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## **The Influence of Organizational Democracy on Employees' Socio-moral Climate and Prosocial Behavioral Orientations**

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### Summary

This study investigates the effects of workers' perceived participation in democratic decision-making on their prosocial behavioral orientations, democratic values, commitment to the firm, and perceptions of socio-moral climate. The sample consists of 325 German-speaking employees from 22 companies in Austria, North Italy, and Southern Germany that vary in their level of organizational democracy (social partnership enterprises, workers' co-operatives, democratic reform enterprises, and employee-owned self-governed firms). The findings suggest that the extent employees participate in democratic forms of organizational decision-making is positively related to the firm's socio-moral climate as well as to their own organizational commitment and prosocial and community-related behavioral orientations. The results also indicate that socio-moral climate is positively related to employees' organizational commitment. The effect of participation in decision-making on organizational commitment is partially mediated by socio-moral climate. Implications for promoting societal and organizational civic virtues among individuals are described.

**Keywords:** Participation, organizational democracy, organizational climate, organizational citizenship behavior, value orientations

## **The Influence of Organizational Democracy on Employees' Socio-moral Climate and Prosocial Behavioral Orientations**

The term *organizational democracy* (earlier synonym: industrial democracy) refers to forms of structurally supported workers' substantive participation, including direct or representative joint consultation, co-determination, and self-determination (see, also in the following, Heller, Pusic, Strauss, & Wilpert, 1998; IDE International Research Group, 1981; Vilmar & Weber, 2004; Weber, 1999). More specifically, organizational democracy refers to on-going, broad-based, and institutionalized employee participation that is not ad hoc or occasional in nature. Political scientists posit that such democratic practices may contribute to public participation in the wider democratic political process (Foley & Polanyi, 2006; Pateman, 1970). In some European countries, in particular, the presumed relationship between workplace democracy and civic participation is a cornerstone of public policy where organizational democracy is conceptualized as "democratic deliberation and participation" (Austrian Federal Ministry for Education, Science, and Culture, 2002; Finish Ministry of Labour, n.d.). Nevertheless, little research exists on *substantive* democratic structures, where employees exercise influence over critical decision-making in contemporary firms. In consequence, little is actually known about whether and how organizational democracy influences the behavior and value orientations of employees, and whether this may indeed contribute to the development of engaged citizens. Thus, our main objective is to investigate whether organizational democracy influences the development of behavioral orientations consistent with being socially responsible citizens. Specifically, the present study investigates the relationships between the extent of democratic organizational participation experienced by the individual worker, socio-moral climate, employee commitment, and readiness to act towards the broader good of the organization and its member community.

The present study makes a significant contribution by overcoming impediments in past research. First, it examines a broad array of firms with democratic practices ranging from limited to substantive. Second, it includes firms from a variety of industries. Third, it examines employees' direct reports of participation and organizational climate. Lastly, it includes employee-owned enterprises, overcoming the widespread neglect in organizational participation studies of employee-owned democratically managed enterprises concerning prosocial and democratic behavioral orientations, especially.

The present study taps the full range of democratic practices from limited to substantive organizational democracy as perceived by the employees. A large body of reviews conducted by researchers in North America and Europe (Heller, 1998; Pasmore &

Fagans, 1992; Rousseau and Shperling, 2003; Strauss, 1998 and 2006; Vilmar & Weber, 2004; Wegge, 2004) confirms that researchers are more likely to examine isolated and occasional forms of participation rather than substantively democratic, self-governed enterprises owned by the employees. Thus the present study is more likely to be generalizable across firms than previous research on employee participation.

### Theoretical Framework

Democratic organizational practices have long been thought to promote the development of a socio-moral climate at work which, in turn, is expected to heighten employee community-orientations and willingness to contribute to the public good (Hoff, Lempert, & Lappe, 1991; Kohlberg, Levine, & Hewer, 1984; Lind & Althof, 1992; Power, Higgins, & Kohlberg, 1989). Despite the lack of research on the impact of high levels of organizational democracy on individual behaviors and value orientations, research on other complex organizational practices suggests that a bundle of co-occurring social processes may be crucial for creating and sustaining the complex behaviors characteristic of participation in democratic societies (e.g., MacDuffie, 1995; Strauss, 1998, 2006). Our research builds on organizational studies in related areas to build and test theory regarding how behavioral orientations arise relevant to democratic participation (Figure 1). Our framework's core premise is that worker experiences of direct involvement in substantive organizational decision-making (participation in *organizational democracy*) foster the perception of a socio-moral climate, prosocial and community-related orientations, and organizational commitment.

