



Work meaningfulness and performance among healthcare professionals: The role of professional respect and participative management

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ABSTRACT

While the existing literature has accumulated much evidence for the impact of formal organizational interventions on employees' experience of meaningfulness and outcomes, less is known about informal influences from coworkers. Drawing on self-determination theory, we propose a multilevel model that explains how professional respect by coworkers and unit participative management, individually and jointly, influence work meaningfulness, which in turn is associated with task performance and service quality. We tested our model using data from 217 nurse–general practitioner dyads from 27 primary healthcare units in Lithuania. The results showed that professional respect is positively related to work meaningfulness but unit participative management is not. Furthermore, work meaningfulness mediates the relationship between professional respect and performance outcomes. Finally, supporting a synergistic perspective, the impacts of professional respect on work meaningfulness and performance outcomes are stronger when unit participative management is high rather than low.

1. Introduction

Reflecting a cultural shift in society toward living a more meaningful life, employees have also become increasingly concerned with gaining personal meaning from what they do at work (Robertson et al., 2020; Rosso et al., 2010; Wrzesniewski et al., 2003). A recent survey shows that nine out of 10 employees are willing to trade a percentage of their lifetime earnings for greater meaning at work (Achor et al., 2018). Work meaningfulness, or the amount of significance and positive meaning that individuals hold for their work (Pratt & Ashforth, 2003; Rosso et al., 2010), is a key experience that employees seek to achieve and that organizations must create conditions to promote (Bailey et al., 2017; Lysova et al., 2019). Against this backdrop, research examining meaningfulness at work has grown considerably over the last decade (e.g., Lysova et al., 2019; Rosso et al., 2010), with studies reporting it to be linked to well-being (Steger et al., 2012), positive job attitudes (Bunderson & Thompson, 2009), work engagement (Kahn, 1990, 2007; May et al., 2004), and job satisfaction (Steger et al., 2012), and also as having significant implications for job performance (Allan et al., 2019).

Given its documented impact on various employee outcomes, much research has contributed to unveiling antecedents of work

meaningfulness. Prior research has predominantly focused on formal organizational interventions such as job design (Allan, 2017; Hackman & Oldham, 1976, 1980; Han et al., 2021), and managerial appeals from formally appointed leaders (e.g., Carton, 2018; Kipfelsberger et al., 2022; for reviews see Lysova et al., 2019; Rosso et al., 2010). Such interventions can be seen as direct and intentional management approaches that organizations use to foster meaningfulness. In contrast, less attention has been paid to the role that coworkers may play in shaping employees' experience of work meaningfulness (Robertson et al., 2020). Even less research has been done to investigate how the influence of coworkers interacts with that of management practices to impact work meaningfulness. These omissions are significant. Coworkers play a significant role in work life and their influence on employees may even overshadow that of leaders, especially in teams where work is carried out collaboratively (Barker, 1993). Consequently, employees' interaction with other people or groups within the workplace can significantly impact their experience of meaningfulness (Robertson et al., 2020; Wrzesniewski et al., 2003). Unlike formal organizational interventions, the influence of coworkers emerges from the close and frequent interactions that they have at work. It can be seen as an informal source of meaningfulness as it is not prescribed by the

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organization or its managers. Additionally, scholars have proposed that the influences emanating from coworkers and those from formal organizational interventions can work interactively and synergistically to influence employees' work experiences (Chiaburu & Harrison, 2008) such as meaningfulness (Lysova et al., 2019).

Thus, to better understand work meaningfulness, this study draws on self-determination theory (SDT; Deci & Ryan, 1980), a potent framework enabling a more comprehensive integration of how formal and informal workplace factors influence meaningfulness. SDT has previously been suggested to be a useful framework to study meaningfulness in life (Ward & King, 2017) and at work (Gagné & Deci, 2005; Rosso et al., 2010). Empirical evidence shows that satisfaction of the three basic human needs outlined in SDT—relatedness, competence, and autonomy—is associated with perceived meaningfulness at work (Martela & Riekk, 2018; Nikolova & Cnossen, 2020). Thus, we draw on SDT to identify and jointly examine formal and informal organizational factors that, by supporting the three basic needs, can promote meaningfulness at work and influence job performance. Accordingly, in this study we develop and test a model that depicts how an informal environmental factor, in the form of professional respect by coworkers, and a formal intervention, such as participative management, individually and jointly influence work meaningfulness, resulting in enhanced job performance. Professional respect by coworkers (hereinafter professional respect) reflects the imputed worth in relation to their professional knowledge and skills that an employee perceives in their interpersonal interactions with coworkers (Rogers & Ashforth, 2017). We propose that professional respect by coworkers can contribute to employees' experience of work meaningfulness. This is because professional respect gives the employees a sense that their knowledge and competence are acknowledged and admired, and that they are valued members of the team, thereby supporting both competence and relatedness needs. Meanwhile, we propose that participative management, as a formal organizational intervention approach to encourage employee participation, will enhance employees' experience of meaningfulness because it encourages employees to voice their opinions and involves them in decision-making, supporting autonomy needs. In turn, work meaningfulness mediates the impact of professional respect and participative management on performance outcomes. Furthermore, building on multilevel and synergistic approaches (Dysvik et al., 2013), we expect professional respect (an individual-level variable) and unit participative management (a group-level variable) to interact in such a way that the impacts of professional respect on meaningfulness will be stronger when unit participative management is high rather than low, leading to enhanced performance. Fig. 1 presents the hypothesized conceptual model.

[Insert Fig. 1 about here].

