

Research paper

Working conditions and organizational support influence on satisfaction and performance

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Abstract

Purpose - The purpose of this paper is to analyze the perceptions of working conditions (e.g. payment, training, work life balance (WLB)), organizational support and their effects on satisfaction with working conditions and job performance. Characterization variables considered relevant were included.

Design/methodology/approach - A sample of 43850 individuals, from 35 European countries, inquired by questionnaire, from European Work Conditions Survey 2015 was analyzed. The study of relationships was conducted trough hierarchical linear regression.

Originality/Value- This research, while addressing working conditions, analyses common antecedents to job satisfaction and performance, allowing comparing its effects, which is seldom done. The findings also contribute for WLB and organizational support literature. The results may provide useful insights to managers to improve job satisfaction and call for reflection on the determinants of job performance.

Findings – The results showed (a) most of characterization variables had a low or non-significant effect on criteria variables; (b) the best predictors for satisfaction with work conditions were payment, WLB, and organizational support, particularly direct management support; (c) for job performance the relevant predictors were tenure, WLB and organizational support.

Research limitations/implications - Cross-sectional design does not allow to establish causal relations between the variables. The exclusive use of self-reported questionnaires can influence results trough common method variance. The low explanatory power of job performance model calls for an alternative model design.

Practical implications - Organizations seeking to increase satisfaction should recognize the importance of payment, WLB, and organizational support.

Keywords: Working conditions; satisfaction; organizational support; performance.

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1. Introduction

There is an extensive body of theoretical work and empirical research regarding job satisfaction and individual performance, traditionally from social psychology, organizational behaviour, and also sociology, which has also been integrated in human resource management field, given the growing acknowledgement of human factor significance in organizational performance. Job satisfaction has been associated with a wide range of outcomes at the individual and organizational level; giving that organizational performance is closely dependent on individual's performance this has been a subject of interest since Taylor's scientific management proposal, over a century ago.

The quest for job satisfaction is manly determined by the expected effects either on the individual or organizational level, such as increased organizational commitment, organizational citizenship behaviors (OCB) and higher individual performance (Judge, Thoresen, Bono and Patton, 2001; Organ, 1997). As Milán, Hessels, Thurik, and Aguado (2013) consider there are various positive outcomes of job satisfaction on individual and organizational performance; it would raise individual performance and organizational effectiveness, lower turnover, and increase customer satisfaction, among others, thus contributing to organizational success.

Also a meta-analysis of the relationship between job satisfaction and engagement with business outcomes, conducted by Harter, Schmidt and Hayes (2002), revealed positive associations with customer satisfaction and loyalty, productivity, profitability, and negative relationships with employee turnover and higher safety levels (less work-time lost with incidents).

When addressing the subject of job satisfaction and performance, besides the sometimes unclear construct definitions, we are also confronted with a multiplicity of approaches and antecedents, from individual to organizational context. For instance, the importance of personality traits on performance, that is of key importance in selection, training and performance appraisal (Barrick and Mount, 1991). For our purposes, we mainly reviewed literature on organizational level variables; here we find the discussion on incentives and rewards effects on performance (Bonner & Sprinkle, 2001; Prendergast, 1999; Jenkins, Mitra, Gupta & Shaw, 1998), but also in satisfaction (Pouliakas and Theodossiou, 2009; Christen, Iyer and Soberman, 2006); and of the quality of supervision, clarity of job responsibilities relationships with job satisfaction (Christen et al., 2006) within other aspects that we discuss later.

We acknowledge the importance of the studies on the relationship between job satisfaction and job performance, as Judge et al. (2001) say is "one of the most venerable research traditions" in industrial and organizational psychology. In their meta-analytic work, besides indentifying up to seven causal models of relationships between the two variables, and although they conclude with the estimation of a mean true correlation of 0.30 between overall job satisfaction and job performance, there are other more skeptical studies (e.g. Brown & Peterson, 1994, Iaffaldano, & Muchinsky, 1985), that indicate a small or non-significant relationship, as well as of Wright and Cropanzano (2000), and Fu & Deshpande, (2014) whose results indicate no significant impact of job satisfaction on job performance.

Our work doesn't follow that direction; we studied both variables in parallel, examining common antecedents, in a large sample. While reviewing the literature only meta-



analysis had similar large sample sizes, but unlike in our study, the effect of various methods/studies have to be controlled; we also worked with a large multi-country European sample (35 countries) this allows for a more comprehensive and generalizable analysis of the variables under study.

The purpose of this study is to contribute empirically to the literature on job satisfaction and job performance. We examine to what extent working conditions, in a broader sense, and organizational support affect attitudes and workers behaviors, namely satisfaction and job performance. Job satisfaction is a multidimensional construct; in this research we studied satisfaction with working conditions, considering that it can have similar antecedents and effects on attitudes and behaviors.

The present study is organized as follows: the next section presents the theoretical background on satisfaction and performance, and their expected antecedent variables on the fields of working conditions and organizational support; the third section on methods, describes samples and measures used; the fourth section reports data analysis and results, which are discussed later in the fifth section. This last section besides discussion refers also to limitations, implications for practice, and suggestions for future research.