Insert Figure 1 about here

*Socio-moral climate* relates to specific elements of organizational climate: its organizational and leadership principles and mechanisms of communication, cooperation, and conflict resolution (see Kohlberg, Wasserman, & Richardson, [1978] and Power et al. [1989] who named this construct 'moral atmosphere'). Socio-moral climate is assumed to have an impact on the (further) development of moral standards and moral competencies among employees. The conditions important for the formation of socio-moral climate differ depending on the nature of the organization and its mission. In the case of schools, for example, Kohlberg and his colleagues (1978) postulated that a 'just community' consists of: (1) Opportunity to discuss ethical issues and respectful consideration of other viewpoints; (2) Participation in rule establishment; and (3) Perception of existing rules as fair. Lempert (1993) extended the concept of socio-moral climate to an industrial context, and concluded

that such settings would entail five components: (1) Involvement of workers in social problems and conflicts of interests, rules, norms, and values; (2) Reliable appreciation, care, and support from colleagues and supervisors; (3) Open and free communication, particularly on the legitimacy of the company's norms, values and principles; (4) Participative cooperation in decision-making, especially referring to the company's norms, values, and principles, and (5) Trust-based assignment and allocation of responsibility for the well-being of others within and outside the company corresponding to the employees' abilities.

We adopt this framework of socio-moral climate in the current study. Noting, however, since Hoff and his colleagues (1991) had difficulties separating the third and the fourth features empirically, these form a single indicator here. We postulate that over time a supportive, involved, and participative socio-moral climate promotes social and moral competencies (in accordance with Lind, 2002; Lind & Althof, 1992; Power et al., 1989) via organizational socialization processes.

Firms where direct democratic participation exists are expected to provide forums where employees can discuss and decide on matters relevant to their everyday current and future work life. Such settings provide opportunities to discuss and debate shared problems and to prepare decisions requiring moral judgments on a high level (e.g. reduction in working hours or personnel layoffs in times of economic crises). With increasing scope (from operational to strategic matters) and workers' participation (from merely being informed to collective decision-making), members are expected to experience a pronounced socio-moral climate. This leads to Hypothesis 1.

*Hypothesis 1:* Individual reports of participation in democratic decision-making are positively related to socio-moral climate experienced by the workers.

Both procedural and interpersonal justice overlap the concept of socio-moral climate to some extent. Interpersonal justice (Bies & Moag, 1986), the quality of interpersonal treatment employees receive in the enactment of organizational procedures, includes treating others with dignity and respect, honesty, courteous treatment, and respect for one's civic and employee's rights. There are, however, two conceptual differences between socio-moral climate and justice. First, these justice concepts focus on what are construed to be stable and wide-spread managerial behaviors and recurring practices directed toward workers. This suggests an invariability across organization members in how they are treated vis a vis principles of justice. In contrast, the construct of socio-moral climate – according to

Kohlberg's (1984) and Habermas' (1995) concept of principled moral discourse – refers to organizational principles, rules, and values that are *negotiable, changeable, and full of conflicts*. As such, their variability implies the active participation of employees in the implementation of such practices. Based upon universal principles (human dignity and justice), individual participation in the exercise of justice principles in organizations is an important resource for individual moral development (Hoff et al., 1991; Lind, 2002; Oser, 1986; Power et al., 1989). Second, unlike attributes of procedural justice, the characteristics of socio-moral climate do *not focus* on relations between a *superior leader and his/her subordinate member(s)*. Normally, justice concepts focus on the extent to which organizational procedures implemented by a supervisor as well as his/her communication behaviors toward his/her subordinates are evaluated as fair. In contrast, a critical distinction between socio-moral climate and justice is the active role employees play in the former, the matter to which we now turn. Employees' right to question or to change high-ranking norms and procedures are distinct from the conceptualization of procedural or interpersonal justice.