Although the influences of coworkers on employees' work

experiences are omnipresent across various work contexts (Morgeson & Humphrey, 2006), such influences are particularly significant in a work context where frequent interactions and cooperation are required (Chiaburu & Harrison, 2008). Healthcare teams, in which multiple professionals work jointly to provide healthcare services, constitute such a work context. In a typical healthcare team, professional nurses work relatively independently of their direct line supervisor (the nurse coordinator) but work closely and interdependently with other professionals, most frequently with medical doctors or, in this particular study, general practitioners (GPs). The doctor–nurse dyad is a particularly relevant unit of this study because it is a key functional unit in primary healthcare organizations. Furthermore, given the implicit status hierarchy dynamics (Laschinger & Finegan, 2005; Nembhard & Edmondson, 2006), nurses are likely to be particularly sensitive to the level of respect received from this colleague, who, although not their line manager, is traditionally assumed to have a higher professional status. Despite the noted unique dynamics in healthcare teams, prior research on nursing professionals has primarily focused on the impact of formal management interventions such as participative management practices (Laschinger et al., 2001, 2004), overlooking influential informal factors such as professional respect from other professionals in the same team (Hudson, 2002). Given that nursing professionals are expected to carry out their tasks with efficiency while providing a high-quality person- and relationship-oriented service (McCrea et al., 2003; Price, 2006), it is crucial to understand how the work environment influences nurses' experience of meaningful and subsequent task performance and service quality. Consequently, to investigate how professional respect, as well as participative management, influence work meaningfulness and job performance among nursing professionals working in healthcare teams, we tested our model with a sample of nursing professionals and GPs working in healthcare clinics in Lithuania.

Our research makes several contributions to the literature. First, by applying SDT to explain the roles that professional respect and participative management play in facilitating meaningfulness, leading to job performance, our research enriches the meaningfulness literature by going beyond the predominant focus on formal interventions to include informal influences of work meaningfulness. Furthermore, we extend our understanding of meaningfulness by considering the joint effects of formal and informal factors, an approach that is largely absent from the extant literature (Lysova et al., 2019).

Second, by integrating the theory on psychological respect (Huo & Binning, 2008) and SDT (Deci & Ryan, 1980), we also extend knowledge of the antecedents of meaningfulness at work by identifying "professional respect" as an informal factor contributing to one's experienced meaningfulness and by theorizing how its effects unfold. Specifically, by focusing on a dyadic, evaluative construct like the professional respect given by GPs to nurses, we answer the call for research that examines the

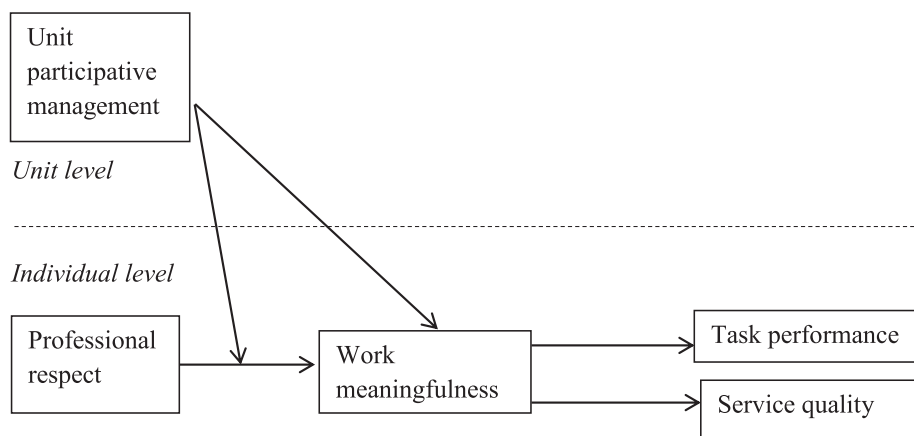


Fig. 1. The hypothesized model.

role of social contexts in facilitating work meaningfulness (Lysova et al., 2019; Rosso et al., 2010), particularly how coworkers can influence meaning at work (Rosso et al., 2010). Finally, owing to the adoption of a market-based orientation for healthcare services, where patients choose from among the options available in accordance with their expectations concerning cost and quality, primary healthcare units are assessed not only on their efficiency but also on the quality of their service delivery (Alexander et al., 2006).

Our study's final contribution is the exploration of the processes through which professional respect, as well as participative management, influence task efficiency and service quality via work meaningfulness among nursing professionals working in multidisciplinary healthcare teams.

2. Theoretical foundation and hypothesis development

2.1. Theoretical foundation

While acknowledging that individual personal and internal or innate traits can be drivers of meaningfulness (Lips-Wiersma & Morris, 2009; Lips-Wiersma & Wright, 2012), scholars in the management literature are increasingly seeking to identify factors in the work environment that can influence employees' experience of meaningfulness (see Lysova et al., 2019, for a review). For example, influenced by the Job Characteristics Model (Hackman & Oldham, 1980), scholars have emphasized that enriched jobs where employees enjoy autonomy or have an impact are likely to foster work meaningfulness (Martela et al. 2021; Sung et al., 2022). Meanwhile, emphasizing the influence of social contexts and in line with the notion that leaders are meaning-givers (Conger, 1991), much research has explored the role of leadership in facilitating work meaningfulness (e.g., Kipfelsberger et al., 2022). While the extant research has provided useful insights into work conditions where management can develop direct interventions through job design or leadership development to promote work meaningfulness, scholars have called for research to consider other social contextual factors such as coworkers (Robertson et al., 2020; Rosso et al., 2010). Given the documented evidence on the relationships between coworkers with multiple attitudinal and behavioral outcomes (Barker, 1993; Chiaburu & Harrison, 2008), it is plausible that coworkers have a significant impact on work meaningfulness. Furthermore, recognizing of the complex and interactive nature of the work environment, scholars have suggested that factors at different levels can simultaneously influence work meaningfulness (Lysova et al., 2019).

These insights emerging from meaningfulness research can be integrated and further explained by SDT, which postulates that a work environment that supports individuals' psychological needs is conducive to work meaningfulness, making this a useful theoretical framework to understand how various factors in the work environment can influence employees' work meaningfulness. The three basic psychological needs identified by SDT include the need for competence, the need for relatedness, and the need for autonomy (Ryan & Deci, 2000). Competence refers to feelings of mastery, knowledge, and efficacy in one's activities; relatedness relates to feeling connected with others, having caring relationships, and a sense of belonging to a community; and autonomy refers to a sense of volition and internal perceived locus of control over one's life.

In the organizational context, according to SDT, when work contexts support needs for competence, relatedness, and autonomy, employees will reach a state of autonomous motivation and feel that the purpose of their tasks matches their personal values. It is at this point of integration that work becomes meaningful (Gagné & Deci, 2005). Drawing on SDT, we propose that professional respect by coworkers, owing to its association with the satisfaction of competence and relatedness needs, and unit participative management, owing to its role in satisfying autonomy needs, can individually and jointly influence work meaningfulness, leading to enhanced job performance. In what follows we provide

further detail on the proposed relationships.