2. Theoretical background and hypothesis

The concept of job satisfaction can be understood as the affective connection or orientation to work as a whole, or in relation to particular aspects, and thus a multi-dimensional or multi-facet construct (Brief & Weiss, 2002; Lu, While, Barribal, 2005). Spector (1997:2) defines job satisfaction as "how people feel about their jobs and different aspects of their jobs is an attitudinal variable, a global feeling or related attitudes towards various aspects or facets of the job", he identifies as common job facets: appreciation, communication, coworkers, fringe benefits, job conditions, nature of work and organization itself, organizational policies and procedures, pay, personal growth, promotion opportunities, recognition, security and supervision (Spector, 1997:3)

According to Arvey, Carter, & Buerkley (1991) the antecedents of job satisfaction can generically be grouped in three models; the ones centered on individuals (e.g. psychological, demographical, dispositional), situational (analyzing relations between context and satisfaction, like organizational climate, or job characteristics) and interactionist (the way the adjustment of individual characteristics and situation acts upon satisfaction). Therefore many researchers have approached this problem trough personal characteristics (demographic and dispositional), role perceptions (conflict, ambiguity, clarity), and organizational variables (job design, organizational structure and communication, supervisory behaviors and compensation, Christen et al., 2006; Brown & Peterson, 1994), positive affectivity (e.g. a meta-analysis by Connolly and Viswesvaran, 2000); and even positive psychology (Harter et al., 2002).

Judge et al. (2001) refer to the concept of core self-evaluation, defined as a broad dispositional trait, including four more specific traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability (low neuroticism), as a potential variable in the dispositional source of job satisfaction. A meta-analysis by the authors found positive relationships between each of these specific traits and job satisfaction, but also with job performance.



In the studies that call upon motivational theories, like job characteristics model (growth, need, strength); as Loher, Noe, Moeller and Fiztgerald (1985), approach using skill variety, task identity and significance, autonomy and feed-back, that would induce psychological states like the feelings of meaningfulness and responsibility, and the knowledge of results, that by nourishing employee growth would turn into positive outcomes, such as high intrinsic motivation, quality of work, satisfaction and low turnover and absenteeism; their results showed a global correlation of .36 between the overall job characteristics and job satisfaction, with a correlation value of .46 between autonomy and job satisfaction (the higher score). In this line of research James & Tetrick (1986) found evidence of a relationship between job characteristics and group structure influence on job perceptions, that on its turn influenced satisfaction with job, but also that the relationship was reciprocal.

As Pichler and Wallace (2008) summarize extrinsic job characteristics are related to financial rewards (pay, benefits), career and development, and on the opposite side there are intrinsic rewards, derived from work itself, which include interesting and challenging tasks and autonomy; the later fulfill individuals aspirations of self-realization, creativity and individuality, and both types of rewards will have a strong influence on job satisfaction. Their work in a European sample with a multi-level analysis, found that at the individual level the job satisfaction determinants were occupation, supervision responsibilities, working hours, and intrinsic and extrinsic job characteristics. These factors also explained a major portion of country level variation.

These variables seem to maintain its importance in different settings, an example is Bozeman & Gaugham (2011) findings with a sample of university teachers, where the best predictors for job satisfaction were work related, namely working with colleagues and the perception of being paid adequately, also in the context of teaching it was found that influence, variety and skill utilization correlated positively and significantly with job satisfaction, but age had a negative correlation (Feather & Rauter 2004). Rosser (2004) reported that female faculty was less satisfied than male counterparts based on workload, quality of benefits, job security, and salary. Ambrose, Huston, and Norman (2005) listed commonly cited reasons for satisfaction (or dissatisfaction) among faculty include: salary; collegiality; mentoring; reappointment, promotion, tenure processes and department heads. Van Herpen, Van Praag, and Cools (2005) also reported a relationship between compensation system, work satisfaction, and turnover intents.

Job performance is a key variable for organizations; the work of Campbell, McHenry & Wise (1990), very centered on skills, distinguishes eight dimensions: job-specific task proficiency, non-job-specific task proficiency, written and oral communication, demonstrating effort, maintaining personal discipline, facilitating peer and team performance, supervision, and management or administration. But with the ongoing debate we find conceptions of job performance that go beyond task performance, to include organizational citizenship behaviors, and even counterproductive behaviors (Viswesnavaran, Ones, 2000).

In our view job performance as proposed by Motowidlo & Borman (1997:72) is broader enough to accommodate this multidimensionality, and underlines that is essentially behaviorally, they define job performance as "the aggregated value to the organization of the discrete behavioral episodes that an individual performs over a standard interval of time", and also distinguish between task and contextual performance, the later taken in account organizational context and organizational citizenship behaviors.



As Van den Broeck, Carpini, Leroy & Diefendorff, (2017) propose the amount of effort one puts in one's work will depend on the type of motivation. Their syntheses focused on work motivation highlights the theories which can be of more interest on this domain. This is the case of reinforcement theory use to understand the impact of compensation, in its various forms (e.g. pay for performance or profit sharing); of Maslow needs theory to argument in favor of more flexible adjustments of companies politics and practices to employees needs; of expectancy theory, by which individuals motivation is contingent upon the evaluation of the combination of expectancy, instrumentality and valence, and thus decide what task to pursue or what level of performance; the theory of planned behavior that adds social context to the rationale of expectancy value theory, suggesting that social context, such as social norms or other people reaction to one's action also influence behavior; and job design, that presupposes that for motivating employees, companies must create condition for them to use their skills, identify with their work and understand its benefits for others, as well as having autonomy and feedback on their actions. The theoretical diversity in the field of motivation, as Van den Broeck et al. (2017) mention calls for some degree of integration, which is intended by self-determination theory.

