The ambivalent effects of participation on performance and job stressors: The role of job crafting and autonomy
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Abstract

Literature provides mixed results on the effect of participatory practices on outcomes such as individual performance and job stressors. By examining these relationships via the mediation of job crafting behaviors, while considering the moderating effect of autonomy, we help clarifying the reasons behind the apparently ambiguous effects of participation. We surveyed 318 employees in an Italian mass retail company. On the one hand, we found a positive effect of participation on performance and a reduction of both role conflict and role overload thanks to increased job crafting behaviors aimed at seeking job resources. On the other hand, we also found that participation and autonomy may augment job stressors because of an associated increase of job crafting behaviors aimed at seeking challenging demands.

Keywords: Job crafting, Participation, Autonomy, Performance, Role overload, Role conflict.
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Introduction

A debate between different theoretical perspectives has developed about the way human resources management practices aimed at increasing workers’ participation in decision making (PDM) influence work outcomes. On the one hand, proponents of the mutual gain perspective show the beneficial effects of workers’ participation on their performance and well-being (Appelbaum, Bailey, Berg, & Kalleberg, 2000). On the other hand, other scholars reveal a “dark side” of participation (Ramsay, Scholarios, & Harley, 2000) by emphasizing that the latter, while increasing performance, may lead to work intensification, offloading of task control, and increased job strain. To complicate matters even more, a number of studies show both positive and negative effects of participation on performance (for a review see Steel and Mento, 1987). Thus, there seems to be conflicting views and evidence about how PDM affects the employees’ performance and well-being.

In this paper, we aim at contributing to such debate through a study based on the Job Demands-Resource (JD-R) job crafting model. More specifically, we explore the way PDM influences job crafting behaviors, and how the latter, while considering the moderating role of autonomy, influence both employees’ performance and job stressors such as role overload and role conflict, which are among the most common stress and burnout inducing conditions.

The rationale for our model rests on the following points. First, several authors insist on the usefulness of the JD-R framework in order to achieve a more detailed understanding of the psychological dynamics through which empowerment-focused Human Resource Management practices (such as PDM, enriched job design, information sharing etc.) affect employees’ performance and job stressors (Kroon, Van de Voorde & Van Veldhoven, 2009, Van De Voorde, Van Veldhoven, & Veld, 2016). Such practices may increase the job resources available to employees, so that they become better protected from stress and
burnout, while both performance and work engagement also improve. At the same time, however, the same practices may increase the level of job demands. The net effect of increased job resources and job demands is unclear. Surprisingly, available literature neglects the proactive role that employees may play in crafting their own job resources and demands in relation to existing HRM practices. We believe that considering employees’ proactive behaviors such as job crafting may be very helpful in clarifying this issue. Indeed, literature on proactivity argues that employees’ participation may facilitate job crafting (Wrzesniewski & Dutton, 2001). However, on the other hand, it is also argued that proactive initiatives aimed at changing the perimeter of one’s work may increase stress as well as work performance (Grant & Ashford, 2008). No study within the proactivity literature (as far as we know) has yet to provide empirical evidence to clarify these two apparently contradictory effects. Thus, by exploring the mediating effect of job crafting between PDM, performance and job stressors, our study aims at helping to clarify the reasons why PDM may have positive and/or negative consequences on such outcomes.

More generally, there seems to be a need for more research about the relationship between human resource practices and job crafting. The meta-analysis by Rudolph and colleagues (2017) summarizes the results of the currently available studies about job crafting in relation to many variables concerning individual differences, job characteristics and demographics. However, very little attention is paid by scholars to the relation between human resource practices such as PDM and job crafting behaviors. The goal of our study is to contribute in filling this literature gap.

Finally, and more specifically, we believe that the role of contextual elements in the workplace should play a more prominent role in job crafting literature. Job crafting is a “situated activity, in the sense that different contexts enable or disable different levels and forms of crafting” (Wrzesniewski & Dutton, 2001, p.180). Indeed, Zhang & Parker (2018)
argue that more research is needed to clarify how job crafting behaviors are affected by contextual elements such as job autonomy, job ambiguity and social context. Even more specifically, Dierdoff and Jensen (2018) argue that task context and social context in the workplace may affect the relationship between job crafting and performance. Our paper, by considering the moderating role of autonomy, which is certainly a prominent task variable in shaping the employees’ ability to engage in almost any behavior, aims at extending our knowledge on the ways work context may influence job crafting behaviors. More specifically, we will show that autonomy may play an interesting role in explaining the relationship between participation, job crafting, performance and job stressors.

To summarize, our study contributes to the existing research literature in the following ways. First, we try to clarify the apparent trade-off between the positive and negative effects of PDM on, respectively, work performance and job stressors by disentangling the mediating mechanisms implied in such relationships thanks to a focus on specific job crafting behaviors. Second, we try to shed light on how and why a relevant contextual condition such as autonomy may help explaining the influence of job crafting on job stressors and performance.

Theoretical background and hypotheses

Participation in decision making, performance and job stressors: a complex relationship

A simple definition of PDM was provided by Yukl (1981), according to which participation should be understood as “the involvement of subordinates in a manager's decision” (p. 108). Such involvement can be generally understood in terms of information sharing. Employees may be and feel involved when leaders inform them about the planning and formulation of workplace decisions and strategies, or communicate other useful
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information about the organization, and also when employees are allowed or even
encouraged to freely express their opinions, ideas and suggestions (Hunter and Hitt, 2001).
According to available literature, a higher level of PDM may generate an increase in the
employees’ understanding of their job expectations and improve their awareness of
organizational policies and operations (Jenkins & Lawler, 1981; Melcher, 1976). In this view,
effective participative programs may be conceptualized as organizational learning systems
that facilitate the discussion of work-related problems, organizational goals, procedures, and
opportunities located both within and outside one's own work group (Marshall, Sthol, 1993).