2.2. Professional respect and work meaningfulness

Professional respect is given and directed toward the focal employee by significant others (e.g., supervisors or colleagues) via interpersonal interactions in the workplace. Through daily interactions and collaborations, significant others form an assessment of the focal employee's professional knowledge, skills, and contributions to the collective work, and give respect accordingly. Unlike other coworker constructs such as coworker support or positive relationships with coworkers, which indicate the supportiveness or friendliness of a social environment (May et al., 2004), or generalized, top-down respect, which is given equally to all members of the organization regardless of their personal attributes or contributions, professional respect is evaluative in nature and signals the value of the focal employees' work and their contribution to the collective (De Cremer & Tyler, 2005; Huo et al., 2010). Here we focus on close coworkers as key sources of professional respect.

The dual pathway model of social respect (Huo & Binning, 2008) suggests that the experience of respect matters to people because it satisfies two core social needs: the striving for status (e.g., being viewed as competent on specific dimensions important for the group (Spears et al., 2006)) and the need to belong (formation of meaningful, affiliative bonds with other group members) (see also Rogers & Ashforth, 2017, for a related formulation). Although speaking in terms of social needs and not drawing directly on SDT, the intersection between this model and SDT is evident, with the need for belonging mirroring relatedness needs and status concerns reflecting competence needs. Bridging these two frameworks, we argue that professional respect constitutes an important source of work meaningfulness because such experience connotes employees' fulfillment of their role responsibility (Burke & Stets, 2009), supporting competence needs. Meanwhile it also provides acknowledgment of employees' value in the given work context (De Cremer & Tyler, 2005; Huo et al., 2010), supporting relatedness needs. As a result, work becomes meaningful.

In greater detail, high levels of professional respect by coworkers indicates to individuals that they are learning, growing, effectively responding to challenges, and meeting their goals, and are thus more likely to feel personally effective (Masten & Reed, 2002), contributing to an experience of competence at work. This felt competence provides a sense of meaning (Gecas, 1991). Feeling a sense of mastery and knowledge conferred by high professional respect means individuals will feel empowered to approach their work and perceive their efforts as meaningful as they can result in the successful attainment of their goals. In contrast, when employees perceive low levels of professional respect, they are likely to experience uncertainty regarding the worth of their work, and even perceive their work to be of low value, resulting in decreased work meaningfulness.

In addition, workers feel related if they experience genuine care and appreciation from their colleagues. Professional respect indicates to employees that they are accepted by their peers and considered to be valued unit members, thus supporting relatedness needs. Providing indirect support for this claim, one investigation found that self-reports of belongingness mediated the relationship between perceived respect and contributions to the group (De Cremer, 2003). Another study reported that respectful treatment increased individuals' perception that they were welcomed and accepted within a group of which they were a member (Simon & Stürmer, 2005). Connectedness to a community and having tight social connections is one of the strongest predictors of meaning in life (Ward & King, 2017); by the same token, being a respected member of a professional community allows one to feel like an important part of a larger unit and should therefore contribute to experienced meaningfulness at work. Indeed, in a longitudinal European survey, relatedness emerged as the strongest predictor of work meaningfulness (Nikolova & Cnossen, 2020). Thus, when professional respect is high, employees feel connected to other unit members, which

facilitates the sense of meaningfulness that stems from working jointly with close others. When professional respect is low, this lack of connectedness detracts from that sense of meaningfulness as individuals do not feel their work is contributing to that of an integrating community.

In sum, we propose that, when employees receive high professional respect, they are likely to perceive that their professional work role and achievement are recognized and affirmed (competence needs) and that their membership of the team is valued (relatedness needs). Consequently, this group of employees will be able to justify why their job is worth doing, resulting in the heightened positive meaning of their work.

H1: Professional respect is positively related to work meaningfulness.

2.3. Unit participative management and work meaningfulness

The essential components of participation encompass direct communication, employee involvement in problem-solving, and representative participation (Budd et al., 2010; Marchington & Wilkinson, 2005). Thus, we define unit participative management as the extent to which nursing professionals are endowed with decision-making power in the unit and operationalize it at the unit level. The extent to which employees are allowed into the decision-making process has been identified as a key approach to support employees' needs for autonomy (Gagné & Deci, 2005), which has implications for their experience of meaningfulness. We propose that participative management constitutes another source of meaningfulness. By offering opportunities for employees to contribute solutions and ideas for problems at work, unit participative management allows employees to get involved in decision-making on issues that affect them. Working under this condition, employees will experience a sense of autonomy and having an impact at work (Grant et al., 2008; Kahn, 1990; Laschinger et al., 2001), facilitating a match between the purpose of their tasks and their personal values, which is at the core of work meaningfulness. Research has shown that participative management practices such as empowerment HRM (Chen et al., 2021) and direct employee participation (Marescaux et al., 2013) are associated with the satisfaction of employees' autonomy needs. Autonomy should therefore lead to meaningfulness because it allows for self-expression, control over work content and process, and the opportunity to exert and develop one's abilities (Nikolova & Cnossen, 2020).

In contrast, when unit participative management is low, employees' autonomy needs are not supported and they are not able to fully demonstrate their capabilities or realize their potential, as there is no opportunity to make contributions. They will also feel detached and experience having little impact on others or any job-related decisions, resulting in reduced work meaningfulness. Providing evidence for this claim, empirical research has shown that participative management is associated with psychological empowerment, a composite psychological experience that includes meaning, together with self-determination, competence, and impact (Spreitzer, 1995). In another study, involving 219 Chinese employees working in private companies, Hon and Rensvold (2006) reported that participation in goal-setting is related to meaningfulness. We hence hypothesize:

H2: Unit participative management is positively related to work meaningfulness.

2.4. Mediating effects of work meaningfulness

Job performance in service settings encompasses both task performance and service quality. While task performance indicates the extent to which employees meet the known expectations and requirements of their role (Borman & Motowidlo, 1997; Griffin et al., 2007), service quality refers to the extent to which service providers deliver a core service to customers in a friendly, caring, and empathetic manner (Bell

et al., 2005). Capturing the social aspects of job performance, service quality is seen as a key performance indicator in the healthcare context (Hausman & Mader, 2004). Drawing on SDT, the intrinsic, positive meaning inherent in work meaningfulness enables employees to engage in self-determined, agentic behaviors (Spreitzer et al., 2005), delivering high levels of task performance and service quality.

