

## *Needs–supplies fit and behavioral outcomes: The mediating role of organizational identification*

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### **Abstract**

While it is well known that person–organization fit is an important antecedent of behavioral outcomes, little is known about needs–supplies fit in this relationship. In this way, we first want to extend our knowledge about defining and assessing work-related needs derived from employment quality indicators as the basis for needs–supplies fit. Second, following the Cognitive and Affective Personality System theory, we test the mediating role of organizational identification to better understand how needs–supplies fit is related to task performance and organizational citizenship behaviors. Data were collected in two companies: sample 1 ( $N = 525$ ) and sample 2 ( $N = 525$ ). Results show (a) that a specific needs–supplies fit perception (i.e., based on 12 work-related needs derived from employment quality indicators) is positively related to a global needs–supplies fit perception (i.e., based on an overall job perception), suggesting that needs–supplies fit may be a multidimensional concept and (b) the full mediating role of organizational identification in the relationship between needs–supplies fit and performance measures.

**Keywords:** needs–supplies fit, organizational identification, task performance, organizational citizenship behaviors, employment quality.

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### **INTRODUCTION**

Person–environment fit is one of the most frequently studied concepts in work and organizational psychology. This concept stresses the fact that individuals who can choose a working environment that is congruent with their personal characteristics (e.g., skills, values and needs) will experience more positive work-related outcomes (Kristof-Brown, Zimmerman, & Johnson, 2005; Piasentin & Chapman, 2006). According to the person–environment fit theory (French, Caplan, & Harrison, 1982), ‘the misfit between the person and the environment may produce psychological, physiological, and behavioral strains and can take two different forms: (a) the extent to which the demands and requirements of the environment match the skills and abilities of the person and (b) the extent to which the rewards and supplies provided by the environment match the needs and preferences of the person’ (Edwards & Van Harrison, 1993, p.628). Following Kristof-Brown, Zimmerman, and Johnson (2005), it is now recognized that person–environment fit is a multidimensional concept which

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covers person–organization fit (PO fit), person–group fit, person–supervisor fit, person–vocation fit and, finally, person–job fit. Person–job fit can also be divided into two basic conceptualizations such as demands–abilities fit and needs–supplies fit (NS fit) (e.g., Kristof-Brown, Zimmerman, & Johnson, 2005; Edwards & Shipp, 2007). Because it is important to further investigate the consequences of NS fit (Kristof-Brown & Billsberry, 2013), and because ‘needs-supplies fit may be the most important type of fit from an employee point of view’ (Cable & De Rue, 2002, p.875), we use it as our conceptual framework for this study.

This study has two objectives. First, we want to extend our knowledge about defining and assessing specific work-related needs derived from employment quality indicators as a basis for NS fit. We consider this a particularly useful and conceptually more advanced attempt compared with previous efforts to consider employment quality (Burchell, Sehnbruch, Piasna, & Agloni, 2014). Following Brown, Charlwood, Forde, and Spencer (2007), using a subjective appraisal of job quality indicators, we suggest a focus on employees’ needs fulfillment to better understand the meaning of needs at work and to better understand how work-related needs fulfillment may result in positive job attitudes. Second, knowing that PO fit is an important antecedent of organization-focused outcomes (Kristof, 1996; Hoffman & Woehr, 2006), we will particularly focus on the importance of NS fit in this relationship. Indeed, although the scientific literature shows that NS fit is strongly related to job satisfaction or turnover intention, its relationship with job performance is unclear. Recent theorizing on organizational fit (Kristof-Brown & Billsberry, 2013) indicates that information is lacking on how NS fit is related to both task performance and organizational citizenship behaviors. In our study, task performance will refer to the recurring set of activities or expected behaviors of an individual that are typically described by formal job descriptions (Borman & Motowildo, 1993), whereas organizational citizenship behaviors are defined as ‘individual behaviors that are discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization’ (Organ, 1988, p.4). More precisely, because little attention has been paid to the underlying psychological mechanisms linking fit perceptions to task performance and organizational citizenship behaviors (Resick, Giberson, Dickson, Wynne, & Bajdo, 2013), an important aim of this paper is to test the mediating role of organizational identification, using the Cognitive and Affective Personality System (CAPS) Theory (Mischel & Shoda, 1995).

### **Employment quality and work needs**

In this project, we will consider job requirements that mirror employment quality indicators as the basis for personal need fulfillment and NS fit.

Employment quality has been defined in many different ways, making it difficult to find a consensus among its large number of definitions (Burchell et al., 2014). Some academics (e.g., Körner, Puch, & Wingerter, 2009; Green & Mostafa, 2012; Holman, 2013; Van Aerden, Moors, Levecque, & Vanroelen, 2015) and institutions (e.g., Muñoz de Bustillo, Fernandez-Macias, Anton, & Esteve, 2009; International Labor Organization, 2012) have attempted to develop a range of indicators to help define employment quality. Globally, these studies have highlighted a large set of characteristics relevant to employment quality, including work organization, wages and payment system, security and flexibility, commitment to skills and development, employment stability, employees’ organization of time, material rewards, workers’ rights and social protection, employability opportunities, safety and ethics employment as well as the work–life balance. In Table 1, we summarized the academic and policy-related approaches, focusing on their overlapping characteristics. This was inspired by the 10 ‘decent work indicators’ provided by the International Labor Organization (2012) and presented by Burchell et al. as ‘a contrasting institutional approach to the dilemma of decent work measurement’ (2014, p.10). This allows for an operationalization of the employment quality concept, or of ‘a good

TABLE 1. SYNTHESIS OF THE EMPLOYMENT QUALITY'S INDICATORS

<i>Number</i>	<i>Employment quality's indicators</i>
1	Job content
2	Work home conciliation
3	Working time
4	Working space
5	Wages
6	Trainings
7	Employability
8	Contract stability
9	Social protection
10	Workplace security

job,' using 10 indicators: (a) job content, (b) work home conciliation, (c) working time, (d) working space, (e) wages, (f) trainings, (g) employability, (h) contract stability, (i) social protection and (j) workplace security.