*Prosocial and community-related behavioral orientations* capture the readiness of organization members to execute supportive actions directed toward others within one's organization or society, with the intention of promoting the welfare of those others. On a theoretical level, van Dyne, Graham and Dienesch (1994, p.766) combine citizenship concepts of political philosophy and organizational behavior in a similar conceptual expansion: "... based on the theoretical heritage of civic citizenship research in philosophy, political science, and social history. From that perspective, civic citizenship is viewed as including all positive community-relevant behaviors of individual citizens". Similarly, our construct of behavioral orientations links principles of prosocial work behavior with society-related citizenship behavior. Thus, a common latent dimension is expected to underlie all components of prosocial and community-related orientations. This extension of prosocial orientations within the context of work and organization is in part compatible with notions of organizational citizenship behavior (OCB) and similar prosocial organizational behaviors (POB; Brief & Motowidlo, 1986), including altruism, courtesy (Konowsky & Organ, 1996), and helping behavior (Moorman & Blakely, 1995; Podsakoff, Ahearne, & MacKenzie, 1997; Van Dyne & LePine, 1998).

Importantly, the present study goes beyond the employer-oriented focus in OCB research, and incorporates the often overlooked facet *solidarity at work* (Flodell, 1989). Solidarity refers to employees' willingness to show consideration for work-related political (i.e., influence) interests of one's peers. Workers who demonstrate solidarity consider their

own behaviors as part of community collective action, eschew short-time selfish interests or opportunism and do not accept a 'law of the jungle' perspective of the world of labor. Solidarity includes workers' readiness to join together in opposing unfair treatment by management.

The construct of prosocial orientations proposed here also contains employees' cognitive and emotional *perspective-taking*. Eisenberg's and Miller's (1987) meta-analysis demonstrated substantial interrelations between empathy and prosocial behavior. Similarly, Kohlberg (1984) and Power et al. (1989) view an advanced level of an individual's social perspective as a prerequisite of his/her moral maturity. An exemplar of this perspective taking is evident in the empathic distress citizens experience upon observing unfair treatment of minorities and the readiness of these citizens to support civil rights initiatives (cf. Hoffman, 1989).

*Community-related behavioral orientations* are also relevant for the functioning and reproduction of local communities and for the civil society as a whole. These orientations encompass citizens willingness to act on humanitarian-egalitarian ethical principles (see Katz & Hass, 1988) like protecting human life and dignity, taking care for others, serving the public good, engaging against poverty in the Third World, on the one hand, and their readiness to engage in democratic political activity (see Bibouche, 2003; Klicperová-Baker, 1998) like defending of democratic institutions, engaging in protests, openness to differing opinions and ways of life, or advocating minorities' rights, on the other. Ideally, for the benefit of society, many citizens would follow such civic virtues as guidelines in their everyday life (Barber, 1984; Dahrendorf, 1995; Habermas, 1995; Moldaschl, 2004; Pateman, 1970; cf. several European studies on civic citizenship reported by Klicperová-Baker, 1998).

We postulate that organizational democratic structures and decision-making processes are positively related to the prosocial behavioral orientations of organization members. A multitude of organizational, task, dispositional, or leadership characteristics are antecedents of OCB or POB (cf. Brief & Motowidlo, 1986; LePine, Erez, & Johnson, 2002; McNeely & Meglino, 1994; Organ & Paine, 1999; Podsakoff, MacKenzie, Paine, & Bachrach, 2000) and behavioral ethics (Trevino, Weaver & Reynolds, 2006). Because of their organizational structure and practices of participation, democratic enterprises are particularly suited to supporting their employees' civil, political, and social rights. Therefore, employee participation in democratic decision-making is expected to also enhance civic virtue in and outside of the organization. In doing so, democratic participation is expected to give rise to employee prosocial and community-related orientations.

*Hypothesis 2a:* Individual participation in democratic decision-making is positively associated with prosocial and community-related behavioral orientations.

As has been demonstrated above, there is some overlap between procedural and interpersonal justice and socio-moral climate in regard to the socio-emotional features of reliable appreciation and support from supervisors and colleagues and, to a limited degree, of open and free communication. Thus, socio-moral climate experienced by the individual worker is expected to play a role in shaping prosocial and community oriented behavioral orientations, consistent with the direct and mediated relationships between procedural and interpersonal justice and OCB (e.g., Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Fasina, Jones & Uggerslev, 2008; LePine et al., 2002; Konovsky, 2000). This leads to Hypothesis 2b.

*Hypothesis 2b:* Socio-moral climate is positively associated with prosocial and community-related behavioral orientations.

We have argued that employees' individual participation in democratic decision-making is positively related to socio-moral climate. This experience of a socio-moral climate in turn is expected to be positively associated with the workers' prosocial and community-related behavioral orientations. Thus, the question has to be addressed whether socio-moral climate plays a mediating role in the effect of individual participation in democratic decision-making on prosocial and community-related behavioral orientations.

