (Eds.). (2021). *Social enterprise in Western Europe: Theory, models and practice*. Routledge. <https://doi.org/10.4324/9780429055140>
- Devaro, J., & Brookshire, D. (2007). Promotions and incentives in nonprofit and for-profit organizations. *ILR Review*, 60(3), 311–339. <https://doi.org/10.1177/001979390706000301>
- Dorado, S., Chen, Y., Prado, A. M., & Simon, V. A. (2022). Attuned HRM systems for social enterprises. *Journal of Business Ethics*, 178, 829–848. <https://doi.org/10.1007/s10551-021-04821-4>
- Ducharme, L. J., Knudsen, H. K., & Roman, P. (2007). Emotional exhaustion and turnover intention in human service occupations: The protective role of coworker support. *Sociological Spectrum*, 28, 81–104. <https://doi.org/10.1080/02732170701675268>
- Frey, B. S. (1994). How intrinsic motivation is crowded out and in? *Rationality and Society*, 6(3), 334–352. <https://doi.org/10.1177/1043463194006003004>
- Frey, B. S. (1997). On the relationship between intrinsic and extrinsic work motivation. *International Journal of Industrial Organization*, 15, 427–439. [https://doi.org/10.1016/S0167-7187\(96\)01028-4](https://doi.org/10.1016/S0167-7187(96)01028-4)
- Gelbach, J. B. (2016). When do covariate matter? And which ones, and how much? *Journal of Labor Economics*, 34(2), 509–543. <https://doi.org/10.1086/683668>
- Grant, A. (2007). Relational job design and the motivation to make a prosocial difference. *The Academy of Management Review*, 32(2), 393–417. <https://doi.org/10.5465/amr.2007.24351328>
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60, 159–170. <https://doi.org/10.1037/h0076546>

- Hamermesh, D. S. (2001). The changing distribution of job satisfaction. *The Journal of Human Resources*, 36(1), 1–30. <https://doi.org/10.2307/3069668>
- Handy, F., & Katz, E. (1998). The wage differential between nonprofit institutions and corporations: Getting more by paying less? *Journal of Comparative Economics*, 26, 246–261. <https://doi.org/10.1006/jcec.1998.1520>
- Handy, F., Mook, L., Ginieniewicz, J., & Quarter, J. (2007). The moral high ground: Differentials among executive directors of Canadian nonprofits. *The Philanthropist*, 21(2), 109–127.
- Hansmann, H. B. (1980). The role of nonprofit enterprise. *Yale Law Journal*, 89(5), 835–901. <https://doi.org/10.2307/796089>
- Heywood, J. S., Siebert, W. S., & Wei, X. (2002). Worker sorting and job satisfaction: The case of union and government jobs. *Industrial and Labor Relations Review*, 55(4), 595–609. <https://doi.org/10.2307/3270624>
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A metanalytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92, 1332–1356. <https://doi.org/10.1037/0021-9010.92.5.1332>
- Judge, T. A., Weiss, H. M., Kammeyer-Mueller, J. D., & Hulin, C. L. (2017). Job attitudes, job satisfaction, and job affect: A century of continuity and of change. *Journal of Applied Psychology*, 102(3), 356–374. <https://doi.org/10.1037/apl0000181>
- Kjeldsen, A., & Anderson, L. (2013). How pro-social motivation affects job satisfaction: An international analysis of countries with different welfare state regimes. *Scandinavian Political Studies*, 36(2), 153–176. <https://doi.org/10.1111/j.1467-9477.2012.00301.x>
- Lanfranchi, J., & Narcy, M. (2008). Différence de satisfaction dans l'emploi entre secteurs à but lucratif et à but non lucratif : Le rôle joué par les caractéristiques d'emploi. *Annals of Public and Cooperative Economics*, 79(2), 323–368. <https://doi.org/10.1111/j.1467-8292.2008.00361.x>
- Lee, J. W., Zhang, L., Dallas, M., & Chin, H. (2019). Managing relational conflict in Korean social enterprises: The role of participatory HRM practices, diversity climate and perceived social impact. *Business Ethics: A European Review*, 28(1), 19–35. <https://doi.org/10.1111/beer.12204>
- Leete, L. (2000). Wage equity and employee motivation in nonprofit and for-profit organizations. *Journal of Economic Behavior and Organization*, 43, 423–446. [https://doi.org/10.1016/S0167-2681\(00\)00129-3](https://doi.org/10.1016/S0167-2681(00)00129-3)
- Leete, L. (2006). 7, Work in the nonprofit sector. In *The nonprofit sector* (pp. 159–179). Yale University Press. <https://doi.org/10.12987/9780300153439-010>
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297–1343). Rand McNally.
- Maier, F., Meyer, M., & Steinbereithner, M. (2016). Nonprofit organizations becoming business-like: A systematic review. *Nonprofit and Voluntary Sector Quarterly*, 45(1), 64–86. <https://doi.org/10.1177/0899764014561796>
- Maisonasse, J., Melnik, K., Petrella, F. and Richez-Battesti, N. (2010). Quelle qualité de l'emploi dans l'économie sociale et solidaire, rapport de recherche pour la Région PACA, la Caisse des Dépôts et Consignations et son Institut Recherche, décembre.
- Melnik, E., Petrella, F., & Richez-Battesti, N. (2013). Does the professionalism of management practices in nonprofits and for-profits affect job satisfaction? *International Journal of Human Resource Management*, 24(6), 1300–1321. <https://doi.org/10.1080/09585192.2012.712543>
- Mirvis, P., & Hackett, E. (1983). Work and work force characteristics in the nonprofit sector. *Monthly Labor Review*, 106(4), 3–12.
- Morgeson, F. P., & Humphrey, S. E. (2006). The work design questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91, 1321–1339. <https://doi.org/10.1037/0021-9010.91.6.1321>
- Mosca, M., Musella, M., & Pastore, F. (2007). Relational goods, monitoring and non-pecuniary compensation in the nonprofit sector: The case of the Italian social services. *Annals of Public and Cooperative Economics*, 78, 57–86. <https://doi.org/10.1111/j.1467-8292.2007.00327.x>
- Moulet, S., & Salibekyan, Z. (2019). The perception of job insecurity in France: Between individual determinants and managerial practices. *Economie et Statistique/Economics and Statistics*, 507-508, 71–90. <https://doi.org/10.24187/ecostat.2019.507d.1978>
- Observatoire de l'ESS. (2023). *Atlas commenté de l'économie sociale et solidaire*. Dalloz, Juris éditions.
- Oldham, G., & Hackman, J. (2010). Not what it was and not what it will be: The future of job design research. *Journal of Organizational Behavior*, 31, 463–479. <https://doi.org/10.1002/job.678>
- Petrella, F., Richez-Battesti, N., Fraisse, L., Laville, J.-L., & Gardin, L. (2021). Social enterprise in France: at the crossroads of the Social Economy, Solidarity Economy and Social entrepreneurship. In J. Defourny & M. Nyssens (Eds.), *Social enterprise in Western Europe: Theory, models and practice* (pp. 69–84). Routledge. <https://doi.org/10.4324/9780429055140-4-6>

