Organizational ethical climates and employee's trust in colleagues, the supervisor, and the organization

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ABSTRACT

Organizational ethical climate (OEC) is an important aspect of the organizational context that has generated a consolidated stream of research. However, the literature exploring its impact on organizational trust has three key limitations: scarcity, fragmentation, and under-theorization. In an attempt to address these limitations, we examine the effects of employees' perceptions of three types of OEC — benevolent, principled and egoistic — and organizational trust in different referents – colleagues, the supervisor, and the organization. We develop a set of baseline hypotheses on the effects of three types of OEC on trust in colleagues, in the supervisor, and in the organization. Drawing on Attribution Theory and Social Exchange Theory, we develop specific hypotheses on the relative strengths of those associations. The hypotheses are tested on a large-scale, probabilistic sample of 6000 employees in six EU countries. The paper concludes by discussing the findings, presenting their practical implications, and proposing avenues for future research.

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1. Introduction

Organizational ethical climate (OEC) reflects the shared perceptions held by employees regarding the organization's norms, policies, practices and procedures. According to the variety of these perceptions, Martin and Cullen (2006) distinguish among benevolent, principled, and egoistic ethical climates. Research efforts to understand the different outcomes associated with the three OECs have shown that OEC is associated with such desired organizational outcomes as job satisfaction (Wang, & Hsieh, 2012), organizational commitment (Erben, & Güneşer, 2008), and trust (DeConinck, 2011; Mulki, Jaramillo, & Locander, 2006). In an attempt to consolidate this substantial knowledge on the outcomes of OEC, several influential studies have recently pointed out a number of important theoretical gaps to be addressed by future research (Martin & Cullen, 2006; Mayer, Kuenzi, & Greenbaum, 2009; Simha & Cullen, 2012; Mayer, 2014).

In light of those studies, we highlight here the shortcomings of the extant literature on OECs' effects. Specifically, we focus on the effects of OECs on a key dimension of organizational life, that is, organizational trust. Indeed, even if organizational trust is increasingly recognized as an essential coordinating mechanism among colleagues, units, and

functions within organizations (e.g. Schoorman, Mayer, & Davis, 2007), and an important prerequisite for organizational success (Audi, 2008), the current evidence on its association with OEC has three basic shortcomings: the literature is scarce, fragmented, and (like other OEC-related studies) under-theorized. As evidence for its scarcity, the above-cited comprehensive reviews have identified only three articles that have studied organizational trust as a consequence of OECs (i.e., DeConinck, 2011; Mulki et al., 2006; Ruppel & Harrington, 2000). As evidence for its fragmentation, these studies are characterized by a focus on a specific type of OEC and on a specific trust referent. For instance, Ruppel and Harrington (2000) focus on egoistic and benevolent OECs as predictors of trust in the organization, while the studies of DeConinck (2011) and Mulki et al. (2006) show that benevolent OEC is associated with trust in supervisors. Such a narrow focus is a key limitation recognized by the recent research on trust, which today increasingly explores the effects of a single (trust) antecedent on trust in different referents (Fulmer & Gelfand, 2012, p. 1192). Moreover, the study by Ruppel and Harrington (2000) focused on IT managers, DeConinck (2011) studied salespersons, whereas Mulki et al. (2006) conducted their fieldwork among healthcare employees, which may constrain the impact of their findings to the specific occupational groups that they studied. The third shortcoming broadly attributed to OEC literature is that the consequences of ethical climates on various outcomes are often under-theorized. In this regard, Mayer, 2014 (p. 436) has recently argued that "there is little theory provided for why ethical climate should be associated with various outcomes".

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In order to address the three above-mentioned limitations (i.e., scarcity, fragmentation,, and under-theorization), we develop two sets of hypotheses. First, we develop a set of baseline hypotheses about the positive effects of benevolent and principled OECs, and negative effects of egoistic OEC on trust in colleagues, in the supervisor, and in the organization. Second, drawing on Attribution Theory (Weiner, 1986) and Social Exchange Theory (Cropanzano & Mitchell, 2005), we develop a set of specific hypotheses about the comparative effects that the three types of OEC (egoistic, benevolent, and principled) have on trust in three key referents, that is, colleagues, the supervisor, and the employing organization. We test the hypotheses on a large-scale and probabilistic sample – based on gender, age, area, industrial sector and occupation – of 6000 employees in six European countries. To this end, we have applied partial least squares (PLS) regression, which is a widely used structural equation modeling technique increasingly employed in management research (Carrión, Henseler, Ringle, & Roldán, 2016).

2. Theoretical background and hypothesis

2.1. The constructs under study: Organizational trust and organizational ethical climates

In this section we provide the basic definitions of first organizational trust and then organizational ethical climates in order to develop specific hypotheses on their relations.