*Hypothesis 2c:* The positive relationship of individual participation in democratic decision-making with prosocial and community-related behavioral orientations is mediated by socio-moral climate.

*Organizational Commitment* holds a special position in our conceptual framework. It comprises employees' attachment to the organization and identification with its goals (e.g. Meyer & Allen, 1997). Affective and normative commitment can be construed as behavioral orientations fostering democracy *if* commitment emerges in companies where employees practice organizational democracy. Several studies (e.g. Culpepper, Gamble, & Blubaugh, 2004; Klein, 1987; Pendleton, Wilson, & Wright, 1998) and reviews on employee-owned

firms (Cotton, 1996; Höge, 2006) have demonstrated that employees who engage in collective decision-making show more affective commitment than employees who lack the possibility to participate in substantial organizational decision-making. Meyer and Allen (1997) have argued that affective commitment results from job characteristics and work experiences that stimulate one's competence and well-being. The antecedents of normative commitment are less clear, though the latter also is assumed to be influenced by organizational socialization processes (Meyer & Allen, 1997; Meyer, Irving, & Allen, 1998; Meyer, Stanley, Herscovitch & Topolnytsky, 2002).

Past research has focused on antecedents of commitment concerning workplace characteristics like individual autonomy and control. Further, procedural and interpersonal justice (possessing conceptual affinity to socio-moral climate as above) have also been consistently linked to affective organizational commitment (Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Meyer et al., 2002), and procedural justice to normative commitment (Cohen-Charash & Spector, 2001). Concomitantly, employees are expected to be more morally and affectively committed to the company the more influence they have over its decisions, the more they gain responsibility for its entrepreneurial affairs, and the more they experience a pronounced socio-moral climate. Thus:

*Hypothesis 3a:* Individual participation in democratic decision-making is positively related to organizational commitment.

*Hypothesis 3b:* Socio-moral climate is positively related to organizational commitment.

Referring to existing field studies about democratic schools, we have theorized that organizational democracy experienced by the worker is expected to contribute positively to the development of socio-moral climate. The experience of socio-moral climate in turn is expected to be positively related to the employee's organizational commitment. Thus, it has to be analyzed whether participation in democratic decision-making influences organizational commitment through its effect on socio-moral climate.

*Hypothesis 3c:* The positive relationship of individual participation in democratic decision-making with organizational commitment is mediated by socio-moral climate.

## Method

### *Organizational setting*

Data were collected in 22 enterprises with German-speaking employees located within an European inter-region encompassing Austria, Southern Germany, and North Italy (see Table 1) from autumn 2004 to late spring 2005. Data on company characteristics were gathered via document analyses and structured interviews with the CEOs. Company sizes ranged from very small (4 employees) to medium (about 150 employees). Eight enterprises ( $n = 81$  employees) were from industrial manufacturing, trade, and handcraft industries, nine from the service sector ( $n = 128$ , including social and cultural service work) and five from high technology firms ( $n = 116$ ). Given our focus on the possible impact of democratic organizational structures, we sampled companies varying in the level of employee participation. Specifically, each of the enterprises were classified as practicing democratic decision-making on one of four different levels (type E1 – type E4; see Table 1).

Insert Table 1 about here

### *Participants*

Out of 593 distributed questionnaires, 333 were returned (a 55 per cent response rate, with a range of 24 to 100 per cent across firms). Due to missing values, 325 were used for analysis. Participants were 31 per cent female. In terms of age, 19 per cent were younger than 30, nearly 60 per cent were between 30 and 45 and about 20 per cent were over 45 years old. About a third held a university degree, 25 per cent a high-school diploma, and 40 per cent finished primary or other schooling without a high-school degree. On average, participants have been employed in their company for 8.9 years. The majority (77 per cent) worked full time while 23 per cent worked at least 20 hours per week. 53 per cent were stockholders or had a share in the profits of their employer. A majority (67 per cent) reported being a member in a participatory or representative board/committee/assembly. The high proportion of participants who held shares of their company or who were engaged in a body of organizational participation is attributable to the study's inclusion of several organizations with relatively distinctive industrial relations systems, including democratic forums like periodic general assemblies and representatives' councils, etc.