- Preston, A. E. (1989). The nonprofit worker in a for-profit world. *Journal of Labor Economics*, 7, 438–463. <https://doi.org/10.1086/298216>
- Raziq, A., & Maulabakhsh, R. (2015). Impact of work environment on job satisfaction. *Procedia Economics and Finance*, 23, 717–725. [https://doi.org/10.1016/s2212-5671\(15\)00524-9](https://doi.org/10.1016/s2212-5671(15)00524-9)
- Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Terza, J. V. (1987). Estimating linear models with ordinal qualitative regressors. *Journal of Econometrics*, 34, 275–291. [https://doi.org/10.1016/0304-4076\(87\)90013-3](https://doi.org/10.1016/0304-4076(87)90013-3)
- van Praag, B., Frijters, P., & Ferrer-i-Carbonell, A. (2003). The anatomy of subjective well-being. *Journal of Economic Behavior & Organization*, 51(1), 29–49. [https://doi.org/10.1016/S0167-2681\(02\)00140-3](https://doi.org/10.1016/S0167-2681(02)00140-3)
- Walk, M., Schinnenburg, H., & Handy, F. (2013). Expectations and experiences of young employees: The case of German nonprofits. *Administration in Social Work*, 37(2), 133–146. <https://doi.org/10.1080/03643107.2012.667658>
- Wang, W., & Seifert, R. (2022). The end of meaningful work in the not-for-profit sector? A case study of ethics in employee relations under the new business-like operation regime. *Journal of Business Ethics*, 181, 1–14. <https://doi.org/10.1007/s10551-021-04891-4>

How to cite this article: Joutard, X., Petrella, F., & Richez-Battesti, N. (2024). Work organization in social enterprises: A source of job satisfaction? *Kyklos*, 1–38. <https://doi.org/10.1111/kykl.12411>

APPENDIX A: CHARACTERISTICS (MEANS) OF ESTABLISHMENTS AND EMPLOYEES

	SSEO	FPO
Establishment—Characteristics ^a		
Number of employees: From 10 to 19***	8.8	10.8
Number of employees: From 20 to 49***	32.6	23.9
Number of employees: From 50 to 99***	23.2	15.1
Number of employees: From 100 to 199***	12.6	15.4
Number of employees: From 200 to 499***	10.0	16.5
Sector: Manufacturing***	1.7	30.9
Sector: Construction***	0.5	8.6
Sector: Commerce, automobile, and motorcycle repair***	2.5	16.1
Sector: Transport and storage***	0.6	11.9
Sector: Information and communication***	0.3	4.7
Sector: Financial and insurance***	6.8	3.1
Sector: Technical, scientific, and specialized activities***	3.4	7.8
Sector: Administrative and support services***	2.3	5.4
Sector: Health and social work***	62.7	3.2
Independent establishment***	71.1	34.7
Establishment subject to collective agreement (CA)***	92.4	97.9
Executive salary growth subject to CA***	94.8	78.3
Non-executive salary growth subject to CA***	95.4	86.9
Establishment—Executive officer ^a		
Length of service (executive officer): Less than 5 years	25.6	26.0
Length of service (executive officer): 5 to 10 years	21.0	19.4
Length of service (executive officer): 10 to 20 years	28.3	27.5
Man (executive officer)***	53.4	61.7
Without diploma (executive officer)***	1.3	3.3
NVQ (National Vocational Qualification—Level 1, 2) or BTEC first diploma*** (executive officer)	2.9	7.2
A levels (executive officer)***	5.2	10.2
Age (executive officer): Less than 25 years old***	0	0.3
Age (executive officer): Between 25 and 30 years old***	1.3	2.6
Age (executive officer): Between 30 and 40 years old***	14.5	21.4
Age (executive officer): Between 40 and 50 years old***	32.8	39.2
Age (executive officer): Between 50 and 60 years old***	36.6	30.7
Establishment—Trade-union presence and committees ^a		
Trade-union delegate within establishment	55.6	57.4
Staff representative within establishment	70.2	68.6
Works committee within establishment***	43.4	50.8
HSC within establishment***	49.3	62.0
Rate of unionization: Less than 5%***	28.5	34.8
Rate of unionization: From 5 to 10%**	11.1	9.4

(Continues)

	SSEO	FPO
Rate of unionization: From 10 to 20%***	14.3	12.0
Member of trade union	58.7	60.3
Links with employment public service***	14.9	22.0
Member of the chamber of commerce***	2.4	9.1
Member of boards of other enterprises***	24.4	16.4
Employees—Sociodemographic characteristics ^a		
Man (employee)***	26.1	60.8
Without diploma (employee)	17.9	18.4
NVQ (National Vocational Qualification—Level 1, 2) or BTEC first diploma (employee)***	22.0	29.8
A levels (employee)	13.4	14.8
Length of seniority (employee): Less than 5 years**	24.3	21.9
Length of seniority (employee): Between 5 and 10 years	25.4	23.9
Length of seniority (employee): Between 10 and 20 years	27.2	28.5
Manual (employee)***	8.8	16.7
Skilled (employee)***	8.6	17.2
Clerical (employee)***	23.0	16.8
Technician/supervisor (employee)***	12.9	18.2
Other qualified (employee)***	23.5	6.6
Unemployed within last 3 years (employee)***	5.2	9.9
Employees—Contracts and job offer ^b		
Open-ended contract (employee)***	86.0	95.0
Regular job (employee)***	97.7	99.4
Net annual salary***	17221	23733
Part-time work***	34.3	11.0
Number of paid hours***	1450	1703
Regular working hours	57.0	56.3
Vocational training within last 3 years***	50.9	45.9
Employees—Participation and trade unions ^a		
Member of trade union (employee)	13.0	10.8
Staff representative (employee)	7.8	6.8

Note: A group test statistic for the equality of means (t-test for unequal variances) was carried out for each factor, and we indicate the level of significance of the differences just after the name of the characteristic.

