

LINKING ORGANIZATIONAL CLIMATE TO WORK ENGAGEMENT: A STUDY IN THE HEALTHCARE SECTOR

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Abstract

Using a two-level structural equation approach, this paper investigates the links between organizational climate and work engagement in a sample of public hospitals in Italy. Drawing from the Job Demands-Resources model, the model posits a positive association between work engagement and a climate promoting worker's autonomy, empowerment and well-being, whereas it suggests that a climate based on efficiency and goal attainment is not favorable for engagement. Results support the hypotheses and suggest that performance based models implemented in recent years as part of public sector reforms are not conducive to engaged workers. Implications for research on work engagement in the public sector and for public management are drawn.

Keywords: healthcare, public sector, work engagement, organizational climate, human resources

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1. Introduction

In the last decade, the growing interest in the link people-performance in public administration has put the quality of the work environment and human resource management at the top of the research agenda (Lowe, 2012; West & Dawson, 2012). Organization members' happiness and well-being are at the core of Positive Organizational Behaviour, which explores the mechanisms through which organizational performance can flourish (Luthans, 2002). The adoption of a positive perspective has driven the attention to the linkages between workers' positive states (engagement, satisfaction, motivation, happiness, among others) and measures of organizational performance (growth, customer satisfaction and loyalty, productivity and so forth). From this perspective, the identification of the organizational drivers (e.g. culture, climate, relations with supervisors' and co-workers) that make employees thrive (Cameron & Caza, 2004) is extremely relevant.

One of the positive constructs that has received high consideration by academics and managers alike is work engagement (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002), a positive psychological state characterized by Vigor, Dedication and Absorption at work. Though work engagement might recall the constructs of involvement and commitment, it additionally entails enduring and pervading emotional-cognitive states (Schaufeli & Bakker, 2003), such as energy and mental resilience, strong involvement matched with feelings of significance, and great concentration and happy interest at work. Empirical research shows that engaged workers improve both their in-role and extra-role behaviour (Salanova, Lorente, Chambel, & Martinez, 2011). Further, work engagement enhances revenues (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009), the quality of governmental services (MacLeod & Clarke, 2011), safety outcomes (Nahrgang, Morgeson, & Hofmann, 2011), customer satisfaction (Salanova, Agut, & Peirò, 2005), and creativity (Michel, Wayne, & Liao, 2015).

The healthcare sector represents an interesting arena for the study of workers' engagement and its organizational antecedents, as hospitals are paradigmatic examples of high-contact services in which the interaction patient-medical personnel is at the heart of the delivery process. Because of the span and intensity of patients' encounter with nurses and physicians, it is likely that workers' engagement not only positively affects performance measures such as productivity or profitability, but also on patients' perceived quality and satisfaction (Goldstein, 2003). Consequently, it is of crucial interest for hospital management to understand how to activate and sustain high levels of employees' engagement, by identifying context specific drivers of engagement. In this direction, "job resources" have been identified as key drivers of work engagement in both the private and public sector (Bakker, 2015). The definition of job resources encompasses any job feature promoting individual progress and job competences, and meeting the employees' demand for self-determination and competence, as well as their need to feel part of the organization (Schaufeli & Bakker, 2004; Bakker & Demerouti, 2007). For illustration, job resources include the availability of information, leader's recognition, opportunities of training, professional growth, and shared decision making (Tuckey, Bakker, & Dollard, 2012). In contrast to job resources, "job demands" refer to characteristics of the job calling for continuous strain or ability, and entailing physical and mental exertion.

Organizational climate, intended as the shared perception of policies, procedures, and practices that are acceptable at work (Denison, 1996), has been recognised as one of the job resources that may support engagement. In particular, organizational climates that satisfy workers' need for advancement, self-fulfilment and job realization are expected to foster work engagement (Bakker & Demerouti, 2007). In spite of the posited link between a climate model that promotes workers' well-being, growth, and empowerment within the organization and work engagement, the empirical exploration of this relation is still a missing gap in the

literature. In fact, although the impact of *specific facets* of workplace climate that may support work engagement (social climate, innovative climate, supporting climate) have been documented (Bakker, Demerouti, & Verbeke, 2004; Hakanen, Bakker, & Schaufeli, 2006; Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Nahrgang et al., 2011), what is missing is the study of the relation between work engagement and a theory-grounded and well-validated model of climate oriented to human resource growth and empowerment.