Following Brown et al. (2007), the association between high-quality jobs (i.e., 'good jobs') and positive job attitudes is based on the perceived fulfillment of work-related needs. This useful and conceptually more advanced approach (Burchell et al., 2014), deemed subjectivist, focuses on the importance of fulfilling workers' needs, as appraised by themselves, relative to objective employment characteristics (e.g., Brown et al., 2007; Holman, 2013). Körner, Puch, and Wingerter (2009) already linked employment quality indicators to Maslow's (1958) basic needs. They argued that individuals will perceive their job as 'good' – having high employment quality – if, for example, their needs for safety, income, security, social dialogue or skills development are fulfilled. Hence, subjectively evaluated work-related needs are useful to understand how high-quality jobs may result in positive job attitudes. However, in our study, we rely on employment quality indicators as the basis for defining required needs and assess their fulfillment within the framework of NS fit.

### **Employment quality and NS fit**

NS fit, defined as the congruence between the individuals' needs on the one hand and the experienced job characteristics on the other (Kristof-Brown, Zimmerman, & Johnson, 2005), refers to the fit between needs and supplies that gives a general perception of need fulfillment (Edwards & Shipp, 2007). A number of studies have already highlighted the positive consequences of needs fulfillment on well-being at work and job satisfaction (e.g., Verquer, Beehr, & Wagner, 2003; Lloyd, McKenna, & King, 2004; Edwards & Shipp, 2007; Guan, Deng, Bond, Chen, & Chan, 2010; Park, Monnot, Jacob, & Wagner, 2011; Dylag, Jaworek, Karwowski, Kozusznik, & Marek, 2013; Krumm, Grube, & Hertel, 2013), advancing that employees feel satisfied when they perceive a fit between the supplies provided by the organization and their own needs. To explain this process, several authors (e.g., Greguras & Diefendorff, 2009) have used the Self-Determination Theory (Deci & Ryan, 2000): if individuals are able to satisfy their innate psychological needs (i.e., need for autonomy, for competence and for relatedness), they will develop their fullest potential and function optimally (Deci & Ryan, 2000). However, while the Self-Determination Theory presents fundamental psychological needs that govern our behavior in various life domains, we want to extend our knowledge about the effect of needs fulfillment by presenting more specific work-related needs linked to employment quality.

Moreover, based on a more diversified view of work-related needs, and because existing NS fit scales assess NS fit through a *global* indicator of the fit between the needs and the job characteristics in general (see Cable & De Rue, 2002; Resick, Baltés, & Shantz, 2007; Greguras & Diefendorff, 2009), we expect that a global needs–supplies (G-NS) fit perception may be the result of a combination of specific needs–supplies (S-NS) fit perceptions. The Information Integration Theory (Anderson, 1962) supports this assumption. Following this theory, individuals integrate information from a number of sources in order to finally make an overall judgment. Information Integration Theory is thus a general theory explaining how, using ‘cognitive algebra,’ several information sources are combined by an individual to produce a response. According to Anderson’s theory, there are three main steps in the impression formation process. The first is the valuation function, in which individuals map each piece of information on a subjective scale. The second step is the integration function, consisting of the combination of the subjective values of information using adding (i.e., stimulus values) or averaging (i.e., stimulus values) cognitive algebra (Anderson, 1965). The third step is the response production function through which the internal impression is translated into a general response.

Such a differential approach has been advanced in organizational justice research as well. More precisely, the Fairness Heuristic Theory (Lind, 2001) suggests that a global impression of fair treatment (i.e., an overall justice perception) is formed quickly through a judgment phase using procedural, distributive and interpersonal justice elements. These specific elements are then aggregated in order to come up with a global justice judgment (see Kim & Leung, 2007; Ambrose & Schminke, 2009).

Thus, following the Information Integration Theory (Anderson, 1962) and the underlying Fairness Heuristic Theory (Lind, 2001), we want to investigate whether overall NS fit is the result of underlying specific fit perceptions linked to employment quality characteristics. Therefore our first hypothesis is

Hypothesis 1: A specific work-related NS fit perception in terms of employment quality is positively associated with a G-NS fit perception.

### **The mediating role of organizational identification**

According to several meta-analyses (e.g., Verquer, Beehr, & Wagner, 2003; Kristof-Brown, Zimmerman, & Johnson, 2005; Hoffman & Woehr, 2006), PO fit is found to be an important antecedent of organizational outcomes such as turnover intention and organizational commitment. Regarding performance, these meta-analyses show that PO fit is more strongly related to organizational citizenship behavior (e.g., Wei, 2013) than to task performance. Nevertheless, up to now, little attention has been paid to the underlying mechanisms linking PO fit perceptions to performance. In this context, the CAPS theory (Mischel & Shoda, 1995) suggests how organizational identification may play a mediating role between fit perceptions and behavioral outcomes such as task performance and organizational citizenship behaviors. When an individual perceives that his/her environment has personal relevance, then the CAPS theory states that a set of cognitive–affective reactions are activated that, in turn, generates patterns of behavior. For Mischel and Shoda (1995), there are three main processes at the basis of the motivational mechanisms linking fit to behavioral outcomes: (a) an encoding process, in which individuals make a conscious determination of the degree of fit with their environment, (b) a mediating process, referring to the activation of four cognitive–affective processes resulting from fit perceptions and (c) a generation process, in which behaviors are activated as a result of the preceding processes. Regarding the mediating process, four affective–cognitive mechanisms that provide motivational force can be highlighted (Mischel & Shoda, 1995; Kristof-Brown, Zimmerman, & Johnson, 2005). One of them is social identification through which individuals define themselves in

