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# Unravelling the relationship between role overload and organizational citizenship behaviour: A test of mediating and moderating effects<sup>☆</sup>

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## ABSTRACT

Building on the conservation of resources theory and self-determination theory, the present study develops and tests a moderated mediation model of organizational citizenship behaviour, in which a) emotional exhaustion serves as a mediating mechanism linking role overload with organizational citizenship behaviour, and b) supervisor autonomy support moderates the relationship between role overload and organizational citizenship behaviour through emotional exhaustion. Results of a time-lagged study of 144 workers from various Canadian organizations provided support for the hypothesized model: supervisor autonomy support buffered a negative effect of role overload on emotional exhaustion and, indirectly, organizational citizenship behaviour. This research sheds light on the intervening variables that may explain the relationship between challenge stressors and extra-role behaviours. It also provides information on managerial practices that may protect employees' optimal functioning against an excessive workload.

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## 1. Introduction

Organizational citizenship behaviour, which refers to intentional and discretionary behaviours enhancing the context of job performance (Nohe & Michaelis, 2016; Organ, 1997), has been recognized by scholars and practitioners as an important resource in organizational functioning and effectiveness (Methot, Lepak, Shipp, & Boswell, 2017). Accordingly, research has progressed significantly on the factors that prompt employees' engagement in organizational citizenship behaviour (Podsakoff, Whiting, Podsakoff, & Blume, 2009). However, to date, little knowledge has been accumulated on the effects that workplace stressors – i.e. the events that demand an adaptive response of some kind (Sacramento, Fay, & West, 2013) – have on organizational citizenship behaviour (Pooja, De Clercq, & Belausteguigoitia, 2016). This is unfortunate, since stressful work conditions can drain the energy needed to engage in positive behaviours, such as organizational citizenship behaviour.

The present study attempts to address this issue by examining the relationship between role overload and organizational citizenship behaviour. In doing so, we will take into account the mediating mechanisms that might underlie the resource-depleting effects of overload on organizational citizenship behaviour and the moderating conditions that can protect and promote employee organizational citizenship behaviour against such draining effects. Additionally, in line with organizational citizenship behaviour theory and research (e.g., Lavelle, Rupp, & Brockner, 2007; Lehmann-Willenbrock, Grohmann, & Kauffeld, 2013), we will consider both organizationally directed and individually directed forms of citizenship behaviour. The former refers to discretionary actions that benefit the organization (i.e., task dedication and civic virtue), whereas the latter includes interpersonal initiatives that benefit individuals (i.e., altruism and interpersonal facilitation) (Van Scotter & Motowidlo, 1996; Williams & Anderson, 1991).

Our specific focus on role overload and on the mediating and moderating mechanisms accounting for its relationship with organizational citizenship behaviour is both theoretically and practically relevant. First, from a theoretical standpoint, meta-analytic research has consistently reported non-significant links between role overload and both work performance (Bowling, Alarcon, Bragg, & Hartman, 2015; Gilboa, Shirom, Fried, & Cooper, 2008) and organizational citizenship behaviour (Eatough, Chang,

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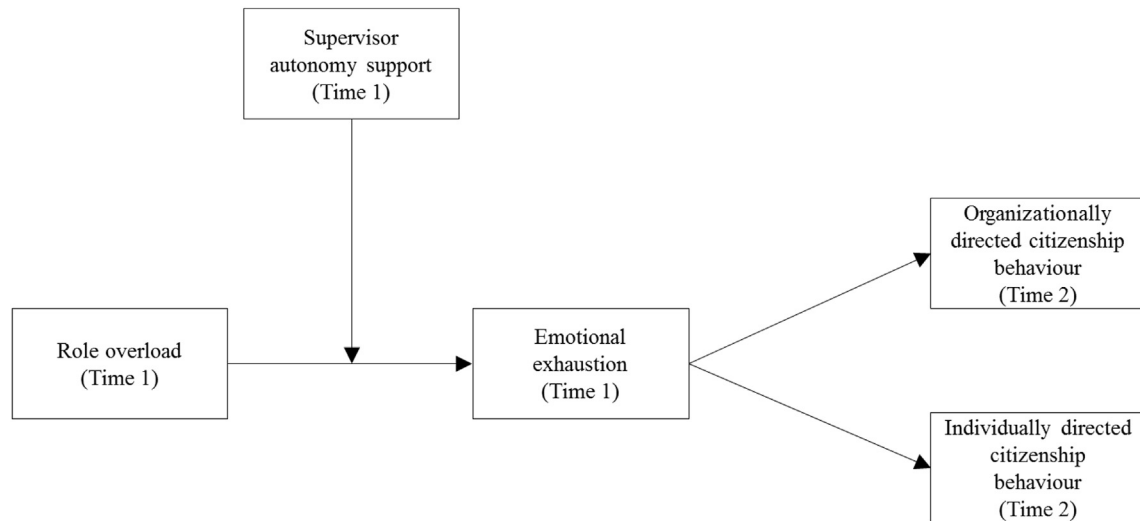


Fig. 1. Conceptual model.

Miloslavic, & Johnson, 2011). As scholars have suggested, further research is therefore needed to identify the mediating processes and boundary conditions of role overload in order to clarify its relationship with work-related outcomes (Eatough et al., 2011; Gilboa et al., 2008). Second, from a practical standpoint, considering that role overload is one of the most frequently experienced work stressors, in conjunction with the ineffectiveness of management strategies to help employees dealing effectively with this stressor (Bowling et al., 2015; Brown, Jones, & Leigh, 2005; Fisher, 2014), organizations might significantly benefit from an improved understanding of the role overload-organizational citizenship behaviour relationship.

To elucidate role overload's relationship with organizational citizenship behaviour, we integrate conservation of resources theory (Gorgievski & Hobfoll, 2008; Hobfoll, 1989, 2001) with self-determination theory (Deci & Ryan, 2000) to argue that: a) exposure to a high workload would make employees more vulnerable to the loss of the resources (i.e., time and energy) that are necessary to sustain discretionary behaviors (Gorgievski & Hobfoll, 2008), thereby leading to increased emotional exhaustion and, ultimately, reduced organizational citizenship behaviour; and b) by receiving extensive autonomy support from supervisors, employees will be buffered against the resource depletion effects of role overload (Gorgievski & Hobfoll, 2008; Hobfoll, 1989), thus being less likely to suffer from emotional exhaustion and, consequently, to withdraw organizational citizenship behaviour.