In order to fill this gap, drawing from a well-known taxonomy of organizational climate models, the Competing Value Framework (CVF) (Patterson et al., 2005; Quinn & Rohrbaugh, 1983), this paper empirically investigates the links between work engagement and two models of organizational climate, namely the Human Relations (HR henceforth) and its polar opposite, the Rational Goals (RG henceforth). The former model emphasizes worker's empowerment, growth, and training and can be posited to engender higher worker engagement. The RG model contrasts with HR, as it focuses on productivity and goal-achievement. In this latter model, job demands are expected to predominate over the provision of job resources. Therefore, the RG model of climate is not expected to support employees' engagement.

The organizational context of the study is the Italian public hospital care. Given the diversity of procedures and protocols across hospital specialties, and in accordance with previous literature (Ancarani, Di Mauro, & Giammanco, 2011; Marinova, Ye, & Singh, 2008), this study measures the engagement of physicians and nurses by aggregating individual perceptions at ward level.

Results show that the HR model is positively related to work engagement, while the effect of RG is insignificant. These results are of interest from both a theoretical and an organizational perspective. Theory-wise, the paper contributes by furthering the understanding of the role of job resources in public sector organizations. In particular, it clarifies whether a climate

oriented to workers' growth and well-being can be considered a job resource within public organizations. From a managerial perspective, since climate is generally considered actionable and potentially steered by management, results highlight the role that hospital managers can play in fostering work engagement. In addition, while an RG model may be beneficial to public organizations in terms of improved efficiency and productivity in service provision, it may need to be complemented with other aspects promoting human resource motivation and growth.

An additional managerial implication stems from the analysis of the hospital ward as the locus of organizational climate. Heads of ward/specialty can leverage on climate to promote engagement at the work group level. This "communal" engagement might assist the creation of a mutual intention and cohesiveness, and involve team members in a sort of "group mind" that might be activated in order to pursue and achieve organizational objectives (Ashforth & Humphrey, 1995).

The paper is organised in five sections. Section 2 sets the theoretical background of the investigation: it explores the concept of work engagement, and discusses its organizational antecedents, giving emphasis to organizational climate as a source of job resources and job demands. Section 3 presents the organizational context at study and the hypotheses tested. Section 4 describes the sample characteristics, the measures employed to assess work engagements and organizational climate, and the Multilevel methodology adopted. The final section is devoted to the presentation of the results, the discussion, and the limitations of the study.

2. Theoretical background

2.1. Work Engagement

Schaufeli et al. (2002) define work engagement as a positive, rewarding psychological state that might recall the constructs of involvement and commitment, but which is additionally characterized by high activity and endurance, great concentration and happy interest at work. Work engagement is associated with feelings of significance, keenness, passion, motivation and gratification, and it indicates an enduring emotional-inspirational state, rather than a momentary and specific emotional condition (Bakker, 2015).

While Maslach and Leiter (1997) purported the idea of engagement as being the antipode of burnout, conversely, Schaufeli et al. (2002) assert that the worker who goes through low burnout must not be necessarily highly engaged, and vice versa. Therefore, they advocate the uniqueness and independence of the two constructs of burnout and engagement and, consequently, develop, and test a new scale, the Utrecht Work Engagement Scale (UWES), including three components: vigor, dedication and absorption at work (Schaufeli & Bakker, 2003; Schaufeli, Bakker, & Salanova, 2006). The UWES encompasses and unifies diverse positive psychological states relevant for human resource management: vigor entails dynamism, dedication recalls commitment, and absorption evokes involvement. However, work engagement is a broader construct including a holistic investment of the worker identity in the work-role, concerning her/his intellectual, affective, and physical sphere (Maslach, Schaufeli, & Leiter, 2001). Conversely, commitment is characterized by an emotive connection to the principles, practices and behavioural codes of the organization (Mowday, 1999), while involvement focuses on workers' mental effort to preserve their job identities (Rich, Lepine, & Crawford, 2010), and on facets of the job related to the satisfaction of the workers' personal needs (Christian, Garza, & Slaughter, 2011).