Over 50 years of research show that PDM may influence a variety of work outcomes,
including work performance. There are two fundamental models explaining such influence.
The affective model shows that PDM improves the employees’ feelings of self-expression,
respect, independence and equality, which in turn improve work satisfaction and performance
(Miller & Monge, 1986). According to the cognitive model, on the other hand, the benefits of
PDM on performance are related to the increased flow of information and knowledge that
help workers to make better choices (Anthony, 1978; Frost, Wakely, & Ruh, 1974) and to
increase their context awareness (Miles & Ritchie, 1971). However, there is mixed,
controversial evidence about the effects of PDM on work performance (Wagner & Gooding,
1987, Steel and Mento, 1987). Locke & Schweiger (1979), for example, argue that such
inconclusive evidence may depend on contextual, moderating factors such as employees’
knowledge and task attributes. Also, the effect of participation on performance may depend
on how leaders follow up, over time, on their own participative initiatives. For example,
Corgnet and Gonzalez (2014) found that the initial positive effect of employees’ participation
on performance may become negative when leaders ignore the employees’ feedback, which
is what the authors call the “consultative participation dilemma”. In other words, if
participation is only rhetorical, limited to “listening” to employees’ voice without any real,
practical influence on leaders’ decisions, its initial positive effect on employees’ performance (due to a greater sense of involvement and engagement) may quickly backfire, because the empowerment expectations, generated by the participation practices themselves, are not translated into actual work changes, and that may ultimately cause disengagement and lower performance. Overall, it seems clear that the effect of PDM on performance is still in need for conceptual and empirical clarification (Corgnet and Gonzalez, 2014).

In this paper, we also focus on the effect of PDM on job stressors like role conflict and role overload. Role conflict describes a situation of inconsistency between: I) the workers’ internal values and their defined role behavior; II) the workers’ time, resources and / or capabilities and their defined role behavior; III) several roles for the same person requiring different or incompatible behaviors as a function of the situation; IV) conflicting expectations and organizational demands, incompatible policies or conflicting requests from others (Rizzo, House, & Lirtzman, 1970). Role overload, on the other hand, describes a situation in which workers do not have sufficient resources (e.g., time, energy, knowledge, etc.) to effectively face role obligations and requirements (Peterson & Smith, 1995).

The effects of PDM on role overload and role conflict are also controversial. Consistently with the mutual gains perspective, PDM should contribute to create a more resourceful, less stressful work environment, with significant benefits for workers’ personal and professional growth (Hackman & Oldham, 1976; Wood & De Menezes, 2011). Also, PDM should facilitate the acquisition of skills, abilities, competences and knowledge so that individuals become better equipped to face stressful situations, hence decreasing job strain and role overload (Jackson & Schuler, 1985). These results seem consistent with the theoretical premises of the Job Demand-Resource model (Bakker & Demerouti, 2007). Finally, PDM may decrease role conflict by: i) improving workers’ understanding of goals and decisions’ rationale; ii) providing the opportunity to negotiate responsibilities; iii)
improving the mindfulness of work, the personal sense of control and the ability to evaluate
circumstances (Humphrey, Nahrgang, & Morgeson, 2007; Valentine, Godkin, & Varca,
2009). However, critical studies show that PDM may increase work effort, work
intensification and employee exploitation (Jensen, Patel, & Messersmith, 2011; Legge, 1995).
The idea is that PDM generates higher expectations and wider responsibilities. It follows that
workload may increase beyond the work-related stress threshold of workers (Ogbonnaya &
Valizade, 2015). Similarly, PDM may increase the number and frequency of interactions with
colleagues and supervisors, leading to higher levels of several job stressors (Kalleberg,
Nesheim, & Olsen, 2009). At the same time, with increased participation, work may become
more demanding because tasks may increase in complexity and diversity. This, again, may
increase stress and workload (Scott-Ladd & Marshall, 2004). Finally, participation may also
lessen the power distance between supervisors and workers and flatten workplace hierarchies,
which may cause discrepancies and ambiguity in the delegation of authority which, in turn,
may generate both task and relationship conflicts among employees (Ogbonnaya & Valizade,
2015).

Overall, these opposing interpretations create quite a complex picture about the effect
of PDM on both performance, role conflict and role overload. We propose that focusing on
PDM’s influence on specific job crafting behaviors may clarify the dynamics at play.

The Job Demands-Resources (JD-R) Job crafting model

Job crafting is a form of proactive behavior through which workers reshape their job
in several ways (Wrzesniewski & Dutton, 2001). A common approach to the empirical study
of job crafting is through the Job Demands-Resources model (Tims & Bakker, 2010),
according to which workers craft their jobs by changing their job resources and demands.
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Job resources are physical, psychological, social or organizational job elements that allow pursuing work goals and promoting personal growth. Insufficient resources generate anxiety, lower motivation, disengagement, withdrawal and prevent employees from goal attainment and personal development; on the contrary, sufficient resources decrease depersonalization, emotional exhaustion, while increasing satisfaction and motivation, work engagement, and the ability to develop further resources (Bakker & Demerouti, 2007). Tims, Bakker, and Derks (2012) proposed a distinction between structural and social resources. Structural resources refer to elements such as responsibility, knowledge and capabilities, whereas social resources refer to support from colleagues, feedback, help, advice and coaching. This distinction is important, as it allows to focus on different aspects of people’s working life, such as task structure and social relations.

Job demands are work features that require sustained physical, cognitive or emotional effort. A distinction between challenging job demands and hindering job demands has been proposed (LePine, Podsakoff, & Lepine, 2005). Hindering job demands prevent employees from achieving goals by generating stress and anxiety. Challenging job demands, even when experienced as complex and difficult, provide increased mastery experiences, satisfaction, self-efficacy, engagement, passion and personal development (Bakker & Demerouti, 2007).

According to the Job Demands-Resources job crafting model, we can observe job crafting in terms of one (or more) of four types of proactive behaviors, aimed at: increasing structural resources, increasing social resources, increasing challenging demands, decreasing hindering demands. This approach to the conceptualization of job crafting is widely used in both theoretical and empirical literature. We chose to utilize it because it provides a wide concept of job crafting with a strong behavioral focus, as it includes behaviors related to both the job’s task structure (in terms of both increasing and / or decreasing tasks), the social structure (resources that may be acquired by the employees through social relations in the
workplace) and individual resources (related to knowledge, capabilities, responsibility and autonomy). We believe that this approach, thanks to the solid conceptual foundation of the general JDR model, allows a comprehensive, cohesive understanding of the job crafting phenomenon. However, there are also limitations. The original job crafting model (Dutton & Wersnewski, 2001) includes the cognitive elements of job crafting, which are not directly considered by the JDR model. Again, the focus of the JDR model is strictly behavioral, and that, while providing a strong advantage in terms of cohesiveness and clarity, may lead to underestimate the cognitive aspects of job crating.