Overall, by examining the proposed model (see Fig. 1), our study is expected to provide three important contributions to the literature. First, prior meta-analytic findings have supported the assumptions that the impairing effects job demands on employee performance occur via increased strain reactions<sup>1</sup> (Lepine, Podsakoff, & Lepine, 2005). Yet, research has disregarded whether the strain mechanisms might account for the specific role overload-organizational citizenship behaviour relationship. Addressing this issue is nonetheless essential since overload, despite having potential to provide opportunities for personal mastery and growth,

<sup>1</sup> In the stress literature, strain refers to physical, psychological and behavioural reactions that emerge in response to stress (French, Caplan, & Harrison, 1982). In this respect, scholars have consistently considered emotional exhaustion as one of the psychological symptoms of strain (e.g., Boswell, Olson-Buchanan, & LePine, 2004; Lee & Ashfort, 1990; Spector, Chen, & O'Connell, 2000).

inherently includes some degree of uncertainty about the likelihood of meeting work-related tasks given time and energy-related constraints (Rodell & Judge, 2009). As such, according to conservation of resources theory, it can deplete the time and energy resources needed to perform organizational citizenship behaviour. The present study extends prior research by providing for the first time an empirical test of the conservation of resources-based assumption that the impairing effects of role overload on organizational citizenship behaviour can occur through a process of resource loss resulting in emotional exhaustion.

Second, there is limited knowledge on the conditions under which strain processes might be more or less likely to transmit the resource-depleting impact of role overload. Because organizational citizenship behaviour requires a conspicuous investment of time and energy resources, and given that such resources are limited, it is relevant to understand how employees can conserve, rather than lose, their resource when facing a heavy overload and, consequently, be enabled to allocate them to citizenship behaviours. Our study clarifies this issue, as it identifies supervisor autonomy support as a contextual condition that, by protecting overloaded employees against resource loss, can prevent the experience of exhaustion and its subsequent impairing effect on organizational citizenship behaviour. Finally, the present study is unique in proposing a self-determined perspective to understand the boundary conditions associated with the process of resource loss. Indeed, by taking into account the moderating role of supervisor autonomy, our study suggests that conservation of resources theory can be enriched by the self-determination-based idea that the contextual conditions supportive of individual self-determination can prevent the experience of resource loss and, consequently, enable employee positive functioning in the presence of stressful job conditions.

### 1.1. Role overload and organizational citizenship behaviour

Although different theories have been proposed to explain the effects of workplace stressors on employee performance, scholars have consistently converged on the assumption implied in the challenge-hindrance framework (Lepine et al., 2005) that, when trying to understand stressors' effects, it is important to take into account the distinction between two broad dimensions of stressors (Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Selye, 1976).

*Hindrance stressors* (e.g., role ambiguity and role conflict) are demands appraised as potentially thwarting one's progress toward work-related accomplishments or personal development. Exposure to such stressors is thus unlikely to motivate higher performance because people do not recognize a positive relationship between coping efforts and the possibility of gaining valued outcomes. For example, employees facing conflicting role demands tend to recognize that they cannot to meet such demands with any amount of effort, as they do not possess the required abilities to accomplish work tasks (Lepine et al., 2005). Likewise, ambiguous role demands are hindrances because employees are unclear about how to satisfy them in the first place (Cheung, Sinclair, Shi, & Wang, 2015). Accordingly, employees tend to regard either conflicting or ambiguous job demands as draining the resources that could otherwise be invested to meet the demands associated with valued outcomes.

*Challenge stressors* (e.g., job responsibilities and job complexity) refer to demands that are appraised as having the potential to promote mastery, achievements, or personal growth. These demands induce the feeling that the efforts to cope with them increase the likelihood of achieving desired outcomes, hence generate higher motivation and, consequently, increased performance. For example, people should believe they can deal with time pressure by working harder, faster, or longer, and that, once this demand is met, they will experience a sense of personal accomplishment.

However, in the case of role overload – i.e., the subjective feeling of having too many role demands given the resources available to meet them (Byrne, 1994) – the situation is more complex. Indeed, as scholars have argued (Eatough et al., 2011; Gilboa et al., 2008; Vandenberghe, Panaccio, Bentein, Mignonac, & Roussel, 2011), this job demand encompasses both challenging and hindering aspects. As a challenge, role overload is related to increased responsibilities and more work challenges and, consequently, has potential to motivate effective performance (Lepine et al., 2005). However, role overload also represents a threat because it inherently entails some level of uncertainty about the extent to which individuals are able to finish their work given the limited amount of available time and energy (Crawford, LePine, & Rich, 2010; Eatough et al., 2011). In this way, the uncertainty associated with a heavy workload increases the potential risk of losing valued work-related resources (i.e., time and energy) (Hobfoll & Freedy, 1993).

From a conservation of resources perspective, such resource-depleting effects are relevant to understand the potentially detrimental impact of role overload on organizational citizenship behaviour. Indeed, according to conservation of resources theory, all individuals strive to obtain, retain, foster, and protect valued resources (e.g., job status, effort, time, and money). However, investing valued resources in contexts where the outcome is uncertain (i.e., high workload contexts) increases the perceived threat to or the loss of such resources. (Hobfoll, 1989, 2001; Ito & Brotheridge, 2009). This in turn impairs psychological health and, consequently, makes resources reservoirs less available to the individual (Hobfoll & Freedy, 1993). Importantly, conservation of resources theory argues that resource loss is more salient to individuals than resource gain, suggesting that real or anticipated resource loss has a stronger power in (de-) motivating effective work behaviors than expected resource gain (Gorgievski & Hobfoll, 2008). Additionally, according to this theoretical framework, burnout represents the end state of the process of resource loss that gradually develops over time depleting individual's resources (Gorgievski & Hobfoll, 2008). As such, this state is expected to motivate individuals to protect the remaining resources (time and energy) by disengaging from those behaviors that can further deplete such resources (Halbesleben & Bowler, 2007).

## 1.2. The mediating role of emotional exhaustion

In line with a conservation of resources framework, we propose that a specific burnout dimension, namely emotional exhaustion, would account for a negative relationship between role overload and organizational citizenship behaviour. Emotional exhaustion is defined as the feeling of being emotionally overextended and drained by one's work (Maslach & Jackson, 1986; Schaufeli & Greenglass, 2001). It represents one of the three components of burnout – along with depersonalization and diminished personal accomplishment – as conceptualized by Maslach and Jackson (1981). The present study focuses on emotional exhaustion rather than all three components because it is more likely to capture the core concept of burnout (Shirom, 1989). Moreover, it has been shown to have more consistent relationships with important antecedent and outcome variables than depersonalization and diminished personal accomplishment (Lee & Ashforth, 1993). In addition, the inclusion of emotional exhaustion is more likely to represent a generalized conservation of resources-based state of resource depletion than depersonalization or diminished personal accomplishment (Halbesleben & Bowler, 2007; Hobfoll, 2001). Indeed, as scholars have argued, depersonalization, by reflecting a detached relationship with the recipients of services, would be an occupational response that is specific of human service employees – i.e. employees that offer guidance, counselling, treatment and provision of basic needs to people to help them stabilize their life, find self-sufficiency and improve their welfare (Evans & Fisher, 1993; Gorgievski & Hobfoll, 2008). On its part, reduced personal accomplishment reflects perceived decline in professional competence and effectiveness. As such it is focused on the loss of specific resources (i.e., work-related competence and effectiveness) rather than on an overall feeling of resource depletion.