The work of Schaufeli and colleagues has stimulated a flourishing stream of literature pivoting around the work engagement construct. Its antecedents and consequences have been explored, showing that the organizational predictors of work engagement overshadow

individual factors and personal characteristics, because work engagement is contingent to the job experience (Bakker, Schaufeli, Leiter, & Taris, 2008).

2.2. *Organizational Antecedents of Work Engagement: the Role of Job Resources*

The theoretical and empirical support for the relation job resources - work engagement (Schauffeli & Bakker, 2004; Bakker, Demerouti, & Sanz-Vergel, 2014) is rooted in the JD-R model. JD-R argues that burnout and work engagement may be the response to two particular categories of job features that characterize each organization, namely, job demands and job resources. Job demands are tangible, psychological, social and organizational features of the job that involve permanent, physical and mental stress, and cause physical, cognitive and emotional effort (workload, difficult and mentally taxing work, tension and difficulties stemming from re-organizations). Job resources are job features that promote individual progress and increase job competence and - by offering decision space and facilitating cooperation - meet the employees' demand for self-determination and competence, as well as their need to feel part of the organization (Schauffeli & Bakker, 2004; Bakker & Demerouti, 2007).

Job resources stimulate positive organizational achievements either by fostering employees' personal development, competence and proficiency or by favouring the achievement of job tasks. When job resources contribute to employees' individual progress, they satisfy workers' quest for self-determination, significance, and adequacy, as suggested by self-determination theory (Ryan & Deci, 2000). When job resources are instrumental to the accomplishment of job tasks, their function can be interpreted in the perspective of the effort-recovery theory (Meijman & Mulder, 1998), according to which a workplace characterized by high resources promotes workers' motivation. Hence, peer and manager support, acknowledgement and advice concerning the job task, autonomy, and professional growth opportunities act as job

resources (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). In fact, constructive criticism and advice encourage discernment and enhance job capability, whereas autonomous decision and social support satisfy, respectively, the needs for autonomy and the need to belong.

The positive relationship between job resources and work engagement is supported by the empirical literature (Bakker, 2015; Crawford, LePine, & Rich 2010). Schaufeli and Bakker (2004) suggest a positive correlation among three job resources, namely, performance feedback, supportive work environment, supervisor's counseling, and all the dimensions of engagement. Koyuncu, Burke and Fiksenbaum (2006) show that autonomy, incentives and acknowledgement predict all the three dimensions of work engagement. Llorens, Bakker, Schaufeli, & Salanova (2006) illustrate that job resources (autonomy, peer support, and performance feedback) positively affect work engagement. Noesgaard and Hansen (2017) point that engagement is influenced by work features, such as support from others.

A causal effect of job resources on work engagement is also endorsed by some longitudinal studies that investigate job resources such as autonomy and organization-based self-esteem (Mauno, Kinnunen, & Ruokolainen, 2007), co-worker support, autonomy, performance feedback, and opportunity for personal growth (Schaufeli, Bakker, & Van Rhenen, 2009; Hakanen, Perhoniemi, & Toppinen-Tanner, 2008).

Meta-analyses by Halbesleben (2010) and Christian et al. (2011) confirm that job resources are the major antecedents of engagement, and that job demands are usually negatively linked to engagement. Nevertheless, as far as the effect of job demands on engagement is concerned, Bakker et al. (2014) stress the need for differentiating between job demands that are perceived by workers as hurdles and job demands considered as challenges. While the former are expected to unambiguously hinder work engagement, the latter (e.g., workload and work time pressure) may positively affect engagement, if coupled with adequate job resources (Bakker et al., 2007).