Trust can be defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer, Davis, & Schoorman, 1995, p. 712). The individual level of analysis, which is the central interest of this study, denotes the degree of trust of an individual, which may differ among various referents (Fulmer & Gelfand, 2012). For example, an individual may trust his or her colleagues but distrust the supervisor at work. Accordingly, Vanhala, Puumalainen, and Blomqvist (2011) distinguished between lateral and vertical trust with respect to the hierarchical level to which the referents belong. In particular, lateral trust refers to trust relations among peers, whereas vertical trust refers to trust relations between employees and their supervisors and/or their organization as a whole (McCauley & Kuhnert, 1992). Previous literature has identified several individual-level antecedents of trust in the three referents. For example, voluntary help, as well as sympathy and cooperation (De Jong, Van der Vegt, & Molleman, 2007; Jap, Robertson, & Hamilton, 2011), have been found to be major factors stimulating trust in colleagues, whereas individualized support (Hernandez, 2008) and ethical leadership (Kalshoven, Den Hartog, & De Hoogh, 2011) have been identified as important predictors of trust in the supervisor. Trust in the organization, on the other hand, mirrors the employees' positive expectations about its capability and fairness (Vanhala et al., 2011). The above-cited line of inquiry suggests that a distinction among the different referents of trust is necessary. Accordingly, several recommendations have been made in the trust literature for simultaneous exploration and comparison of the diverse effects that the same antecedent exerts on trust in different referents (e.g. Fulmer & Gelfand, 2012).

The second construct under study in this paper is OEC, which reflects the shared perceptions held by employees regarding the organization's norms, policies, practices and procedures (Martin & Cullen, 2006). Therefore, an OEC determines "the shared perception of what is correct behavior and how ethical situations should be handled in an organization" (Victor & Cullen, 1988, p. 51). The seminal works by Victor and Cullen (1988), and later by Martin and Cullen (2006) suggest that a distinction can be drawn among benevolent, principled, and egoistic OEC. Indeed, an employee that perceives the organization as one that nurtures benevolent OEC behaves in a manner considered to be oriented towards common interest and well-being. As a result, the focal employee is likely to strive to maximize the utility of the social community in which she or he is embedded. On the other hand, organizations that nurture a principled OEC induce individual behaviors of compliance with the rules and norms of conduct that have been formally or informally established within the organization. Finally, employees in organizations from which an egoistic OEC stems, engage in behaviors driven by self-interest. Contrary to the employees that perceive a benevolent OEC, these are driven by instrumental considerations in terms of maximizing their utility. This threefold distinction has obtained wide acceptance in the academic literature, and several authors have called for the study of the simultaneous effects of the three types of OEC (e.g. Mayer, 2014).

2.2. Baseline hypotheses: The relations between organizational ethical climates and organizational trust

2.2.1. Benevolent OEC and organizational trust

In this type of climate, employees observe that their colleagues make decisions based on an overarching concern for the well-being of all organizational members (Bulutlar & Öz, 2009). As has been shown in previous studies (e.g. Jap et al., 2011), a benevolent OEC stimulates social exchanges based on mutual obligations, where the treatment received from colleagues is expected to be reciprocated with trust. Similarly, the employees are likely to trust the supervisor if they perceive that the latter keeps her or his promises and serves as an ethical role model (Treviño & Brown, 2004). When supervisors communicate the organization's ethical expectations, they provide the workers with a sense of shared values, which in turn, enhance their beliefs that the supervisor has moral values and acts fairly (Ruppel & Harrington, 2000). Indeed, it is evident from previous studies that supervisors' fairness and support is associated with trust from employees (Kalshoven et al., 2011). Therefore, a benevolent OEC may stimulate exchanges in which employees receive a sense of well-being, and in return, recompense their supervisor with trust. This implies that employees who receive economic and socio-emotional resources from their organization tend to respond by placing trust also in the organization. The employees that perceive a benevolent OEC may consider the organization itself as responsible for such a climate, and consequently place more trust in this impersonal referent (Elangovan & Shapiro, 1998; Tyler & Kramer, 1996). Following this logic, we hypothesize that:

H1. *A benevolent ethical climate is positively associated with trust in colleagues, trust in the supervisor, and trust in the organization.*