The mediating role of job crafting behaviors aimed at increasing job resources

There is a consensus about the idea that participation and awareness may foster discretionary behavior. In their seminal contribution, Wrzesniewski and Dutton (2001, p. 195) observe that when managers share information about “what they are trying to accomplish and why”, workers “can use this knowledge to motivate and legitimate their own job crafting behaviors”. In this paper we hypothesize, more specifically, that job crafting plays a mediating role between PDM, performance and job stressors. We will argue that PDM may enable job crafting behaviors which, in turn, may increase performance and affect, in different ways, job stressors. We will consider separately the 4 different kinds of job crafting behaviors included in the JDR job crafting model (increasing structural and social resources, increasing challenging job demands and decreasing hindering demands).

First, we hypothesize that PDM is associated with increased job crafting behaviors aimed at increasing structural and social resources. Generally speaking, employees that are better informed, as it happens when organizations utilize PDM practices, should increase their self-efficacy, context awareness and ability to identify new opportunities and strategies to acquire new resources (Tims & Bakker, 2010). With higher PDM, employees need to
process new information and face new problems, which creates new possibilities to learn, to
develop mental abilities and new skills (Panari, Guglielmi, Simbula, & Depolo, 2010). Also,
the possibility to provide opinions and ideas may facilitate the development of thinking skills
and trigger initiatives aimed at acquiring more knowledge, information and support from
colleagues. Even a constructive interaction with the supervisor or other colleagues may create
conditions for more frequent behaviors aimed at seeking social resources (help, support,
guidance etc.). According to Tjosvold (1998, p. 211) “Employee’s involvement in decision
making has potential, but realizing this potential requires developing the relationships and
skills necessary for the open-minded discussion of opposing views”. Thus, job crafting aimed
at increasing structural (knowledge, responsibilities etc) and social (support, feedback, help)
resources may represent the answer to both opportunities and needs triggered by PDM.

Second, we hypothesize that job crafting behaviors aimed at acquiring new structural
and social resources may increase work performance. Several scholars speculate (Clegg &
Spencer, 2007; Tims & Bakker, 2010) and find empirically (Bakker, Tims, & Derks, 2012;
Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012; Tims et al., 2012) a positive relation
between job crafting and performance. Specifically, increasing job resources may improve
performance by increasing both extrinsic motivation (through means that are more adequate
to the achievement of goals) and intrinsic motivation (through personal development and
mastery), and by decreasing the negative effects (i.e stress, burnout) generated by chronic job
demands (Tims & Bakker, 2010).

Third, we hypothesize that job crafting behaviors aimed at increasing job resources
may decrease job stressors such as role conflict and role overload. Increased structural
resources such as knowledge may improve workers’ understanding of their role expectations,
bring clarity and consistency to the situation, thereby decreasing role conflict (Jackson &
Schuler, 1985; Singh, 2000), and may also help solving problems and working in a more
efficient way, thereby decreasing the perceived role overload (Chou & Robert, 2008).

Similarly, an increase in social resources may also reduce job stressors, as increased coaching
from the supervisor may help workers to understand their role expectations (Abu Elanain,
2014; Gunasekaran, Korukonda, Virtanen, & Yli-Olli, 1994). Finally, improving the
interaction with supervisors may generate more socio-emotional support which, as found by
Singh (2000), may constitute an important resource to decrease role conflict. Social support
may be helpful to alleviate exhaustion (Bakker, Demerouti, & Euwema, 2005) and to
preserve the energy to tackle work demands (LePine et al., 2005). Research shows that
feedback and help received by supervisors decrease role overload (Chou & Robert, 2008).

Overall, we hypothesize the following:

Hypothesis 1. Participation in decision making is a) positively related to overall
performance and negatively related to b) role overload and c) role conflict through the
mediation of increasing structural resources.

Hypothesis 2. Participation in decision making is a) positively related to overall
performance and negatively related to b) role overload and c) role conflict through the
mediation of increasing social resources.

The mediating role of job crafting behaviors aimed at increasing challenging job
demands and decreasing hindering demands

According to the job crafting JD-R model, workers craft their jobs not only to acquire
new resources, but also to change their job demands by both increasing their challenging
demands and / or decreasing their hindering demands.

First, we hypothesize that PDM may increase the workers’ motivation and
opportunities to engage in job crafting behaviors aimed at increasing their challenging
demands, which in turn will increase work performance but, at the same time, will also increase role conflict and role overload.

Through PDM, employees are better informed about their organizational context and their own job, which should increase their awareness and critical thinking (Miles & Ritchie, 1971) which, in turn, should improve their ability to identify new challenging job demands (Scholl, 1999, 2001). Also, PDM may increase workers’ intrinsic motivation and hence their inclination to seek out new challenges and increase effort and commitment (Wu, Wei, Zhang, & Han, 2011). The feeling of interest increases the workers’ propensity to explore new experiences and ideas, to expand the self in the process and to generate a sense of achievement which, in turn, allows them to envision even greater achievements in the future through new challenging demands (Fredrickson, 2001).

At the same time, increasing challenging job demands may improve work performance. By shaping a more challenging job, workers may create for themselves the opportunity to execute more complex tasks, thereby promoting their personal development and adopting an active style of coping with problems. All these elements may lead to better work performance (Crawford, LePine, & Rich, 2010; Podsakoff, LePine, & LePine, 2007).

However, while a certain consensus exists about the positive outcomes that increased challenging job demands may generate, several authors have argued about the existence of negative effects for the some job stressors. Literature shows that initiatives aimed at increasing effort and tasks, even when voluntary, may nonetheless lead to role overload and role conflict (Bolino & Turnley, 2005; Desombre, Kelliher, Macfarlane, & Ozbilgin, 2006). Thus, when workers craft their job by increasing their challenging demands, they may create for themselves a situation of both excessive workload and conflict between the formally prescribed tasks and those tasks that they proactively embraced (Berg, Grant, & Johnson, 2010). Overall, we hypothesize the following:
Hypothesis 3. Participation in decision making is positively related to a) overall performance, b) role overload and c) role conflict through the mediation of increasing challenging demands.