2.3. *Organizational Climate as Job Resource*

Organizational climate encompasses the collective view of what behaviours are considered acceptable and hence rewarded within an organization. It is the expression of embedded cultural aspects (principles, views, and convictions), and the manifestation of combined individual mind-sets and actions within an organization (Denison, 1996).

A tenet of the JD-R model is that an organizational climate that satisfies workers' need for advancement, self-fulfilment and job realization fosters work engagement (Bakker & Demerouti, 2007). In the JD-R framework, job resources may be not only valued as such, but also because they are instrumental for obtaining or protecting other valuable resources (Bakker et al., 2007). From this, it follows that an organizational climate based on worker's empowerment, welfare and professional growth opportunities may be considered as a sort of "second order" resource concerning the relational sphere, as it generates further resources, such as leader and co-worker support, exchange of information, and so forth.

In this light, the role of the leader as *climate builder* is paramount. As suggested by the Social Exchange Theory (SET) (Blau, 1964), on which JD-R largely builds, a leader who provides subordinates with specific valuable assets that potentially generate high-quality relationships, informs them of desired role behaviours and of the priority assigned to certain organizational behaviours. In this process, the leader contributes to generating a particular organizational climate (Stajkovic & Luthans, 1997). Outstanding leaders favour a climate enabling them to support subordinates to accomplish personal, group, and eventually organizational goals (Perryer & Jordan, 2005).

The extant literature has posited and provided empirical evidence that some domain-specific climates are linked with work engagement. For instance, a social climate (comfortable and relaxed workplace), an innovative climate (supporting continuous improvement) (Hakanen, Bakker, & Schaufeli, 2006), a supporting climate (encouraging and supporting new ideas) (Bakker et al., 2007), a “team” climate (Bakker et al., 2004), and a safety climate (Nahrgang et al., 2011) are positively related to work engagement, and therefore can ex post be rationalized as job resources. Although the above findings strengthen the idea that specific facets of climate may predict work engagement, this knowledge has developed unsystematically. This is partly due to the use of approaches for the measurement of climate that are not grounded in a well-established theory.

An influential contribution providing a taxonomy of organizational climate models is the Competing Values Framework (CVF), developed by Quinn and Rohrbaugh (1983). The CVF embodies diverse managerial theories and identifies competing values matching paradigmatic dilemmas within organizations. The first dilemma concerns the focus on internal environment and inner processes versus external environment and external stakeholders relationships (e.g. suppliers, customers). The second one relates to the pre-eminence of control, over resources and processes, versus flexibility. Four different organizational models stem from the intersection of the value dimensions external/internal focus with control/flexibility: Human Relations, Open Systems, Rational Goal and Internal Process. Each model, being rooted in a specific set of competing values, has a polar opposite model with diametrical emphases (Quinn & Rohrbaugh, 1983). The Human Resource model is the one that best fits the idea of job resource, as it bestows or protects resources that have been proved to lead to work engagement (Bakker et al. 2007). HR encompasses the values of flexibility and internal focus and uses cohesion and morale to achieve human resources development. Both its means (cohesion and moral) and ends (human resource development) can be considered resources

enhancing work engagement (Schaufeli & Bakker, 2004). The Rational Goal model represents the polar opposite of HR since it builds on external focus and control, and uses goal setting, planning, and performance evaluation as means to attain productivity and efficiency (Quinn & Rourbagh, 1983).

While HR bestows a specific set of organizational resources that are expected to be beneficial to engagement, the RG climate may or may not be conducive to work engagement. On the one hand, RG undeniably emphasizes job demands, which are generally negatively related with engagement (Halbesleben, 2010; Christian et al., 2011). On the other hand, it focuses on goal setting and performance evaluation that may be perceived as “challenging” demands and may therefore enhance engagement, if adequate job resources are simultaneously provided (Bakker et al. 2014).