Scope: Combination of samples: employees and executive officers.

^a Factor proportion in %.

^b Factor proportion in %, except for net annual salary (average in euros) and number of hours (average in hours).

*** Significant at 1%.

** Significant at 5%.

* Significant at 10%.

Source: DARES, REPONSE Survey, 2011.

APPENDIX B: DESCRIPTIVE STATISTICS AND CORRELATION WITH JOB SATISFACTION INDICES

TABLE B1 Descriptive statistics for job satisfaction indices.

Descriptive statistics for the job satisfaction indices			
Variables	Mean SSEO	Mean FPO	Description
score_job satisf_	2.90 (0.64)	2.82 (0.68)	Overall job satisfaction [1 to 4]
score_atmosp satisf_	2.81 (0.81)	2.76 (0.84)	Satisfaction with the workplace atmosphere [1 to 4]
score_condt satisf_	2.81 (0.72)	2.79 (0.75)	Satisfaction with working conditions [1 to 4]
score_train satisf_	2.67 (0.83)	2.51 (0.87)	Satisfaction with the opportunity to receive training [1 to 4]
score_remu satisf_	2.27 (0.77)	2.29 (0.79)	Satisfaction with the remuneration [1 to 4]

Note: The standard deviations are the coefficients in parentheses. Likert scales are shown in square brackets in the "Description" column.

Scope: Combination of samples: employees and executive officers.

Source: DARES, REPOSE Survey, 2011.

TABLE B2 Correlation coefficient for job satisfaction indices.

Correlation coefficient for job satisfaction indices					
	score_job satisf_	score_atmosp satisf_	score_condt satisf	score_train satisf_	score_remu satisf_
score_job satisf_	1.00	0.50	0.59	0.38	0.44
score_atmosp satisf_	0.50	1.00	0.51	0.34	0.29
score_condt satisf_	0.59	0.51	1.00	0.37	0.43
score_train satisf_	0.38	0.34	0.37	1.00	0.34
score_remu satisf_	0.44	0.29	0.43	0.34	1.00
Cronbach's alpha coefficient (normalized): 0.785					

Note: For the Pearson correlation coefficient, the Proba $>|r|$ under $H_0: \rho = 0$ is always significant at 1%.

Scope: Combination of samples: employees and executive officers.

Source: DARES, REPOSE Survey, 2011.

APPENDIX C: DESCRIPTIVE STATISTICS AND CORRELATION WITH WORK ORGANIZATION INDICES

TABLE C1 Descriptive statistics for work organization indices.

Descriptive statistics for management by objective indices			
Variables	Mean SSEO	Mean FPO	Description
Skills and learning indices			
Skills_ind	2.14 (0.77)	2.25 (0.84)	Full use of one's skills [1 to 4]
New skills_ind	2.45 (0.82)	2.59 (0.82)	Learn new skills and receive training [1 to 4]
Autonomy indices			
Reconcil_ind	2.10 (0.78)	2.25 (0.82)	Reconcile family life and working life [1 to 4]
freedom_ind	2.11 (0.82)	2.22 (0.88)	Freedom to decide how to do one's work [1 to 4]
No hurry_ind	3.59 (1.21)	3.76 (1.17)	No obligation to hurry [1 to 4]
No disapproval_ind	2.20 (0.66)	2.27 (0.72)	No obligation to do things against his will [1 to 4]
Valuation indices			
Not bored_ind	2.18 (0.59)	2.30 (0.76)	Do not get bored during work [1 to 4]
wquali_ind	2.31 (0.73)	2.30 (0.76)	Able to do high-quality work [1 to 4]
recognit_ind	2.66 (0.82)	2.76 (0.83)	Recognition of the value of his work [1 to 4]
health_ind	2.36 (0.86)	2.49 (0.98)	Work does not endanger one's health [1 to 4]
Relation indices			
relsup_ind	2.38 (0.85)	2.47 (0.86)	Quality of relations with superiors [1 to 4]
evalsup_ind	1.90 (0.53)	1.73 (0.64)	Proper evaluation by supervisor [1 to 4]
samecoll_ind	1.90 (1.11)	1.75 (0.88)	Work with the same colleagues [1 to 4]
helpcoll_ind	2.60 (1.05)	2.52 (0.89)	Help from colleagues [1 to 4]
Supin1_ind	2.29 (1.06)	2.38 (1.03)	Know who supervisor will be in 1 year [1 to 4]
Information indices			
inform_wcondt	0.63 (0.48)	0.56 (0.50)	Access to information on working conditions [0 to 1]
inform_emp	0.53 (0.50)	0.50 (0.50)	Access to information on terms of employment [0 to 1]
inform_train	0.65 (0.48)	0.52 (0.50)	Access to information on training opportunities [0 to 1]
inform_whoors	0.69 (0.46)	0.64 (0.48)	Access to information on working hours [0 to 1]
inform_wages	0.56 (0.50)	0.55 (0.50)	Access to information on wages [0 to 1]
Negotiation indices			
negoc_wage	0.34 (0.47)	0.48 (0.50)	Participation in negotiations on pay [0 to 1]
negoc_whoors	0.34 (0.47)	0.39 (0.49)	Participation in negotiations on working hours [0 to 1]
negoc_wcondt	0.34 (0.47)	0.30 (0.46)	Participation in negotiations on working conditions [0 to 1]

Note: The standard deviations are the coefficients in parentheses. Likert scales are shown in square brackets in the "Description" column.

Scope: Combination of samples: employees and executive officers.

Source: DARES, REPNSE Survey, 2011.

TABLE C2 Correlation coefficient for learning indices.

Correlation coefficient for learning indices		
	skills_ind	New skills_ind
Skills_ind full use of one's skills	1.00	0.44
New skills_ind learn new skills and receive training	0.44	1.00
Cronbach's alpha coefficient (normalized): 0.616		

Note: For the Pearson correlation coefficient, the Proba $>|r|$ under $H_0: \text{Rho} = 0$ is always significant at 1%.