Consistent with a conservation of resources perspective, we argue that the experience of emotional exhaustion due to the exposure to a heavy workload would motivate employees to minimize further loss of resources by reducing the investment in resource-depleting activities (Hobfoll, 1989; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Empirical research suggests that engaging in either organizationally or individually oriented organizational citizenship behaviours requires a conspicuous investment of time and energy resources. For example, civic virtue, a form of organizationally directed organizational citizenship behaviour, implies taking personal initiatives to make suggestions for improvement. As such, it represents a time-consuming and energy-depleting activity because it involves researching problems, analysing data, preparing action plans, striving to get support from coworkers, and allocating cognitive resources to make suggestions for constructive changes (Nielsen, Bachrach, Sundstrom, & Halfhill, 2012). Likewise, altruism, a type of individually directed organizational citizenship behaviour, requires employees to allocate their time away from work tasks to help coworkers, as well as to invest sustained attention in trying to identify and understand others' needs (Isen, 1970; Nielsen et al., 2012; Thompson, Cowan, & Rosenhan, 1980).

Importantly, emotionally exhausted individuals tend to feel a lack of energy, and are thus less inclined to adopt organizational citizenship behaviours. Indeed, the reduced energy that originates from exhaustion might interfere with the individual's capacity to deploy efforts, which is an essential condition for discretionary behaviours, such as organizational citizenship behaviour. Moreover, engaging in such behaviours not only requires energy reserve, but also leads to more uncertain and less noticeable outcomes than ordinary task performance (Koopman, Lanaj, & Scott, 2016). Accordingly, when emotional exhaustion occurs, investing the remaining time and energy resources in such behaviours might

entail a high risk of further resource loss that override the possibility of resource accumulation (Schaufeli & Taris, 2005). This hence points to a negative relationship emotional exhaustion in the relationship between role overload and organizational citizenship behaviour.

However, relying on the compensation argument, some scholars have contended that exhaustion might be positively related to organizational citizenship behaviour (Demerouti, Verbeke, & Bakker, 2005; Halbesleben & Bowler, 2007). Indeed, the experience of burnout might still make individuals willing to pursue some professional goals. As a consequence, such individuals might tend to compensate the drop in their in-role performance by engaging in extra-role behaviours. Yet, this reasoning is probably more plausible in the short term than in the long term. Indeed, as Zellars and Tepper (2003) have argued, the compensation process is more readily applicable when the level of stress is low. Because emotional exhaustion represents an extreme form of stress that augments with time, the compensation argument might be unlikely to be appropriate in the case of emotional exhaustion.

In summary, we propose that role overload, by depleting an individual's time and energy resources, is likely to increase the experience of emotional exhaustion. This in turn is expected to undermine employee engagement in organizational citizenship behaviours. Whereas such an indirect link has yet to be empirically established, previous research indirectly supports our assumption by reporting, separately, a positive link between role overload and emotional exhaustion (e.g., Bakker, Demerouti, & Verbeke, 2004; Lee & Ashforth, 1996) and a negative association between emotional exhaustion and organizational citizenship behaviours (e.g., Chiu & Tsai, 2006; Gaudet, Tremblay, & Doucet, 2014). The following hypothesis is therefore advanced:

**Hypothesis 1.** Role overload will be indirectly negatively related to organizational citizenship behaviour mediated through emotional exhaustion.

### 1.3. The moderating role of supervisor autonomy support

Conservation of resources theory argues that, in order to protect resource loss, individuals must *invest resources* to ensure and enhance resource gain processes (Hobfoll, 2002). However, and importantly, such a resource investment requires that: a) people are enabled to successfully cope with job demands; and b) meeting these demands has positive attributes, meaning that it allows to obtain personally valued gains (Gorgievski & Hobfoll, 2008). Accordingly, the more such requirements are fulfilled, the more likely it is that people will be enabled to achieve valued gains in the face of high job demands, and that, consequently, will be protected against resource loss.

In this regard, self-determination theory provides important insights into the specific conditions allowing employees to both successfully handle job demands and view such coping efforts as worthwhile. According to this framework, people are said to act in autonomous, or self-determined, ways as they realize that their behaviors can be undertaken with a full sense of choice, fully endorse (i.e., value), and feel a sense of “authorship” (i.e., internal locus of causality) for these behaviors (Deci & Ryan, 1995).

Self-determination theory further holds that the context in which individuals are embedded plays a key role in promoting (vs. undermining) their autonomous functioning. According to Deci and Ryan (1980, 1985), contextual (working) conditions can be predominantly controlling or autonomy supportive. Controlling conditions pressure people to achieve a particular outcome, thereby thwarting the expression of an authentic and self-determined self (Williams, Grow, Freedman, Ryan, & Deci, 1996). Thus, under

controlling conditions, individuals act with a lower sense of choice, are less likely to “take in” the value underlying expected behaviors, and are more inclined to perceive an external locus of causality for their actions (Koestner, Ryan, Bernieri, & Holt, 1984). Conversely, autonomy-supportive conditions provide individuals with choice and opportunities for self-direction, and emphasize the meaningfulness of their behaviors. Thus, these conditions promote one's autonomous functioning. In workplace contexts, it is generally supervisors that are responsible for providing employees with autonomy-supportive (versus controlling) conditions (Baard, Deci, & Ryan, 2004).

As such, the concept of autonomy support differs from that of job autonomy. Indeed, while both constructs involve a sense of freedom in the execution of one's work activity, autonomy support, unlike job autonomy, further implies the provision of information and explanations that allow employees to recognize the meaningfulness and value of their work behaviour (Baard et al., 2004). Autonomy support, by improving the feasibility and meaningfulness of meeting job demands, is essential to enhancing the likelihood that employees will invest resources to obtain further gains and, consequently, will be protected against resource depletion. Specifically, employees who receive higher supervisor autonomy support are more likely to feel they can enact their behaviours freely and with no sense of coercion, thereby experiencing a higher degree of personal control over their behavioural outcomes (Deci & Ryan, 1987). Such employees will thus believe that changing the demanding situation is under their own power (Rodríguez, Bravo, Peiró, & Schaufeli, 2001). As a result, they will be more likely to enact a broad range of active coping strategies (e.g., problem solving, seeking advice and social support, and taking direct actions) that enhance their capacity to handle role overload effectively (Ito & Brotheridge, 2003).

Moreover, by emphasizing the meaningfulness of employee behaviours, autonomy-supportive supervisors facilitate the choice of actions that are aligned with employees' own values, preferences and needs (Shamir, House, & Arthur, 1993; Smith, Ntoumanis, & Duda, 2007). Such functioning is essential to enhance the value employees ascribe to their work, because it enables them to maintain a consistency with valued beliefs, values and interests while doing their job (Baumeister & Vohs, 2002; Shamir et al., 1993). Thus, employees will develop an increased sense of identification with their overall work and its related goals. Consequently, they will be more motivated to invest their resources in their job (Sheldon, 2002). This is essential to enhance resource investment to strive to meet demanding aspects of one's job (i.e., increased workload), since individuals would recognize that such coping efforts are important to achieve valued work-related goals (Britt, Adler, & Bartone, 2001).