2.2.2. Principled OEC and organizational trust

When an organization is characterized by a principled OEC, employees' behavior is driven by concerns for the well-being of others; but in this instance, it is so primarily through the application and interpretation of rules and codes (Martin & Cullen, 2006). Since the employees observe that all organizational members respect those rules and codes, giving rise to a positive OEC, they regard their imminent peers as directly responsible for such a positive climate. Accordingly, a principled OEC stimulates exchanges where obeying to the organizational rules and codes is exchanged with trust. Employees operating under strict rules of conduct are likely to be confident that the rules and codes will be followed by everyone within the organization, including the superiors (Parboteeah et al., 2010). The supervisors, in fact, are direct transmitters of organizational rules and codes; consequently, they are directly liable for a positive OEC. When the organization adheres to professional codes and regulations, the supervisor must adhere to the same professional codes and regulations as well (Colquitt, LePine, Piccolo, Zapata, & Rich, 2012). Finally, in a principled OEC, the decision-making process is based on solid and verifiable rules of conduct. When an organization is based on specific codes, employees feel "protected" by their organization and tend to reciprocate with trust (Cullen,

Parboteeah, & Victor, 2003). Moreover, the employees in a principled OEC are more likely to perceive less conflict, find their work more meaningful, and display positive attitudes (Martin & Cullen, 2006). As a consequence, we hypothesize that:

H2. *A principled ethical climate is positively associated with trust in colleagues, trust in the supervisor, and trust in the organization.*

2.2.3. Egoistic OEC and organizational trust

Finally, within organizations characterized by an egoistic OEC, employees' behavior is driven by self-interest. In such a climate, the employees perceive the organization as an advocate of a decision-making process that arises from egoistic perspectives (Martin & Cullen, 2006). It is likely that the employees share a perception that such decisions may only serve one's self-interest or personal benefits, which undermines the conditions for healthy competition within the organization (Bulutlar & Öz, 2009). In such an ethical climate, it is difficult to create stable relationships between colleagues, which further constrains employees to place trust in their colleagues. Given the perceived virtues common for an egoistic OEC, social exchanges are seriously discouraged. In this type of climate, where each actor is primarily concerned with self-interest and self-benefit maximization, it is unlikely that the employees will tend to reciprocate with trust. Instead, the employees are more likely to feel more vulnerable and less willing to trust their supervisor (Strutton, Pelton, & Lumpkin, 1993). When the supervisor communicates egoistic ethical values, employees may think that the supervisor has unethical values, negative behaviors and is unfair (Ruppel & Harrington, 2000). As a result, the employees' trust in the supervisor is negatively associated with the perception of fairness (Aryee, Budhwar, & Chen, 2002). Furthermore, O'Reilly and Chatman (1986) observe that, in an egoistic OEC, one of the reasons why trust in supervisors is negatively affected by egoistic OEC may be the prevalence of self-interested behaviors and a lack of cooperation. The employees in organizations characterized by an egoistic OEC may perceive their work as meaningless. Consequently, the likelihood of identification with the organization and work commitment diminishes (Cullen et al., 2003). In a situation where the employees have scant identification with the employer organization, exchanges between the two parties are aggravated (Mulki et al., 2006). Accordingly, Elangovan and Shapiro (1998) suggest that an opportunistic betrayal of trust is an outcome of a rational calculation of self-interest in a particular situation. Therefore, we hypothesize that:

H3. *An egoistic ethical climate is negatively associated with trust in colleagues, trust in the supervisor and trust in the organization.*

2.3. The strength of the associations between OECs and trust in different referents: An attribution theory perspective

Attribution Theory (AT) suggests that employees make sense of behaviors and decisions observed during their work by attributing the causes of specific behaviors and decisions either to internal factors – responsibility linked to the actor actually behaving and/or taking a decision – or to external factors – responsibility linked to the social context or other actors not directly involved in the behaviors and/or decisions (Eberly, Holley, Johnson, & Mitchell, 2011; Tomlinson & Mayer, 2009; Weiner, 1986). Therefore, employees' attributions concern causal assessments, and they follow logical or quasi-scientific processes through which employees assign relative priority to potential causal actors, situations, or circumstances (Lord & Smith, 1983). Correspondingly, we draw on AT to develop hypotheses regarding the relative strengths of the associations between OECs and trust in different referents.

Consistently with the idea that trust in the organization is a function of management philosophies and experiences of reciprocity (Tyler & Kramer, 1996), we argue that employees regard organizations as most responsible for the perceived OEC. Following AT, employees attribute the behaviors of organizations mostly to internal factors, which mean that employees recognize that the choice of implementing a specific OEC is full responsibility of the organization. Having attributed the causes of particular OECs to internal factors related to the organization itself, employees then place trust in the organization. Indeed, since OEC by definition reflects the shared perceptions held by employees about the organization's norms, policies, and procedures (Martin & Cullen, 2006), the employees will reciprocate their perceptions about the underlying OEC with trust in the subject that can be most easily associated with these norms, policies, and procedures.