TABLE C3 Correlation coefficient for autonomy indices.

Correlation coefficient for autonomy indices				
	concil_ind	freedom_ind	No hurry_ind	No disapproval_ind
concil_ind reconcile family life and working life	1.00	0.26	0.22	0.18
freedom_ind Freedom to decide how to do one's work	0.26	1.00	0.11	0.24
No hurry_ind no obligation to hurry	0.22	0.11	1.00	0.17
No disapproval_ind no obligation to do things against his will	0.18	0.24	0.17	1.00
Cronbach's alpha coefficient (normalized): 0.504				

Note: For the Pearson correlation coefficient, the Proba $>|r|$ under $H_0: \text{Rho} = 0$ is always significant at 1%.

TABLE C4 Correlation coefficient for valuation indices.

Correlation coefficient for valuation indices				
	Not bored_ind	wquali_ind	recognit_ind	health_ind
Not bored_ind Do not get bored during work	1.00	0.24	0.29	0.27
wquali_ind Able to do high-quality work	0.24	1.00	0.47	0.24
recognit_ind Recognition of the value of his work	0.29	0.47	1.00	0.31
health_ind Work does not endanger one's health	0.27	0.24	0.31	1.00
Cronbach's alpha coefficient (normalized): 0.640				

Note: For the Pearson correlation coefficient, the Proba $>|r|$ under $H_0: \text{Rho} = 0$ is always significant at 1%.

Scope: Combination of samples: employees and executive officers.

Source: DARES, REPOSE Survey, 2011.

TABLE C5 Correlation coefficient for relation indices.

Correlation coefficient for relation indices					
	relsup_ind	evalsup_ind	samecoll_ind	helpcoll_ind	Supin1_ind
relsup_ind Quality of relations with superiors	1.00	0.16	0.08	0.24	0.25
evalsup_ind Proper evaluation by supervisor	0.16	1.00	0.04	0.07	0.07
samecoll_ind Work with the same colleagues	0.089	0.04	1.00	0.34	0.24
helpcoll_ind Help from colleagues	0.24	0.07	0.34	1.00	0.15
Supin1_ind Know who supervisor will be in 1 year	0.25	0.07	0.24	0.15	1.00
Cronbach's alpha coefficient (normalized): 0.515					

Note: For the Pearson correlation coefficient, the Proba $>|r|$ under $H_0: \text{Rho} = 0$ is always significant at 1%.

TABLE C6 Correlation coefficient for information indices.

Correlation coefficient for information indices					
	inf_wcondt	inf_emp	inf_train	inf_hours	inf_wages
inf_wcondt access to information on working cond.	1.00	0.63	0.55	0.65	0.59
inf_emp access to information on terms of emp.	0.63	1.00	0.51	0.58	0.58
inf_train access to information on training opp.	0.55	0.51	1.00	0.49	0.49
inf_hours access to information on working hours	0.65	0.58	0.49	1.00	0.60
inf_wages access to information on wages	0.59	0.58	0.49	0.60	1.00
Cronbach's alpha coefficient (normalized): 0.896					

Note: For the Pearson correlation coefficient, the Proba $>|r|$ under $H_0: \text{Rho} = 0$ is always significant at 1%.

TABLE C7 Correlation coefficient for negotiation indices.

Correlation coefficient for negotiation indices			
	negoc_wage	negoc_hours	negoc_wcondt
negoc_wage participation in negotiations on pay	1.00	0.67	0.42
negoc_hours participation in negotiations on working hours	0.67	1.00	0.70
negoc_wcondt participation in negotiations on working cond.	0.42	0.70	1.00
Cronbach's alpha coefficient (normalized): 0.828			

Note: For the Pearson correlation coefficient, the Proba $>|r|$ under $H_0: \text{Rho} = 0$ is always significant at 1%.

APPENDIX D: Descriptive statistics and correlation with management by objective indices

TABLE D1 Descriptive statistics for management by objective indices.

Descriptive statistics for management by objective indices			
Variables	Mean SSEO	Mean FPO	Description
Objectives indices			
object_secur	0.76 (0.43)	0.80 (0.40)	Specific and quantified objectives for the company in 2010 concerning security
object_qualite	0.87 (0.34)	0.86 (0.35)	Specific and quantified objectives for the company in 2010 concerning quality
object_budg	0.92 (0.28)	0.87 (0.33)	Specific and quantified objectives for the company in 2010 concerning budget
object_rent	0.41 (0.49)	0.75 (0.43)	Specific and quantified objectives for the company in 2010 concerning profitability/cost-effectiveness
object_crois	0.31 (0.46)	0.65 (0.48)	Specific and quantified objectives for the company in 2010 concerning growth and market shares
object_cout	0.81 (0.39)	0.81 (0.39)	Specific and quantified objectives for the company in 2010 concerning labor costs.
Profit indices			
stock_cad	0.00 (0.00)	0.07 (0.26)	Management staff benefited from stock options
primco_cad	0.18 (0.38)	0.62 (0.49)	Management staff benefited from bonuses linked to collective performance
primi_cad	0.18 (0.39)	0.68 (0.47)	Management staff benefited from bonuses linked to individual performance (objective bonus, performance bonus)
stock_ncad	0.00 (0.00)	0.02 (0.13)	Non-executive staff benefited from stock options
primco_ncad	0.17 (0.38)	0.65 (0.48)	Non-executive staff benefited from bonuses linked to collective performance
primi_ncad	0.49 (0.48)	0.50 (0.49)	Non-executive staff benefited from bonuses linked to individual performance (objective bonus, performance bonus)
Incentives indices			
lien_sal	0.27 (0.45)	0.67 (0.47)	Link between the results of an employee's periodic appraisal and his/her salary or bonus
lien_form	0.65 (0.48)	0.69 (0.46)	Link between the results of an employee's periodic assessment and his/her training
lien_prom	0.47 (0.50)	0.75 (0.44)	Link between the results of an employee's periodic assessment and his/her promotion
lien_secemp	0.19 (0.40)	0.29 (0.46)	Link between the results of an employee's periodic assessment and his/her job security

Note: The standard deviations are the coefficients in parentheses. For all the indices, the Likert scale is [0 to 1].

Scope: Sample of executive officers.