### *Measures*

*Organizational Democracy.* Individual participation in democratic decision-making is measured following the De Facto Participation Power scale (IDE International Research Group, 1981, p.52) in the form of the „... involvement as subjectively experienced by the

sample respondents, respectively“ (p.58). This perceived involvement refers to the worker’s participation in strategic, tactical, or operational decision-making. Dependent on each company’s division of labor and work organization the respective workers vary in the extent to which they participate in processes of information, consultation, or co-determination. Apart from individual differences in the experience of decision-making authority different requirements of decision-making may account for a heterogenous distribution of democratic influence among the workers within the same company. For example, in many workers co-operatives some members belong to the executive board or administrative council while others only participate in the annual general assembly; employees who are not member of the co-operative do not at all participate in strategic or tactical decision-making.

This scale was developed following work described in previous studies (Bartoelke, Eschweiler, Flechsenberger, Palgi, & Rosner, 1985; Heller, Drenth, Koopman, & Rus, 1988; IDE International Research Group, 1981; Tannenbaum, Kavcic, Rosner, Vianello, & Wieser, 1974; Ulich & Weber, 1996; Vilmar & Weber, 2004) in order to measure employees’ perceived involvement in three types of democratic decision-making. The first type, *strategic decisions*, refers to long-term decisions with high importance for the whole company; 16 items were used (e.g., concerning decisions on corporate constitutions, budget planning, major capital investments, investments in other firms, restructuring of the firm, election of board members, election of the CEO, admission of new stockholders, quality planning, establishment of marketing principles, and non-profit-making activities). The second type, *tactical decisions*, pertains to intermediate-term decisions with high importance for parts of the firm or moderate importance for the whole firm; 15 items were used (e.g., concerning decisions on production or sales-planning, process improvements, purchasing of resources, delegation of representatives to a company board, election of a spokesperson of a workgroup, decisions on hiring or dismissals of workers, personnel planning, conceptualization of vocational training methods, differentiation of wages, modification of the working time system, engagement of a management consultancy). The last type, *operational decisions*, refers to short-term decisions with high importance for the respective worker/workplace; 12 items were used (e.g., decisions on work scheduling, personnel placement, or assignment of activities). The three indicators use a 5-point Likert scale (1 = *I am not involved at all*, 2 = *I am informed about the matter beforehand*, 3 = *I can give my opinion*, 4 = *My opinion is taken into account*, 5 = *I take part in the decision-making with equal right*). Level 4 and 5 represent pronounced levels of employee participation in organizational democracy; participation is only binding on management at these levels.

*Socio-moral Climate.* We developed a scale to measure the four components of socio-moral climate: Involvement in Social Conflict (4 items; sample item: ‘Contradictory economic interests between the employees and the organization are discussed frankly’), Reliable Appreciation and Support (4 items; sample item: ‘Nobody is indifferent to others’), Open and Free Communication (4 items; sample item: ‘We have no taboos’), Responsibility Allocation (4 items; sample item: ‘Our job contributes to the protection of the environment’). Since socio-moral climate represents a construct on the organizational level, all items refer to the organization as a whole.

*Prosocial and Community-Related Behavioral Orientations.* This construct consists of six components. First, Prosocial Work Behaviors comprises 10 items of the measures Altruism and Courtesy (e.g., ‘I help others who have been absent’) of the Organizational Citizenship Behavior questionnaire developed by Staufenbiel and Hartz (2000). They integrated many items from Konovsky and Organ (1996), Moorman and Blakely (1995), and Podsakoff et al. (1997). The validated German language version that was used in this study has the advantage that the self-report measure correlates highly with the supervisor-report version (across the four subscales  $r = .60$ ; range: .45 to .69; see also the studies of van Dyne and LePine, 1998, and Moorman and Blakely, 1995). The second component, Perspective-Taking/Empathy (10 items; e.g., ‘I feel compassion and sorrow for people who have more problems than I’), is based on a German scale developed by Holz-Ebeling and Steinmetz (1995) who included items from Davis (1980), too. The third component, Solidarity at Work, comprises items with positive and negative indicators of solidarity vs. rivalry behavior (Flodell, 1989). Each respondent was asked to indicate what she/he would advise a new colleague concerning topics of solidarity with employees’ interests. We took 11 items from this German scale (e.g., ‘You need to worry about the interests of the colleagues with whom you have to collaborate’) and added two items on readiness to defend colleagues against unfair treatment by a supervisor and to support colleagues of other firms that are in trouble. The fourth component, Humanitarian-Egalitarian Ethic scale (adapted and translated by Doll & Dick 2000, following Katz & Hass, 1988), assesses readiness to act on moral obligations. Validated on a large sample in Germany, 8 of this measure’s 12 items are used here (e.g., ‘The benefit of the community should be considered in one’s own acting’). The fifth component, Bibouche’s (2003) Democratic Engagement Orientation measures participants’ tendency to act in a community-oriented fashion to support the poor and members of minorities to bring more justice in their everyday life (e.g., ‘Our prosperous nation has to take responsibility for poor nations’). Lastly, five items from Mohiyeddini’s and Montada’s

(1998) Self-Efficacy in Promoting Justice in the World were used to assess individual's beliefs in his or her capacity to act effectively from a humanitarian perspective (e.g., 'I can make a contribution to more justice in the world').