Following this line of reasoning, we expect the strength of the relationship between OECs and the referents of trust to diminish as the organizational hierarchy approaches lower levels. Since the employees are, to a certain extent, influenced by the behaviors and decisions taken by the organization and supervisors, the focal employee will attribute the behaviors and decisions of his or her colleagues mostly to external factors. Hence, the association between OECs and trust in colleagues is weaker than the association between OECs and trust in the organization.

As regards the supervisors' behaviors and decisions, we argue that employees attribute those behaviors and decisions to both internal factors (recognizing the discretion that a supervisor has) and external ones (recognizing that even a supervisor is exposed to pressures from the organization). Thus, in this case, we expect the association between OECs and trust in supervisors to be weaker than the one between OECs and trust in the organization, and stronger than the one between OECs and trust in colleagues. Accordingly, we propose the following hypothesis:

H4. *The association of each type of OECs is strongest with trust in the organization and weakest with trust in colleagues.*

2.4. The strength of the associations between the different types of OEC and organizational trust: A SET perspective

In an attempt to provide theoretical arguments on the specific relations between each type of OEC and organizational trust, we turn to social exchange theory (SET), which is the dominant theoretical framework for explaining the concept of trust within organizational contexts (Fulmer & Gelfand, 2012; Mayer, 2014). Basically, the SET proposes that human relationships are formed by the use of a subjective cost-benefit analysis where individuals attempt to maximize benefits and minimize costs (for a review, see Cropanzano & Mitchell, 2005). When individuals perceive that the social exchanges in which they are involved are not in equilibrium, trust decreases (Khazanchi & Masterson, 2011). In regard to SET within organizations, Saks (2006) discusses the relationship between an employee and the organization by arguing that obligations are generated through a series of interactions between parties in a state of reciprocal interdependence. Hence, the more the employees are committed to their work, the greater the amounts of cognitive, emotional, and physical resources that they will devote to performing their job duties. By contrast, when the organization fails to provide economic or socio-emotional resources, the employees are more likely to withdraw and disengage themselves from their roles.

In this context, we argue that each type of OEC induces certain behaviors and decisions to be taken by the organizational actors and which in their turn, affect employees' perceptions about the availability of economic or socio-emotional resources. For example, principled OEC fosters behaviors and decisions inspired by the organizational norms and rules, whereas benevolent OEC fosters behaviors and decisions inspired by the well-being of all organizational actors. The two climates, therefore, provide the employees with specific resources, which may be valued differently, according to the innate individual system of

values. As a result of individual differences in valuing the resources that stem from an OEC, there will be a variance of trust reciprocation.

Considering that trust is a volitional construct – that is, an employee attitude which cannot be formally required to employees but can be found in an organization only when employees *decide on* and *commit to* it (Mayer et al., 1995) – trust development within employees cannot be prescribed by any formal rule. Instead, it is fostered by employees' recognition of specific behaviors by trustees. A recent review of the literature (Fulmer & Gelfand, 2012) shows that trustees' characteristics predict the extent to which a trustor will place trust, relate to trustees' abilities (i.e., the extent to which a trustee has sufficient knowledge and skills to achieve goals and to interact properly with the trustor), benevolence (i.e., the extent to which a trustee performs actions that intentionally hurt the trustor), and integrity (i.e., the extent to which a trustee has sound moral and ethical values guiding actions) (Mayer et al., 1995). Accordingly, we expect principled ethical climate to be the type of OEC that presents the weakest association with organizational trust. In fact, it fosters in organizational actors (i.e. trustees) behaviors that are in line with the internal and external norms and procedures. Without neglecting that those types of behaviors have no values for employees, we argue that trust development is based on other types of trustees' decisions and behaviors, which are in line with the presence of a strong benevolent OEC and/or the absence of a strong egoistic OEC. As a result, we expect benevolent OEC to be reciprocated by higher levels of trust in comparison to the principled OEC. Finally, we expect that an egoistic OEC fosters behaviors and decisions that deprive the employees of economic and socio-emotional resources. We argue that such deprivation has negative effects on organizational trust which are stronger than the positive effects caused by the provision of the employees with the resources furnished by actors' behaviors and decisions fostered by the principled OEC. Therefore, we propose the following hypothesis:

H5. *The associations of benevolent OEC as well as egoistic OEC with trust in colleagues, the supervisor and the organization are stronger than the associations of principled OEC with trust in colleagues, the supervisor and the organization.*

3. Method

3.1. Empirical context

The analysis is conducted on a sample comprising 6000 employees in six EU countries (i.e. Italy, Germany, Poland, UK, Spain and France). The data collection was organized in partnership with a global company which, in the six above-mentioned countries, provides HR-related services. In collaboration with that company, we generated a probabilistic sample based upon gender, age, area, industrial sector and occupation. For each country, the company delivered questionnaires until 1000 observations in line with the probabilistic sample. The original instruments in English were translated into Italian, French, Polish, German and Spanish, and then back-translated into English.