When experiencing meaningfulness, employees are likely to direct their attention and energy to their job and become more engaged (Barrick et al., 2013; Hackman & Oldham, 1980; Kahn, 1990; Roberson, 1990), even when they encounter setbacks (Davis et al., 1998). Furthermore, meaningful work encourages employees to stretch their effort (Mulki & Laskk, 2019), explore better ways of doing things, and advance their knowledge and skills (Amabile & Pratt, 2016). As a result, employees engaged in meaningful work will become more capable of fulfilling their role responsibilities, leading to enhanced task performance.

Employees deriving positive, intrinsic meaning from their job are better at building positive social relationships (Ragins & Dutton, 2007) and more likely to engage in meaningful interactions with others (Ward & King, 2017). According to Spreitzer and colleagues (2005), positive meaning enables employees to "heedfully relate with others" at work, understand how their work affects others, and become attentive to others' needs and expectations (p. 541). In our research context, nurses experiencing high meaningfulness are more likely to show willingness to focus on their patients' well-being and deliver their service with care, friendliness, and empathy, resulting in higher levels of service quality. Thus far, we have argued that professional respect and unit participative management influence work meaningfulness (H1 and H2), which, in turn, drives task performance and service quality. These hypotheses suggest that professional respect and unit participative management indirectly influence task performance and service quality via work meaningfulness. Thus, we propose:

H3: Work meaningfulness mediates the impact of professional respect on (a) task performance, and (b) service quality.

H4: Work meaningfulness mediates the impact of participative management on (a) task performance, and (b) service quality

2.4.1. The joint effect of professional respect and unit participative management

Building on a synergistic perspective (Deci & Ryan, 2000; Dysvik et al., 2013), we propose that the effects of professional respect and unit participative management on meaningfulness are stronger when they are both at high levels. SDT postulates that, when people experience satisfaction of the needs for relatedness and competence with respect to a behavior, they will tend to internalize its value and regulation, but the degree of satisfaction of the need for autonomy is what distinguishes the level of internalization. Satisfaction of the need for autonomy is hence necessary for the value and regulation to be more fully internalized so that the subsequent enactment of the behavior will be autonomous. Thus, social contexts that support choice and autonomy not only meet individual's needs for autonomy but also help facilitate the motivation activated by external factors to become more internalized (Deci & Ryan, 2000). Consistent with this thesis, research (Dysvik et al., 2013, study 2) has shown that individuals who feel competent at work experience higher levels of intrinsic motivation when job autonomy is high.

More specifically, when employees experience high levels of professional respect, they will feel confident with their professional capabilities and also connected to others at work. When participative management is high, the impact of professional respect on meaningfulness is stronger because such conditions allow employees experiencing professional respect to seize the opportunity and get involved in the decision-making process on issues that affect their work group as well as themselves. This in turn will help them fully internalize the positive meaning and value of their work as signaled by their coworkers, resulting in higher meaningfulness. On the other hand, if employees

experience high levels of professional respect but unit participative management is low, failing to support their autonomy needs, the lack of autonomy or excess external constraints will inhibit the internalization process, leading to a lower level of meaningfulness. In other words, the opportunity to internalize the positive meanings offered by professional respect becomes limited, not allowing employees experiencing professional respect to freely process and construct the endorsed value of their work and internalize it to become personally meaningful. We argue then that the effects of professional respect on work meaningfulness will become stronger as participative management increases, and so will the indirect effects of professional respect on performance outcomes (task performance and service quality) via work meaningfulness. In effect, we test a moderated mediation model (Edwards & Lambert, 2007) translated into the following hypotheses. Accordingly, we propose:

H5: Unit participative management moderates the relationship between professional respect and work meaningfulness such that the relationship is stronger when unit participative management is high rather than low.

H6: Unit participative management moderates the indirect effects of professional respect on (a) task performance, and (b) service quality via work meaningfulness such that the effects are stronger when unit participative management is high rather than low.

3. Method

3.1. Sample and procedure

Data for this study were obtained from twelve primary healthcare organizations across four major cities in Lithuania. These organizations are responsible for providing family medicine and primary care via their healthcare clinics (units). Participants were nurses and GPs who worked in dyads within the same healthcare unit to provide a healthcare service. Although these multiprofessional teams (nurses and GPs) reported to different managers, they worked in dyads within the same unit and toward a common goal—to ensure the delivery of high-quality and effective healthcare to their patients. We focused on GP–nurse dyads as they represented fundamental units of care in this medical system. We consider this sample to be representative as the same organizational structure and operating models are reflected across the country.

Nurses and GPs in the participating organizations received separate coded questionnaires, which were distributed during staff meetings by one of the coauthors and a research assistant. The cover letter to the questionnaire included the purpose of the research, the voluntary nature of participation, and the anonymity of participants' responses. The participants were asked to return the completed questionnaire in the self-seal envelope provided via a collection box. The nurses' questionnaire included measures of perceived professional respect (received from GPs), unit participative management (applied to nurses), work meaningfulness, service quality, and demographics. The GPs were asked to rate the task performance of the nurses in their dyad, with each GP rating only one nurse. It should be noted that, although the GPs did not act as the nurses' line managers (nurses and GPs report to different line managers), they led on clinical matters and worked closely with assisting nurses to ensure the delivery of high-quality and effective healthcare to their patients. As such, the GPs were aware of the performance duties and responsibilities of the nurses and were well enough informed to rate their nurse's job performance. Additionally, this approach is consistent with the movement toward matrix structures and team-based work which has prompted scholars to use peers to rate performance (Ete et al., 2022; Viswesvaran et al., 2002). Meanwhile, nurses were better placed to report upon their service quality given that GPs were often not present in those situations where nurses had an opportunity to demonstrate discretionary and personalized care (e.g., home visits, phone consultations, laboratory procedures). Prior research has used the same approach in similar healthcare contexts (e.g., Young et al., 2004). This approach also carries the methodological benefit of avoiding an inflated

correlation between the outcome variables due to common method variance.

Of the 374 nurses' and 407 GPs' questionnaires distributed, 318 nurses' and 336 GPs' questionnaires were received, representing a response rate of 85% and 83% for nurses and GPs, respectively. Owing to missing responses and a lack of information regarding some dyads, we were able to match 217 questionnaires from 27 units (representing a response rate of 58% and 53% for nurses and GPs, respectively), with the number of dyads per unit varying between three and 20 and an average of eight. The sample size, although relatively small at level 2, falls within the range of previous research (Mathieu et al., 2012). The participating nurses were all female, with an average age of 49.61 years (SD = 9.35) and an average organizational tenure of 21.58 years (SD = 10.30).