Conversely, when supervisors are not supportive of individual self-determination, the process of resource loss engendered by role overload is unlikely to be interrupted, since the feasibility and valence of coping with this stressing condition would be undermined. As a consequence, employees would have lower odds of obtaining valued resource gains. Indeed, when supervisor autonomy support is low, employees feel a greater coercion to behave in a specific ways. This lowers choiceful behaviours and, consequently, engenders a more external locus of causality (Deci & Ryan, 1985; Ryan, 1982). As a result, employees will believe that changing the demanding aspects of their job is beyond their power and would thus feel less prone to undertake active coping strategies to deal with role overload (Meier, Semmer, Elfering, & Jacobshagen, 2008). Furthermore, under low autonomy supportive conditions, employees recognize that their work activities and related outcomes are not emanated from their true self, or experienced as their own doing (Deci & Ryan, 1995). Employees would thus be less likely to



link work behaviour and related goals with their own values, needs and, interest. As a result, they will not see the value of striving to meet demanding working conditions.

Taken together, our line of reasoning suggests that high autonomy-supporting conditions would act as a moderating condition that will attenuate a negative indirect relationship between role overload and organizational citizenship behaviour via emotional exhaustion. Indirect support for our prediction comes from different streams of research showing that supervisor autonomy support leads to higher individual well-being (Gillet, Fouquereau, Forest, Brunault, & Colombat, 2012), and that autonomous motivation (i.e., a direct outcome of supervisor autonomy support) allows employees to experience less psychological distress in the presence of job demands (Fernet, Austin, Trépanier, & Dussault, 2013; Parker, Jimmieson, & Amiot, 2010).

**Hypothesis 2.** Supervisor autonomy support will moderate the negative indirect relationship between role overload and organizational citizenship behaviour via emotional exhaustion, such that the indirect relationship will be weaker when supervisor autonomy support is higher.

## 2. Method

### 2.1. Participants and procedure

We conducted a prospective study with two measurement times separated by a 6-month interval. Role overload, supervisor autonomy support, and emotional exhaustion were measured at Time 1, and organizational citizenship behaviour were measured at Time 2.

Data were collected from various Canadian organizations through a secure online platform between March and November, 2013. The research team approached individual workers as well as organizations from various industries to invite them to join a larger research program on psychological health and behaviors at work. Individuals interested in the research submitted their contact information and were invited to participate through a personalized email sent by the researchers. The organization's representatives demonstrating an interest for the project transmitted employees' contact information, in order for researchers to invite them individually to participate in the study. To be eligible, respondents had to meet the following inclusion criteria: be at least 18 years old, Canadian citizens or permanent residents of Canada, and in their current position for at least three months. Each participant was assigned an identification code to preserve confidentiality. 627 participants completed the questionnaires at Time 1, and 235 completed the questionnaires at both waves (attrition rate: 63%). The responses of 12 individuals were also eliminated because they worked as self-employed workers, a status that did not allow them to experience supervisor's autonomy support practices, nor to have opportunities to engage in organizational citizenship behaviours.

After removing 79 incomplete responses, the final sample comprised 144 participants, who worked in one of three types of organizations: private companies (63.4%), public organizations (34.1%), and non-profit institutions (2.5%). Participants had an average age of 33.6 years ( $SD = 7.3$ ), and the majority of them were female (58.1%), possessed an undergraduate degree or higher (62.3%), and reported an organizational tenure between 1 and 5 years (49.4%).

### 2.2. Measures

#### 2.2.1. Role overload

Respondents completed an instrument adapted from the Job Content Questionnaire (Karasek et al., 1998) by Vézina et al. (2011).

It assessed role overload with six items (e.g., "I am asked to do an excessive amount of work"), measured on a 4-point scale (0 = Strongly disagree to 3 = Strongly agree).

#### 2.2.2. Supervisor autonomy support

Employees completed the Perceived Autonomy Support Scale for Employees (PASS-E; Moreau & Mageau, 2012). This questionnaire uses a 7-point Likert scale (1 = Do not agree at all; 7 = Very strongly agree) and includes nine items measuring immediate supervisors' autonomy supportive practices (e.g., "Within certain limits, my supervisor gives me the freedom to choose how and when I will execute my tasks"). We relied on employee perceptions to measure supervisor autonomy support for two reasons. First, we partially build our theoretical model based on self-determination theory, which posits that the effects of autonomy supportive (vs. controlling) contextual factors depend on the personal meaning a person gives to these factors (Deci & Ryan, 1985, 1987). We thus believe that a subjective measure of supervisor autonomy support would better reflect the extent to which employees are aware of this supervisory practice. Second, methodologically, follower ratings can be considered reliable measures of supervisor behaviour because – compared to peer or supervisor's self-ratings – they reflect direct assessments of one's leader (Hogan, Curphy, & Hogan, 1994; Judge, Bono, Ilies, & Gerhardt, 2002; Kaiser, Hogan, & Craig, 2008).

#### 2.2.3. Emotional exhaustion

Participants completed the Shirom-Melamed Burnout Measure (SMBM; Shirom & Melamed, 2006). It assesses the emotional exhaustion component of burnout with three items (e.g., "I feel I am not capable of investing emotionally in coworkers and customers") on a 7-point Likert scale (1 = Never or almost never; 7 = Always or almost always).

#### 2.2.4. Organizational citizenship behaviour

Participants completed a questionnaire based on the instruments proposed by Podsakoff, MacKenzie, Moorman, and Fetter (1990), and Van Scotter and Motowidlo (1996). It assessed four organizational citizenship behaviour dimensions: altruism, civic virtue, interpersonal facilitation, and task dedication. It comprises 24 items measured on a 5-point scale (e.g., "Attend functions that are not required, but help the company image"; 1 = Never to 5 = Always).

#### 2.2.5. Control variables

Following prior research on strain and extra-role behaviours, we controlled for some demographic characteristics. First, we controlled for age, which has been shown to have negative associations with emotional exhaustion (e.g., Brewer & Shapard, 2004) and positive relationships with organizational citizenship behaviour (e.g., Chou & Pearson, 2011). We also included education as a control variable as prior studies have found it to be positively related to strain reactions (e.g., Bartz & Maloney, 1986) as well as to organizational citizenship behaviour (e.g., Gregerson, 1993). Finally, we created two dummy variables (public/non-public, private/non-private) in order to assess whether the impact of different types of organizations on emotional exhaustion and organizational citizenship behaviour.

## 3. Results

### 3.1. Confirmatory factor analysis and assessment of common method variance

First, we established discriminant validity among the study variables with Mplus 7.11 (Muthén & Muthén, 1998–2012).