3.2. Measures

3.2.1. Employee's perception of organizational ethical climate

Ethical Climate questionnaires (ECQs) have been used in many studies in which the OEC has been the principal variable (Parboteeah et al., 2010). Following previous studies in the field (e.g. Elci & Alpkan, 2009), in our study the employees were asked to rate the three dimensions of OEC on a 9-item index where the responses were rated on a six-point Likert-type scale ranging from 1 = "strongly disagree" to 6 = "strongly agree" (Parboteeah & Kapp, 2008).

The items measuring benevolent OEC had a Cronbach's alpha equal to 0.79; $\alpha = 0.80$ for principled OEC; and $\alpha = 0.67$ for egoistic OECs.

Consistently with Hair, Black, Babin, Anderson, and Tatham (2006), we considered a Cronbach's alpha higher than 0.60 to be a good indicator of internal reliability. With regard to the measure of egoistic OEC, we also observed that other studies had accepted the construct with a Cronbach's alpha slightly above 0.60 (e.g. Cullen et al., 2003).

3.2.2. Organizational trust

3.2.2.1. Trust in colleagues.
Trust in colleagues was assessed with the ten-item measures ($\alpha = 0.89$) developed by Gillespie (2003).

3.2.2.2. Trust in supervisor.
Trust in the supervisor was instead assessed with the five-item measures ($\alpha = 0.72$) developed by Mayer and Gavin (2005), an update of Mayer and Davis's (1999) measure.

3.2.2.3. Trust in the organization.
Trust in the organization was measured with the scale developed by Vanhala et al. (2011). Differently from the original scale, which was composed of three specific sub-factors measured by 31 items, our construct validity analysis led us to only one single factor including 27 items ($\alpha = 0.96$).

3.3. Data analysis

In order to analyse the research model and to study the relationships between different variables and the weight that each of them places on the others, we chose a structural equation modeling technique, the Partial Least Squares (PLS) (Wold, 1985). There were two main reasons for the decision. First, PLS does not require assumptions about multivariate normality (Fornell & Bookstein, 1982). Accordingly, we tested whether the indicators included in the model presented normal distributions, analysing the shapes of all distributions and assessing symmetry and kurtosis indicators through Kolmogorov-Smirnov and Shapiro-Wilk tests. The results led us to reject the hypothesis of normal distribution, and confirmed the appropriateness of using PLS. Second, all of the variables studied had multiple indicators, and since the primary aim of PLS – as opposed to more traditional co-variance structural equation modeling – is to maximize the variance explained in latent and endogenous variables, we valued the fact that PLS weights indicator loadings on constructs in the context of the theoretical model rather than in isolation (Hulland, 1999).

In our study, the relationships between latent and manifest variables were defined by using reflective measure specification. The analysis was conducted using the "Smart PLS 2.0" software package, and the algorithm for missing value imputation was the mean replacement, with a path weighting scheme. Results were similar as if the procedure of case-wise replacement was applied. To assess the indicator reliability, the loadings of all the PLS analysis reflective indicators were examined (Carrión et al., 2016).

3.3.1. Common methods variance

Our reliance on a self-report survey may generate concerns about Common Method Variance (CMV) in our analysis. Since self-report surveys are among the most frequent forms of data collection in organization, management and information systems research, there has been a great deal of debate, but limited consensus, on the extent of CMV associated with them (Crampton & Wagner, 1994; Malhotra, Kim, & Patil, 2006).

Drawing upon this premise, we followed state-of-art indications in past research suggesting the precautions that researchers can take to detect and address CMV (Spector, 2006). First, we followed Podsakoff, MacKenzie, Lee, and Podsakoff's (2003) indications and took procedural measures to prevent CMV. We then implemented the Harman's single factor test; the method yielded results that are consistent with the hypothesis of negligible CMV in the study. Finally, we implemented the Marker-Variable Technique, which has acquired consensus as an approach to the detection of CMV (Lindell & Whitney, 2001). In the

study we identified the item "Trust in European Institutions" as the marker variable, which theoretically does not have relationships with the other variables in the study. We calculated the correlation matrix between all the variables analysed, and we detected, as a proxy for CMV, the average value of $r_{M1} = 0.01$ (with benevolence as dependent variable), $r_{M2} = 0.01$ (with principle as dependent variable) and $r_{M3} = 0.03$ (with egoism as dependent variable). We also computed the CMV-adjusted correlations between the variables under investigation, r_A, by partialling out r_{Mi} (with $i = 1, ...3$) from the uncorrected correlations r_U.