We now focus on the mediating role of job crafting behaviors aimed at decreasing hindering demands. This kind of behavior may be often difficult to carry out, as job demands are often perceived by workers as “givens” that should not be avoided or decreased (Hakanen, Bakker, & Schaufeli, 2006). However, improved dialogue and interaction with supervisors that engage in participatory practices may help workers to understand which hindering activities and demands may be eliminated without disappointing their supervisors, while at the same time improving performance, as such demands may be the cause of anxiety, stress, dissatisfaction or other obstacles to the achievement of goals (Crawford et al., 2010; Tims & Bakker, 2010). Thus, we expect that PDM will increase job crafting behaviors aimed at decreasing hindering demands, with positive consequences on performance.

Moreover, decreasing hindering demands may help retaining energy and other resources to perform more effectively at work (Tims & Bakker, 2010), thereby decreasing role overload and conflict. When demands are decreased because they are perceived as either inconsistent with one’s values or preferences or too difficult in relation to available resources, feelings of being threatened, exhausted or frustrated may be prevented (Tims, Bakker, & Derks, 2015).

Overall, we hypothesize that PDM will encourage more job crafting behaviors aimed at decreasing hindering demands. As a consequence, we should observe a positive effect on performance and a reduction of role conflict and role overload.

Hypothesis 4. Participation in decision making is positively related to a) overall performance, and negatively related to b) role overload and c) role conflict through the mediation of decreasing hindering demands.
The moderating role of autonomy

Job autonomy describes the level of independence and freedom that workers are allowed to enjoy in relation to their work environment and job description (Hackman & Oldham, 1976). In other words, autonomy refers to the employees’ specific capacity to make their own decisions about significant elements of their job.

It should be noted that autonomy is both a contextual element of any job and also, in the JD-R job crafting model, a structural resource that employees may try to increase through job crafting behaviors. The two things do not contradict each other. On the contrary, it is necessary to consider both aspects. For example, workers whose job imply some degree of autonomy may use such autonomy to craft their job, and their job crafting behaviors may be aimed at (among other things) increasing their autonomy even more. Our model attempts to consider both aspects: autonomy as a contextual variable and as a structural resource that job crafters may try to increase. Indeed, in job crafting literature several scholars show the relevance of autonomy for a better understanding of the effects of job crafting in the workplace (Zhang & Parker, 2018). For example, Dierdorff and Jensen (2018) found that job autonomy, together with other task and social elements, buffered the dysfunctional effects of job crafting. Also, Slemp, Kern, and Vella-Brodrick (2015) found a synergistic relationship between autonomy and job crafting in influencing positive affect, negative affect and job satisfaction.

We hypothesize that when job autonomy increases, the positive relation between job crafting behaviors aimed at increasing resources and work performance may be strengthened. This hypothesis is consistent with the idea that proactive behaviors may have more significant effects when exercised in jobs requiring relevant workers’ discretion, in comparison to jobs that merely require compliance to procedures (Fuller, Hester, & Cox,
2010). In discretionary jobs, performance is more strongly related to the individuals’ ability to take initiative rather than to mere execution of prescribed activities. Thus, when workers enjoy higher autonomy, they should be able to utilize the increased resources that they acquire through job crafting in order to achieve better performance. Similar conclusions can be drawn about job stressors, as with more autonomy job crafters can utilize resources to decrease their role overload and role conflict. Previous studies show that workers with more autonomy have more opportunities and are more able to utilize knowledge and skills to decrease job stressors (Shimazu, Umanodan, & Schaufeli, 2006). The same logic should apply to job crafting behaviors aimed at increasing both social and structural resources.

Hence, we hypothesize the following:

**Hypothesis 5. Autonomy strengthens a) the positive, indirect effect of participation in decision making on overall performance via increasing structural resources and the negative, indirect effect of participation in decision making on b) role overload and c) role conflict via increasing structural resources.**

**Hypothesis 6. Autonomy strengthens a) the positive, indirect effect of participation in decision making on overall performance via increasing social resources and the negative, indirect effect of participation in decision making on b) role overload and c) role conflict via increasing social resources.**

We also argue that autonomy may strengthen the relation between job crafting behaviors aimed at increasing challenging job demands and performance. Both Karasek (1979)’s job demands-control model (JD-C model) and the JD-R model (Bakker & Demerouti, 2007) seem to support such argument. According to Karasek (1979), when high job demands and low control (high strain jobs) are present, then negative effects on workers’ health and performance are more likely. When high job demands and high control (active jobs) are present, then higher satisfaction, motivation, growth and learning are more likely to
occur. Similarly, one of the fundamental assumptions of the JD-R model is that autonomy may replenish the energy depleted by job demands, thereby improving the workers’ ability to face responsibilities (Bakker & Demerouti, 2007). Also, higher autonomy may facilitate the implementation of coping strategies in the face of job demands (Lazarus & Folkman, 1984). Being able to schedule, organize and plan one’s tasks and priorities may help decreasing workload and conflicting expectations (Jensen et al., 2011). Hence, we hypothesize the following:

**Hypothesis 7.** Autonomy (a) strengthens the positive, indirect effect of participation in decision making on overall performance via increasing challenging demands, and weakens the positive, indirect effect of participation in decision making on (b) role overload and (c) role conflict via increasing challenging demands.

We also argue that higher autonomy strengthens the positive relation between job crafting behaviors aimed at decreasing hindering job demands, and performance. In jobs with low autonomy, work performance is more directly related to an accurate execution of predetermined, well defined, procedural tasks. In these cases, avoiding some of the hindering tasks may, at best, generate a low or moderate increase in performance. On the contrary, in jobs with higher autonomy, performance is more directly related to the individual’s discretion judgment. Thus, avoiding hindering tasks thanks to the presence of higher autonomy may lead to more significant benefits on work performance.

Finally, we argue that higher autonomy strengthens the negative relation between job crafting behaviors aimed at decreasing hindering demands, and job stressors. In order to explain such hypothesis, we need to consider that behaviors aimed at decreasing job demands may be seen within the organization as socially undesirable (Tims, Bakker, & Derks, 2013) and leading to sanctions (Grant & Ashford, 2008). Thus, we can expect that, in general, employees may be very cautious in engaging in such behaviors. However, higher autonomy
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should decrease the perception of risk of being sanctioned for such behavior. Also, we need to consider that enjoying more autonomy may encourage actions aimed at achieving personal goals and satisfying personal needs, such as reducing stress. These two combined effects of autonomy (an increased propensity to decrease hindering demands with less fear of sanctions, and to satisfy personal needs) may explain why employees with higher autonomy may tend to use such autonomy, at least in part, to reduce their work overload and role conflict by decreasing hindering demands. For all the reasons mentioned above, we hypothesize the following:

Hypothesis 8. Autonomy strengthens a) the positive, indirect effect of participation in decision making on performance, and the negative, indirect effect of participation in decision making on b) role overload and c) role conflict via decreasing hindering demands.