Source: DARES, REPNSE Survey, 2011.

TABLE D2 Correlation coefficient for objectives indices.

Correlation coefficient for objectives indices						
	object_secur	object_qualite	object_budg	object_rent	object_crois	object_cout
object_secur	1.00	0.51	0.29	0.22	0.15	0.26
object_qualite	0.51	1.00	0.36	0.26	0.21	0.29
object_budg	0.29	0.36	1.00	0.36	0.31	0.52
object_rent	0.22	0.26	0.36	1.00	0.56	0.36
object_crois	0.15	0.21	0.31	0.56	1.00	0.32
object_cout	0.26	0.29	0.52	0.36	0.32	1.00

Cronbach's alpha coefficient (normalized): 0.749

Note: For the Pearson correlation coefficient, the Proba $>|r|$ under $H_0: \text{Rho} = 0$ is always significant at 1%.

Scope: Sample of Executive Officers.

Source: DARES, REPONSE Survey, 2011.

TABLE D3 Correlation coefficient for profit indices.

Correlation coefficient for profit indices						
	stock_cad	primco_cad	primi_cad	stock_ncad	primco_ncad	primi_ncad
stock_cad	1.00	0.17	0.15	0.42	0.14	0.06
primco_cad	0.17	1.00	0.46	0.08	0.82	0.20
primi_cad	0.15	0.46	1.00	0.07	0.40	0.45
stock_ncad	0.42	0.08	0.07	1.00	0.07	0.06
primco_ncad	0.14	0.83	0.40	0.07	1.00	0.20
primi_ncad	0.06	0.20	0.45	0.06	0.20	1.00

Cronbach's alpha coefficient (normalized): 0.668

Note: For the Pearson correlation coefficient, the Proba $>|r|$ under $H_0: \text{Rho} = 0$ is always significant at 1%.

TABLE D4 Correlation coefficient for incentives indices.

Correlation coefficient for incentives indices				
	lien_sal	lien_form	lien_prom	lien_secemp
lien_sal	1.00	0.35	0.57	0.29
lien_form	0.35	1.00	0.50	0.25
lien_prom	0.57	0.50	1.00	0.32
lien_secemp	0.29	0.25	0.32	1.00

Cronbach's alpha coefficient (normalized): 0.710

Note: For the Pearson correlation coefficient, the Proba $>|r|$ under $H_0: \text{Rho} = 0$ is always significant at 1%.

Scope: sample of executive officers.

Source: DARES, REPONSE Survey, 2011.

APPENDIX E

TABLE E1 Effects of working at an SSEO on job satisfaction (with the Gelbach decomposition).

Job satisfaction	Base model estimate	Full model estimate	Gelbach decomposition
Simple model (without control factors in the base model) ^a Numb. Obs.: 11094			
Job satisfaction gap	0.0443*** (0.0116)	-0.0029 (0.0109)	-
WO			0.040*** (0.0076)
MO			0.0073 (0.00479)
Model with individual and firm factors ^b Numb. Obs.: 10966			
Job satisfaction gap	0.0447** (0.0182)	0.0159 (0.0143)	-
WO			0.0247** (0.0106)
MO			0.004 (0.00303)
Standard model (with job characteristics, individual and firm factors) ^c Numb. Obs.: 10795			
Job satisfaction gap	0.0421** (0.0184)	0.0141 (0.0147)	-
WO			0.0225** (0.0103)
MO			0.0047 (0.00303)

Note: In all the specifications, the so-called "full model" adds the set of organization and management indicators to the regressors.

Scope: Combination of samples: employees and executive officers.

^aIn the base model, only the establishment fixed effects are present.

^bIn the base model, individual and firm control factors are then added: for the individual level, SOC, unemployment within the last 3 years, length of service, qualification, gender, membership in a trade union, being a staff representative; for the establishment level, number of employees, sectors, being an independent establishment, being an establishment subject to a collective agreement (CA), executive salary growth subject to a CA, non-executive salary growth subject to a CA.

^cIn the base model, additional job control factors are included: net annual salary, working hours (part-time, number of paid hours, regular working hours), contract type (open-ended), and vocational training within past 3 years.

*** $p < 1\%$, ** $p < 5\%$, and * $p < 10\%$.

Source: DARES, REPOSE Survey, 2011.

TABLE E2 Effects of working at an SSEO on satisfaction with work atmosphere (with the Gelbach decomposition).

Atmosphere	Base model estimate	Full model estimate	Gelbach decomposition
Simple model (without control factors in the base model) ^a Numb. Obs.: 11063			
Atmosphere satisf. gap	0.0293** (0.013)	0.0001 (0.0136)	-
WO			0.0262*** (0.00678)
MO			0.003 (0.00578)
Model with individual and firm factors ^b Numb. Obs.: 10937			
Atmosphere satisf. gap	0.0367* (0.0198)	0.0153 (0.0173)	-
WO			0.0189** (0.00923)
MO			0.00255 (0.00360)
Standard model (with job characteristics, individual and firm factors) ^c Numb. Obs.: 10772			
Atmosphere satisf. gap	0.0253 (0.0203)	0.006 (0.0179)	-
WO			0.0169* (0.009)
MO			0.002 (0.00358)

TABLE E3 Effects of working at an SSEO on satisfaction with working conditions (with the Gelbach decomposition).

Working conditions (WC)	Base model estimate	Full model estimate	Gelbach decomposition
Simple model (without control factors in the base model) ^a Numb. Obs.: 11156			
WC satisfaction gap	0.0169*	−0.0148	-
	(0.009)	(0.0123)	
WO			0.0141***
			(0.00874)
MO			−0.0109**
			(0.00522)
Model with individual and firm factors ^b Numb. Obs.: 11028			
WC satisfaction gap	0.0571***	0.0242	-
	(0.0202)	(0.0159)	
WO			0.0316***
			(0.0118)
MO			0.0132***
			(0.00328)
Standard model (with job characteristics, individual and firm factors) ^c Numb. Obs.: 10859			
WC satisfaction gap	0.0534***	0.0240	-
	(0.0204)	(0.0162)	
WO			0.0277**
			(0.0115)
MO			0.00162
			(0.00329)

TABLE E4 Effects of working at an SSEO on satisfaction with training (with the Gelbach decomposition).