3.2. Measures

The questionnaire was developed in English and translated into Lithuanian following the procedures recommended by Brislin (1980). Unless otherwise indicated, response options ranged from 1 ("strongly disagree") to 7 ("strongly agree").

Task performance was captured using a six-item scale developed by Williams and Anderson (1991). A sample item is "This nurse adequately completes assigned duties." The scale's alpha reliability was 0.86.

Service quality was measured using an eight-item scale, with five items adapted from Hausman and Mader (2004) and three items from Bell et al. (2005). A sample item is "I take my patients' best interest to heart." The scale's alpha reliability was 0.95.

Unit participative management was captured using a three-item scale adapted from participation in decision-making by Arnold et al. (2000). A sample item is "Clinic management uses nurses' suggestions to make decisions that affect them." The scale's alpha reliability was 0.87. We examined whether the data justified aggregation of the unit-level constructs by calculating rwg(j) (James et al., 1984) and ICCs (Bliese, 2000). The resultant mean rwg(j) value was 0.65, indicating a moderate agreement among nurses (LeBreton & Senter, 2008). The ICC1 and ICC2 were 0.04 and 0.24, respectively, lower than ideal, which is likely attributable to the small unit sizes in this sample (Bliese, 2000). Taking into account the supportive rwg(j) value as well as the conceptualization of unit participative management, we decided to proceed with aggregation at the team level (Bliese, 2000).

Professional respect was measured using a three-item scale adapted from Liden and Maslyn (1998). Since the original scale was developed in a leader–follower context, and our sample GPs were not acting as the nurses' managers, we asked five nurses across clinics to reflect upon the content of items. They unanimously confirmed that the items described the interactions they had with their GPs, establishing the face validity of the measure. A sample item is "The GP respects my knowledge of and competence on the job." The scale's alpha reliability was 0.91.

Work meaningfulness was assessed using a three-item scale from Spreitzer (1995). A sample item is "My job activities in my clinic are personally meaningful to me." The scale's alpha reliability was 0.90. This approach to capturing meaningfulness mirrors that of reputed recent research (e.g., Vogel et al., 2020).

Controls. We controlled for individual perceptions of participative management and nurses' tenure with their clinic, as this has often been used as a proxy measure for individuals' expertise (Joshi & Knight, 2015).

3.3. Data analysis

Given the nested nature of the data, in which nurses (level 1) were nested within healthcare units (level 2), we used multilevel path analytical modeling with Mplus 7.4 (Muthén & Muthén, 2012) to account for the nonindependence of observations (Raudenbush & Bryk, 2002). This approach also allows for estimating multiple predictors and moderation effects simultaneously. We used calculated mean variables

and, in line with the existing literature (Aguinis et al., 2013), we group-mean-centered professional respect and individual perceived participative management at the individual level to eliminate the potential confounding effects residing at the group level. To test for the main effects (H1 and H2) and the mediation (H3a,b and H4a,b), we specified a multilevel path mediation model in which professional respect and unit participative management were related to work meaningfulness, and work meaningfulness to task performance and service quality. The controls were related to work meaningfulness, task performance, and service quality. To test for the hypothesized moderating (H5) and moderated mediation effects (H6a,b), we built an integrated model that encompassed the mediation model and the cross-level moderating effect of unit participative management on the relationship between professional respect and meaningfulness.

4. Results

4.1. Confirmatory factor analyses

To establish the discriminant validity of the constructs we tested a measurement model consisting of four latent variables: unit participative management, professional respect, work meaningfulness, and service quality (task performance was rated by GPs and thus not included). The values on the fit indexes indicated that the four-factor CFA model fit the data well ($\chi^2 = 300.49$, $df = 113$, CFI = 0.92, TLI = 0.90, RMSEA = 0.08, SRMR = 0.06). Furthermore, we compared the hypothesized four-factor measurement model with several parsimonious models. The model comparison showed that the hypothesized four-factor model had a significantly better fit than the three-factor Model A (combining unit participative management and professional respect) ($\Delta\chi^2/\Delta df = 553.37/3$), the three-factor Model B (combining professional respect and meaningfulness) ($\Delta\chi^2/\Delta df = 498.84/3$), the three-factor Model C (combining meaningfulness and service quality) ($\Delta\chi^2/\Delta df = 320.08/3$), and the one-factor model (combining all variables) ($\Delta\chi^2/\Delta df = 1052.09/6$). The composite reliability of all the variables rated by nurses exceeded 0.70, the minimum cut-off value, indicating an adequate level of convergent validity. The average variance extracted (AVE) was 0.70 for unit participative management, 0.79 for professional respect, 0.77 for work meaningfulness, and 0.49 for service quality. We then compared the AVE of each variable with its shared variance with all other variables (Farrell, 2010). The variance shared among two variables was always less than the variance in the items explained by each of these variables, indicating good discriminant validity (Fornell & Larcker, 1981).

4.2. Hypothesis tests

Table 1 shows the descriptive statistics and correlations of study variables at the individual level. The results of multilevel path analytical modeling for the mediation model are summarized in Table 2. As shown in the table, while professional respect was positively and significantly related to work meaningfulness ($B = 0.19$, $s.e. = 0.08$, $p < .05$), supporting H1, unit participative management was not ($B = 0.08$, $s.e. = 0.10$, $p > .05$), rejecting H2. Meanwhile, work meaningfulness was positively related to task performance ($B = 0.16$, $s.e. = 0.06$, $p < .05$) and

Table 1 Means, standard deviations, and correlations among all study variables.

	Mean	SD	1	2	3	4	5	6
1 Tenure	21.58	10.30						
2 Individual perceptions of participative management	4.14	1.56	-0.02	(0.87)				
3 Professional respect	5.42	1.13	0.01	0.17*	(0.93)			
4 Work meaningfulness	5.94	1.03	0.08	0.29**	0.29**	(0.90)		
5 Service quality	5.96	0.77	0.09	0.12	0.48**	0.53**	(0.86)	
6 Task performance	5.70	1.08	-0.05	0.11	0.30**	0.24**	0.20**	(0.86)

Note: N = 217; * $p < .05$, ** $p < .01$. Coefficient alphas appear in parentheses on the diagonal.