3. The relation between climate and engagement in public hospitals

3.1. The organizational context: Italian public hospitals

The type of organization analyzed and the institutional pressures it is subject to affect the values, norms and behaviors considered acceptable within each workplace. This leads to question which organizational climate models are expected to apply to the organizational context under study, namely Italian public hospitals.

As part of the Italian National Health Service, public hospitals represent the main pillar of hospital care in Italy, providing about 75% of the inpatient care. Each public hospital is made up of Operating Units (OUs) or wards, mostly overlapping with specialties (e.g. Cardiology, Orthopedics). Each OU is endowed with fully integrated resident medical and nursing personnel who, once recruited, forms the permanent staff of the OU. The head of the OU is a

physician appointed by the hospital's manager for a period of five years. She/he has managerial responsibilities and enjoys discretionary powers on medical and nursing personnel, beds, and equipment (e.g., computerized axial tomography), and facilities (e.g., operating theatres) (Cabiedes & Guillen, 2001).

Wards provide diversified and specialized health assistance addressing a large variety of patients' needs. Since co-ordination is a crucial requisite of the healthcare delivery process, an essential part of the ward manager role is that of co-ordinating the subordinates' activities in order to fully achieve the ward goals and objectives. The ward manager, acting as a leader, is responsible for delivering organizational resources to the ward personnel. In this process, she/he informs the latter of the desired organizational behaviors and contributes to the development, at the ward level, of mutual ideas and assessments concerning "the way things work here", and to the promotion of a particular organizational climate, entailing specific policies, procedures, and practices.

These features lead to consider wards as loci of stable relations, thus supporting the hospital OU as the groundwork of organizational climate (Ancarani et al., 2011). Further, unlike other public services, hospital care hinges on teamwork delivered by highly professional personnel (Borrill, West, Carter, & Dawson, 2003; Shortell et al., 2001). The existence of strong professional cultures (Gifford, Zammuto, & Goodman, 2002; Hofstede, 1980) suggests that a "clan" HR model (Quinn & Rohrbaugh, 1983) may well represent the climate within wards.

At the same time, in the last twenty years, the Italian National Health Service has undergone a deep reform, aimed at improving quality and efficiency. Since the reform, Italian public hospitals must be run according to managerial criteria, and are required to break even. Further, the heads of ward annually bargain with the hospital general management over the targets to be achieved (Ancarani et al., 2011; 2017). The clinical and the financial performance of wards is subject to close scrutiny and periodic performance evaluation by

internal and external bodies. Hence, legislative reforms have pushed towards the development of an organizational climate that resembles RG, characterised by emphasis on goal setting, productivity, performance improvement, performance evaluation and feedback.

To summarise, HR and RG may plausibly be considered the most frequently encountered climate models within the Italian public hospital system. The former, because of the predominance of strong professional bureaucracies (physicians and nurses). The latter, because of the compelling incentive and performance appraisal mechanisms implemented in the Italian public health sector since the reform.

3.2. Hypotheses tested

In this section, drawing from the J-DR model, and from the engagement and climate literatures, two hypotheses are put forward. They concern the relation between work engagement and, respectively, the HR and the RG climate models. As argued in the preceding sections, the adoption of the ward as unit of analysis is justified by the highly specialised nature of hospitals' production processes and, in the Italian context, by the ample autonomy of the ward manager.

According to the CVF theory, HR and RG represent competing climate models. HR is focused on inner stakeholders' satisfaction and control, while RG on external stakeholders' satisfaction and flexibility in reaching organizational goals. Therefore, they reflect opposing means and ends and are likely to affect engagement in different directions. More central to the focus of the present research, HR and RG may be associated with different job resources and demands directed to the ward personnel. In particular, the constituent features of HR are worker's welfare and autonomy, relevance of training and personal growth, and worker's empowerment through participation in decision-making (Patterson et al., 2005). These may all be unambiguously interpreted as job resources (Shauffeli & Bakker, 2004; Bakker & Demerouti, 2007). Therefore, the following hypothesis is formulated:

H1: At the hospital ward level, the Human Resources climate is positively associated with work engagement.