Training	Base model estimate	Full model estimate	Gelbach decomposition
Simple model (without control factors in the base model) ^a Numb. Obs.: 10802			
Training satisfaction gap	0.0775*** (0.0139)	0.0659 (0.0142)	-
WO			0.0413*** (0.00742)
MO			-0.0297*** (0.0065)
Model with individual and firm factors ^b Numb. Obs.: 10675			
Training satisfaction gap	0.0488** (0.0208)	0.0251 (0.0189)	-
WO			0.0303*** (0.0102)
MO			-0.00667* (0.0038)
Standard model (with job characteristics, individual and firm factors) ^c Numb. Obs.: 10521			
Training satisfaction gap	0.0467** (0.0195)	0.0232 (0.018)	-
WO			0.0276*** (0.00894)
MO			-0.00460 (0.00362)

TABLE E5 Effects of working at an SSEO on satisfaction with earnings (with the Gelbach decomposition).

Earnings	Base model estimate	Full model estimate	Gelbach decomposition
Simple model (without control factors in the base model) ^a Numb. Obs.: 11098			
Earning satisfaction gap	-0.0209	-0.041***	-
	(0.0141)	(0.0149)	
WO			0.0233***
MO			(0.0072)
			0.0031
			(0.0066)
Model with individual and firm factors ^b Numb. Obs.: 10972			
Earning satisfaction gap	0.086	-0.0035	-
	(0.0215)	(0.0204)	
WO			0.0162*
MO			(0.00912)
			0.00579 (0.00413)
Standard model (with job characteristics, individual and firm factors) ^c Numb. Obs.: 10806			
Earning satisfaction gap	0.0243	0.0019	-
	(0.0214)	(0.0206)	
WO			0.0140*
MO			(0.00830)
			0.00785*
			(0.00404)

APPENDIX F

TABLE F1 Conditional decomposition of the estimation of the job satisfaction gap (WO and MO details in the standard model case).

VARIABLES	Base model estimate	Full model estimate ^a	Gelbach decomposition ^b
Job satisfaction	0.0421** (0.0184)	0.0141 (0.0145)	-
WO			
Skills and learning	-		0.00407 (0.00267)
Valuation of work	-		0.00755 (0.00601)
Quality of relations	-		-0.0011 (0.00111)
Job autonomy	-		0.00834*** (30%) (0.00252)
Access to information	-		0.00362** (13%) (0.0014)
Negotiations (take part in)	-		0.00281 (0.000613)
MO			
Objectives	-		0.001 (0.00119)
Profits	-		0.00156 (0.00279)
Incentives	-		0.00219* (8%) (0.00129)
<i>Numb. Obs.: 10795</i>			

Note: The so-called “base model” corresponds to the standard model, which includes job characteristics, individual and firm factors. The so-called “full model” adds the set of organization and management indicators to the regressors.

Scope: Combination of samples: employees and executive officers.

^aThe detailed estimate of the full model is provided in Table F6 and allows the effects of the other covariates to be examined.

^bThe percentages in bracket are obtained by relating the—significant—coefficients (in percentage points, i.e. multiplying by 100) to the difference between the estimations of the job satisfaction gap (2.8 points here).

*** $p < 1\%$, ** $p < 5\%$, and * $p < 10\%$.

Source: DARES, REPOSE Survey, 2011.

TABLE F2 Conditional decomposition of the estimation of the satisfaction gap concerning work atmosphere (WO and MO details in the standard model case).

VARIABLES	Base model estimate	Full model estimate ^a	Gelbach decomposition ^a
Atmosphere	0.0253	0.006	-
WO	(0.0203)	(0.0179)	
Skills and learning	-		0.00104 (0.000849)
Valuation of work	-		0.00582 (0.00452)
Quality of relations	-		-0.00325 (0.00284)
Job autonomy	-		0.00706*** (0.00234)
Access to information	-		0.00600*** (0.00202)
Negotiations (take part in)	-		0.00293 (0.00265)
MO			
Objectives	-		-0.00223 (0.00157)
Profits	-		0.00034 (0.00331)
Incentives	-		0.00392**
<i>Numb. Obs.: 10772</i>			(0.00166)

^aThe detailed estimate of the full model is provided in Table F6 and allows the effects of the other covariates to be examined.

TABLE F3 Conditional decomposition of the estimation of the satisfaction gap concerning working conditions (WO and MO details in the standard model case).

VARIABLES	Base model estimate	Full model estimate ^a	Gelbach decomposition ^a
Working conditions	0.0534*** (0.0204)	0.0240 (0.0162)	-
WO			
Skills and learning	-		0.000435 (0.000553)
Valuation of work	-		0.00848 (0.00723)
Quality of relations	-		-0.00119 (0.00112)
Job autonomy	-		0.0127*** (43%) (0.00376)
Access to information	-		0.00692*** (23%) (0.00217)
Negotiations (take part in)	-		0.00118 (0.00166)
MO			
Objectives	-		0.000716 (0.00129)
Profits	-		-0.00195 (0.00306)
Incentives	-		0.00285* (10%) (0.00147)
<i>Numb. Obs.: 10859</i>			

^aThe detailed estimate of the full model is provided in Table F6 and allows the effects of the other covariates to be examined.

TABLE F4 Conditional decomposition of the estimation of the satisfaction gap concerning training (WO and MO details in the standard model case).

VARIABLES	Base model estimate	Full model estimate ^a	Gelbach decomposition ^a
Training	0.0467** (0.0195)	0.0238 (0.018)	-
WO			
Skills and learning	-		0.00319 (0.00238)
Valuation of work	-		0.00250 (0.00235)
Quality of relations	-		-0.00095 (0.000992)
Job autonomy	-		0.00293** (13%) (0.00149)
Access to information	-		0.0197*** (84%) (0.00560)
Negotiations (take part in)	-		0.00303 (0.00343)
MO			
Objectives	-		0.000256 (0.00154)
Profits	-		-0.005 (0.00343)
Incentives	-		1.12e-05
<i>Numb. Obs.: 10521</i>			(0.00148)

^aThe detailed estimate of the full model is provided in Table F6 and allows the effects of the other covariates to be examined.

TABLE F5 Conditional decomposition of the estimation of the satisfaction gap concerning earnings (WO and MO details in the standard model case).