Self-determination theory (SDT) as proposed by Deci, Olafsen& Ryan (2017) intends to be a macro theory of human motivation that evolved from research on intrinsic and extrinsic motivation. In terms of work motivation, the authors postulate that all employees have the psychological need for competence, autonomy and relatedness, satisfying these needs would promote autonomous motivation, high quality performance and well-being; other feature of this motivational theory is introducing the concepts of autonomous motivation and controlled motivation. Autonomous motivation is characterized by people being engaged in an activity with a full sense of willingness, volition, and choice (Deci et al. 2017:20), even if it is often related to intrinsic motivated activities, to employees, extrinsically motivated activities can fall in this category, under certain conditions such as understating the purpose of their jobs, having autonomy, and receiving feed-back and support. Autonomous motivation would have a positive effect on performance, learning and adjustment. Controlled motivation has an extrinsic focus; this can be contingent rewards or power dynamics, and would narrow employee's efforts, and have negative consequences on performance and work engagement.

For SDT autonomous motivation will be positively related to persistence, performance quality and well-being than controlled motivation, and both types of motivation are related to leadership styles, working conditions and payment. The work context leads to perception of autonomy support, when manager's or supervisor's behavior is oriented to "acknowledging the employees' perspectives, offering choices, providing meaningful feedback, encouraging initiation, making assignments optimally challenging, and giving a rationale when requesting that an employee do a particular task" (Deci et al. 2017:26), which in our view points in the same direction than organizational support. Job characteristics such as autonomy, task identity and feedback would also support employee's autonomy and relatedness needs.

As the authors recognize, the role of pay in SDT is controversial; the relation of pay with intrinsic motivation, of enhancing or undermining, is described as being conditional to the functional significance of the reward is either informational or controlling. It is informational if the reward is perceived as conveying positive competence, satisfying the need for competence thus enhancing intrinsic motivation, it



will be controlling if the reward lead employee to feel pressured, for instance into behave in certain manner, frustrating the need for autonomy and undermining intrinsic motivation. Tangible rewards are many times perceived to have this control function, and although they might be effective in attain desirable behaviors from workforce, but also have negative aspects, as divesting in non-rewarded tasks or behaviors.

In our view SDT brings an interesting theoretical rationale for considering intrinsic and extrinsic motivators, or autonomous and controlled motivation, integrated in organizational context and emphasizing the role of management or supervisory action.

Still comprising the antecedents of job performance, we also find dispositional variables (e.g. happiness, Cropanzano and Wright, 2001; and psychological well-being, Wright and Cropanzano, 2000). Other type of antecedents are attitudinal, like organizational commitment; but the work of Riketta (2002), a meta-analysis on the relationships between organizational commitment and job performance found only a modest relationship between the two constructs, and also that age, tenure, and job level, was non-significant. In job related characteristics, role ambiguity (expectations on the role) and role conflict (incompatibility of demands) were also tested by Tubre & Collins (2000) revealing a negative relationship between role ambiguity and job performance, but a negligible, even if negative, relationship with role conflict.

Our decision in study common antecedents to both variables is substantiated in literature; according to Christen et al. (2006) effort, compensation, quality of supervision, clarity of job responsibilities, would be examples of these common variables. To those we can also add autonomy, feed-back from others, social support and working conditions (Humphrey, Nahrgang, and Morgeson, 2007); perceived organizational support and supervisor support and favorable job conditions (e.g. training, fringe benefits, high earnings, low stress and pressure) as in a study by Eisenberger, Cummings, Armeli and Lynch (1997).

The meta-analytic work of Humphrey et al. (2007) develops previous work, testing a model of expanded work design, comprising work design characteristics (e.g. autonomy, skill variety, task identity, task significance, and feedback from the job), social characteristics (including social support) and work context characteristics (e.g. work conditions) as antecedents both for job satisfaction (attitudinal outcome) and job performance (behavioural outcome). Their findings suggest a positive correlation between autonomy and job satisfaction and also subjective performance; the results also point to positive relations of feed-back from others, social support and working condition on job satisfaction, and negative effect of physical demands on job satisfaction. The relations of feedback from others and social support to subjective job performance were positive, although weaker for social support.

2.1. Working conditions relationships with satisfaction and job performance

Over the years the concept of working conditions has evolved from strictly regarding health, safety and hygiene conditions to a broader conception. For International Labor Organization working conditions cover a broad range of topics and issues, from working time (hours of work, rest periods, and work schedules) to remuneration, as well as the physical conditions and mental demands that exist in the workplace¹.

European Union definition of working conditions even if similar widens the range, in this way working conditions "Covers the working environment and aspects of



employees' terms and conditions of employment – in particular, from the perspective of job quality: career and employment security; health and well-being at the workplace; development of skills and competencies; and work–life balance"².

Keeping in mind these open concepts of working conditions, we analyzed a set of variables that have been commonly studied as antecedents of satisfaction and performance, as already discussed, and to which we added work-life balance.

Haar, Russo, Suñe, & Ollier-Malaterre (2014:3) define work-life balance as "an individual's assessment of how well her or his multiple life roles are balanced"; as Beauregard & Henry (2009) state work-life balance is commonly associated with organizational support for workers care of dependents, flexible work options and family or personal leave; the use of these practices would be an advantage for recruiting and retaining workers and also reflect positively on individual performance, since would help individuals to manage their multiple conflicting roles, thus reducing work-life conflict, and leading to higher organizational performance.

The multi-country study of Haar et al. (2014) found support for a positive relationship between work-life balance and job satisfaction, although moderated by cultural variables (degree of individualism and gender egalitarianism). Perceptions that work organization was family supportive and superior support were found to have a positive effect on job satisfaction (Allen, 2001). Even though referring to work-life support environment Allen (2001) presents role theory as a rationale for this relation; multiple roles conflict can cause individuals to experience difficulties in performing it all, due to conflicting demands, causing role strain that could be reduce or prevented by resources, such as family supportive benefits, supervisors or work environment. An empirical study by Kim (2014) found positive relations of work-life balance with in-role performance, although through the mediation of affective commitment. The work of Bal & De Lange (2015) on workplace flexibility practices, to help workers to balance work and non-work responsibilities revealed that the effect of these practices was related to the life cycle, on younger workers these practices enhanced engagement, and in older workers enhanced job performance, the overall results indicating that there was a relationship between workplace flexibility and work performance through work engagement. While studying the relations between work-life balance, organizational pride and job satisfaction, the work of Mas-Machuca, Berbegal-Mirabent & Alegre (2016) showed positive relations between work-life balance and job satisfaction, although with the full mediation of organizational pride.