*Organizational Commitment.* Organizational commitment was operationalized using two 4-item scales (Felfe, Schmook, Schyns & Six, 2008), one for Affective Commitment (e.g., 'I feel a strong sense of belonging to my organization') and one for Normative Commitment (e.g., 'I would feel somewhat guilty if I left the organization right now'). Felfe et al. developed these German adaptations to reflect Meyer and Allen's (1997) measures of commitment in a German cultural context. The meta-analysis of Meyer et al. (2002) reports high correlations between affective and normative commitment ( $\rho = 0.63$ , in studies outside North America:  $\rho = 0.69$ ), and similar effects of both commitment dimensions on outcomes such as OCB. In our study, the two scales are employed as separate indicators of the organizational commitment latent construct.

All scales were measured using 6-point Likert scales (from 1 = *strongly disagree* to 6 = *strongly agree*) except for the Solidarity scale which used a 4-point scale (from 1 = *by no means* to 4 = *in every case*).

#### *Reliability and Discriminant Validity*

The descriptive statistics presented in Table 2 stem from our sample of 325 employees across 22 companies. Reliabilities demonstrate all scales reached acceptable internal consistency (minimal  $\alpha = 0.76$ ). However, two items from the Responsibility Allocation scale (of the socio-moral climate scale) were omitted due to problems identified during the surveying process. This leads to a limited validity of this indicator. Note also that the correlations between the six components of prosocial and community-related behavioral orientations are rather high. Although they are analytically separable, these constructs are indeed related (e.g., Hoffman, 1989; Power et al., 1989) and appear to overlap semantically. Participants failed to differentiate between prosocial and community-related behavioral orientations; thus these orientations are combined here.

Insert Table 2 about here

To ensure the successful operationalization of constructs, confirmatory factor analyses (CFA) with maximum likelihood estimation were conducted for the four latent variables at the item-level using AMOS 7.0. A summary of the tested models is shown in Table 3. With the exception of socio-moral climate, all latent variables reached an acceptable fit in their hypothesized factor structure. Specifically, a one-factor model of prosocial and community-related behavioral orientations proved significantly better ( $\chi^2 = 2786.692$ ,  $df = 1453$ ; RMSEA

= 0.053; TLI = 0.801; CFI = 0.812) than a two-factor model ( $\chi^2 = 2827.06$ ,  $df = 1462$ ; RMSEA = 0.054; TLI = 0.797; CFI = 0.807). The relatively poor fit of the socio-moral climate construct (four-factor model) may be due to the high intercorrelations among subscales. The fit of this four-factor model was ( $\chi^2 = 276.07$ ,  $df = 68$ ; RMSEA = 0.097; TLI = 0.856; CFI = 0.892) compared with that of a one-factor model ( $\chi^2 = 300.68$ ,  $df = 75$ ; RMSEA = 0.096; TLI = 0.858; CFI = 0.883), a two-factor model ( $\chi^2 = 296.72$ ,  $df = 74$ ; RMSEA = 0.096; TLI = 0.858; CFI = 0.885) and a three-factor model ( $\chi^2 = 302.22$ ,  $df = 72$ ; RMSEA = 0.099; TLI = 0.849; CFI = 0.881). The empirical data fitted best to our four factor model because of the significant chi-square differences ( $\Delta\chi^2 = 24.61$ ,  $\Delta df = 7$ ;  $\Delta\chi^2 = 20.65$ ,  $\Delta df = 6$ ;  $\Delta\chi^2 = 26.15$ ,  $\Delta df = 4$ ).

Insert Table 3 about here

#### *Analysis procedure and level of analysis*

Missing values were imputed by the expectation-maximization (EM) algorithm. The EM algorithm estimates missing data using an iterative maximum-likelihood procedure. This is the recommended method for preventing biases caused by not completely random missing data processes (Zwingmann, Wirtz, Müller, Körber, & Murken, 2006). The imputation was performed with the software NORM (Graham, Cumsille, & Elek-Fisk, 2003).