VARIABLES	Base model estimate	Full model estimate ^a	Gelbach decomposition ^a
Earnings	0.0243 (0.0214)	0.0019 (0.0206)	-
WO			
Skills and learning	-		-0.000698 (0.000706)
Valuation of work	-		0.00673 (0.00564)
Quality of relations	-		-0.00213 (0.00182)
Job autonomy	-		0.00103 (0.00139)
Access to information	-		0.00883*** (0.00270)
Negotiations (take part in)	-		0.00313 (0.00346)
MO			
Objectives	-		0.00336* (0.00169)
Profits	-		0.00086 (0.00367)
Incentives	-		0.00364** (0.00174)
<i>Numb. Obs.: 10806</i>			

^aThe detailed estimate of the full model is provided in Table F6 and allows the effects of the other covariates to be examined.

TABLE F6 Estimates of the “Full model” for global satisfaction and for each level of satisfaction.

Job satisfaction variables	Global	Atmosphere	Working conditions	Training	Earnings
Intercept	0.257*** (0.064)	0.243*** (0.073)	0.206*** (0.073)	0.196** (0.084)	0.131 (0.083)
SSEO	0.014 (0.015)	0.006 (0.018)	0.024 (0.016)	0.024 (0.018)	0.002 (0.021)
Establishment—Characteristics^a					
Number of employees: From 10 to 19	-0.250 (0.020)	-0.083*** (0.024)	-0.017 (0.022)	-0.017 (0.024)	-0.017 (0.024)
Number of employees: From 20 to 49	-0.040** (0.016)	-0.089*** (0.020)	-0.038** (0.018)	-0.033 (0.021)	-0.037* (0.020)
Number of employees: From 50 to 99	-0.035** (0.014)	-0.054*** (0.017)	-0.004 (0.016)	-0.029 (0.018)	-0.046** (0.018)
Number of employees: From 100 to 199	-0.025* (0.014)	-0.057*** (0.015)	-0.008 (0.014)	-0.023 (0.017)	-0.021 (0.017)
Number of employees: From 200 to 499	-0.010 (0.130)	-0.016 (0.014)	-0.002 (0.014)	-0.020 (0.016)	-0.008 (0.017)
Sector: Manufacturing	0.028* (0.016)	-0.014 (0.018)	0.023 (0.016)	-0.018 (0.018)	0.063*** (0.019)
Sector: Construction	0.024 (0.018)	0.064*** (0.021)	0.043** (0.020)	-0.058** (0.023)	0.042* (0.024)
Sector: Commerce, automobile, and motorcycle repair	0.002 (0.016)	0.031* (0.019)	0.023 (0.017)	-0.009 (0.019)	-0.023 (0.020)
Sector: Transport and storage	0.038** (0.018)	0.041** (0.020)	0.079*** (0.019)	-0.001 (0.021)	0.085*** (0.024)
Sector: Information and communication	-0.061*** (0.023)	0.045* (0.027)	-0.003 (0.022)	-0.087*** (0.029)	-0.023 (0.029)
Sector: Financial and insurance	-0.018 (0.021)	-0.043 (0.026)	0.027 (0.023)	0.007 (0.027)	-0.002 (0.028)
Sector: Technical, scientific, and specialized activities	-0.027 (0.018)	-0.015 (0.022)	0.017 (0.019)	-0.004 (0.023)	-0.046** (0.023)
Sector: Administrative and support services	-0.003 (0.020)	-0.003 (0.028)	0.041* (0.021)	-0.004 (0.025)	0.064** (0.027)
Sector: Health and social work	0.005 (0.018)	0.000 (0.021)	-0.042** (0.020)	-0.031 (0.021)	-0.045** (0.023)
Independent establishment	-0.004 (0.008)	-0.001 (0.010)	-0.003 (0.009)	-0.002 (0.010)	0.012 (0.011)
Establishment subject to collective agreement (CA)	0.038* (0.022)	0.068*** (0.025)	0.013 (0.022)	-0.053** (0.023)	0.031 (0.028)
Executive salary growth subject to CA	-0.03** (0.013)	-0.011 (0.014)	0.009 (0.014)	0.005 (0.014)	-0.005 (0.016)
Non-executive salary growth subject to CA	0.051*** (0.015)	0.027 (0.017)	0.008 (0.016)	0.035** (0.018)	0.024 (0.019)
Employees—Sociodemographic characteristics^b					
Man	0.024** (0.009)	0.021** (0.010)	0.026*** (0.010)	-0.028*** (0.011)	-0.005 (0.011)

(Continues)

TABLE F6 (Continued)

Job satisfaction variables	Global	Atmosphere	Working conditions	Training	Earnings
Without diploma	0.105*** (0.013)	0.017 (0.015)	0.050*** (0.013)	0.105*** (0.015)	0.003 (0.016)
NVQ (National Vocational Qualification— Level 1, 2) or BTEC first diploma	0.073*** (0.012)	0.002 (0.013)	0.022* (0.012)	0.072*** (0.013)	−0.029** (0.014)
A levels	0.052*** (0.013)	0.017 (0.014)	0.028** (0.013)	0.055*** (0.014)	0.021 (0.015)
Length of seniority: Less than 5 years	0.021* (0.012)	0.072*** (0.014)	0.044*** (0.013)	0.009 (0.014)	0.076*** (0.015)
Length of seniority: Between 5 and 10 years	0.022* (0.011)	0.044*** (0.013)	0.044*** (0.012)	−0.029** (0.013)	0.042*** (0.014)
Length of seniority: Between 10 and 20 years	0.011 (0.011)	0.027** (0.012)	0.012 (0.011)	−0.006 (0.0121)	0.038*** (0.012)
Manual	−0.086*** (0.016)	−0.030* (0.018)	−0.114*** (0.016)	−0.066*** (0.019)	−0.097*** (0.021)
Skilled	−0.060*** (0.015)	−0.032* (0.017)	−0.091*** (0.016)	−0.075*** (0.018)	−0.100*** (0.020)
Clerical	−0.036** (0.014)	−0.035** (0.016)	−0.038*** (0.014)	−0.037** (0.017)	−0.060*** (0.019)
Technician/supervisor	−0.015 (0.012)	−0.030** (0.014)	−0.019 (0.013)	−0.038*** (0.015)	−0.035** (0.018)
Other qualified	−0.015 (0.016)	−0.016 (0.019)	−0.063*** (0.017)	−0.036* (0.020)	−0.055*** (0.021)
Unemployed within last 3 years	−0.012 (0.015)	0.013 (0.016)	−0.009 (0.015)	−0.035** (0.016)	−0.032** (0.016)
Establishment—Trade-union presence and committees ^c					
Trade-union delegate within establishment	−0.004 (0.011)	−0.022 (0.013)	−0.017 (0.012)	0.000 (0.013)	−0.018 (0.014)
Staff representative within establishment	0.000 (0.010)	0.000 (0.012)	−0.009 (0.010)	0.035*** (0.012)	0.009 (0.012)
Works committee within establishment	−0.023* (0.012)	−0.004 (0.014)	0.012 (0.013)	−0.030** (0.014)	−0.003 (0.015)
HSC within establishment	−0.001 (0.013)	−0.013 (0.015)	−0.0046 (0.014)	0.009 (0.015)	−0.017 (0.015)
Rate of unionization: Less than 5%	−0.006 (0.009)	0.022* (0.011)	0.004 (0.010)	−0.012 (0.012)	0.012 (0.012)
Rate of unionization: From 5 to 10%	−0.008 (0.013)	0.021 (0.015)	0.019 (0.014)	0.018 (0.015)	0.031* (0.017)
Rate of unionization: From 10 to 20%	−0.028** (0.012)	−0.018 (0.013)	0.010 (0.012)	−0.013 (0.014)	−0.011 (0.015)
Employees—Contracts and job offer					
Regular job	−0.064 (0.050)	−0.012 (0.057)	−0.056 (0.061)	−0.112 (0.074)	−0.088 (0.067)
Part-time work	−0.006 (0.013)	0.035** (0.015)	−0.001 (0.014)	−0.007 (0.015)	0.001 (0.015)
Number of paid hours	−0.0001** (0.000)	−0.000 (0.000)	−0.000 (0.000)	−0.0001*** (0.000)	−0.0001*** (0.000)