The whole model is summarised in Figure 1

Methodology

Participants and procedures

This study was conducted in an Italian organization in the mass retail industry. Participation was voluntary. Several work profiles (store level operators, supervisors and managers) participated. After discussing the goals and methodology of the study with the Human Resource Manager of the company, we distributed 503 questionnaires. Every employee was clearly informed about the anonymity of the entire process. All participants were asked to indicate their supervisor and to put the completed form inside a closed box. After about 4 weeks, the filled forms were collected and 37 supervisors and managers were
asked to provide the performance data about their collaborators. We collected 318 correctly filled questionnaires (63% response rate). The average age of respondents was 45 (SD = 9.72), the minimum 19 and maximum 63; about 47% were male. The average job tenure was 10.64 years (SD = 7.85). About 23.6% of respondents have a bachelor degree or more, 62.3% a high school diploma, 14.2% a middle school diploma or less. About 78.6% of respondents are store level operators, 10.4% are supervisors, 6.9% middle managers and 4.1% higher level managers.

**Measures**

The measuring scales were translated into the local language (Italian). To validate the translation, we used the back translation method (Brislin, Lonner, & Thorndike, 1973). The authors independently translated the measuring items into Italian, agreed on a common version, then asked an English mother tongue professional translator to translate such version back to English. The latter version was almost identical to the original version.

**Participation in decision making.** We measured participation in decision making through a 5 item scale developed by Steel and Mento (1987). A sample item was “My supervisor usually asks for my opinions and thoughts in decisions affecting my work”. The alpha was 0.93.

**Autonomy.** We measured perceived autonomy by adapting a 3 item scale developed by Sheldon, Elliot, Kim, and Kasser (2001). A sample item was: “At work I am free to do things my own way”. The alpha was 0.81.

**Job crafting.** We measured job crafting through the sub-dimensions of the job crafting scale developed by Tims et al. (2012). The first three dimensions “increasing structural resources”, “increasing social resources” and “increasing challenging demand” include 5 items each, while “decreasing hindering demands” utilizes 6 items. Examples for each variable are the following: “I try to develop my capabilities” for increasing structural
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resources; “I ask colleagues for advice” for increasing social resources; “When an interesting project comes along, I offer myself proactively as project co-worker” for increasing challenging demands; “I organize my work so as to minimize contact with people whose expectations are unrealistic” for decreasing hindering demands. The Cronbach’s alpha estimates for these scale were, respectively, 0.85, 0.90, 0.85, and 0.86.

**Overall performance.** We measured overall performance through a scale developed by Motowidlo and Van Scotter (1994). It includes 3 items on a seven-point scales. The supervisor of each respondent assessed how the latter performed in relation to the performance standard required for his / her job, in relation to both others of the same rank, and to others in the same work unit. Alpha was 0.95.

**Role overload.** We measured role overload through a 3 item scale developed by Beehr, Walsh, and Taber (1976). A sample item was: “it often seems like I have too much work for one person to do”. The alpha was 0.91.

**Role conflict.** We measured role conflict through a 8 item scale developed by Rizzo et al. (1970). A sample item was: “I receive incompatible requests from two or more people”. The alpha was 0.95.

**Control variables.** We controlled for several potentially relevant variables. First, we controlled for job tenure (number of years in the same job) because job experience may influence job crafting behavior in a variety of ways (Berg, Wrzesniewski, & Dutton, 2010). On the one hand, long tenured employees may be less inclined to craft their job because they are more accustomed to their tasks. On the other hand, long tenured members may have a better understanding of available opportunities for job crafting thanks to a deeper knowledge of their job and their organizational context. We also controlled for age and gender since both may influence employees’ preference for certain work characteristics (Bipp, 2010) and, by consequence, their motivation for job crafting. Bipp (2010) found that older workers turn
more towards tasks that protect their self-concept and provide opportunities for positive events. Also, she found that both older workers and women show more interest for autonomy and feedback. Hence, it is possible that gender and age may influence specific job crafting behaviors like seeking more structural and social resources (such as autonomy and feedback) and increasing challenging job demands.

Moreover, we controlled for education (Tims et al., 2012), because higher education may facilitate job crafting initiatives in several ways. First, because education may provide more knowledge and other resources, but also because highly educated employees usually occupy higher level roles characterized by more autonomy and responsibility which may allow for more job crafting opportunities (A B Bakker et al., 2012). For the same reason we also controlled for formal position: at different ranks, employees may enjoy different degrees of autonomy or freedom to act as job crafters (Berg, Wrzesniewski, et al., 2010).

Results

In Table 1 means, standard deviations, and inter-correlations of all variables are reported.


Before testing our hypotheses, we studied the structural validity of the scales used in the analysis by performing a confirmatory factor analysis in AMOS. The proposed model, a nine-factor model in which PDM, job crafting, overall performance, role overload and role conflict and decreasing hindering demands load on another factor, exhibits an acceptable fit [$\chi^2 = 1620.13$ (df = 824), CFI = 0.92, IFI = 0.92, TLI = 0.91, RMSEA = 0.05]. Other competitive models, i.e. an eight-factor model where we constrained increasing structural resources and increasing social resources to load on one factor [$\chi^2 = 2577.61$ (df = 832), CFI
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= 0.82, IFI = 0.82, TLI = 0.80, RMSEA = 0.81)) and a seven-factor model, where we constrained increasing structural resources and increasing social resources to load on one factor and role overload and role conflict to load on another factor, [χ² = 3183.06 (df = 839), CFI = 0.75, IFI = 0.75, TLI = 0.73, RMSEA = 0.09], show a poorer fit of the data.

The common method bias was examined by constructing a common latent factor for all the items. Then we compared the model with the common latent factor (CLF) to the model minus the CLF by using standardized regression weights (Podsakoff et al., 2003). We utilized a difference of 0.20 to indicate the possible CLF influence. We found no significant difference, which suggests that common method bias is not a significant problem in this sample.