In particular, with a sample size of n, r_A and its t-statistic can be calculated as follows:

$$r_A = \frac{r_U - r_{Mi}}{1 - r_{Mi}},$$

$$t_{\alpha/2, n-3} = \frac{r_A}{\sqrt{(1 - r_A^2)/(n - 3)}}$$

Using previous equations, investigators can examine the impact of CMV on the magnitude and significance of the correlations. In our case all the adjusted correlations were still significant; therefore the CMV did not significantly affect the results of the survey.

4. Results

Sets of exclusive proxy variables linked to the latent variables included in the model should possess a high level of reliability, that is, the "internal consistency" of the scale. Cronbach's alpha coefficient could be used for this measurement (see Table 1), obtained as an average of the correlations between every proxy variable pair. As Cronbach's alpha tends to provide a severe underestimation of the internal consistency reliability of latent variables in PLS path models, it is more appropriate to apply a different measure: the composite reliability ρ_c (Henseler, Ringle, & Sinkovics, 2009). The composite reliability takes into account that indicators have different loadings and may be interpreted in the same way as Cronbach's alpha: a value below 0.70 indicates a lack of reliability.

Required to establish convergent and discriminant validity in PLS is an appropriate AVE (Average Variance Extracted) analysis. The values of AVE indices, which are used to measure the percentage of variance explained by each factor and which are applied within each latent construct, must be greater than 0.50 to confirm convergent validity and the goodness of the model (Henseler et al., 2009). For discriminant validity the square root of the AVE and the correlations are compared.

In order to verify the hypotheses, we considered three models, in which the independent variables were *benevolent, principled* and *egoistic* OEC, while the dependent variables were *trust in colleagues, trust in the supervisor* and *trust in the organization*.

On examining the values of alpha and ρc, we concluded that, except for egoistic OEC, all the measures had a good "internal consistency". All the values of AVE indices were at least over 0.50; we thus confirmed convergent validity and the goodness of the model (Henseler et al., 2009). Discriminant validity was satisfied with the square root of the AVE of each construct larger than the correlation of the specific construct with any of the other constructs in the model.

Table 2
Path coefficients.

		Benevolent			Principled		
		Path	Path	P-values	Path	Path	Values
Trust in colleagues	Up to 1 vs others	0.43	0.35	0.08	0.45	0.37	0.05
	From 1 to 5 vs others	0.34	0.37	0.22	0.33	0.40	0.05
	Over 5 vs others	0.36	0.37	0.45	0.38	0.37	0.35
Trust in supervisor	Up to 1 vs others	0.41	0.44	0.30	0.38	0.39	0.37
	From 1 to 5 vs others	0.42	0.44	0.25	0.38	0.39	0.37
	Over 5 vs others	0.45	0.41	0.12	0.40	0.38	0.27
Trust in organization	Up to 1 vs others	0.66	0.70	0.05	0.60	0.64	0.19
	From 1 to 5 vs others	0.70	0.69	0.42	0.63	0.63	0.46
	Over 5 vs others	0.70	0.68	0.17	0.64	0.62	0.20

The path coefficients shown in Table 2 below represent standardized regression coefficients which connect latent variables and quantify the direct impact of each explanatory variable on the concepts with which it is linked by constrained causality. The evaluation conducted to obtain path coefficients, with their significance, as well as the R^2, allowed us to confirm or reject the previously formulated hypotheses (see Table 3).

The benevolent OEC was positively associated with all the referents of trust that were studied: that is, colleagues (0.36; $t = 21.62$; $R^2 = 0.13$), the supervisor (0.43; $t = 26.01$; $R^2 = 0.19$) and the organization (0.70; $t = 60.24$; $R^2 = 0.48$). Thus HP1 was fully supported. HP2 was also supported because the results suggest that principled OEC, similarly to benevolent OEC, is positively associated with trust in colleagues (0.38; $t = 20.75$; $R^2 = 0.14$), trust in the supervisor (0.39; $t = 21.92$; $R^2 = 0.15$), and trust in the organization (0.63; $t = 45.63$; $R^2 = 0.40$). Finally, employees' perceptions of an OEC as egoistic did not have significant negative effects on trust in the three referents, hence HP3 was not supported.

With respect to the HP4, the results show that the strongest associations are between the benevolent and principled OECs and trust in the organization, followed by trust in the supervisor, and trust in colleagues. Indeed, for every unit change in the shared perceptions of the employees about the benevolent OEC, trust in colleagues, and trust in the supervisor respectively increased by 0.36 and 0.43 measurement units, whereas trust in the organization increased by 0.70. Similarly, for every unit increase in principled OEC, trust in colleagues and trust in the supervisor respectively increased by 0.38 and 0.39 measurement units, whereas trust in organization increased by 0.63. Thus, the results partially support HP4.