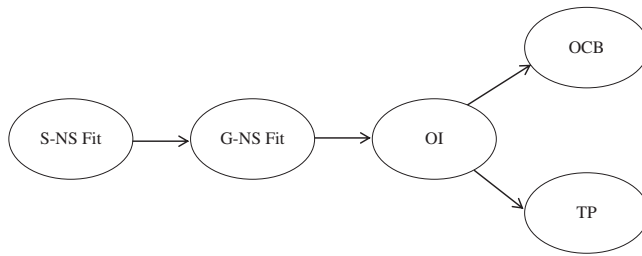


FIGURE 1. HYPOTHESIZED MODEL

NOTE. G-NS = GLOBAL NEEDS–SUPPLIES; OCB = ORGANIZATIONAL CITIZENSHIP BEHAVIORS; OI = ORGANIZATIONAL IDENTIFICATION; S-NS = SPECIFIC NEEDS–SUPPLIES; TP = IN-ROLE PERFORMANCE.

terms of various social group memberships (Banaji & Prentice, 1994). In a work environment, organizational identification, defined as ‘a perception of oneness with or belongingness to the organization’ (Ashforth & Mael, 1989, p. 21) is considered a kind of social identification (Resick et al., 2013). Organizational identification has been found to be an important consequence of organizational fit perceptions (Cable & De Rue, 2002; Saks & Ashforth, 2002; Kristof-Brown, Zimmerman, & Johnson, 2005). When employees perceive congruence between themselves and their organization, they are more likely to define themselves as a member of the organization (Saks & Ashforth, 1997). Concerning NS fit, only few studies have demonstrated a link with organizational identification (Cable & Edwards, 2004) or job performance (Edwards & Shipp, 2007). Nevertheless, regarding the CAPS theory, we can reasonably argue that perceiving a fit between employment quality-related needs and the actual job characteristics will activate a set of cognitive and affective mechanisms, positively related to organizational identification which, in turn, will activate positive organizational behaviors such as task performance and organizational citizenship behaviors. Consequently, our second and third hypotheses are as follows:

Hypothesis 2a: Organizational identification mediates a positive relationship between general NS fit and task performance.

Hypothesis 2b: Organizational identification mediates a positive relationship between general NS fit and organizational citizenship behaviors.

Regarding these hypotheses, Figure 1 summarizes our research model.

## METHOD

### Samples and procedure

In order to test the generalizability of our hypotheses with different populations, this study relies on two samples from two different organizational contexts: one private company from the air transport sector and one public company from a Belgian federal administrative service. Given the considerable differences between public and private organizations (Boyne, 2002), these two samples should help us to increase our model generalizability to a large set of workers.

### Sample 1

For the first sample, data were collected online (through an electronic link to the survey, for the white-collars) and on-site (through collective sessions, for the blue-collars), in a private Belgian organization from the air transport sector. For both data collections, we explained the purpose of the study and

stressed the confidentiality of the responses. Questionnaires were completed by 525 French-speaking workers (response rate = 37.4%). Among the participants, 49.3% is blue-collar, 47.8% is white-collar and 2.7% is unknown. A majority of respondents (72%) is male, having between 11 and 20 years of seniority in that company. The average age is 39 years.

### **Sample 2**

The second sample is made up of workers from a Belgian Federal Public Service. Data were only collected online through an electronic link to the survey including in an e-mail explaining the purpose of the study and stressing the confidentiality of the responses. For this study, we randomly selected 525 respondents from a larger data set. In this organization, we had three different professional status levels (from lower to higher): levels A (26.5%), B (55.2%) and C (17.7%). These levels can be compared with a traditional workforce differentiation: blue-collar, clerical and managers. A majority of respondents (88.2%) is male, 56.8% is Dutch speaking and 43.2% is French speaking. The average seniority is 20 years and the average age is 44 years.

### **Measures**

Unless otherwise specified, the questionnaires were originally in English. We followed the back-translation procedure to propose version in French and Dutch (Brislin, 1980).

### **S-NS Fit**

S-NS fit was measured using a newly created questionnaire based on previous interviews (see Travaglianti, Oriane, Pichault, & Hansez, 2015) in order to empirically test the relevance of job characteristics as indicators of employment quality as presented in the theoretical section of this paper (see Table 1). This preliminary questionnaire was pretested on a separate snowball sample ( $N = 250$ ).

The final questionnaire (see Appendix) consisted of 37 items covering 12 work-related need factors, that is, the need for a challenging job (three items,  $\alpha = 0.58$ , e.g., 'Do a stimulating job'), work-family balance (three items,  $\alpha = 0.83$ , e.g., 'Balance my private and professional life'), a clear time schedule (three items,  $\alpha = 0.78$ , e.g., 'Have predictable work schedule'), work flexibility (three items,  $\alpha = 0.73$ , e.g., 'Work from home') additional rewards (three items,  $\alpha = 0.80$ , e.g., 'Receive an individual performance bonus'), regular financial rewards (three items,  $\alpha = 0.82$ , e.g., 'Receive a fixed monthly income'), personal development opportunities (three items,  $\alpha = 0.91$ , e.g., 'Follow training to extend my skills'), employability (three items,  $\alpha = 0.68$ , e.g., 'Broad my chances to get another job'), job security (three items,  $\alpha = 0.84$ , e.g., 'Have a stable work contract'), social protection (three items,  $\alpha = 0.73$ , e.g., 'Be supported by trade-union'), a comfortable work environment (three items,  $\alpha = 0.85$ , e.g., 'Have a good working equipment'), and fairness and recognition from the supervisor (four items,  $\alpha = 0.88$ , e.g., 'Be recognized by superiors') (Table 2).

The questionnaire was originally developed in French and we followed standard back-translation procedures to present also a Dutch version. For each item, participants were asked to indicate their ideal state as compared with the present state on a 7-point scale from 3 = 'would like much less than now,' to +3 = 'would like much more than now', with 0 (satisfied with my current state) as the middle value.