Table 2 Results of Multilevel Path Modeling for Mediation.

Variables	Work meaningfulness	Task performance	Service quality	
Level 1				
Tenure	0.01(0.01)	-0.01(0.01)	0.00 (0.00)	
Individual perceptions of participative management	0.19*** (0.05)	0.01(0.05)	-0.03 (0.04)	
Professional respect	0.19* (0.08)	0.18*** (0.05)	0.22*** (0.06)	
Work meaningfulness		0.16*(0.06)	0.35*** (0.08)	
Level 2				
Unit participative management	0.08(0.10)	0.04(0.08)	-0.05 (0.07)	
Total pseudo-R ²	0.13	0.11	0.38	
Δ pseudo-R ² for adding meaningfulness	0.03	0.16		
Results for indirect effect				
	Estimate	SE	LL95% CI	UL95% CI
Professional respect → work meaningfulness → task performance	0.03	0.02	0.001	0.078
Professional respect → work meaningfulness → service quality	0.07	0.04	0.006	0.160

Note: Unstandardized coefficients and their standard errors are reported. $N_{(employees)} = 217$; $N_{(unit)} = 27$; * $p < .05$; *** $p < .001$. LL = low limit; CI = confidence interval; UL = upper limit.

service quality ($B = 0.35$, $s.e. = 0.08$, $p < .01$). Additionally, the indirect effects of professional respect on task performance (estimate = 0.03, $s.e. = 0.02$, 95% CI [0.001, 0.078]) and service quality (estimate = 0.07, $s.e. = 0.04$, 95% CI [0.006, 0.160]) via work meaningfulness were positive and significant, supporting H3a and H3b. In contrast, given that unit participative management was not related to work meaningfulness, both H4a and H4b were rejected.

The results of multilevel path analytical modeling for the moderated mediation model are presented in Table 3. As shown in the table, the cross-level interaction term of unit participative management and professional respect significantly predicted work meaningfulness ($B = 0.20$, $s.e. = 0.09$, $p < .05$). The cross-level interaction term accounted for an increase of 9% variance in work meaningfulness above and beyond that accounted for by the controls, professional respect, and unit participative management. The simple slope tests showed that the relationship between professional respect and meaningfulness was positive when unit participative management was high (simple slope = 0.41, $s.e. = 0.12$, $p < .001$) but became nonsignificant when unit participative management was low (simple slope = 0.11, $s.e. = 0.09$, $p > .05$). These results, depicted in Fig. 2, support H5.

Finally, H6a and H6b predicted that unit participative management

Table 3
Results of Multilevel Path Modeling for Moderated Mediation.

Variables	Work meaningfulness	Task performance	Service quality
Level 1			
Tenure	0.01(0.01)	-0.01(0.01)	0.00(0.00)
Individual perceptions of participative management	0.20** (0.01)	0.01(0.05)	-0.02(0.03)
Professional respect	0.26*(0.07)	0.19***(0.04)	0.25***(0.05)
Work meaningfulness		0.14*(0.06)	0.33***(0.08)
Level 2			
Unit participative management	-0.10(0.08)	0.00(0.09)	-0.10(0.06)
Cross-level interaction			
Professional respect × Unit participative management	0.20*(0.09)		
Total pseudo-R ²	0.22	0.11	0.38
Δ pseudo-R ² for adding interaction term	0.09		

Note: Unstandardized coefficients and their standard errors are reported. N_(employees) = 217; N_(unit) = 27; **p* <.05; ***p* <.01; ****p* <.001.

moderates the indirect effects of professional respect on task performance and service quality via work meaningfulness. The results of the moderated mediation model showed that the interaction term of professional respect and unit participation on task performance and service quality via work meaningfulness were both positive and significant (B = 0.07, s.e. = 0.03, 95% CI [0.001, 0.129] for task performance and B = 0.15, s.e. = 0.06, 95% CI [0.028, 0.264] for service quality). Furthermore, simple slope tests revealed that the indirect effect of professional respect on task performance via work meaningfulness was positive and significant when unit participative management was high (estimate = 0.06, s.e. = 0.03, 95% CI [0.005, 0.111]) but became nonsignificant when unit participative management was low (estimate = -0.02, s.e. = 0.01, 95% CI [-0.046, 0.003]). Similarly, the indirect effect of professional respect on service quality via work meaningfulness was positive and significant when unit participative management was high (estimate = 0.13, s.e. = 0.05, 95% CI [0.022, 0.240]) but became nonsignificant when unit participative management was low (estimate = 0.03, s.e. = 0.03, 95% CI [-0.030, 0.098]). Taken together, these results support H6a and H6b.

4.3. Additional analysis

Although participative management was conceptualized and operationalized as a group-level construct, the ICC values do not fully support such conceptualization; thus, we also tested whether the results were consistent when participative management was modeled at the individual level. The results of the simple mediation model showed that participative management was related to meaningfulness (B = 0.19, s.e. = 0.05, t = 4.06, *p* <.001) and so was professional respect (B = 0.19, s.e. = 0.08, t = 2.30, *p* <.05). Participative management indirectly influenced task performance (estimate = 0.02, s.e. = 0.01, 95% CI [0.005, 0.061]) and service quality (estimate = 0.07, s.e. = 0.01, 95% CI [0.036, 0.096]) through meaningfulness. In parallel, professional respect also indirectly influenced task performance (estimate = 0.03, s.e. = 0.02, 95% CI [0.001, 0.078]) and service quality (estimate = 0.07, s.e. = 0.04, 95% CI [0.006, 0.168]) via meaningfulness. The results of the moderated mediation model showed that the interactive term of participative management and professional respect was significant (B = 0.09, s.e. = 0.03, t = 2.805, *p* <.01, 95% CI [0.028, 0.156]). Furthermore, the relationship between professional respect and meaningfulness was positive and significant (simple slope = 0.39, s.e. = 0.08, t = 4.74, *p* <.001) when participative management was high but became nonsignificant (simple slope = 0.10, s.e. = 0.07, t = 1.44, *p* >.05) when participative management was low. Overall, these results suggest that, regardless of whether participative management was analyzed as an individual- or team-level construct, it maximized the effects of professional respect on work meaningfulness, strengthening our confidence in this effect. Given its theoretical underpinnings and operationalization, we decided to proceed with our theorizing as a group-level factor.