Standardized latent variable scores for supervisor autonomy support and organizational citizenship behaviour's dimensions were used as indicators of their corresponding second-order constructs. The hypothesized five-factor model (role overload, supervisor autonomy support, emotional exhaustion, organizationally directed organizational citizenship behaviour, and individually directed organizational citizenship behaviour) displayed an acceptable fit to the data ( $\chi^2 [94] = 171.67$ ; CFI = .91; RMSEA = .07; SRMR = .07), and outperformed any simpler representation of the data ( $p < .01$ ) ( $\chi^2 [98-104] = 183.50-583.52$ ; CFI = .44-.90; RMSEA = .07-.18; SRMR = .07-.15). More precisely, the results of the one-factor model (i.e., Harman single-factor test) yielded poor fit to the data ( $\chi^2 [104] = 583.52$ ; CFI = .44; RMSEA = .18; SRMR = .15,  $\Delta\chi^2 [10] = 411.85$ ,  $p < .01$ ).

Additionally, although the separation of predicting variables from the criterion helped alleviate the problems associated with the use of self-report data, the fact that role overload, supervisor autonomy support and emotional exhaustion were measured at the same time could still originate common method bias problems. Therefore, consistent with Podsakoff, MacKenzie and Podsakoffs (2012) statistical recommendations, we used the unmeasured latent method factor approach to control for the effects of common method variance, prior to testing hypotheses. Accordingly, we added a common method factor to the hypothesized three-factor model including role overload, supervisor autonomy support and emotional exhaustion, to assess the potential increase in model fit that would be obtained from accounting for the unmeasured method factor. The model provided a better fit to the data than the same model without the method factor:  $\chi^2 (39) = 65.06$ , CFI = .95; RMSEA = .06; SRMR = .06;  $\Delta\chi^2 (12) = 44.37$ ,  $p < .01$ . Nonetheless, the method factor accounted for 7% of total variance, which is below the average portion of variance (26%) reported in self-report studies (Podsakoff et al., 2012). We can therefore conclude that common method bias is unlikely to be a major concern in this study. Consequently, the common method factor was not retained in subsequent analyses. Table 1 provides descriptive statistics, correlations, and reliability estimates for the measures.

### 3.2. Hypothesis testing

To test the hypothesized model, we conducted bootstrap analyses with the PROCESS macro for SPSS (Hayes, 2012), which uses ordinary least square to estimate direct, indirect and moderated indirect effects. This method allows simultaneous testing of complete models that integrate mediation and moderation to examine the conditional nature of indirect effects, as is recommended by methodologists (Preacher, Rucker, & Hayes, 2007). The bootstrapping approach used to examine indirect and conditional

indirect effects helps resolve the problems associated with the Baron and Kenny (1986) causal steps and Sobel test procedures (e.g., low statistical power; Hayes, 2009; Preacher & Hayes, 2008). This approach also employs a bootstrapping procedure to estimate conditional indirect effects, which involves resampling the data multiple times and calculating the statistic of interest (Efron & Tibshirani, 1993). A 95% confidence interval is next created through the bias-corrected percentile method, to test the significance of conditional indirect effects. Accordingly, we used bootstrapping with 5000 resamplings, as recommended by Hayes (2013), to generate 95% bias-corrected confidence intervals of conditional indirect effects.

Table 2 presents the results of (moderated) multiple regression analyses predicting emotional exhaustion and organizational citizenship behaviour, and provides the basic information that is necessary to test Hypotheses 1 and 2. Hypotheses 1 stated that emotional exhaustion would mediate a negative relationship between role overload and organizational citizenship behaviours. As shown in Table 2, role overload had a positive relationship with emotional exhaustion ( $B = .45$ ,  $p < .01$ ; Model 1), which in turn was negatively associated with both organizationally directed organizational citizenship behaviour ( $B = -.15$ ,  $p < .05$ ; Model 4) and individually directed organizational citizenship behaviour ( $B = -.20$ ,  $p < .01$ ; Model 5). Additionally, based on 20,000 bootstrap replications, results indicated that role overload had an indirect negative effect on organizationally directed organizational citizenship behaviour (indirect effect =  $-.07$ ; 95% CI =  $-.18$ ,  $-.02$ ) and individually directed organizational citizenship behaviour (indirect effect =  $-.09$ ; 95% CI =  $-.20$ ,  $-.03$ ) via increased emotional exhaustion. These findings hence lend support for Hypotheses 1. Yet, results also provided evidence for a positive and significant direct link between role overload and both organizationally directed organizational citizenship behaviour ( $B = .43$ ,  $p < .01$ ; Table 2, Model 4) and individually directed organizational citizenship behaviour ( $B = .45$ ,  $p < .01$ ; Table 2, Model 5).

Hypothesis 2 predicted that supervisor autonomy support would moderate the role overload-emotional exhaustion-organizational citizenship behaviour indirect relationship such that this relationship would be weaker at high levels of supervisor autonomy support. To test this hypothesis, we first examined whether the relationship between role overload and emotional exhaustion would be moderated by supervisor autonomy support. Accordingly, following Cohen and Cohen's (1983) recommendations, controls and main effect terms (i.e., role overload and supervisor autonomy support) were centered, and the predictor variable, the moderator and the interaction term were then entered sequentially in the regression equation. As can be seen from Table 2 (Model 4), the role overload X supervisor autonomy support interaction term

**Table 1**  
Descriptive statistics and correlations.

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Organization type 1 (private/non-private)	–	–	–										
2. Organization type 2 (public/non-public)	–	–	-.39**	–									
3. Gender	–	–	-.19*	.19	–								
4. Age	33.55	7.30	-.12	.14	-.04	–							
5. Education level	–	–	-.15	.15	-.08	.02**	–						
6. Organizational tenure	–	–	-.18*	.16	.04	.42**	.14	–					
7. Role overload	1.88	.54	-.11	.12	-.04	.05	.08	-.06	(.65)				
8. Supervisor autonomy support	4.66	1.44	-.10	.11	.11	.02	.33**	.09	-.01	(.91)			
9. Emotional exhaustion	2.62	1.07	-.09	.06	-.03	-.07	.03	.02	.25**	-.20*	(.70)		
10. OCBO (Time 2)	3.31	.81	.04	-.04	-.04	.18*	.04	.13	.30**	.19*	-.09	(.84)	
11. OCBI (Time 2)	3.41	.83	.13	-.12	-.04	.10	-.04	.02	.22*	.09	-.13	.79**	(.88)

Note.  $N = 144$ . Internal consistency coefficients (Cronbach's alphas) appear along the diagonal in parentheses. OCBO = organizationally directed organizational citizenship behaviour; OCBI = individually directed organizational citizenship behaviour. \* $p < .05$ ; \*\* $p < .01$ .