The RG climate emphasises effort exertion, productivity and efficiency at work, quality, pressure to produce or deliver, goal setting, and performance based appraisal. Most of the above can be considered as job demands, as they require effort and in certain instances may give rise to strain and stress at work. In public organizations, the focus on efficiency may be an important source of strain. In fact, the quest for more efficiency is often the result of public sector reforms that lead to an increased amount of tasks perceived to be unproductive (e.g. reporting) (Farrell & Morris, 1999; Yaya, 2017), while paying insufficient attention to cultural change and staff issues (Coram & Burnes, 2001).

On the other hand, some of the job demands imposed by RG can be interpreted as “challenges”, because they are framed as targets to be achieved within a performance based organizational model (Bakker et al., 2014). According to Bakker and colleagues, these demands/challenges may promote engagement if they are coupled with adequate supporting job resources (Llorens et al., 2006).

Within the constituent dimensions of RG, the features interpretable as resources are clarity of goals and performance feedback. However, this may not be sufficient to back the efforts required by this climate model (Christian et al., 2011), especially if not backed by other supportive resources (e.g. financial). Therefore, the following hypothesis concerning RG is posited:

H2: At the hospital ward level, the Rational Goal climate is negatively associated with work engagement.

4. METHODOLOGY

4.1. Sample characteristics

Data for model estimation were collected through a cross-sectional study. A questionnaire previously agreed with the hospital management was directly administered to 494 personnel units (91 physicians and 403 nurses) in 29 wards belonging to three public hospitals in Italy. The three hospitals were chosen so as to represent organizations of different size, where size was defined according to the number of hospital beds (Table 1). The wards involved in the study were selected by the research team in collaboration with the hospital management, with the aim to build a sample representing a significant variety of specialties. Wards with fewer than five staff units, and wards with no managerial autonomy (denominated “simple operating units” in the public hospital sector nomenclature) were excluded from the study. The average response rate was around 60%. Ethical approval was granted through ad hoc agreements between the University of Catania and each of the three hospitals participating in the research project.

Table 1. Sample characteristics (3 Hospitals ; 29 wards; 494 respondents)

	Beds	Wards	Wards involved in the study	Respondents	Age (36-55 years)	Physicians
Hospital 1 (large size)	921	47	15	258	166	52
Hospital 2 (medium size)	367	20	10	204	132	35
Hospital 3 (small size)	139	12	4	32	20	4

4.2. **Measures**

Work Engagement

Work engagement was assessed through the 9-item UWES engagement scale (Shaufeli & Bakker, 2003) encompassing three sub-scales: Vigour (*At my work, I feel bursting with energy; At my job, I feel strong and vigorous; When I get up in the morning, I feel like going to work*); Dedication (*I am enthusiastic about my job; My job inspires me; I am proud of the work that I do*); Absorption (*I feel happy when I am working intensely; I am immersed in my work; I get carried away when I am working*). Following Shaufeli et al. (2006), the three sub-scales were graded on a 7-point Likert scale, and showed satisfactory internal consistency: Vigor ($\alpha=0.885$), Dedication ($\alpha=0.882$), and Absorption ($\alpha=0.841$).

Organizational Climate: HR and RG

Both HR and RG were made operational as second order constructs. Both the HR and RG scales assessed were drawn from the CVF as made operational by Patterson et al. (2005). The six HR scales used were: Autonomy; Integration with other wards; Involvement in decision-making; Supervisory support; Training; Welfare. The six RG scales used were: Clarity of organizational goals; Efficiency and productivity at work; Effort towards achieving goals; Pressure to produce; Performance feedback; Quality. For both climate models, the scales adopted in the study had previously been validated in the healthcare context by Ancarani et al. (2011). In order to avoid common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), which could arise if engagement and climate were assessed by the same respondents, and in analogy with other studies on culture/climate in healthcare (McFadden, Henagan, & Gowen III, 2009), climate inside each ward was assessed by the ward manager who was

asked to state on a 7 point Likert scale the relevance of the dimensions of HR ($\alpha=0.766$) and of RG ($\alpha=0.866$) in his/her U.O.