Due to the nested composition of our sample (respondents are nested in supervisors) we tested for possible statistical dependence in our data. If the non independence phenomenon is detected, a multilevel analysis is required (Hox, 2002). Thus, we calculated ICC(1)s for all variables included in the study (Bliese, 2000). According to Hox (2002), coefficients of .05–.09 indicate a low effect, coefficients of .10–.14 represent a moderate effect, and coefficients of .15 above indicate a large effect. Since the ICC(1)s of all variables were less than .05, we decided to apply OLS regression analysis in our research.

Moderated mediation analyses were executed on the SPSS ver. 19 macro using PROCESS (model 14), provided by Hayes (2013). The variables in the proposed model were mean centered to minimize multicollinearity. Regression results for moderated mediation and indirect effects of PDM on overall performance, role overload and role conflict at high and low levels of autonomy are reported respectively in Table 2 and Table 3.

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Insert Table 2 about here

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Results support hypotheses H1a), H1b) e H1c) as the indirect effect of PDM on overall performance, role overload and role conflict through increasing structural resources is respectively $\beta = 0.03 \ [0.01, 0.09]$, $\beta = -0.04 \ [-0.08, -0.02]$) and $\beta = -0.04 \ [-0.08, -0.01]$. The indirect effect of PDM on overall performance through increasing social resources was not significant (with a confidence interval of $-0.04$ to $0.01$), hence H2a is not supported. Instead, H2b and H2c are supported, as the indirect effect of PDM on role overload and role conflict through increasing social resources was respectively $\beta = -0.01 \ [-0.04, -0.01]$) and $\beta = -0.01 \ [-0.05, -0.01]$.

Results also support H3a), H3b) and H3c) as the indirect effect of PDM on overall performance, role overload and role conflict through increasing challenging demands was respectively $\beta = 0.04 \ [0.01, 0.10]$, $\beta = 0.05 \ [0.02, 0.10]$ and $\beta = 0.04 \ [0.01, 0.09]$.

Finally, H4a), H4b) e H4c) are not supported, as the indirect effect of PDM on overall performance, role overload and role conflict through decreasing hindering demands was non significant.

Results (Table 3) show that when employees have higher autonomy, PDM has an indirect effect on role overload ($b = -0.06$, 95% bias-corrected CI $[-0.12, -0.03]$) and role conflict ($b = -0.06$, 95% bias-corrected CI $[-0.11, -0.02]$) via increasing structural resources, thus H5b and H5c are also supported. Contrary to our hypotheses, the indirect effect of PDM on overall performance via increasing structural resources is significant only for low autonomy levels ($b = 0.06$, 95% bias-corrected CI $[0.01, 0.14]$), but not for high autonomy levels ($b = 0.01$, 95% bias-corrected CI $[-0.04, 0.05]$), hence H5a is not supported.
Moreover, Table 3 shows that the indirect effects of PDM on overall performance, role overload and role conflict via increasing social resources are not significant at any level of autonomy, thus H6a, H6b and H6c are not supported.

Contrary to our expectations, decreasing autonomy strengthen the relationship between PDM and overall performance via increasing challenging demands ($b = 0.09$, 95% bias-corrected CI [0.03, 0.17]), while increasing autonomy strengthen the relationship between PDM, role overload ($b = 0.09$, 95% bias-corrected CI [0.04, 0.15]) and role conflict ($b = 0.07$, 95% bias-corrected CI [0.02, 0.14]) via increasing challenging demands. Thus, H7a, H7b and H7c are not supported.

Finally, Table 3 shows that the indirect effects of PDM on overall performance, role overload and role conflict via decreasing hindering demands are not significant at any level of autonomy, hence H8a, H8b e H8c are not supported.

In order to provide a clearer representation of the significant interaction effects we plotted simple slopes one standard deviation below and one above the mean of the autonomy measure (Figure 2, 3, 4, 5, 6).
Discussion

First, we focus on results related to performance. As expected, we found that PDM is positively related to performance via job crafting behaviors aimed at increasing structural resources and challenging job demands. However, we did not find the same effect in the case of job crafting behaviors aimed at increasing social resources. Other job crafting studies found similar evidence (Weseler & Niessen, 2016). This result may be explained if we consider that employee’s performance is measured through the reports of supervisors. Thus, while social resources (support, coaching, advice etc.) may indeed help employees to improve their performance, literature on help seeking (Lee, 1997) shows that such initiatives may signal, to colleagues and supervisors, a lack of sufficient competence and abilities. Thus, a supervisor may interpret such behavior as typical of a bad performer, which can be reflected in performance evaluations.

Also, we did not find support for the idea that PDM is positively related to performance via job crafting behaviors aimed at decreasing hindering demands. Again, two opposing phenomena may be at play and help explain such result. On the one hand, avoiding specific activities may actually decrease the performance evaluation by the supervisor because the latter may assess in a negative way such avoidance. On the other hand, as postulated by job crafting literature (Tims & Bakker, 2010), hindering demands, by definition, are perceived by employees as an obstacle to their ability to achieve goals. The net effect may be neutral.
THE AMBIVALENT EFFECTS OF PARTICIPATION

We will now examine our results related to role conflict and role overload. Our results support our hypotheses about the negative effect of PDM on role conflict and role overload via job crafting behaviors aimed at increasing structural and social resources. In this case, as expected, these behaviors tend to decrease role conflict and role overload. We also found a positive effect of PDM via job crafting behaviors aimed at increasing challenging job demands on role conflict and role overload. In this case, as expected, this behavior tends to increase the level of these job stressors. However, we did not find support for the hypothesis about a negative relation between PDM and these job stressors via job crafting behaviors aimed at decreasing hindering demands. A possible explanation may be found if we consider that demands are often perceived as “givens” by the workers. Thus, workers may find it to be psychologically difficult to engage in a decrease of their demands (however hindering), because they might expect or fear to be sanctioned for that kind of initiative. Thus, even in a participatory climate, the expected reduction of job stressors that a decrease in hindering demands generates may be offset by such negative psychological consequences.