**Table 2**  
Multiple regression results for emotional exhaustion and organizational citizenship behaviour.

Variables	Emotional exhaustion			OCBO	OCBI
	Model 1	Model 2	Model 3	Model 4	Model 5
<i>Control variables</i>					
Organization type 1 (private/non-private)	-.35	.05	.09	-.33	.28
Organization type 2 (public/non-public)	-.23	.17	.27	-.49	.04
Age	-.08	-.01	-.01	.01	.01
Education level	.02	.10	.13	-.00	-.03
<i>Independent variables</i>					
Role overload	.45**	.42*	.32*	.53**	.45**
Autonomy support		-.16*	-.16*		
<i>Interaction term</i>					
Role overload × Supervisor autonomy support			-.21*		
<i>Mediator</i>					
Emotional exhaustion				-.15*	-.20**
Total R <sup>2</sup>	.07	.12*	.15*	.17**	.16**
ΔR <sup>2</sup>		.05*	.03*		

Note.  $N = 144$ . Except for Total  $R^2$  and  $\Delta R^2$  rows, entries are unstandardized regression coefficients. OCBO = organizationally directed organizational citizenship behaviour; OCBI = individually directed organizational citizenship behaviour.

\* $p < .05$ ; \*\* $p < .01$ .

demonstrated a significant effect on organizational citizenship behaviour ( $\beta = -.17$ ,  $p < .05$ ). In line with Aiken and West's recommendation (1991), we plotted the effects of role overload on emotional exhaustion at high (1 SD above the mean) and low (1 SD below the mean) levels of supervisor autonomy support and conducted a simple slope test in order to interpret the moderation effects. As illustrated in Fig. 2, the positive relationship between role overload and emotional exhaustion was positive and significant when supervisor autonomy support was low ( $B = .67$ ,  $p < .01$ ) but became non-significant when the moderator was high ( $B = .07$ ,  $ns$ ), providing preliminary support for Hypothesis 2.

Having providing evidence for a moderation effect of supervisor autonomy support on the role overload-emotional exhaustion relationship, we therefore tested whether the indirect relationship between role overload and organizational citizenship behaviours via emotional exhaustion would be weaker at higher levels of supervisor autonomy support. This pattern of relationships is referred to as the conditional indirect effect (Preacher et al., 2007). To this end, we used 20,000 resamplings to generate bias-corrected 95% confidence intervals (CIs) for the magnitude of the indirect effects of role overload on organizationally directed organizational citizenship behaviour and individually directed organizational

citizenship behaviour via emotional exhaustion at different values of supervisor autonomy support. In line with our hypothesis, the index of moderated mediation was significant for both organizationally directed organizational citizenship behaviour (.03, 95% CI = .01, .09) and individually directed organizational citizenship behaviour (.04, 95% CI = .01, .11), suggesting that the indirect relationship between role overload and both organizationally directed organizational citizenship behaviour and individually directed organizational citizenship behaviour through emotional exhaustion was significantly moderated by supervisor autonomy support. Moreover, results showed that the conditional indirect effect on organizationally directed organizational citizenship behaviour and individually directed organizational citizenship behaviour was negative and significant at 1 SD below the mean (indirect effect on organizationally directed organizational citizenship behaviour =  $-.11$ , 95% CI =  $-.24$ ,  $-.02$ ; indirect effect on individually directed organizational citizenship behaviour =  $-.14$ , 95% CI =  $-.28$ ,  $-.05$ ), but it was non-significant at 1 SD above the mean (indirect effect on organizationally directed organizational citizenship behaviour =  $-.01$ , CI =  $-.09$ ,  $.03$ ; indirect effect on individually directed organizational citizenship behaviour =  $-.01$ , CI =  $-.10$ ,  $.06$ ). This provides support for Hypothesis 2.

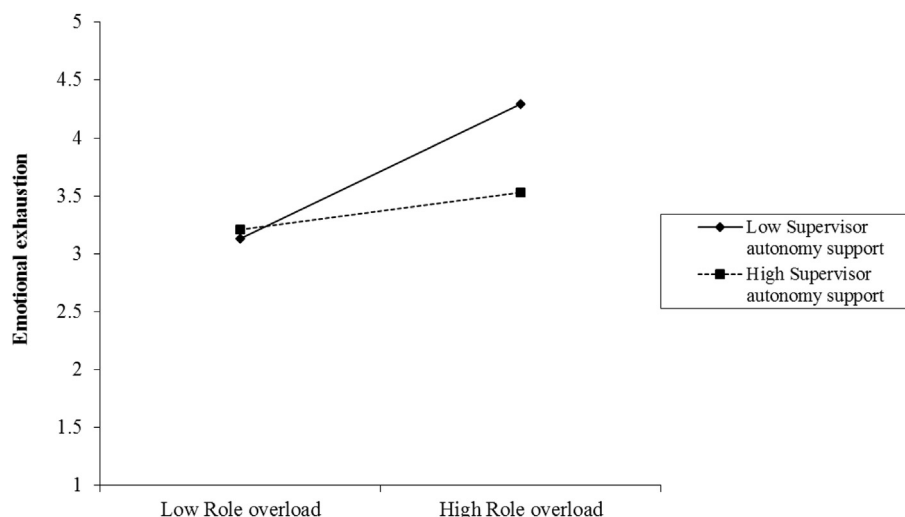


Fig. 2. Emotional exhaustion as a function of role overload at low (1 SD below the mean) and high (1 SD above the mean) levels of supervisor autonomy support.

#### 4. Discussion

In our study, we positioned emotional exhaustion and supervisor autonomy support as intervening factors that explain, respectively, how and under what conditions role overload is related to individual engagement in citizenship behaviours. Drawing on conservation of resources theory, we contended that perceptions of excessive workload would deplete an individual's time and energy resources, thus increasing the likelihood of exhaustion reactions that would in turn prevent employees from investing their remaining resources in organizational citizenship behaviours. Additionally, based on self-determination theory, we argued that autonomy-supportive supervisors would protect employees against the resource depletion process that would otherwise provoke exhaustion reactions and a subsequent withdrawal from organizational citizenship behaviour. Overall, our predictions were supported by the study results. Specifically, role overload was found to be indirectly related to organizational citizenship behaviour via emotional exhaustion whereas, supervisor autonomy support was found to buffer the negative relationship of role overload with emotional exhaustion and, indirectly, organizational citizenship behaviour. Finally, although not specifically related to our hypotheses, we also provided evidence for a positive direct association between role overload and organizational citizenship behaviour.

##### 4.1. Theoretical implications

Taken together, our findings make important theoretical contributions to the literature on role stressors and organizational citizenship behaviour. First, prior research has applied conservation of resources principles to explain how certain conditions in the work environment could affect work-related outcomes via either a resource accumulation or a resource depletion process leading to exhaustion reactions (i.e., burnout and emotional exhaustion). For example, Cole, Bernerth, Walter, and Holt (2010) showed that organizational justice acted as a resource-enhancing factor that, by reducing emotional exhaustion, led to higher organizational commitment and lower turnover intentions (2010). Likewise, Smoktunowicz et al. (2015) provided evidence for a mediating effect of burnout in a negative relationship between job demands and counterproductive work behaviours, whereas Chi and Liang (2013) showed that abusive supervision indirectly affected subordinates' work-withdrawal behaviours through emotional exhaustion.