TABLE F6 (Continued)

Job satisfaction variables	Global	Atmosphere	Working conditions	Training	Earnings
Regular working hours	−0.002 (0.008)	−0.000 (0.009)	0.032*** (0.008)	−0.017* (0.009)	0.000 (0.009)
Vocational training within last 3 years	0.050*** (0.008)	0.033*** (0.009)	0.036*** (0.008)	0.250*** (0.010)	0.049*** (0.009)
Open-ended contract	−0.046*** (0.017)	−0.054*** (0.018)	−0.060*** (0.018)	−0.024 (0.021)	−0.045** (0.021)
Work organizations indices					
Skills and learning indices	0.242*** (0.027)	0.062* (0.032)	0.025 (0.029)	0.214*** (0.033)	−0.048 (0.033)
Valuation indices	0.530*** (0.030)	0.394*** (0.035)	0.630*** (0.032)	0.203*** (0.037)	0.492*** (0.038)
Relation indices	0.094*** (0.026)	0.252*** (0.031)	0.094*** (0.029)	0.067** (0.032)	0.156*** (0.033)
Autonomy indices	0.194*** (0.025)	0.166*** (0.030)	0.299*** (0.027)	0.070** (0.030)	0.024 (0.033)
Information indices	0.077*** (0.024)	0.132*** (0.029)	0.153*** (0.027)	0.449*** (0.030)	0.199*** (0.031)
Negotiation indices	−0.032 (0.022)	−0.044* (0.026)	−0.063*** (0.024)	−0.041 (0.027)	−0.042 (0.028)
Management by objectives indices					
Objectives indices	−0.012 (0.015)	0.028 (0.018)	−0.009 (0.016)	−0.003 (0.018)	−0.042** (0.019)
Profit indices	−0.010 (0.017)	−0.002 (0.020)	0.012 (0.019)	0.030 (0.021)	−0.006 (0.023)
Incentives indices	−0.026* (0.015)	−0.047*** (0.018)	−0.034** (0.016)	−0.001 (0.018)	−0.044** (0.019)

Note: Standard errors are in parentheses.

Scope: Combination of samples: employees and executive officers.

^aCovariate references: Number of employees: more than 500 employees – Other sectors.

^bCovariate references: higher education diploma—Length of seniority: more than 20 years—executive.

^cCovariate references: Rate of unionization: more than 20%.

Source: DARES, REPOSE Survey, 2011.

*** $p < 1\%$, ** $p < 5\%$, and * $p < 10\%$.

APPENDIX G: EFFECTS OF WO AND MO INDICES ON JOB SATISFACTION FOR ALL EMPLOYEES (SSEO AND FPOS)

Satisfaction ...	Global	Atmosphere	Working conditions	Training	Remuneration
WO factors					
Skills and learning (crossing with SSEO)	0.25*** (NS)	0.07** (NS)	NS (NS)	0.22*** (NS)	-0.06* (NS)
Valuation of work (crossing with SSEO)	0.53*** (NS)	0.38*** (NS)	0.62*** (NS)	0.17*** (NS)	0.52*** (-0.24**)
Quality of interpersonal relations (crossing with SSEO)	0.10*** (NS)	0.27*** (NS)	0.09*** (NS)	0.07** (NS)	0.13*** (NS)
Autonomy in work (crossing with SSEO)	0.201*** (NS)	0.17*** (-0.08*)	0.31*** (NS)	0.07** (-0.08*)	NS (NS)
Access to information (crossing with SSEO)	0.07*** (NS)	0.11*** (0.14*)	0.15*** (NS)	0.45*** (NS)	NS (NS)
Participation in negotiations (crossing with SSEO)	-0.04** (NS)	-0.06** (NS)	-0.02* (NS)	NS (-0.12*)	-0.05* (NS)
MO Factors					
Practices by objectives (crossing with SSEO)	NS (NS)	NS (NS)	NS (NS)	NS (NS)	NS (NS)
Profit-sharing practices (crossing with SSEO)	NS (NS)	NS (NS)	NS (NS)	0.03* (NS)	NS (NS)
Incentive practices (crossing with SSEO)	-0.03** (0.07*)	-0.05** (NS)	-0.03** (0.07*)	NS (NS)	-0.04** (NS)

Abbreviation: NS, not significant.

Scope: Combination of samples: employees and executive officers.

Source: DARES, REPOSE Survey, 2011.

*** $p < 1\%$, ** $p < 5\%$, and * $p < 10\%$.