Overall, our results suggest that participation does help creating the conditions that encourage workers to craft their jobs, increase performance and decrease job stressors such as role conflict and role overload. However, the job crafting JD-R model allows to shed light on different, more specific processes happening at the same time. The first one is consistent with a positive perspective, according to which PDM has a positive effect on performance and individual well-being thanks to an associated increase of available job resources. The second one is consistent with a critical perspective, according to which PDM, while increasing performance, may also increase stress because of an increase of job demands. Our results show that these processes may actually happen at the same time, because different behaviors (in our case, different job crafting behaviors), facilitated and encouraged by PDM, may both
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increase performance and increase or decrease job stressors for different reasons that are specific to each behavior.

We now focus on results related to the moderating effect of autonomy. First, autonomy does influence the relation between job crafting behaviors aimed at increasing structural resources and performance, but differently from what we expected. We found that these job crafting behaviors improve performance only when a lower level of autonomy is present. A few explanations can be proposed. First, we should take into account that, in job crafting literature, autonomy is considered a structural resource for workers (together with knowledge, responsibility and others). Thus, one could speculate that increasing resources may have decreasing returns. In other words, when autonomy available for workers is already high and they engage in behaviors aimed at increasing their structural resources even more, the actual boost on performance may be minimal, as they already have a significant amount of resources at their disposal. On the contrary, when the initial level of autonomy is low, any behavior aimed at increasing their structural resources (including an increase of autonomy itself) may generate a more significant performance boost.

Another possible explanation is that when workers with higher autonomy craft their jobs to increase their resources, they may utilize such increased resources to pursue personal goals rather than organizational goals, as other authors already speculated (Lyons, 2008). Indeed, our results about the moderating role of autonomy in relation to role conflict and role overload seem to confirm such interpretation. More specifically, we found that increased structural resources are used, at high level of autonomy, to decrease job stressors. In other words, increased resources are directed towards a personal need rather than performance.

Similarly, we also found that autonomy influences the relation between job crafting behaviors aimed at increasing challenging job demands and performance only when a lower level of autonomy is present. Again, we propose two possible interpretations of this
unexpected result. First, when workers have higher autonomy, behaviors aimed at increasing challenging demands may be oriented towards personal goals rather than work performance. For example, workers may choose to engage in activities that they enjoy more even though they do not necessarily improve their performance. A second explanation may be related to the fact that when workers have higher autonomy, usually their job is less “structured” and/or characterized by more uncertainty, so that the cause-effect relation between effort and performance becomes more ambiguous. In this case, it may be more difficult for workers to extend their activities and demands in ways that are clearly conducive to better performance, even when their intentions are such.

Finally, we also found an unexpected result in the way autonomy moderates the relation between job crafting behaviors aimed at increasing challenging job demands and both role conflict and role overload. We expected that higher autonomy would alleviate the augmented stress caused by challenging job demands, but we found an opposite phenomenon. A possible explanation that literature suggests is that higher autonomy may allow workers to face new challenges by working harder and longer (Örtqvist, Drnovsek, & Wincent, 2007). In other words, autonomy can function as a source of self-imposed stress, fatigue, overload and conflict.

Overall, our study contributes to the debate about participation as a relevant practice in influencing worker’s behavior and its consequences about their own performance and significant job stressors such as role conflict and role overload. By adopting the job crafting JD-R model, we show empirically that both the “positive” and the “critical” views on participatory practices have merit. The advantage of such model is that it allows to observe different phenomena related to different kinds of behaviors triggered by participation and moderated by autonomy. If we look at behaviors aimed at acquiring job resources, we found that participation generally has beneficial effects on both performance and role overload and
role conflict. This result is consistent with the mutual gain perspective (Appelbaum et al., 2000). Also, higher autonomy seems to shift the focus of such behaviors from organizational performance to the pursuit of individual well-being. However, when we consider participation in relation to behaviors aimed at increasing challenging job demands, the outcome is quite different. While the overall performance seems to benefit from such behavior, there are negative consequences for the individual in relation to role overload and role conflict. This result is consistent with the critical perspective (Kroon, Van de Voorde, & Van Veldhoven, 2009; Ramsay et al., 2000). In this case, the level of autonomy is also significant, as more autonomy neither protects workers from role overload and role conflict, nor increases performance.

Managerial implications, limits and future research directions

Our results can be utilized by managers in a variety of ways. At a more general level, the main suggestion is that participation has an organizational positive impact by increasing performance and reducing job stressors. Thus, the most fundamental takeaway is that managers should implement participatory practices in order to achieve those results.

However, our study also shows some specific negative effects of participation. Considering the mediation of job crafting and the moderating effect of autonomy improves our understanding of the reasons why such negative effects may happen, and that should help managers to fine-tune their implementation of participatory practices in order to decrease the negative effects while retaining the positive ones. We propose here a few suggestions.

First, our results suggest that managers should pay attention on how performance is evaluated in relation to behaviors aimed at seeking social resources. If supervisors evaluate employees who seek help and advice as low performers not because of objective performance measures, but because of the signaling effect of such behaviors, that may indeed discourage information exchanges, learning, coaching and other positive effects of participation. Thus,
we suggest that organizations should make sure that these two elements (performance
evaluation and social resource seeking behaviors) are as disconnected as possible.

Second, our results suggest that participation may increase job stressors via behaviors
aimed at increasing challenging job demands. In other words, it seems necessary to find a
delicate balance between two different aspects: On the one hand, we observe the employees’
desire to have more challenging, motivating jobs, which is facilitated by participation and
leads to better performance. On the other hand, we also observe the increased stress that new
challenges generate, even when they are chosen by the employees themselves. While it is
beyond the scope of our paper to imagine how to find the right balance, we suggest that
managers should explicitly consider, in their human resource management policies, both
aspects of increased participation, not just the positive one. When participatory practices are
increased, managers should expect that also stress may increase, especially for employees
that will try to increase their demands, so participatory policies should be accompanied by
other policies that help employees to deal with, and reduce, stress. Interestingly, our study
may also provide a possible, although partial answer to this problem. We found that when
employees have a high level of autonomy, they tend to use their structural resources to
decrease job stressors. Thus, it seems that providing more autonomy to employees may help
managers to find a better balance between the need to “push” employees to engage in more
challenging demands and the need to contain their stress level. In more general terms, our
results suggest that the combination of increased participation and increased autonomy may
be a more effective human resource policy rather than increased participation alone.