However, to the best of our knowledge, our study is the first to adopt a conservation of resources perspective to examine emotional exhaustion as the end state of a resource depletion process that is engendered by a high workload and that ultimately results in a disengagement from organizational citizenship behaviours. By providing empirical support for such an indirect relationship, our study therefore contributes to disclose the mediating mechanisms underlying role overload's specific relationship with workplace outcomes, which is an essential, though still poorly explored, step towards clarifying the inconsistent links between role overload and work-related behaviours reported by prior meta-analyses (Bowling et al., 2015; Gilboa et al., 2008). In this respect, conservation of resources theory helps clarifying this relationship because it suggests that increased overload is associated with a resource depletion process that is reflected in increased feelings of emotional exhaustion (Gorgievski & Hobfoll, 2008). Supporting this perspective, our findings are thus unique in providing evidence for a negative relationship between role overload and organizational citizenship behaviour and, more precisely, in highlighting that such a relationship occurs *because* of the exhaustion reactions associated with a heavy workload.

As such, this results also meaningfully extends prior research on the relationship role overload and organizational citizenship behaviour. Indeed, Eatough et al.'s (2011) meta-analytic findings showed that role overload was indirectly negatively related to organizational citizenship behaviour via reduced job satisfaction. Yet, as the authors claimed, "additional pathways (e.g., low cognitive resources; Kanfer & Ackerman, 1989) may exist to explain these relationships" (Eatough et al., 2011, p. 628). Our study addressed this issue by providing evidence for increased strain reactions as an alternative pathway through which overload can be (negatively) related organizational citizenship behaviour. This finding is relevant, since it suggests that in demanding work environments, engagement in organizational citizenship behaviours can be inhibited not only by an increased dissatisfaction with one's job, but also by a process of resource loss that makes employees more vulnerable to exhaustion. In this respect, separate research streams have reported significant relationships between role overload and emotional exhaustion (e.g., Bakker et al., 2004), as well as between emotional exhaustion (or burnout) and organizational citizenship behaviour (e.g., Cropanzano et al., 2003). Our study moves an important step forward, as it integrates these constructs into a comprehensive mediated process that explains for the first time how emotional exhaustion can act as a key mechanism accounting for a negative relationship between role overload and organizational citizenship behaviour.

However, our study also revealed a positive and significant direct relationship between role overload and organizational citizenship behaviour. This finding is consistent with the theoretical assumption implied in the challenge-hindrance framework (discussed above). That is, work overload increases responsibility and challenges because it is perceived as having the potential to facilitate the accomplishment of valued personal outcomes (Eatough et al., 2011). As such, it is likely to promote a higher sense of work ownership that directly motivates extra-role behaviours (e.g., Ziegler, Schlett, Casel, & Diehl, 2012). Notwithstanding this, the significant mediating role of strain in transmitting the negative effects of role overload on organizational citizenship behaviour points to the fact that challenge stressors represent work demands that need to be adequately managed in order to prevent them from depleting the energy needed to enact extra-role behaviours. This emphasizes the pertinence of identifying the conditions that could buffer the strain associated to of role overload.

Accordingly, our study examined the moderating role of supervisor autonomy support on the role overload-emotional exhaustion-organizational citizenship behaviour indirect relationship. Our findings are consistent with our predictions: when supervisor autonomy support was high, role overload was unrelated to emotional exhaustion and had the weakest indirect negative relationship with organizational citizenship behaviour. Traditionally, the stress literature has placed a great emphasis on the job resources that can alleviate the negative impact of such demanding conditions on strain reactions (e.g., Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003). In doing so, research has mostly focused on those contextual conditions that enhance individuals' ability to cope with workplace stressors, such as job autonomy, performance feedback, social support from colleagues, task variety, and job control (Crawford et al., 2010). However, as conservation of resources theory suggests, in order for people to prevent resource depletion and the associated strain (i.e., exhaustion), they need not only need to perceive that they *can* handle demanding aspects of their jobs, but also to *be willing* to do so or regard this as worthwhile (Gorgievski & Hobfoll, 2008). Indeed, only when both conditions are met, will employees be more likely to invest time and energy in ways that allow them to deal with job demands, and consequently, achieve valued resource gains to prevent resource



loss.

In line with a conservation of resources perspective, and drawing insights from self-determination theory, the present study is the first to identify a contextual resource – i.e. supervisor autonomy support – that, by providing employees with opportunities for choiceful behaviours and by emphasizing the meaningfulness of their work, can enhance both the feasibility and value associated with striving to meet a heavy workload. As such, supervisor autonomy support was hypothesized and found to prevent the resource depletion process associated with role overload that would otherwise lead to increased exhaustion and, ultimately, reduced organizational citizenship behaviours. By providing evidence for such a significant moderating (i.e., buffering) effect, our study has important theoretical implications that expand prior conservation of resources-based research, as it emphasizes for the first time how promoting individual's self-determined functioning is a meaningful and effective way to counteract the process of resource loss and, consequently, enable effective resource investment in citizenship behaviours. As such, the present investigation is unique in highlighting the relevance of adopting a self-determination approach to examine the boundary conditions associated to the process of resource loss and resource investment in relation to demanding aspects of the job.

Furthermore, by confirming the role of supervisor autonomy support as an important contextual resource to prevent strain and promote citizenship behaviours, our study provides further insights into the benefits of autonomy-supportive contexts in the workplace. To date, indeed, scholars have assessed the direct role of supervisor autonomy support in connection with work-related outcomes, such as well-being, burnout, and work motivation (e.g., Gillet et al., 2012). Our findings extend prior self-determination literature by showing that supervisors who exhibit autonomy-supportive behaviours can further protect employees' resources against the depleting effects of excessive workload. As such, these results highlight the meaningfulness of exploring supervisor autonomy support as a boundary condition enabling effective employee functioning in the presence of a stressful work environment, rather than addressing its direct effects alone, as prior research has done.

By providing empirical evidence for our hypothesized moderated mediation model, the current research also adds to the stress and performance literature that have been published in the last years in the *European Management Journal*. Indeed, the stress literature has focused on different, and often neglected, sources of stress, such as customer unfriendly behaviours (Walsh, 2011) and information overflow (Ledzińska & Postek, 2017). However, role overload has been neglected by this research stream and, thereby, its ambiguous effects on workplace outcomes have been left unaddressed. Likewise, the performance literature has primarily considered employee in-role performance in relation to different individual and contextual determinants (e.g., Latorre, Guest, Ramos, & Gracia, 2016; Lindebaum, 2013; Puck & Pregonig, 2014). Yet, these studies have disregarded the extra-role aspects of performance (i.e., organizational citizenship behaviours) as well as how these aspects can be influenced by workplace stressors. The present study departs from, and extends these research streams by contributing to clarify how and under what conditions role overload affects employee engagement in extra-role (citizenship) behaviours. In doing so, our investigation integrates the topics of workplace stressors and employee performance, which, to date, had been examined separately by research previously published in the *European Management Journal*. Thus, we hope that our findings will encourage future studies to pursue such an integrated approach in studying workplace stressors and employee performance in the organizations.