Since this paper focuses on the importance of fit and not on its valence (i.e., positive or negative fit), further analyses used the absolute values of the original response scale (Warr & Inceoglu, 2012), from 0 (no discrepancy = fit, i.e., satisfied with current state) to 3 (high perceived discrepancy, irrespective of it being negative or positive). In order to increase comprehensibility, we then reversed these scores, indicating that a high value represents optimal fit, and a low value is a misfit (either overfit or underfit).

TABLE 2. THE EMPLOYMENT QUALITY INDICATORS AND THE WORK-RELATED NEEDS

Number	Employment quality's indicators (literature)	work-related needs (interviews)
1	Job content	Challenging job
2	Work home conciliation	Work-family balance
3	Working time	Clear time schedule
4	Working space	Work flexibility
5	Wages	Regular financial rewarding
6	Trainings	Personal development opportunities
7	Employability	Employability
8	Contract stability	Job security
9	Social protection	Social protection
10	Workplace security	Comfortable work environment
11		Fairness
12		Recognition

### ***G-NS Fit***

G-NS fit perception was assessed using the 3-item scale developed by Cable and De Rue (2002) (e.g., 'There is a good fit between what my job offers me and what I am looking for in a job'). A 5-point Likert scale ranging from 1 = 'totally disagree,' to 5 = 'totally agree' was used.

### ***Organizational identification***

Employees' identification with the organization was measured using a 5-point Likert scale (1 = 'totally disagree,' to 5 = 'totally agree') with the six-items suggested by Mael and Ashforth (1992) (e.g., 'When someone criticizes the organization, it feels like a personal insult').

### ***Organizational citizenship behaviors***

Citizenship behaviors were assessed with the Podsakoff, MacKenzie, Moorman, and Fetter (1990) scale. For this study, we chose the three items with the highest loading on each of its five dimensions (i.e., altruism, conscientiousness, sportsmanship, courtesy and civic virtue). In this way, we had a total of 15 items (e.g., 'I help others who have been absent'). A 7-point Likert scale ranging from 1 = 'totally disagree,' to 7 = 'totally agree' was used to answer these items.

### ***Task performance***

Task performance was measured using the in-role performance scale developed by Williams and Anderson (1991). From this scale, we chose the three items with the highest loading on the single in-role performance factor (e.g., 'I perform task that are expected of me'). A 7-point Likert scale ranging from 1 = 'totally disagree,' to 7 = 'totally agree' was used to answer these items.

### ***Covariates***

Based on the full partial method recommended by Little (2013), we accounted for the influence of covariates by specifying paths from all socio-demographic variables to all endogenous and exogenous variables. After running this initial model, we removed the nonsignificant effects. Thus, in sample 1, we controlled statistically for gender, age and status. In sample 2, we controlled for age, status and language. These variables have already been found to correlate with NS fit (e.g., Krumm, Grube, & Hertel, 2013), organizational citizenship behaviors (e.g., Feather and Rauter, 2004; Beauregard, 2012; Ng & Feldman, 2008) and task performance (e.g., Ng & Feldman, 2008).



## Data analysis

We tested our research model using Structural Equation Modeling with maximum likelihood estimation (Mplus 7, Muthén & Muthén, 1998–2014). The model's goodness-of-fit was evaluated with absolute and relative indices (Kline, 2005). As the number of parameters to be estimated was large, relative to the overall sample size, we reduced the number of parameters using the subscale aggregation approach (Drasgow & Kanfer, 1985). This parceling strategy allowed us to preserve the common construct variance while minimizing unrelated specific variance (Little, Rhemtulla, Gibson, & Schoemann, 2013). In this way, our S-NS fit (latent variable) became a superordinate construct (Edwards, 2001) made up of 12 observed variables (our 12 dimensions) created by aggregating their respective items. To test the indirect effects, we used the bootstrapping approach, consistent with several authors (Shrout & Bolger, 2002; Preacher & Hayes, 2004; Hayes, 2009) who suggested this for studying relations in mediation models, because of the limitations of the traditional Sobel test (1982). Finally, we used a full information maximum likelihood approach because of missing values being present. Therefore, all available information in the data set was used to estimate the individual log likelihood functions.

## RESULTS

### Confirmatory factor analyses

Following Bentler's (1990) recommendations, we first examined the fit of our hypothesized five-factor measurement model (i.e., S-NS fit, G-NS fit, organizational identification, organizational citizenship behaviors and task performance). The results indicate that our five-factor model fitted the data reasonably well in both samples (sample 1:  $\chi^2$  ( $df$ ) = 637.23 (277),  $p < .001$ , comparative fit index [CFI] = 0.94, standardized root mean square residual [SRMR] = 0.05, root mean square error of approximation [RMSEA] = 0.05; sample 2:  $\chi^2$  ( $df$ ) = 537.43 (277),  $p < .001$ , CFI = 0.95, SRMR = 0.05, RMSEA = 0.04).

Next, starting from this five-factor model, we compared its fit with a series of alternative and more constrained measurement models to ensure that the predicted model best reflected the data structure and to ensure that our constructs were independent (Anderson & Gerbing, 1988). In this way, in both samples, we compared our five-factor model with (a) a four-factor model (S-NS fit, G-NS fit = 1 factor), (b) a four-factor model (task performance, organizational citizenship behaviors = 1 factor), (c) a four-factor model (organizational identification, organizational citizenship behaviors = 1 factor), (d) a four-factor model (organizational identification, task performance = 1 factor), (e) a three-factor model (organizational identification, task performance, organizational citizenship behaviors = 1 factor), (f) a two-factor model (G-NS fit, organizational identification, task performance, organizational citizenship behaviors = 1 factor) and finally (g) a one-factor model (all variables as a unique factor).  $\chi^2$  difference tests were then used to compare the fit of each of these nested models with that of the five-factor model (Bentler, 1990).

Results of these confirmatory factor analyses indicate that, in both samples, the five-factor model was significantly superior to all alternative models. Consequently, we treated these five constructs as independent from each other in subsequent analyses. Fit indices for these alternative models are presented in Table 3.