Finally, with respect to HP5, the results show that trust in the organization and trust in the supervisor are more strongly associated with benevolent OEC than with principled OEC, as predicted; at the same time, differently from what was predicted, trust in colleagues is more strongly associated with principled OEC than with benevolent OEC. Because egoistic OEC is not associated with any outcome, the predictions on this type of OEC are not supported. Overall, the results only partially support HP5.

Table 1
The measurement model including the reliabilities (alpha, ρ_c), AVE, and correlations between the latent variables.

Variables	α	ρ_c	AVE	Model 1 (benevolent)			Model 2 (principled)			Model 3 (egoistic)		
				1	4	5	2	4	5	3	4	5
1. Benevolent	0.79	0.90	0.82	1								
2. Principled	0.80	0.97	0.62				1					
3. Egoistic	0.67	0.81	0.59							1		
4. Trust in colleagues	0.89	0.91	0.50	0.36			0.38			0.16		
5. Trust in supervisor	0.72	0.84	0.64	0.43	0.48		0.39	0.50		0.18	0.47	
6. Trust in organization	0.96	0.97	0.51	0.70	0.46	0.53	0.63	0.46	0.52	0.20	0.44	0.53

Table 3
PLS estimates.

	R^2	β	t-Statistic
Benevolent → trust in colleagues	0.130	0.361	21.62
Benevolent → trust in supervisor	0.186	0.432	26.005
Benevolent → trust in organization	0.483	0.695	60.244
Principled → trust in colleagues	0.142	0.377	20.746
Principled → trust in supervisor	0.152	0.390	21.916
Principled → trust in organization	0.398	0.631	45.627
Egoistic → trust in colleagues	0.027	0.163	8.846
Egoistic → trust in supervisor	0.033	0.181	9.162
Egoistic → trust in organization	0.040	0.201	9.218

In order to analyse the 'Goodness-of-Fit' (GoF) of the models concerned, we drew on the well-established index suggested by Tenenhaus, Amato, and Vinzi (2004). In the proposed Model 1, GoF is equal to 0.33; while in Model 2 GoF is equal to 0.30. According to the classification of Wetzels, Odekerken-Schröder, and Van Oppen (2009), this GoF value is good (small = 0.10; medium = 0.25; large = 0.36). All the previous R^2 and the GoF values are then acceptable.

5. Discussion

In the following three paragraphs, we discuss and highlight the implications of our findings on (i) the baseline predictions on the OECs – trust relations (HPs 1–3), (ii) the AT-informed predictions on the effects of OECs on trust in different references (HP4), and (iii) the SET-informed predictions on the effects on each type of OEC on organizational trust (HP5).

In regard to the OECs-trust relations, we found support for our baseline hypotheses (i.e., H1 and H2) regarding the positive effects of employees' perception of benevolent and principled OECs. The results did not support HP3 on the negative effects of employees' perception of an egoistic ethical climate. In this regard, past studies have reported two contrasting results: (i) the perceived egoistic climate is not likely to occur concurrently with perceived benevolent and principled OECs in an organization (Bulutlar & Öz, 2009; Parboteeah et al., 2010); (ii) employees' perceptions of egoistic, principled and benevolent OECs can co-exist in the same organization (Victor & Cullen, 1988). Our results support the idea that perceived egoistic OEC does not stand in stark contrast to perceived principled and benevolent OECs. Indeed, the findings of this paper suggest that the perception of egoistic OEC does not imply a decrease of trust in any of the referents considered. When organizational actors pursue their self-interest, employees do not necessarily perceive themselves as provided with fewer resources, which could then result in less interest in reciprocating with trust. On the contrary, the resources perceived by employees seem not to depend on the establishment of an egoistic climate. It is indeed likely that even in a more egoistic climate, employees may perceive the organizational environment as resourceful.

A second consideration stems from the findings on the relative impact of OECs on trust in the three referents considered. In our HP4 we predicted that the association of all types of OECs is the strongest with trust in the organization, and weakest with trust in colleagues. We have partially supported this prediction because our findings suggest that egoistic OEC is not related to any of the referents concerned. This gives credit to our AT-based perspective because our findings suggest that employees attribute (and, consistently reciprocate with trust) the causes of the organization's behaviors and decisions mostly to internal factors, the causes of colleagues' behaviors and decisions mostly to external factors, and the causes of the supervisors' behaviors and decisions to both internal and external factors.