5. Discussion

Drawing on SDT, we investigated how professional respect and unit participative management influence job performance via work meaningfulness. Based on a sample of nurses working in primary healthcare units in Lithuania, our findings revealed that professional respect, but not unit participative management, related to work meaningfulness, which in turn mediated the relationship between professional respect and performance outcomes. Furthermore, unit participative management moderated the effect of professional respect and work meaningfulness and the indirect effect of professional respect on job performance via work meaningfulness such that the effects were stronger when unit participative management was high rather than low.

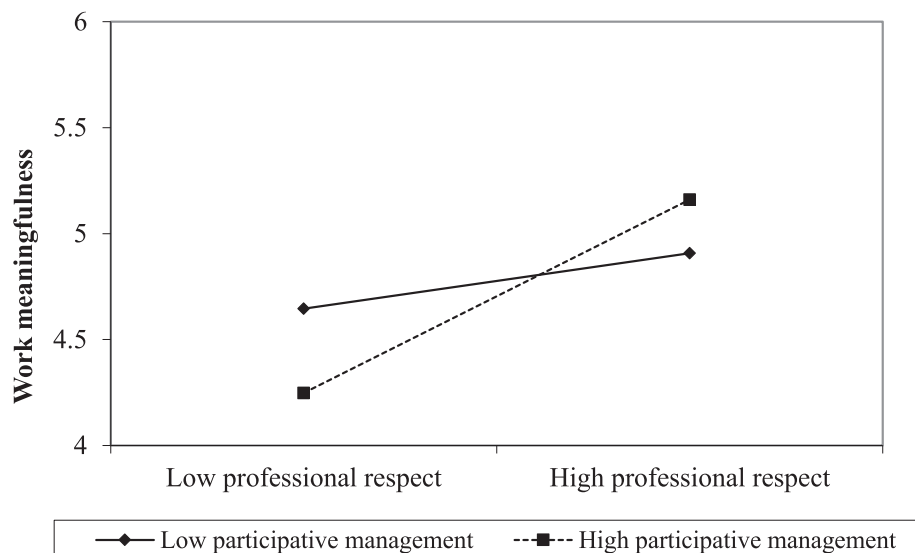


Fig. 2. Active effects of professional respect and unit participative management on work meaningfulness.

5.1. Theoretical implications

This study offers several theoretical implications. First, despite the literature suggesting that coworkers may be an important source for employees' experience of work meaningfulness (Robertson et al., 2020; Rosso et al., 2010; Wrzesniewski et al., 2003), empirical research has provided limited evidence. We hence respond to the research call to examine the role of social contexts in facilitating work meaningfulness (Lysova et al., 2019; Rosso et al., 2010) and show that employees who receive higher professional respect from coworkers are more likely to experience work meaningfulness, leading to enhanced performance. This is because professional respect conveyed by coworkers in their daily interactions supports employees' needs for competence and relatedness, helping employees see the intrinsic and positive meaning of their work, resulting in high levels of work meaningfulness. Thus, our study extends prior research by demonstrating the important role that coworkers play in employees' experience of work meaningfulness. Furthermore, consistent with prior research that investigates the relational environment in the healthcare contexts (e.g., Gittel et al., 2000; Gittel et al., 2008), our finding highlights that respect from coworkers, a central element in the relational environment, can make an important difference in nursing professionals' work meaningfulness and performance in such contexts.

Contrary to our hypothesis, unit participative management did not relate to work meaningfulness. This finding is at odds with Hon and Rensvold (2006), who reported that participation in goal-setting encouraged by supervisors was positively related to meaningfulness. This may underscore the differences between participation as a management practice and participation enacted by direct supervisors. Given the central role that supervisors play in employees' work life, especially in the Chinese context as in Hon and Rensvold's (2006) study, it is plausible that participation encouraged by supervisors may be more impactful than that offered by unit management. Although both can support employees' need for autonomy (Maynard et al., 2012), future research should investigate whether these two approaches are complementary or substitutable for each other in influencing work meaningfulness. Our result might also suggest that having opportunities to participate in decision-making could be more meaningful for some employees but not for others, as the literature suggests that employees may not always react positively to empowerment practices (Cheong et al., 2019). On the other hand, it is worthy of note that the results of additional analysis examining the effect of participative management operationalized as an individual-level construct showed that this variable did indeed have a positive effect on work meaningfulness. It might be that this is due to the stronger statistical power at the individual level, or that the impact of participative management as felt by each individual indeed is more predictive of their meaningfulness than that of the group. Future research should endeavor to investigate unit participative management further for its roles in promoting work meaningfulness at both levels of analysis.

In addition, an important implication can be drawn from the significant moderating effects of unit participative management. We found that the effects of professional respect on work meaningfulness and subsequent performance outcomes were stronger when unit participative management was high rather than low. Although SDT suggests that factors supporting needs for autonomy, competency, and relatedness can individually facilitate intrinsic motivation and positive meaning of work, scholars have proposed possible synergistic effects when two or three basic psychological needs are met simultaneously (Ryan & Deci, 2000). As Ryan and Deci (2000, p. 75) noted, individuals thrive when all of their psychological needs are satisfied: a social environment that satisfies some needs but not others "is expected to result in some impoverishment of well-being." Augmenting the earlier effort of Dysvik and colleagues (2013), who reported the synergistic effects of supporting both needs for competence and autonomy, our study provides further empirical evidence by demonstrating that work meaningfulness

is higher when work contexts support autonomy (as captured by high unit participative management) as well as competence and relatedness (as indicated by high professional respect). It is also important to note that the interaction effect was significant regardless of whether the participative management was operationalized as an individual or group construct, speaking to the relevance of this boundary condition.