### Relationships among variables

Means, standard deviations, Cronbach's  $\alpha$ s and correlations among variables are presented in Table 4.



TABLE 3. CONFIRMATORY FACTOR ANALYSIS FIT INDICES FOR MEASUREMENT MODEL

Model	$\chi^2$	df	$\Delta\chi^2$ ( $\Delta df$ )	CFI	SRMR	RMSEA
Sample 1 (N = 525)						
Five-factor model	637.23	277	–	0.94	0.05	0.05
Four-factor model (S-NS, G-NS = 1 factor)	1,142.12	281	504.99 (4)***	0.86	0.09	0.08
Four-factor model (TP, OCB = 1 factor)	868.98	281	231.75 (4)***	0.91	0.07	0.07
Four-factor model (OI, OCB = 1 factor)	1,060.10	281	422.84 (4)***	0.87	0.09	0.08
Four-factor model (OI, TP = 1 factor)	1,509.82	281	872.59 (4)***	0.80	0.10	0.09
Three-factor model (OI, TP, OCB = 1 factor)	1,648.35	284	1,011.12 (7)***	0.78	0.10	0.10
Two-factor model (G-NS, OI, TP, OCB = 1 factor)	2,248.13	286	1,610.9 (9)***	0.68	0.14	0.12
One-factor model	3,818.98	287	3,181.75 (10)***	0.37	0.18	0.16
Sample 2 (N = 525)						
Five-factor model	537.43	277	–	0.95	0.05	0.04
Four-factor model (S-NS, G-NS = 1 factor)	1,266.11	281	728.68 (4)***	0.81	0.11	0.08
Four-factor model (TP, OCB = 1 factor)	588.48	281	51.05 (4)***	0.94	0.06	0.05
Four-factor model (OI, OCB = 1 factor)	809.40	281	271.97 (4)***	0.90	0.08	0.06
Four-factor model (OI, TP = 1 factor)	1,249.63	281	712.20 (4)***	0.82	0.08	0.08
Three-factor model (OI, TP, OCB = 1 factor)	1,271.78	284	734.35 (7)***	0.81	0.08	0.08
Two-factor model (G-NS, OI, TP, OCB = 1 factor)	2,493.44	286	1,946.01 (9)***	0.58	0.13	0.12
One-factor model	3,196.88	287	2,659.45 (10)***	0.44	0.16	0.14

Note. CFI = comparative fit index; G-NS = global needs–supplies fit; OCB = organizational citizenship behaviors; OI = organizational identification; RMSEA = root mean square error of approximation; S-NS = specific needs–supplies fit; SRMR = standardized root mean square residual; TP = in-role performance.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

### Test of the research model

In order to investigate partial mediation instead of total mediation, we compared the fit of our hypothesized model with a series of alternative models to ensure that our hypothesized model offered the best depiction of our data. In this way, we successively added direct theoretically plausible paths (James, Mulaik, & Brett, 1982) to our latent variables (see Table 5). We thus added a first path between S-NS fit and organizational identification (alternative model 1). We then compared this alternative model 1 with our hypothesized model using a  $\chi^2$  difference test (& Griffin, 2001). As the  $\chi^2$  difference test showed no significant result, we did not retain alternative model 1 as superior to our hypothesized model. Next, starting from the hypothesized model, we successively added a second path between S-NS fit and organizational citizenship behaviors (alternative model 2), a third path between S-NS fit and task performance (alternative model 3), a fourth path between G-NS fit and organizational citizenship behaviors (alternative model 4), a fifth path between G-NS fit and task performance (alternative model 5) and finally we included all five paths (alternative model 6). In both samples, and following the same procedure as explained above for alternative model 1 ( $\chi^2$  difference test), none of these alternative models showed a significantly better fit than our hypothesized model. As shown in Table 5, in both samples, our hypothesized total mediation model (Figure 1) presented better fit indices (sample 1:  $\chi^2$  ( $df$ ) = 755.01 (353),  $p < .001$ , CFI = 0.92, SRMR = 0.07, RMSEA = 0.05; sample 2:  $\chi^2$  ( $df$ ) = 767.32 (354),  $p < .001$ , CFI = 0.90, SRMR = 0.06, RMSEA = 0.05). Thus, the best model is the one with no direct link, therefore we get no support for a total mediation model. Hence, we retained the hypothesized model as the best fitting model.

Standardized parameter estimates for the final model are shown in Figure 2. In order to make it more comprehensible, only structural relationships are shown and the effects of the covariates are

**TABLE 4. DESCRIPTIVE STATISTICS AND INTERCORRELATIONS AMONG VARIABLES**

	Variables	Minimum	Maximum	M	SD	1	2	3	4	5	6	7	8
Sample 1 (N = 525)													
1	GENDER	-	-	-	-	-							
2	AGE	23	63	39.2	8.78	-0.09	-						
3	STATUS	-	-	-	-	-0.35***	-0.01	-					
4	S-NS fit	0	3	1.7	0.64	0.19**	0.04	-0.27***	(0.92)				
5	G-NS fit	1	5	2.8	0.98	0.11	0.13	-0.05	0.42***	(0.88)			
6	OI	1	5	3.1	0.96	-0.09	0.20**	-0.01	0.15	0.38***	(0.89)		
7	OCB	2	7	5.2	0.86	0.16*	0.05	-0.24***	0.01	0.20**	0.41***	(0.92)	
8	TP	1	7	6	1.10	0.14*	-0.02	-0.14*	-0.14*	0.13*	0.26***	0.65***	(0.86)
Sample 2 (N = 525)													
1	AGE	20	64	43.4	9.08	-							
2	STATUS	-	-	-	-	-0.27***	-						
3	LANGUAGE	-	-	-	-	0.13*	0.03	-					
4	S-NS fit	0	3	2.3	0.49	0.21***	-0.04	0.10	(0.93)				
5	G-NS fit	1	5	3.3	0.88	0.17**	-0.07	0.07	0.39***	(0.92)			
6	OI	1	5	3.5	0.79	-0.06	0.09	0.17**	0.08	0.14*	(0.87)		
7	OCB	4	7	5.3	0.60	0.07	0.07	0.14*	0.01	0.21***	0.32***	(0.89)	
8	TP	2	7	5.9	0.85	0.09	-0.08	0.11	0.03	0.16**	0.21***	0.56***	(0.91)