On the antecedents of job satisfaction, the study of Alegre, Mas-Machuca, & Berbegal-Mirabent (2016) brings evidence that even though there is more than one path to job satisfaction, work-family balance, autonomy and supervisor support (along with teamwork and identification to strategy) are important variables to achieve job satisfaction.

The importance of work environment is stressed by Spector (1997), in his view it consists of safety, job security, good relations with co-workers, performance recognition, motivation for performance and participation in decision making, failing to meet these conditions would have detrimental effects on employee's performance. According to Bakker, Demerouti, & Verbeke, (2004), high workload, emotional demands, work-home conflicts make it difficult for employees to engage efficiently in their tasks, since they have to split their efforts and attention, thus lowering their work performance.



Results by Jayaweera (2015) suggest significant relationships between physical and psychosocial environment (quantitative demands, emotional demands, influence at work, meaning of work, role clarity, quality of leadership, sense of community, among others) with job performance.

The work of Kinzl, Knotzer, Traweger, Heidegger & Benzer (2005), even if in a particular setting (health sector) showed that having control over work (e.g. handling tasks, time control and participation) had a strong positive effect on job satisfaction. Also in Bozeman & Gaugham (2011) colleagues respect and the perception of being paid fairly were the variables found to explain job satisfaction on university members.

The discussion and search for the positive effects of payment and incentives on performance is extensive in literature; the work of Bonner & Sprinkle (2002:305) effectively summarizes the general postulate "incentives lead to greater effort than would have been the case in their absence". Nevertheless, as the authors stress, empirical results bring mixed evidence of such positive effect of pay on performance, with studies revealing null effects, even if there is also evidence that incentives may (and not) act as mediating factors, acting on higher goals or self-efficacy; moderation effects should also be taken in account, for they can be a source of inconsistency in findings.

A literature review by Rynes, Gerhart, & Minette (2004) makes a synthesis that provides useful insight in this matter; there are a number of studies on behavioral responses to pay that provide evidence for positive effects of individual pay on productivity, even with larger effect than intrinsic motivators (e.g. more interesting work), or with similar size effects for social rewards and feedback. This relationship is however affected (either moderated or mediated) by individual factors (e.g. such as personality) and/or situational contingencies (e.g. low motivational power for increased performance when pay increases are independent of firm performance). The earlier references made to SDT, regarding rewards being perceived as informational or controlling and their effects on the relationship with performance are exemplified by the results of the meta-analysis of Cerasoli, Nicklin & Ford (2014) on the relationship between intrinsic motivation and extrinsic incentives on performance, Their study brought evidence that intrinsic motivation is a predictor of performance, this effect remained in the presence of incentives, but its prediction effect was affected by incentive salience; when incentives had a direct relation with performance intrinsic motivation was less important, and more important when the relation incentivesperformance was indirect. Another result was that intrinsic motivation was a better predictor of quality of performance, in contrast incentives predicted better quantity of performance; the authors concluded that instead of thinking intrinsic motivation and incentives as antagonist they should be considered simultaneously.

One of the behavioral consequences associated with autonomy (the individual freedom to perform tasks) for their motivational power is higher performance (Humphrey et al. 2007); Roelen, Koopmans, & Groothoff, (2008) concluded in their research that satisfaction with task variety, colleagues, career, job autonomy, working conditions, and satisfaction whit workload were positively related to overall job satisfaction; however work pace, salary and satisfaction with supervision didn't reveal statistically significant relationships. Somewhat different results are presented by Nguyen, Taylor, & Bradley, S. (2003) where current income and autonomy were positively related with job satisfaction.



The review and meta-analysis of the Job Description Index (JDI), one of the most used measures of job satisfaction, by Kinicki, McKee-Ryan, Schriesheim, & Carson, (2002) give us further support for the use of the chosen variables of working conditions. JDI includes five dimensions – pay, promotion, coworker, work and supervision, and is intended to give a global assessment of job satisfaction. Although we have chosen organizational support theory, for theoretical reasons, to include in our study the variables of coworkers and supervision support, which are conceptualized and operationalized in a different way from JDI, our use of these variables along with pay, autonomy and job stressors are in line with the results reported of these variables being consistently correlated with job satisfaction, and also with job performance via job satisfaction, even though we prefer to consider it as common antecedents.

Job stressors are, according to Spector & Jex (1998) stressful aspects of jobs, individual exposure to stressors result in strains. When employees are exposed to stressful working conditions, their perception will lead to strains, which can include negative behaviors, illness and distress. Job stressors commonly considered in research are role ambiguity and role conflict, to which authors add interpersonal conflict, and organizational constraints on performance.

These organizational constrains would be of different nature, Peters & O'Connor (1980) propose the following: job related information, tools and equipment, materials and supplies, budgetary support, required services and help from others, task preparation, time availability (e.g. time needed to do the job, time limits, interruptions), work environment (including physical and safety aspects), that would interfere with the translate of abilities and motivation into effective performance. The work of Motowidlo, Packard & Manning (1986) in a sample of nurses found evidence that the perceptions of stress had negative effects on several facets of nursing job performance, through the mediation of depression. Also, having an exhausting job was found to have a large negative effect on job satisfaction (Souza-Poza, Souza-Poza, 2000).