All hypotheses were tested on the individual level. Yet, to test whether the respondents across the 22 companies agreed on their evaluation of socio-moral climate, intraclass correlations were calculated. We applied the ‘two-way-mixed-effect-model average measure reliability’ (ICC [3, k]; see Shrout & Fleiss, 1979) with absolute agreement. This measure is used when each of k raters (employees in the company) rates all n targets (items of socio-moral climate). Findings are presented in Table 4.

Insert Table 4 about here

The results demonstrate acceptable within-group interrater agreement with a range of  $r_{ICC(3,k)}$  between .925 and .639 in 16 companies (255 raters), moderate agreement with a range of  $r_{ICC(3,k)}$  between .315 and .301 in four companies (51 raters), and unacceptable level of agreement with a range of  $r_{ICC(3,k)}$  between .039 and -.002 in two other companies (19 raters). Referring to the present sample it has to be considered that the ICC (3, k) with absolute agreement stands for a stringent measure whereas the operationalization of the socio-moral climate, representing a construct of considerable complexity, is preliminary. For that reason, a relatively low within-group interrater agreement between .490 and .300, as it applies for the firms 106, 210, and 306, may be still regarded still acceptable (see Wirtz, 2004). The unacceptable within-group interrater agreement in the firms 103 and 207 may be

due to current internal organizational problems and we excluded these two enterprises from further analyses. Nevertheless, since within the sample at least 78 per cent of the respondents showed agreement regarding their ratings of their socio-moral climate, the findings may be interpreted as providing some support for the assumption that the socio-moral climate in the 20 firms individually experienced by the employees also embodies an inter-individual phenomenon with an organizational-level effect upon individual outcomes.

## Results

### *Tested models*

Figure 2 summarizes the results of the tested SEM model (Model A) of our hypothetical framework.

Insert Figure 2 about here

The hypothesized model ( $N = 306$ ) fits the empirical data with a  $\chi^2$ -value of 212.41 with  $df = 83$ , implying a reasonably well  $\chi^2/df$ -ratio of 2.559 ( $p < 0.001$ ). The following fit indices were obtained: RMSEA = 0.071, TLI = 0.934, and CFI = 0.948.

All hypothesized relationships between the four latent variables of our Model A are empirically represented by highly significant standardized path coefficients. In particular, concerning Hypothesis 1, a path coefficient of  $\beta_{\text{std.}} = 0.495$  ( $p < 0.001$ ) demonstrates a positive relationship of medium size between participation in democratic decision-making and socio-moral climate. Furthermore, Hypotheses 2a and 3a were supported as well. Individual participation in decision-making is positively related to prosocial and community-related orientations ( $\beta_{\text{std.}} = 0.284$ ;  $p < 0.001$ ) as well as organizational commitment ( $\beta_{\text{std.}} = 0.282$ ;  $p < 0.001$ ). Additionally, in accordance with Hypotheses 2b and 3b, socio-moral climate is associated with both prosocial and community-related orientations ( $\beta_{\text{std.}} = 0.286$ ;  $p < 0.001$ ) and organizational commitment ( $\beta_{\text{std.}} = 0.519$ ;  $p < 0.001$ ). With respect to Hypotheses 2c and 3c, the results show evidence for a partial mediation effect of socio-moral climate. Sobel tests (Sobel, 1982) reached significant levels for socio-moral climate's mediating role in accounting for participation in democratic decision-making's positive relationship with employees' prosocial and community-related orientations (Sobel  $z = 3.87$ ,  $p < .001$ , two-tailed) and with organizational commitment (Sobel  $z = 4.71$ ,  $p < .001$ , two-tailed).

Before any conclusions could be drawn from the results described above, it was necessary to analyze the impact of common method variance because in this study only self-report measures were used. For this reason, the procedure for the potential effects of an unmeasured latent methods factor (recommended by Podsakoff, MacKenzie, Lee, &