Our study has also some limitations. Because of the cross-sectional nature of data we
cannot be certain of the causal direction of the tested relations. Even though our model is
theoretically solid and based on previous studies, future longitudinal studies may help
establish the causality of the observed relations.
Also, our data are almost always based on self-reports, and this may imply the possibility of common-method variance. However, such choice was necessary because of the nature of some of the observed phenomena (i.e. job crafting) which cannot be quantified through external information and assessments. In other cases, whenever possible (i.e. performance) we used data from heterogeneous sources. However, common-method variance has been suggested to be less of an issue in moderated regression (Pierce & Gardner, 2004) and the fact that answers were treated confidentially has probably alleviated the common-method bias. Future research may attempt to utilize more objective data to measure the observed variables.

Also, we utilized data from a single organization. This decreases the generalizability of results. It would be interesting to replicate this study in different organizations.

Finally, we only focused on one specific HR practice and on a narrow range of job stressors. It would be interesting, in future studies, to consider the role of job crafting in relation to a wider array of HR practices and job stressors.

References


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Table 1

Descriptive statistics and intercorrelations of the variables

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Notes. n = 318. Cronbach’s alpha are listed in parentheses on the diagonal. Gender: male = 1; female = 0. Education: 1 = middle school diploma or less; 2 = high school diploma; 3 = bachelor degree or more. Position: 4 = higher level managers; 3 = middle managers; 2 = supervisors; 1 = store level operators.

*p < 0.05 (two-tailed). **p < 0.01 (two-tailed). ***p < 0.001 (two-tailed).
Table 2

Results of regression analysis

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<th>Increasing social resources</th>
<th>Increasing challenging demands</th>
<th>Decreasing hindering demands</th>
<th>Overall performance</th>
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<th>Role conflict</th>
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<td>Autonomy</td>
<td>.19*</td>
<td>.09</td>
<td>-.16*</td>
<td>.07</td>
<td>-.01</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>Increasing structural resources x Autonomy</td>
<td>-.30*</td>
<td>.13</td>
<td>-.28**</td>
<td>.10</td>
<td>-.25*</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>Increasing social resources x Autonomy</td>
<td>-.07</td>
<td>.09</td>
<td>.06</td>
<td>.07</td>
<td>.01</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>Increasing challenging demands x Autonomy</td>
<td>-.33**</td>
<td>.12</td>
<td>.22*</td>
<td>.09</td>
<td>.27*</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>Decreasing hindering demands x Autonomy</td>
<td>-.01</td>
<td>.11</td>
<td>-.05</td>
<td>.09</td>
<td>.16</td>
<td>.10</td>
<td></td>
</tr>
</tbody>
</table>

R²: .10  .03  .18  .02  .23  .18  .12
F: 5.95*** 1.69 11.26*** .84 5.99*** 4.35*** 2.89***

Notes. n = 318. Standard errors in italic.
*p < 0.05. **p < 0.01. ***p < 0.001.
Table 3

Indirect effects of Participation in decision making on Overall Performance, Role overload and Role conflict at high and low levels of Autonomy

<table>
<thead>
<tr>
<th>Mediator</th>
<th>Level of Autonomy</th>
<th>Overall performance</th>
<th></th>
<th>Role overload</th>
<th></th>
<th>Role conflict</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>95% CI</td>
<td></td>
<td>95% CI</td>
<td></td>
<td>95% CI</td>
<td></td>
</tr>
<tr>
<td>Increasing structural resources</td>
<td>Low</td>
<td>0.06 (0.03)</td>
<td>0.01 (0.14)</td>
<td>-0.01 (0.02)</td>
<td>-0.05 (0.02)</td>
<td>-0.01 (0.02)</td>
<td>-0.05 (0.03)</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>0.01 (0.02)</td>
<td>-0.04 (0.05)</td>
<td>-0.06 (0.03)</td>
<td>-0.12 (0.03)</td>
<td>-0.06 (0.02)</td>
<td>-0.11 (0.02)</td>
</tr>
<tr>
<td>Increasing social resources</td>
<td>Low</td>
<td>-0.01 (0.01)</td>
<td>-0.04 (0.01)</td>
<td>-0.02 (0.01)</td>
<td>-0.06 (0.01)</td>
<td>-0.02 (0.02)</td>
<td>-0.13 (0.01)</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>-0.02 (0.02)</td>
<td>-0.07 (0.01)</td>
<td>-0.01 (0.01)</td>
<td>-0.05 (0.01)</td>
<td>-0.02 (0.01)</td>
<td>-0.07 (0.00)</td>
</tr>
<tr>
<td>Increasing challenging demands</td>
<td>Low</td>
<td>0.09 (0.03)</td>
<td>0.03 (0.17)</td>
<td>0.03 (0.02)</td>
<td>-0.01 (0.08)</td>
<td>-0.01 (0.03)</td>
<td>-0.06 (0.04)</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>0.01 (0.03)</td>
<td>-0.06 (0.05)</td>
<td>0.09 (0.03)</td>
<td>0.04 (0.15)</td>
<td>0.07 (0.03)</td>
<td>0.02 (0.14)</td>
</tr>
<tr>
<td>Decreasing hindering demands</td>
<td>Low</td>
<td>-0.01 (0.01)</td>
<td>-0.03 (0.01)</td>
<td>0.01 (0.01)</td>
<td>-0.01 (0.01)</td>
<td>-0.01 (0.01)</td>
<td>-0.01 (0.01)</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>-0.01 (0.01)</td>
<td>-0.04 (0.01)</td>
<td>-0.01 (0.01)</td>
<td>-0.02 (0.01)</td>
<td>0.01 (0.01)</td>
<td>-0.01 (0.05)</td>
</tr>
</tbody>
</table>

Notes. n = 318. Entries are unstandardized coefficient estimates (95% confidence interval). CI, confidence interval; LL, lower limit; UL, upper limit.
Figure 1. Schematic representation of the model
Figure 2: Autonomy as moderator of the relationship between Increasing structural resources and Overall performance
Figure 3: Autonomy as moderator of the relationship between Increasing structural resources and Role overload.
Figure 4: Autonomy as moderator of the relationship between Increasing structural resources and Role conflict
Figure 5: Autonomy as moderator of the relationship between Increasing challenging demands and Overall performance.
Figure 6: Autonomy as moderator of the relationship between Increasing challenging demands and Role overload