4.3. Multilevel SEM Methodology

The hypotheses of the study have been tested via a two-level structural equation analysis (Mathieu & Chen, 2011) (Fig.1). The rationale of the two-level approach lies in the fact that engagement is exhibited by physicians and nurses (first level units), who are nested into hospital wards (second level units). While engagement (the dependent variable) is an individual characteristic, climate is measured at the ward's level. The within-ward (or first level) model controls for the effects on engagement of personal characteristics, i.e. medical role (nurse = 1, physician = 0), and age (measured in years), whereas the between-ward (or second level) model estimates the effects on work engagement of the ward's climate models, HR and RG. The multi-level design estimates random intercepts, taking into account the unobservable heterogeneity across wards stemming from the correlations among the measures of engagement provided by the members of the same ward.

TAKE IN FIGURE 1 ABOUT HERE

5. Findings

5.1. Model results

Table 2 shows the results of the multilevel analysis and reports factor loadings for the three constructs. Goodness of fit indices are satisfactory (CFI=0.848; RMSEA=0.051). The within-ward analysis shows that the dichotomous variable for the medical role is positive and significant, signaling that nurses are more engaged than physicians are (coeff. = 0.194; st.dev.

= 0.097; $p < 0.05$). The age variable has a negative coefficient but is only weakly significant.

The between ward analysis shows that the HR ward climate is significantly and positively related to work engagement (coeff. = 0.657; st.dev. = 0.142; $p < 0.01$), therefore confirming hypothesis H1. Hypotheses H2 is not supported, as RG has an insignificant effect on work engagement.

Table 2 – SEM Model estimation

WITHIN WARD ANALYSIS			
PATH	ST. COEFF	ST.DEV	P
AGE → ENGAGEMENT	-0.244	0.138	0.077
MEDICAL ROLE → ENGAGEMENT	0.194	0.097	0.045
BETWEEN WARD ANALYSIS			
HR CLIMATE → ENGAGEMENT	0.657	0.142	0.000
MANAGER'S RG → ENGAGEMENT	0.191	0.153	0.211
FACTOR LOADINGS			
VIGOUR → ENGAGEMENT	0.974	0.034	0.000
DEDICATION → ENGAGEMENT	0.983	0.023	0.000
ABSORPTION → ENGAGEMENT	0.974	0.034	0.000
AUTONOMY → HR	0.580	0.069	0.000
INTEGRATION → HR	0.775	0.067	0.000
INVOLVEMENT → HR	0.716	0.073	0.000
SUPERV. SUPPORT → HR	0.467	0.097	0.000
TRAINING → HR	0.518	0.144	0.000
WELFARE → HR	0.580	0.069	0.000
CLARITY OF GOALS → RG	0.616	0.120	0.000
EFFICIENCY → RG	0.767	0.086	0.000
EFFORT → RG	0.733	0.138	0.000
PERF. FEEDBACK → RG	0.787	0.077	0.000
PRESS. PRODUCE → RG	0.759	0.145	0.000
QUALITY → RG	0.648	0.150	0.000

5.2. Discussion

This paper hypothesizes that work engagement is influenced by organizational climate, considered a resource in itself and instrumental for obtaining or protecting other valuable resources (Bakker et al., 2007). Unlike previous studies that have focused on specific facets

of workplace climate (Bakker et al., 2004; Hakanen et al., 2006; Bakker et al. 2007; Nahrgang et al., 2011), this contribution is the first to investigate the relation between two theory-grounded organizational climate models and work engagement within healthcare organizations. The two climates are grounded in the Competing Value Framework, and can be regarded as polar opposites, the Human Resource model focusing towards internal stakeholders and flexibility, and the Rational Goal model focusing on external stakeholders and on strict control. The relevance of these two climate models for public organizations lies in the fact that the HR model is the one that best fits the idea of job resources (Bakker et al. 2007), while RG emphasizes job demands, which are expected to be negatively related with engagement (Halbesleben, 2010; Christian et al., 2011) when they are not matched by offsetting resources.