Accordingly, we posit the following hypothesis:

Hypothesis 1a: there are positive relationships between autonomy, training, payment, work-life balance and satisfaction with working conditions.

Hypothesis 1b: there are positive relationships between autonomy, training, payment, work-life balance and job performance.

Hypothesis 2a: there are negative relationships between work at high speed, tight deadlines and satisfaction with working conditions.

Hypothesis 2b: there are negative relationships between work at high speed, tight deadlines and job performance.



2.2. Organizational support relationships with satisfaction with working conditions and job performance

Research on organizational support (the individual belief that the organization values its contribution and cares about its well-being) in general terms indicates a positive influence on the perceptions, attitudes and behaviors of individuals (Rhoades & Eisenberger, 2002). In our study, we used colleagues and direct management support as measures for organizational support. According to Rhoades & Eisenberger (2002) employees also develop general views as to which degree supervisors' value their contributions and care about their well-being, supervisors while acting as organization agents they signal organizational support. Although the role of co-workers support is considered less important than of leaders, the supportiveness of all members should be related to organizational support. Literature presents a wide range of outcomes linked to organizational support (Kurtessis, Eisenberger, Ford, Buffardi, Stewart, Adis, 2017), namely higher level of identification with the organization, affective commitment, a more pleasant work experience and relationships with job satisfaction and self-efficacy. The work of Knapp, Smith, & Sprinkle (2017) confronting the efficacy of job characteristics, such as autonomy, skill variety, task identity, task significance, and feedback, with a relational perspective, using POS, found that both autonomy and POS had positive and significant effects on job satisfaction. Another empirical study by Lambert, Minor, Wells, & Hogan, (2016) found that administrative, supervisory, and co-worker support were positively related to job satisfaction and organizational commitment.

Influencing positively employees perceptions of organizational support, we find organizational rewards and job conditions, which according to Rhoades & Eisenberger (2002) include pay, job security, autonomy, training, and reducing perceived organizational support are role stressors (e.g. work overload), as well as organization size. Perceived organizational support should be positively related to job related affect, including job satisfaction, and standard job performance as well extra role behaviors. The meta-analysis conducted by the authors found strong relationships between supervisor support, rewards and favorable job conditions and perceived organizational support, and also for job satisfaction and performance, although of moderate size for the latter. The relationship with job satisfaction is also reported in Eisenberger, Armeli, Rexwinkel, Lynch & Rhoades (2001).

Harter et al. (2002) also recognized the importance of supervisor or manager's influence over satisfaction, but in their work items related to supervisor were part, as a facet, of a global satisfaction measure. Besides having an interesting job, good relations with management were the most decisive factors for job satisfaction, and statistically significant in the multi- country study of Souza-Poza, Souza-Poza (2000). Furthermore the research of Becker, Billings, Eveleth, & Gilbert (1996) found that commitment to supervisor had a positive relationship with performance. Thus, we hypothesize the following:

Hypothesis 3a: there are positive relationships between immediate manager support, co-workers help and support and satisfaction with working conditions.

Hypothesis 3b: there are positive relationships between immediate manager support, co-workers help and support and job performance.



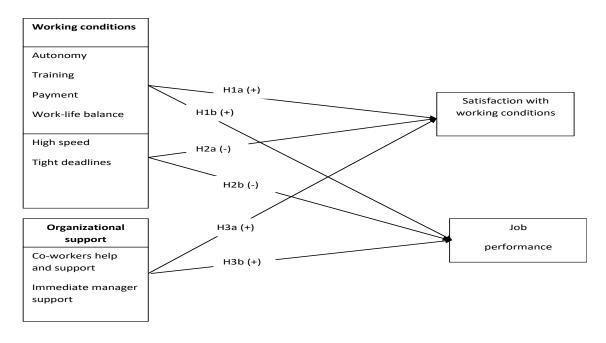


Figure 1. Research model

Source: Author.

3. Method

To test our hypothesis data from the European Working Conditions Survey (ECWS) 2015 questionnaire were used. All respondents were residents of the country of interview; all the 35 European³ countries covered by EWCS 2015 were included in this study.

3.1. Sample

Of the 43850 European citizens sample the average country representation in percentage was 2,9%, the mode 2,3%, the country with the maximum respondents was Spain (7,7%). The overall mean age of respondents was 43,34 years old, of this sample 50% was male, the majority worked in the private sector (69%), had a permanent contract (77%), the most common level of education was upper secondary education (42%). The most representative categories of tenure were 1 to 5 years (33%), over 21 years (27%) and 6 to 10 years (20%); the large majority held no managerial positions (83%).

Despite being a multilevel sample (individuals belonging to different countries), we conducted this analysis at the individual level, since having calculated the baseline models for our dependent variables, satisfaction with working conditions and job performance, based on country, we found intra-class correlation levels of only 6% and 4% respectively. According to Marôco (2011) the reference (*cut-off*) values to evaluate the pertinence of multilevel analysis are of 10%, since the values obtained are lower, we did not proceed whit the analysis. This relative "homogeneity" is not as surprising as it seems, since the multi-country study by Souza-Poza and Souza-Poza (2000) found high levels of satisfaction in all countries studied, despite some differences, and their sample had a higher cultural or contextual variability, since the 21 countries included Anglo



Saxon (UK, USA and New Zealand), Western and Eastern European countries and also Japan and Israel.

3.2. Measures

Participants rated their own working conditions (autonomy, training, payment, work-life balance, high-speed, tight deadlines) organizational support (from co-workers and immediate manager), satisfaction with working conditions and performance on multiple scales (from 0-1/ "yes/no", to Likert type 1-5 or 1-7). When considered appropriate, questions were recoded so that to the higher value of the scale corresponded to higher agreement.