Note. Cronbach's  $\alpha$ s are provided on the diagonal.  
 AGE = age; GENDER = gender (men coded 0; women coded 1); G-NS, Global Needs-Supplies Fit; LANGUAGE = language (Dutch coded 0; French code 1); S-NS = specific needs-supplies fit; STATUS = status; OCB = organizational citizenship behaviors; OI = organizational identification; TP = in-role performance.  
 \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

TABLE 5. FIT INDICES FOR STRUCTURAL MODELS

Model	$\chi^2$	df	$\Delta\chi^2$ ( $\Delta df$ )	CFI	SRMR	RMSEA	Model comparison
Sample 1 (N = 525)							
Hypothesized	755.01	353	–	0.92	0.07	0.05	
Alternative 1	753.70	352	1.31 (ns)	0.92	0.07	0.06	Hypothesized versus Alternative 1
Alternative 2	754.77	352	0.24 (ns)	0.92	0.07	0.06	Hypothesized versus Alternative 2
Alternative 3	754.45	352	0.54 (ns)	0.92	0.07	0.06	Hypothesized versus Alternative 3
Alternative 4	754.77	352	0.24 (ns)	0.92	0.07	0.06	Hypothesized versus Alternative 4
Alternative 5	754.65	352	0.36 (ns)	0.92	0.07	0.06	Hypothesized versus Alternative 5
Alternative 6	744.28	348	10.73 (ns)	0.91	0.06	0.05	Hypothesized versus Alternative 6
Sample 2 (N = 525)							
Hypothesized	767.32	354	–	0.90	0.06	0.05	
Alternative 1	767.31	353	0.01 (ns)	0.90	0.06	0.06	Hypothesized versus Alternative 1
Alternative 2	767.30	353	0.02 (ns)	0.90	0.06	0.06	Hypothesized versus Alternative 2
Alternative 3	767.30	353	0.02 (ns)	0.90	0.06	0.05	Hypothesized versus Alternative 3
Alternative 4	767.30	353	0.02 (ns)	0.90	0.06	0.06	Hypothesized versus Alternative 4
Alternative 5	767.30	353	0.02 (ns)	0.90	0.06	0.06	Hypothesized versus Alternative 5
Alternative 6	756.57	349	10.75 (ns)	0.90	0.06	0.06	Hypothesized versus Alternative 6

Note. CFI = comparative fit index; G-NS = global needs–supplies fit; OCB = organizational citizenship behaviors; OI, organizational identification; RMSEA = root mean square error of approximation; S-NS = specific needs–supplies fit; SRMR = standardized root mean square residual; TP = in-role performance; Alternative 1 = direct path between S-NS and OI; Alternative 2 = direct path between S-NS and OCB; Alternative 3 = direct path between S-NS and TP; Alternative 4 = direct path between G-NS and OCB; Alternative 5 = direct path between G-NS and TP; Alternative 6 = all paths together; ns = not significant.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

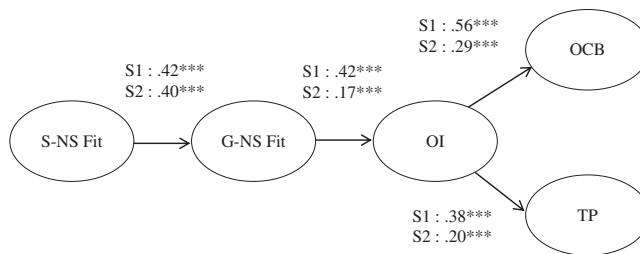


FIGURE 2. FINAL MODEL

NOTE. COMPLETELY STANDARDIZED PATH COEFFICIENTS. G-NS = GLOBAL NEEDS–SUPPLIES; OCB = ORGANIZATIONAL CITIZENSHIP BEHAVIORS; OI = ORGANIZATIONAL IDENTIFICATION; S-NS = SPECIFIC NEEDS–SUPPLIES; TP = IN-ROLE PERFORMANCE.

described in the text. In sample 1, status was positively related to G-NS fit ( $\gamma = 0.12$ ,  $p < .05$ ) and negatively to S-NS fit and organizational citizenship behaviors ( $\gamma = -0.33$ ,  $p < .001$ ;  $\gamma = -0.14$ ,  $p < .001$ , respectively). Age was positively related to organizational identification ( $\gamma = 0.12$ ,  $p < .05$ ) but not to S-NS fit ( $\gamma = 0.10$ ,  $p > .05$ ). Gender was not significantly related to neither S-NS nor G-NS fit ( $\gamma = 0.11$ ,  $p > .05$ ;  $\gamma = 0.07$ ,  $p > .05$ , respectively). In sample 2, age was positively related to S-NS and G-NS fit ( $\gamma = 0.20$ ,  $p < .001$ ;  $\gamma = 0.10$ ,  $p < .05$ , respectively), status was positively related to G-NS fit and organizational identification ( $\gamma = 0.13$ ,  $p < .05$ ;  $\gamma = 0.13$ ,  $p < .05$ , respectively) and finally language was positively related to organizational identification ( $\gamma = 0.16$ ,  $p < .01$ ).