As argued above, one can plausibly argue that HR and RG are the most frequently encountered climate models within the Italian public hospital system. In fact, strong professional bureaucracies such as nurses and physicians tend to generate a “clan” climate that is inward oriented to professional development. On the other hand, since the public healthcare reforms of the early nineties, Italian public hospitals have undergone a dramatic shift towards managerial models characterised by patient oriented goals and performance appraisal mechanisms. Since this process has often been carried out without counterbalancing the new demands with additional resources, it is likely that it may have not generated higher worker engagement.

The empirical analysis reveals that a climate oriented to human resource management enhances the work engagement of employees, while a climate oriented to efficiency and productivity is not significantly related to work engagement.

The positive relation between HR and engagement confirms that autonomy, integration, involvement in decision making, support and attention to workers’ welfare all contribute to

increase work engagement, since they are perceived as valuable resources that can motivate workers to go the extra mile.

The finding of an insignificant relation with engagement suggests that indeed the job resources offered by RG might be too scarce to address the high challenging job demands this climate model entails, and to ignite a positive interaction leading to engagement (Bakker et al., 2014). Therefore, the insignificant impact of RG may be tied to a resource-demand imbalance. In case of overload of demands, even when the accompanying reward system tied to RG models is working well, employees feel they get rewarded for “getting their work done” and not for “going the extra-mile”. Alternatively, rewards may lack credibility, thus diminishing the perceived resources provided to handle the additional demands posed.

To sum up, the comparison of results concerning HR and RG suggests that the paths to improve organizational performance are manifold. Notwithstanding public sector reforms usually focus on measures to improve efficiency and productivity through monitoring and performance based systems, our results suggest that managers should also focus on subordinates’ empowerment and participation, thus supporting work engagement and extra role behavior. In healthcare, engaged physicians and nurses may foster clinical and process quality, thus improving patient outcomes. In this perspective, ward managers should adapt their priorities when facing low levels of ward personnel’s engagement. This recommendation is consonant with Howard (1998)’s analysis suggesting that, in the hospital setting, the simultaneous enhancement of both efficiency and human relations is attainable. As purported by Gifford et al. (2002), a control-oriented management choice is likely to be highly demanding in terms of time, costs, and medical personnel strain. Hence, the managerial effort might be better directed toward the realization of a less autocratic organizational setting (Wijewardena, Samaratunge, & Härtel, 2014); this, in turn, would

increase employees' well-being at work. As suggested by O'Reilly (1989), organizational values directed to the development and the maintenance of high levels of intensity and dedication among personnel usually distinguish prosperous organizations.

Finally, the hypotheses tested build on the assumption that the locus of organizational climate within hospitals is the hospital ward due to the head of ward's high discretionary powers on personnel and resource management (Cabiedes & Guillen, 2001). This arrangement favors the creation of a climate at the unit level rather than at the hospital level (Callen, Braithwaite, & Westbrook, 2007; Gosling, Westbrook, & Braithwaite, 2003). In turn, this unit climate affects the subordinates' work engagement. In this light, results supplement the literature emphasizing the relevance of middle managers in the management of human resources in the public sector (Mostafa & Andrews, 2017; Op de Beeck & Wynen, 2017).

6. Limitations and Future Agenda

Several limitations of the present research must be acknowledged. First, while the study has thrown light on the linkages between two general organizational climate models and work engagement, lack of longitudinal data has prevented drawing unambiguous inference on the causality nexus. Second, as the focus on engagement stems from its expected impacts on organizational outcomes (Schaufeli & Bakker, 2004), the inclusion in the analysis of measures of such outcomes (e.g. patient satisfaction, lower readmission rates; lower mortality rates) could shed light on the climate-engagement-performance relations. Finally, cross-country investigations may help evaluating country-dependency due to diverse health care institutional backgrounds.

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