Working conditions. To assess respondents working conditions we used the following indicators:

Autonomy. An additive index varying from 0 to 3 was built based on three questions ("Are you able to choose or change your order of tasks"), ("Are you able to choose or change your methods of work"), ("Are you able to choose or change your speed or rate of work"), each question recoded to 0 "no", 1 "yes".

Payment. One question with a Likert type scale of 1 ("strongly agree") to 5 ("Strongly disagree"), was used (.... *I feel I get paid appropriately*);

High speed. One question with a Likert type scale of 1 ("all of the time") to 7 ("never") was used (....working at very high speed).

Tight deadlines. One question with a Likert type scale of 1 ("all of the time") to 7 ("never") was used (....working to tight deadlines)

Training. One question was used (...training paid /provided by employer last 12 months), that was recoded in two items "up to 9 days" and "10 days or more"

Work-life balance. We used a scale based on 5 items (sample item included ".... found that your job prevented you from giving the time you wanted to your family", with a scale of 1 ("always") to 5 ("never"), where the lower value correspond to the lower work-life balance. The assessment of the one-dimensionality of this measure was made with exploratory factorial analysis (EFA), using principal components analysis that showed the existence of items correlation (Bartlett test with significance of 0.000, and KMO of 0.792), the total percentage explained by the single factor was 54.4. This measure showed good levels of internal reliability, with a Cronbach's alpha = .78. The mean of these items formed the work-life balance score.



Organizational support. We used two measures, one item for co-workers help and support (...your colleagues help and support you) with a Likert type scale of 1 ("allways") to 5 ("never"); for the immediate manager support we used a scale based on 5 items (sample item included "....your immediate boss provides useful feedback on your work"), each with a with a Likert type scale of 1 ("strongly agree") to 5 ("Strongly disagree"). The assessment of the one-dimensionality of this measure was made with EFA, using principal components analysis, which showed the existence of items correlation (Bartlett test with significance of 0.000, and KMO of 0,909), the total percentage explained by the single factor was 65.6. This measure showed good levels of internal reliability, with a Cronbach's alpha = .89. The mean of these items formed the immediate manager support score.

Satisfaction with working conditions. This dependent variable was measured with one question, a Likert type scale was used, ranging from 1 ("very satisfied") to 4 ("not at all satisfied"), (On the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main paid job).

Job performance. This dependent variable was measured with one question, a Likert type scale was used, ranging from 1 ("always") to 5 ("never"), (...In my opinion, I am good at my job)

Control measures. Previous studies have found relationships between demographics and job satisfaction and performance; gender differentiations (e.g. women more satisfied with jobs than men, Clark & Oswald, 1996; a negative relationship with performance, Becker et al., 1996), a relationship with age (non-linear in Sloane and Ward, 2001; small and positive for young workers, McEvoy & Cascio,1989), a relationship with schooling level (e.g. higher levels of education were previously associated with lower levels of job satisfaction, Clark & Oswald, 1996), job tenure (positive effect of tenure in performance, Borjas, 1979; Eisenberger, Rhoades and Cameron, 1999; and in job satisfaction, Riza, Ganzach & Liu, 2016), managerial role, sector and size of company (Millán, Hessels, Thurik, & Aguado 2013), precarious employment was associated with job dissatisfaction (Benavides, Benaches, Dieu-Roux and Roman, 2000). We included age, sex, tenure, educational level, type of organization, dimension, nature of contract (permanent vs. precarious) and managerial position, all these variables (with the exception of age) were dummy coded.

Since we were conditioned by the use of secondary data, in relation with job satisfaction, and on the problem of using single items measures, the review of the literature on this particular methodological subject, conducted by Bozeman & Gaugham (2011) suggest that there is evidence that the use of a single item measure will still ensure reliability and validity of results.

Given that all variables were collected from the same source, the data are vulnerable to common method variance. Therefore, we used Harman's single test factor (1967), of which the unrotated factor solution resulted in 15 factors, the first explaining only 29%



of the total variance. Hence, although common method bias cannot be completely discarded it should not affect the validity of the findings.

Descriptive statistics and correlations among study variables are reported in Table 1, table 2 presents the results of regression analysis testing the hypothesized relationships between variables.

4. Results

Table 1 presents the means, standard deviations, and inter-correlations of the independent with dependent variables. It is worth noting that for satisfaction with working conditions all relationships are significant and in the predicted directions, both payment and immediate manager support stand out with the strongest correlations (r=0.44, p<0.001; r=0.43, p<0.001); in relation with job performance both high speed and thigh deadlines showed no significant correlations, all others variables have positive significant correlations, as predicted, although of small size.

In order to test the study hypotheses, multiple regression analyses were conducted. Table 2 present the regression results for both dependent variables, satisfaction with working conditions and job performance.