**TABLE 6. MEDIATION OF THE EFFECTS OF GLOBAL NEEDS–SUPPLIES (G-NS) FIT ON ORGANIZATIONAL CITIZENSHIP BEHAVIORS (OCB) AND IN-ROLE PERFORMANCE (TP) THROUGH ORGANIZATIONAL IDENTIFICATION (OI)**

		SE	Percentile (99% CI)	
			Lower	Upper
Sample 1 (N = 525)				
G-NS fit	OCB	0.23	0.13	0.34
G-NS fit	TP	0.12	0.04	0.21
Sample 2 (N = 525)				
G-NS fit	OCB	0.07	0.001	0.13
G-NS fit	TP	0.04	0.008	0.08

Note. 1000 bootstrap samples.  
CI = confidence interval.

Controlling for these variables, S-NS fit was positively associated with G-NS fit (sample 1:  $\gamma = 0.42$ ,  $p < .001$ ; sample 2:  $\gamma = 0.40$ ,  $p < .001$ ) which, in turn, was positively associated with organizational identification (sample 1:  $\beta = 0.42$ ,  $p < .001$ ; sample 2:  $\beta = 0.17$ ,  $p < .001$ ) which, in turn was positively associated with organizational citizenship behaviors and in-role performance (sample 1:  $\beta = 0.56$ ,  $p < .001$ ;  $\beta = 0.29$ ,  $p < 0.001$ , and sample 2:  $\beta = 0.38$ ,  $p < .001$ ;  $\beta = 0.20$ ,  $p < .001$ , respectively). Our first hypothesis, Hypothesis 1 is thus supported.

Regarding the indirect effect of S-NS fit on organizational citizenship behaviors and task performance (via organizational identification), bootstrap analyses indicated, in both samples, that no confidence interval included 0, highlighting the significance of the indirect effect (sample 1:  $p < .001$ , and sample 2:  $p < .05$ ) (see Table 6). Hypotheses 2a and 2b, suggesting for the mediating role of organizational identification, are thus fully supported.

## DISCUSSION

Considering the importance of undertaking additional research on NS fit and on the underlying mechanisms linking needs fulfillment perceptions to organizational outcomes (Kristof-Brown & Billsberry, 2013), the present study had two objectives. First, we have revealed the relevance of 12 specific work-related needs, and their subjective assessment, linked to employment quality. We have converted existing knowledge on employment quality, both from a policy-related and an academic point of view, into work-related needs and shown its pertinence for NS fit research. We have thus shown that NS fit is affected by various specific work-related needs, and can be considered a multi-dimensional construct, contrary to its traditional treatment as a unidimensional construct (Cable & De Rue, 2002). Second, although NS fit is strongly related to job-related outcomes such as job satisfaction (Kristof-Brown, Zimmerman, & Johnson, 2005), we have contributed to clarifying the mediation effect of organizational identification in the relationship NS fit and behavioral outcomes.

Our first hypothesis: ‘a specific work-related NS fit perception in terms of employment quality is positively associated with a G-NS fit perception,’ is fully supported in both our samples. This can be explained through the Information Integration Theory (Anderson, 1962). This theory suggests that individuals integrate information from a number of (related) sources before making an overall judgment. In the context of our research, employees first judge whether their experienced job characteristics fulfill their specific employment quality-related needs before they have an overall NS fit perception regarding their job in general. Such a differential approach has also been advanced in

organizational justice research (see Kim & Leung, 2007; Ambrose & Schminke, 2009) leading to the Fairness Heuristic Theory (Lind, 2001).

Thus, while NS fit is traditionally seen as a single-factor concept (e.g., Cable & De Rue, 2002; Resick, Baltes, & Shantz, 2007; Greguras & Diefendorff, 2009), the present study highlights that individuals have S-NS fit perceptions based on 12 work-related needs associated with employment quality. This builds on the work of a number of instances involved in employment quality initiatives at a European level, whether policy- or academic-related. It seems that such endeavors are considered important by employees themselves, creating expectations about their fulfillment beyond any institutional or safety objective.

Our second and third hypotheses, Hypothesis 2a: 'organizational identification mediates a positive relationship between general NS fit and task performance' and Hypothesis 2b: 'organizational identification mediates a positive relationship between general NS fit and organizational citizenship behaviors,' are fully supported in both our samples. According to our results, NS fit perceptions are positively associated with behavioral outcomes such as task performance and organizational citizenship behaviors, only through organizational identification. This result is in line with the CAPS theory (Mischel & Shoda, 1995) and suggests that organizational identification is an important cognitive mechanism through which perceived NS fit is linked to behavioral outcomes. Indeed, while organizational identification has already been found to be a consequence of PO fit perceptions (e.g., Saks & Ashforth, 2002), our results advance that NS fit is also positively associated with organizational identification, confirming the few studies which have already explored this relationship (e.g., Cable & Edwards, 2004). More precisely, the present study highlights a new underlying process in the development of performance. Indeed, our results stress the importance of organizational identification in the relationship between NS fit perceptions, task performance and organizational citizenship behaviors. Therefore, we consider our study a promising first step towards better understanding the underlying mechanisms linking fit perceptions to job attitudes.

In view of the full mediation of the fit-outcomes relationship by organizational identification, it has to be emphasized that the claim that 'a current unfulfilled need will motivate performance when anticipated supplies are expected to fulfil this need, indicating that needs fulfilled by current supplies have no motivating potential' (Edwards & Shipp, 2007, p. 229), is not supported by our data. In our study, even if employees perceived that their job characteristics fulfilled their work-related needs, they tended to indicate that they performed better and developed organizational citizenship behaviors, but only through their increased identification to the organization. Moreover, examining the inter-correlations among variables (Table 4), we note a negative relationship between S-NS fit and in-role performance (especially in sample 1;  $r = -0.14$ ,  $p < .05$ ). Without implying any causality, we may advance that a S-NS fit perception (based on 12 work-related needs) does not have the same motivational potential as a G-NS fit perception. In other words, when an individual perceives a fit between his/her needs and his/her job in general, (s)he will be motivated to perform. Conversely, perceiving a fit on different job facets does not seem sufficient to enhance job performance. In that case, referring to Edwards and Shipp's (2007) assumptions, one may believe that it is simpler for the organization to provide supplies in order to fulfill certain specific unfulfilled needs, than to alter an overall NS fit perception. Consequently, employees will tend to be less motivated and perform less well.