Furthermore, our finding on the mediating effects of meaningfulness enriches an ongoing conversation concerning how and when organizations can influence employee job performance via work meaningfulness (Lysova et al., 2019). Prior research has tended to conceptualize work meaningfulness and test its mediating influences as one subdimension of employees' overall positive work experiences (Aryee & Chen, 2006; Liden, Wayne, & Sparrowe, 2000). Our finding that work meaningfulness mediates the relationship between professional respect and job performance confirms the utility of work meaningfulness as a crucial psychological experience that mediates the impact of work environment on employee outcomes (Barrick et al., 2013; Humphrey et al., 2007). Furthermore, our finding that the strength of the mediating effects of work meaningfulness is contingent on levels of participative management indicates that the mediating influences of meaningfulness are subjected to multiple rather than single influential factors in the work environment. Taken together, our findings suggest that future research should treat work meaningfulness as a useful construct on its own and develop a better understanding of when it is more or less likely to mediate the influences of work contexts on job performance.

Finally, our findings also contribute to the respect literature. Extant research has predominantly examined the impact of respect on employees' well-being and self-esteem because respect satisfied their social needs for status and needs for belonging (Huo et al., 2010; Rogers & Ashforth, 2017). We provide evidence for the positive effects of professional respect on related work-related outcomes such as meaningfulness, task performance, and service quality. Extending prior research that has documented the importance of respectful treatment from leaders (e.g., Decker & Van Quaquebeke, 2015; Van Quaquebeke & Eckloff, 2010) and organizations (e.g., Ng, 2016), our study highlights the impact of professional respect from coworkers. Respect given by coworkers is particularly crucial in work contexts such as, in our study, healthcare teams owing to the frequent interactions and interdependent nature of their work, turning these coworkers into the most salient and proximal senders of respect, whose respect carries more weight than that from other sources (Rogers & Ashforth, 2017).

5.2. Practical implications

Our findings suggest that HR and line managers should see professional respect as a crucial aspect of the work environment to promote work meaningfulness and job performance. In the context of our research, professional respect from GPs who work with nurses proves to be a powerful factor that drives nurses' work meaningfulness and performance. This means that organizations should endeavor to develop effective interventions (e.g., Leiter et al., 2011) to foster respectful behaviors in the workplace, especially among different professional groups such as medical doctors and nurses. For example, organizations and managers could aim to promote a culture of respect in the workplace. According to Carmeli and colleagues (2015), within such a culture, employees are more likely to experience respect among themselves because their colleagues express appreciation and respect for each other's contribution to the organization, recognize and understand each other's efforts, pay attention to each other's needs, and treat each other in a respectful rather than a demanding way.

Organizations should also practice participative management with a consideration of concurrent factors in the work environment. While participative management has the potential to foster meaningfulness, it is important to ensure that other enabling organizational factors are present so that employees can respond positively to this management approach. A social context that signals the value of one's work such as

professional respect can strengthen employees' confidence and motivation in taking up the opportunities offered by participation management. Therefore, when implementing participative management practices, organizations should at the same time create a supportive environment in which employees are treated as valued contributing members. Finally, our findings suggest that it is because of work meaningfulness that employees are more likely to be fully functioning in their work when they experience professional respect and have the opportunity to make contributions via participative management. As such, organizations should focus on crafting employees' work meaningfulness if they are to achieve multiple performance goals such as task efficiency and service quality.

5.3. Limitations and future directions

This study is not without limitations, which offer suggestions for future research. First, although we build our rationale for the relationships between professional respect and participative management, and work meaningfulness on SDT, assuming that our predictors support relatedness, competence, and autonomy needs, we did not directly test this assumption, as we did not measure need satisfaction. We do draw on previous empirical evidence to support these relationships, and not capturing need satisfaction when its role is assumed is not an unprecedented approach (e.g., Aryee et al., 2019). However, future research can provide a more comprehensive test of the theoretical rationale by capturing this variable.

Second, given the cross-sectional research design, the causal effects of the relationships discussed in this study cannot be clearly determined. For example, although literature suggests that work meaningfulness leads to performance (Hackman & Oldham, 1980; Kahn, 1990), high-performance employees may be more likely to be exposed to positive social cues from their peers and management regarding their contributions to the unit, resulting in enhanced meaningfulness. Future research should use a longitudinal design to ascertain the causal status of the relationships reported in this study. Relatedly, it would be interesting to adopt a dynamic approach to examine how professional respect and meaningfulness evolve and may mutually influence each other over time. Finally, adopting a diary study methodology (Ohly et al., 2010) would allow for exploring intra-individual variations in experienced meaningfulness over the course of the day as a consequence of demonstrations of professional respect.

Third, we relied on self-report data for the other variables. This causes concerns about the potential influence of common method variance (CMV) on the findings reported in this paper. The CFA results, however, revealed each study variable to be distinct, and the Fornell-Larcker (1981) test also showed good discriminant validity, alleviating such concerns. Furthermore, CMV cannot account for the similar result patterns for the two performance outcome variables rated by different sources, or the cross-level moderating effects on work meaningfulness (Lai et al., 2013). Nevertheless, future research should endeavor to obtain service quality data from other sources such as customers to further validate these results.

Fourth, the sample used in our study may limit the generalizability of our findings to other work contexts. The healthcare work environment is notorious for its well-entrenched status hierarchy and barriers between different professions (e.g., medical doctors vs. nurses) (Nembhard & Edmondson, 2006), with nurses' professional knowledge and skills often not being respected (Laschinger & Finegan, 2005). Given that respect is most salient where it is problematic (Miller, 2001), professional respect may have a greater impact on meaningfulness in such contexts as healthcare units. Future research should consider other contexts in which professional status differences and disrespect are less prominent.

6. Conclusion

In summary, by adopting SDT and testing a multilevel path model

that explains how professional respect and unit participative management, individually and jointly, relate to work meaningfulness and performance outcomes, we extend research that examines organizational factors that influence employees' work meaningfulness, leading to enhanced performance. Building on prior research, our research suggests that to promote performance via work meaningfulness, organizations should endeavor to promote social contexts that support relatedness and competence needs (i.e., professional respect), in addition to deploying participative management that support autonomy needs. Furthermore, this research reveals a novel source of meaningfulness, the respect received from relevant coworkers. Such insight should trigger further consideration of how experienced respect can compensate for or accentuate the effect of other organizational factors. Finally, our study should encourage future research to further explore how different types of interactions with coworkers, a relatively understudied factor in the work environment, influence employees' experience of meaningfulness at work.

CRedit authorship contribution statement

Qin Zhou: Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Conceptualization. **Claudia Sacramento:** Writing – review & editing, Writing – original draft, Conceptualization. **Ieva Martinaityte:** Writing – review & editing, Methodology, Formal analysis, Data curation, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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