Table 1. Means standard deviations and correlations of independent variables with dependent variables

	M	SD	1	2	3	4	5	6	7	8
1. High speed	3.55	2.02	-					,		
2. Thight dealines	3.61	2.05	.67**	-						
3. Payment	3.23	1.31	11**	09**	-					
4. Autonomy	2.08	1.15	12**	06**	.11**	-				
5. Immediate manager support	3.95	0.90	10**	10**	.36**	.14**	-			
6. Co-workers help and suppport	3.99	1.11	.02**	.02**	.15**	.06**	.35**	-		
7. Work-life balance	3.89	0.78	30**	31**	.201**	01**	.18**	.07**	-	
8. Satisfaction with working conditions	3.06	0.71	15**	13**	.44**	.15**	.43**	.20**	.26**	-
9. Job performance	4.41	0.68	-0.01	-0.01	.05**	.06**	.16**	.16**	.09**	.13**

^{**}p<0,01; *p<0,05

N=43850

Source: Author



Table 2. Hierarchical linear regression for satisfaction with working conditions and job performance

	Satisfaction	n with workin	g conditions	J.	Job performance				
	Model 1	odel 1 Model 2 Model		Model 1	Model 2	Model 3			
Variables	β	β	β	β	β	β			
Age	.014	008	.010	0.043**	0.038*	0.051***			
Sex	.007	-0.041***	-0.029**	005	013	006			
Public sector	.005	.006	.004	-0.027*	024	-0.027*			
Joint private-public organisation or									
company Not-for-profit sector or an NGO	.010	006	006	004	005	006			
Other sector	002	003	004	009	006	007			
Dimension: 2-4	.009	.002	002	.017	.016	.014			
Dimension: 5-9	009	006	015	025	028	036			
Dimension: 10-49	055	033	042	036	039	047			
Dimension: 50-99	083	041	047	073	076	085			
Dimension: 100-249	-0.102*	064	064	073	077	081			
Dimension: 250-500	078	053	044	077	082	081			
Dimension: +500	050	028	026	042	047	048			
Primary education	081	052	045	066	071	071			
	012	002	002	.002	.003	.001			
Lower secondary education	025	028	006	009	015	006			
Upper secondary education	054	081	033	035	046	024			
Post-secondary non-tertiary education	032	050	027	016	022	013			
Short-cycle tertiary education	013	035	.002	087	086	071			
Bachelor or equivalent	.018	015	.013	057	057	047			
Master or equivalent	.008	030	.007	122	118	101			
Doctorate or equivalent	010	025	011	043	040	033			
Manager up to 5	.003	.011	.003	.019	.024	.018			
Manager more than 5	0.059***	0.050***	0.043***	.017	.019	.016			
Permanent contract	.024	.010	.010	006	007	007			
Tenure 1-5	021	.020	.024	.041	.048	0.050*			
Tenure 6-10	-0.049*	.008	.015	0.068**	0.080***	0.083***			
Tenure 11-15	-0.058**	015	008	0.051**	0.062**	0.066**			
Tenure 16-20	029	007	005	0.066***	0.075***	0.075***			
Tenure =>20	-0.055**	018	015	0.059*	0.067**	0.067**			
Training: 10 days or more		0.062***	0.045***		.017	.006			
High speed		-0.055***	-0.054***		.026	.026			
Autonomy		0.090***	0.059***		.001	017			
Thight dealines		021	011		.027	0.032*			
Payment		0.289***	0.225***		.003	-0.032*			
Work-life balance		0.222***	0.176***		0.114***	0.085***			
Immediate manager support			0.248***			0.122***			
Co-workers help and support			0.081***			0.091***			
R^2	.009	.198	.268	.017	.028	.054			
F for change in R2	2.926***	251.026***	305.652***	4.726***	13.099***	89.809***			

*** p< 0.001; **p< 0.01; *p< 0.05

Source: Author

Model 1 includes only control variables; there are only a few that significantly affect satisfaction with working conditions; establishment dimension of 50-99 workers have a



small negative effect ($\beta = -0.102$, p<0.05), contrary to the results of Mílan et al. (2013) where small firm size had a positive effect on satisfaction; we found a positive effect of managing more than five people ($\beta = 0.059$, p<0.001), that holds for models 2 and 3, when the independent variables were added, but always with a very small effect, which is in line with evidence from the study by Mílan et al. (2013) where employees with supervisory roles were more likely to be satisfied; the effects of tenure appeared only in model 1, for categories of 6 to 10, 11 to 15 and more than 20, all negative and with a very small size, this directionality of the relationship was also found by Riza et al. (2016). Model 2 tested hypothesis 1a and hypothesis 2a. Hypothesis 1a was fully supported, with the effects of payment and work-life balance standing out ($\beta = 0.289$, p<0.001; $\beta = 0.222$, p<0.001, respectively). These results are coherent with previous research, the positive relation between payment or compensation with job satisfaction was found previously (Bozeman & Gaugham, 2011; Van Herpen et al. 2005; D'Addio, Eriksson, T., & Frijters, 2007; Vandenberghe, & Tremblay, 2008), also as Haar et al. (2014) found work-life balance has a positive relationship with job satisfaction, as well as Mas-Machuca et al. (2016), even if only to mediation by organizational pride. The results only partially supported hypothesis 2a, since tight deadlines had no significant effect, but autonomy had a positive, although small, significant effect, as hypothesized, the previously mentioned study of Alegre et al. (2016) corroborates our finding. Hypothesis 3a was tested in Model 3, both variables of organizational support, immediate manager support and co-workers help and support showed a positive significant effect on satisfaction with working conditions, although with very distinct sizes ($\beta = 0.248$, p<0.001; $\beta = 0.081$, p<0.001, correspondingly), these results concur with previous empirical findings (Rhoades & Eisenberger, 2002; Eisenberger et al. 2001; Souza-Poza, Souza-Poza, 2000; Lambert et al. 2016). We also verified that Model 2 variables hold their significance although with small decreases in size. Knapp et al. (2017) found similar results, with autonomy and POS having positive and significant effects on job satisfaction. The results obtained in our study indicate that working conditions and organizational support explain a significant amount of the variance in satisfaction with working conditions ($R^2=0.268$, p<0.001).