Finally, our results on the specific impacts of the three types of OECs and trust in colleagues, supervisors and the organization partially confirm our HP5. The results support our predictions that the perceived benevolent ethical climate, rather than the principled ethical climate, has stronger impact on trust in the supervisor and trust in the organization. Instead, our results do not fully support the prediction that the perceived principled ethical climate, rather than the benevolent ethical climate, has stronger impact on trust in colleagues. To interpret these findings, we revise our SET-informed arguments. We argued that benevolent OEC fosters in *all* organizational actors (i.e. colleagues, supervisors and the organization) behaviors and decisions that provide employees with resources which are more valuable than the resources provided by behaviors and decisions fostered by principled OEC. On the other hand, our findings show that the value attributed by employees to those resources depends on the organizational actor considered. Specifically, in the horizontal relations with their colleagues, employees attribute more value to (and reciprocate with trust) behaviors and decisions informed by the principled OEC. However, in the vertical relations with their supervisors and employing organization, employees attribute more value to (and reciprocate with trust) behaviors and decisions informed by the benevolent OEC. We interpret this result in light of the key features of those two types of relations. In the horizontal relations with colleagues, where the levels of power of an employee and his/her colleagues are likely to be comparable (Astley & Sachdeva, 1984), and the relations may be characterized by some degree of competition (Birkinshaw, 2001), employees will assign greater value to principle-oriented behaviors because they "guarantee" that colleagues respect norms, rules, and procedures. Diversely, in the vertical relations with supervisors and the organization – which are actors typically more powerful than the employee (Astley & Sachdeva, 1984) and where the relation with the employee is not usually competitive (Birkinshaw, 2001) – employees value more benevolent-oriented behaviors because they "guarantee" that those actors do not abuse their power and that they make decisions considering employees well-being.

6. Managerial implications

With respect to our findings related to the baseline hypotheses, we make two straightforward recommendations on how practicing managers interested in developing organizational trust should prioritize organizational interventions. First, managers should focus on promoting policies and practices that encourage the development of benevolent and principled OECs, which are positively associated with organizational trust. Second, managers should not focus on the reduction of egoistic OEC, since our findings suggest that such a climate is not associated with trust in any organizational referent.

The theory and findings presented in this paper further suggest that the strength of the relationship between benevolent and principled OECs differs across the levels of formal organizational hierarchy, captured in our paper by the three referents of trust (i.e. HP4). In practice, these findings have value because they support managers in developing realistic expectations about the trust-related effects of their interventions on benevolent and principled OECs. Our findings imply that the policies and practices intended towards promoting benevolent and principled OECs will have decreasing strength as the lower hierarchical levels are approached.

Finally, with respect to the hypothesized relationships in HP5, our findings have practical interest because they provide the managers with evidence-based recommendations on their OEC-based interventions aimed at developing organizational trust. Specifically, our findings suggest that managers interested in developing trust in the organization and in supervisors need to prioritize organizational interventions targeting benevolent OEC. Managers interested in developing trust in colleagues should prioritize organizational interventions targeting principled OEC.

7. Limitations and future research

We highlight three basic limitations that open avenues for future research. First, our study provides a cross-sectional analysis which does

not allow full inferences to be drawn on the direction of causality. We therefore believe that future research could improve these inferences through longitudinal analysis and multiple-method research designs. Second, we did not include control variables in the measurement model. While we believe that this omission did not alter the main results of our study, we consider that testing the impacts of those individual and organizational-level variables on the phenomena under study may be an important direction for future multi-level research on the topic. Third, generalization of the results should be carefully considered. Besides employees' perceptions, institutional settings and national cultures may have affected our results. Considering the available evidence on the impact that environmental factors have on employees' perceptions of OECs (e.g. Deshpande, George, & Joseph, 2000; Lin, 2011), and the more general need for studies on OEC which consider its embeddedness in the cultural and institutional context (Dixton, Kwantes, & Magomaeva, 2014), comparative analyses of these scenarios might engender further theoretical advances in trust-and OEC-related research.

Besides overcoming the limitations of the present study, future research might enrich the knowledge that stems from the results of our study in several ways. Most notably, we believe that future research can explore the mechanisms that mediate between perceived OEC and trust in order to explain the causation better, and also to identify possible differences between employees' perceptions of, and dynamics with, supervisors and co-workers. In particular, future research might explore whether specific dimensions of referents' trustworthiness mediate the OEC–trust relations. Moreover, employees' work is increasingly interconnected with supervisors and co-workers. Hence, it might be important for future research to move beyond the perspective of a single employee and investigate also the trust aggregately emanating from teams (or workgroups) and from units/departments (Fulmer & Gelfand, 2012).

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