Overall, the present investigation contributes to the literature on challenge stressors and extra-role behaviours by providing important new knowledge on the mediating processes and boundary conditions associated with the role overload-organizational citizenship behaviour relationship. As such, this study addresses prior research calls to clarify the effects of role overload in the workplace, and offers further insights into how employees strivings to conserve valued resource in the presence of demanding situations benefit from the presence of a work environment that is supportive of individual autonomous functioning.

#### 4.2. Limitations and directions for future research

There are several limitations of our study that deserve mention. First, although data were collected at two points, we cannot draw conclusive statistical inferences about causality. Addressing this issue is nonetheless relevant, since an emerging stream of research has illustrated the personal costs associated with employee engagement in organizational citizenship behaviours, such as role overload and stress (Koopman et al., 2016). Indeed, given the amount of time and energy resources that organizational citizenship behaviours require on the part of employees, involving in such work behaviours could make such resources less available to accomplish other relevant work-related tasks. As a consequence, employees might be more likely to perceive a conflict between the organizational demands and the resources they can allocate to meet such demands, resulting in increased role overload and impaired health conditions. In order to more precisely account for the conditional indirect process bridging role overload, emotional exhaustion and organizational citizenship behaviour, as well as to rule out potential reciprocal relationships, future research should therefore measure these variables at multiple points in time and adopt longitudinal methods such as panel or time-series designs. Likewise, further research is needed to understand whether, how and under what conditions employee engagement in organizational citizenship behaviour in the presence of role overload can intensify or diminish subsequent perceptions of incompatibility between the role requirements and the amount of resources available, and, consequently, undermine future involvement in citizenship behaviours.

Another limitation is the use of self-report measures to assess the study variables, which can produce common method variance and, consequently, inflate our results. Therefore, the use of supplementary other-report evaluations, such as supervisors' or peers' ratings of organizational citizenship behaviour, should be recommended in future studies. However, it is worth mentioning that supervisors and coworkers may have less accurate knowledge as to how much and which aspects of organizational citizenship behaviour an employee actually displays. Accordingly, self-report assessments may be more adequate than external ratings (Coyne & Ong, 2007). Also, research has indicated that there are not significant differences between mean supervisor and self-ratings of organizational citizenship behaviour (Allen, Barnard, Rush, & Russell, 2000). Moreover, we statistically controlled for common method bias by following Podsakoff et al.'s (2003) recommendations, and showed that the likelihood of method variance influencing the results of this study is low. Moreover, the small sample size and the exclusive focus on a specific North American population (i.e., Canadian working adults) limited the generalizability of our findings. Future research is therefore needed to replicate our study on a larger sample of employees from different Countries. Yet, despite this limitation, our study was carried out on a heterogeneous sample in terms of industries and occupations, which allows for a more robust interpretation of our findings and contributes to their application to the general working population.

Furthermore, because the core goal of our study was to clarify the relationship between role overload and organizational citizenship behaviour, we exclusively focused on this workplace stressor and disregarded other types of job demands. However, in line with a challenge-hindrances perspective, it would be worth integrating role overload with other different challenge and hindrance stressors, in order to examine their distinct effects on emotional exhaustion and organizational citizenship behaviour. In this respect, workplace stressors encompassing only challenging elements, such as job responsibilities and job complexity, might be less harmful to exhaustion and subsequent organizational citizenship behaviour than role overload, whereas such negative effects might be exacerbated in the case of hindrance stressors, such as role ambiguity and role conflict. Likewise, the present study considered only supervisor autonomy support as a boundary condition of role overload. Yet, consistent with a self-determination perspective, other relevant contextual resources, such as transformational leadership (e.g., Bono & Judge, 2003), authentic leadership (e.g., Leroy, Anseel, Gardner, & Sels, 2015), and mastery climate (Ulrich-French & Cox, 2014), have been shown to be beneficial to employee autonomous functioning. As such, these resources should be included in future stress research to investigate whether and how they affect the resource-depleting impact of role overload or other stressful work conditions.

Finally, according to conservation of resources theory, when resource investment in the presence of job demands enables the accumulation valued resource gains, not only can employees be prevented from resource loss and associated strain, but they can also experience more positive health and, consequently, can dispose of a greater resource reservoir that can be invested in effective work behaviours (Hobfoll, 2001). This principle, which has received extensive support in the stress literature (e.g., Hakanen, Perhoniemi, & Toppinen-Tanner, 2008; Halbesleben & Wheeler, 2011), therefore underscores the relevance of examining whether and when role overload can lead to a process of resource gains that, by improving psychological functioning (e.g., work engagement and well-being), would mobilize a higher engagement in organizational citizenship behaviours or other relevant work behaviours (e.g., creativity, innovation, proactive behaviours). This might also be a meaningful research avenue to explain the positive and significant direct association between role overload and organizational citizenship behaviour that was found in the present study.

#### 4.3. Managerial implications

This study allowed the identification of two potential managerial levers that can contribute to subordinates' psychological health and productive behaviours. First, our results revealed that *role overload* tends to be negatively related to employee outcomes, as it contributes to increased emotional exhaustion and lowers engagement in organizational citizenship behaviour. Second, *supervisor autonomy support* offers a buffer against the negative effect of role overload on employees' emotional exhaustion. Such results emphasize the need for managers to diminish unnecessary workloads whenever possible and to adopt management practices based on supervisor autonomy support.

To diminish role overload, supervisors can take actions to minimize threatening job demands that drain employees' energy (Van den Broeck, De Cuyper, De Witte, & Vansteenkiste, 2010). However, not all job demands lead to role overload and have negative effects for employees. Some demands, such as role ambiguity, job insecurity, constraints, and interpersonal conflicts are considered as "job hindrances" (e.g., Cavanaugh et al., 2000; Lepine et al., 2005) and should be avoided when possible to limit their detrimental consequences on employees' proactive behaviors and

mental health. Other demands called "job challenges", such as workload, time pressure, and cognitive demands, generate opportunities for personal development (Cavanaugh et al., 2000) and are associated with positive consequences and not with exhaustion (Van den Broeck et al., 2010). In their daily actions, supervisors should therefore aim at limiting subordinates' exposure to job hindrances rather than aiming at eliminating job challenges.

To support employees' self-determination and fulfil their basic psychological needs, supervisors can adopt a series of autonomy-supportive practices. Autonomy support requires that managers understand and acknowledge their subordinates' point of view, offer opportunities for choice, provide meaningful information, and foster self-initiation (e.g., Deci & Ryan, 1985). For example, they can support an organizational culture of acceptance of honest mistakes, encourage employees' initiatives and innovative solutions, assign projects based on employees' strengths and competence, or nourish positive relationships among employees at work (Dagenais-Desmarais, Forest, Crevier-Braud, & Girouard, 2014). The results of our study suggest that, by integrating these two managerial levers in their daily actions, supervisors can contribute to decreasing the risk of employee burnout. This will increase the likelihood of having a mobilized workforce who is willing to engage proactively in the success of the organization, beyond formal performance expectations.

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