The results concerning job performance follow a different pattern, control variables (Model 1) show a small positive effect of age ($\beta = 0.043$, p<0.01), as previous studies (Sloan and Ward, 2011, and McEvoy & Cascio,1989), that holds in Model 2 and 3, with small differences in size, and a equally small effect of public sector ($\beta = -0.027$, p<0.05, equal in model 3), tenure also has also a positive significant effect, even if small, from six to more than 20 years, that is common to the three models, in line with the findings of Borjas (1979) and Eisenberger et al. (1999).

Regarding hypothesis 1b and hypothesis 2b, they were only partially supported, and with mixed results. On hypothesis 1b only work-life balance had a positive significant effect in Models 2 and 3 ($\beta = 0.114$, p<0.001; $\beta = 0.085$, p<0.001, respectively); this



result is different from Kim (2014) and Bal & De Lange (2015), since we were able to find a direct relationship. Hypothesis 3b was fully supported, Model 3 shows that immediate manager support and co-workers help and support have a positive effect on job performance ($\beta = 0.122$, p<0.001; $\beta = 0.091$, p<0.001, in this order), these results reinforce past findings (Rhoades & Eisenberger, 2002; Becker et al., 1996). While testing this hypothesis we observed very small effects of thigh deadlines ($\beta = 0.032$, p<0.05) and payment ($\beta = -0.032$, p<0.05), this may be due to a spurious relation of some interaction effect (e.g. the negative effect of role conflict, also a job stressor, was found to be moderated by job type, on Tubre & Collins, 2000), that given the negligible size was not tested. The total explanatory of the third model is still very low, with an adjusted R² of only 0,054.

5. Discussion and conclusions

This article empirically advances the knowledge of working conditions relationships with satisfaction and job performance. It analyses a wide range of what are considered common antecedents of satisfaction and job performance, but seldom tested empirically together. It brings evidence on the importance of payment, work-life balance and organizational support for satisfaction, as well as the role of the two later variables for performance.

The first contribution of study is that, among the presupposed common antecedents of satisfaction and performance, only work-life-balance and organizational support had simultaneous effect on both. Employees that perceive to be able to balance work-roles and family, or other activities, are more satisfied with their working conditions and also perform better, since role conflict will be lower and they will be able to better engage in their work activities, as predicted by Beauregard & Henry, (2009), since the interference of work and personal life generates negative effects, such as reducing satisfaction, commitment and effort. These results on organizational support confirm previous studies. Organizational support, especially from immediate manager, contributes in a significant manner for satisfaction and performance. Employee positive perceptions of the treatment they receive from managers generates feelings of a more satisfying work experience, and the reciprocity behavior of workers' towards the organization can justify the positive effect on performance (Rhoades & Eisenberger, 2002; Kurtessis et al., 2017).

Secondly, in what concerns satisfaction with working conditions, autonomy and training had the expected positive relations with satisfaction, which is consistent with motivational theories, and the perception of training as an organization investment in employees can lead to positive attitudes. Still, the importance of payment stands out. Our findings add evidence to the importance of payment to satisfaction, an ongoing



discussion, showing that its importance has been many times overlooked. The work of Rynes, Gerhart & Minette (2004) highlights several important reasons for this to happen; there is a contradiction between the importance of payment when asking directly to people with the actual behavioural response to payment, eluding the actual importance of money rewards; the more relevance of intrinsic motivators in research; a certain "prejudice" from practitioners in assuming the importance of payment; and the misuse of payment as a motivator, or a non-linear effect across pay-levels. Empirically, compensation systems were found to affect work satisfaction in other studies (e.g. Van Herpen et al. 2005; D'Addio, Eriksson, T., & Frijters, 2007; Vandenberghe, & Tremblay, 2008). In contrast the effect of payment in performance, of negligible size but in the contrary direction to what we predicted seems to lack the informational significance, of conveying positive competence (Deci et al. 2017); in other words, employees may feel that payment is adequate, thus contributing to satisfaction with working conditions, but that it's not relevant for their performance, therefore lacking motivational effect.

Third, our findings concerning job performance, showed that the cumulative effect of experience, associated with tenure, lead to better task proficiency that reflects on higher self-assessment of performance, but it raises questions on the investments organizations make in training (e.g. intensity, quality, pertinence) since it doesn't seems to reflect on performance.

We believe that our study has practical implications for organizations management. Organizations seeking to increase both satisfaction and performance from their employees in order to achieve better global performance should recognize the importance of leader support and also of co-workers, and encourage it, either with formal training programs or valuing support, cooperation and helping others, a dimension of organizational citizenship behavior, trough organizational culture. Implement adequately practices in order to allow employees a work-life balance should also be considered a management tool for raising satisfaction with working conditions and job performance. The implementation of adequate compensation schemes, fundamental for satisfaction with working conditions should also take in account how to reach better performance.

This study has several limitations that need to be acknowledged. The major limitation is the use of secondary data; the measurement of the study variables was constrained by the items used in the ECWS 2015 survey, and as we pointed out in the method section most of the variables were measured through single-item, such as satisfaction with working condition and job performance. Secondly, all data was collected from self-response questionnaire, which can cause common method variance, and despite the results of Harman's test, the value of relationships can be inflated. Another limitation is the use of cross-sectional data, that doesn't allow for causal inference of relationships.



In methodological terms future research should consider longitudinal panel data, in order to search for causal relationships.

The poor results found for our model on job performance call for different approaches, with different predictors, although not discarding organizational support and work-life balance, a greater emphasis on individual attitudinal variables would probably increase explained variance.

Notes

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¹ https://www.eurofound.europa.eu/topic/working-conditions

² https://www.ilo.org/global/topics/working-conditions/lang--en/index.htm

³ Austria, Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, United Kingdom, Albania, Former Yugoslav Republic of Macedonia, Montenegro, Serbia, Turkey, Norway, Switzerland



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