### Limitations and future directions

This study is not without limitations. First, we used self-reported data, which may lead to common method bias. Nevertheless, this bias was partially addressed through our confirmatory factor analyses showing, in both our samples, a single-factor model showed a poor fit to the data (i.e., Harman's single-factor test; Podsakoff, MacKenzie, & Podsakoff, 2012). Second, our research design was

cross-sectional, which precludes making inferences of causality among the variables. A longitudinal design should help us to be sure about the direction of our relationships and about the processes underlying the general NS fit perceptions. Finally, although we tested our hypotheses within two organizational contexts, additional research must be undertaken to generalize our findings even further. It would thus be useful to conduct additional studies to extend the validation of our newly created questionnaire and to test the direction of our relationships with a longitudinal design and in different populations.

### **Practical implications**

Our results are also important for managerial practice. Indeed, the positive links between NS fit and behavioral outcomes suggest that managers ought to focus much more on work-related needs fulfillment and not only on a good demand–ability fit for successful job performance. Moreover, because organizational citizenship behaviors are important to enhance organizations' success (Podsakoff, Whiting, Podsakoff, & Blume, 2009), we encourage managers to consider such behaviors more thoroughly. These suggestions emphasize the role of the manager in encouraging workers' performance. They also recognize the need for an enhanced understanding of the skills, abilities and behaviors managers require if they are to prevent and reduce stress at work (i.e., management that tries to manage workload and resources, to deal with work problems, etc.; Yarker, Lewis, & Donaldson-Feilder, 2008). Our results also imply the need to restore what is called proximity management, that is, managers who try to make effective professional relationships and mutual respect coexist in a powerless context (Bourion, 2001). In such a context, the manager should be able to maintain and consolidate a trust relationship with his/her employees (Bourion & Persson, 2006). In our opinion, and regarding individuals' needs, it is important for managers to know their team and individuals' specific needs in order to motivate them to engage in citizenship and task performance.

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### **CONFLICTS OF INTEREST**

None.

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**APPENDIX**

**TABLE A1. SPECIFIC NEEDS–SUPPLIES FIT QUESTIONNAIRE**

Ideally, I would like to ...	-3 <i>Far less than now</i>	-2 <i>Less than now</i>	-1 <i>A bit less than now</i>	0 <i>Satisfied with my current state</i>	1 <i>A bit more than now</i>	2 <i>More than now</i>	3 <i>Far more than now</i>
Do a stimulating job	○→	○→	○→	○→	○→	○→	○→
Be versatile	○→	○→	○→	○→	○→	○→	○→
Be autonomous	○→	○→	○→	○→	○→	○→	○→
Balance my private life and my professional life	○→	○→	○→	○→	○→	○→	○→
Give priority to my private life	○→	○→	○→	○→	○→	○→	○→
Have working hours that allow me to manage my private life	○→	○→	○→	○→	○→	○→	○→
Have a predictable work schedule	○→	○→	○→	○→	○→	○→	○→
Choose my working hours	○→	○→	○→	○→	○→	○→	○→
Have a fixed work schedule	○→	○→	○→	○→	○→	○→	○→
Work from home	○→	○→	○→	○→	○→	○→	○→
Distance working	○→	○→	○→	○→	○→	○→	○→
Access inter-site mobility	○→	○→	○→	○→	○→	○→	○→
Receive an individual performance based bonus	○→	○→	○→	○→	○→	○→	○→
Receive a group bonus based on the company's results	○→	○→	○→	○→	○→	○→	○→
Benefit from extras (luncheon vouchers, gift vouchers, etc.)	○→	○→	○→	○→	○→	○→	○→
Receive a fixed monthly income	○→	○→	○→	○→	○→	○→	○→
Receive income at a fixed date	○→	○→	○→	○→	○→	○→	○→
Receive enough income to cover my needs	○→	○→	○→	○→	○→	○→	○→
Follow training courses to extend my skills	○→	○→	○→	○→	○→	○→	○→
Follow training courses that correspond to my expectations	○→	○→	○→	○→	○→	○→	○→
Follow training courses to progress in my career	○→	○→	○→	○→	○→	○→	○→
Work in a successful company (profitability, size, reputation)	○→	○→	○→	○→	○→	○→	○→
Broad my chances of being able to get another job	○→	○→	○→	○→	○→	○→	○→
Work in an activity sector that has potential	○→	○→	○→	○→	○→	○→	○→

**TABLE A1.** (Continued)

<i>Ideally, I would like to ...</i>	-3 <i>Far less than now</i>	-2 <i>Less than now</i>	-1 <i>A bit less than now</i>	0 <i>Satisfied with my current state</i>	1 <i>A bit more than now</i>	2 <i>More than now</i>	3 <i>Far more than now</i>
Have a stable work contract	○→	○→	○→	○→	○→	○→	○→
Have a contract that gives me an untroubled view of the future	○→	○→	○→	○→	○→	○→	○→
Enjoy stable employment	○→	○→	○→	○→	○→	○→	○→
Have my demands supported by trade union representatives	○→	○→	○→	○→	○→	○→	○→
Be sure of a high income security in case of being fired/losing my job	○→	○→	○→	○→	○→	○→	○→
Know my social rights	○→	○→	○→	○→	○→	○→	○→
Enjoy acceptable physical working conditions	○→	○→	○→	○→	○→	○→	○→
Have a suitably organized workstation	○→	○→	○→	○→	○→	○→	○→
Have good working equipment	○→	○→	○→	○→	○→	○→	○→
Be recognized by my superiors	○→	○→	○→	○→	○→	○→	○→
Work in a positive atmosphere	○→	○→	○→	○→	○→	○→	○→
Be treated honestly and with respect	○→	○→	○→	○→	○→	○→	○→
Get on well with my superiors	○→	○→	○→	○→	○→	○→	○→