Podsakoff, 2003) was applied. The common method factor model (Model B) contained all the indicators and latent constructs of the hypothesized model, except all the indicator variables for the latent constructs were double loaded onto this method factor. Table 5 indicates that the inclusion of a common method factor improved the model fit. The chi-square difference between the common method factor model and the initial hypothesized model (Model A) is 88.00 ( $\Delta df = 13$ ), which is significant ( $p < .001$ ). Furthermore, as Table 6 indicates, common method variance had a substantial effect on the path from socio-moral climate to prosocial/community-related orientations such that it is no longer significant. This challenges Hypothesis 2b. Additionally, the common method factor influenced the path from participation in democratic decision-making to prosocial/community-related orientations such that the path (of similar effect size as within Model A) is not longer significant but still showed a statistical tendency ( $\beta_{std.} = 0.324$ ;  $p < 0.1$ ). The other three hypothesized relationships maintained their significance. The inclusion of this common method factor considerably reduced the amount of variance accounted for in prosocial and community-related orientations from 24 per cent to 12 per cent. We note, however, that the same-source factor did not eliminate the proportion of variance explained. The proportion of variance in socio-moral climate decreased from 25 per cent to 20 per cent and in organizational commitment from 49 per cent to 42 per cent. All in all, it seems that though common method variance plays a role it does not account for our main results.

Insert Tables 5 and 6 about here

As an additional test of the validity of the hypothesized model, we tested Model C which added educational level, gender, and age as potential control variables (cf. Lind, 2002; Schooler, Mulatu, & Oates, 2004; Trevino et al., 2006). Accordingly, we added structural paths from those control variables directly to the outcome variable. The results indicated that none of the five relationships stated within the hypothesized Model A changed in significance after entering these controls (see Table 6). Furthermore, the chi-square difference between the hypothesized model and the model controlling for demographic features is 172.69, which is significant ( $p < .001$ ) at 45 degrees of freedom. Thus, the results suggest that the former model is not refuted (see also fit indices in Table 5).

Because a direct relationship between participation in democratic decision-making and prosocial orientations has seldom been investigated (cf. Wegge, 2004), we tested this in an additional model. Model D is identical to Model A except for the omitted path from perceived participation in democratic decision-making to prosocial and community-related orientations. In this model the explained variance in prosocial and community-related

orientations decreased from 24 per cent to 20 per cent and the chi-square difference between both models was 18.69, which is significant at 1 degree of freedom ( $p < .001$ ). This demonstrates that the direct effect of democratic participation on prosocial and community-related orientations is important to the fit of the model and should not be omitted.

We are well aware that in cross-sectional studies, like the present one, relationships between latent constructs can only be *postulated* causally but it is not feasible to empirically support any causal effects. However, in order to explore competing causal explanations we created another model (Model E in Table 5), hypothesizing that committed employees perceive their workplaces to include more possibilities for democratic decision-making and a higher level of socio-moral climate. In other words, the direction of the regression paths from organizational commitment to organizational democracy and socio-moral climate was reversed, with all other elements of the initial model remaining unchanged. As can be seen from Table 5, the alternative Commitment Model shows exactly the same fit indices as the initial model. Furthermore, all path coefficients remain significant, while the amount of the path coefficient between organizational democracy and socio-moral climate decreased, and the amount of the path coefficient from organizational commitment to organizational democracy increased. The plausibility of Model E is discussed below.

## **Discussion**

### *Theoretical implications*

The findings suggest that as the level of participation in decision-making processes increases, the more positively employees perceive the features of their company's socio-moral climate. Furthermore, it was found that higher participation in operational, tactical, and strategic decision-making is associated with higher levels of prosocial and community-related behavioral orientations, behaviors that are characterized by mutual help, solidarity, humanitarian values, democratic engagement, and higher self-efficacy in regard to the promotion of justice in the world. Additionally, perceived participation of employees in democratic decision-making is also related to worker's affective and normative commitment. Moreover, organizational commitment is positively influenced by socio-moral climate, too. Finally, the findings indicate a partial mediator role of socio-moral climate in the effect of participation in democratic decision-making on organizational commitment. With one exception (see in the following), the hypotheses were also corroborated when the influences of an unmeasured latent methods factor (Podsakoff et al., 2003) or educational level, gender, and age were controlled. However, against the background of the results, it remains unclear

whether a pronounced socio-moral climate has a positive influence on prosocial and community-related orientations of employees, given the role of common method bias.

Our results call attention to the (perceived) *structural* features of participation and their impact on behavioral orientations. Extent of participation is substantially related to active contributions on the well-being of the organization and its member community. We regard the positive relationship between participation and prosocial/community-related behavioral orientations as limited support for our hypothesized model. Although probably influenced by single-source self-reports the regression coefficient representing this relationship still showed a statistical tendency when a common method factor was included. In view of the lack of quantitative empirical studies referring to prosocial orientations within employee-owned democratically managed enterprises on the one hand, and the scope and complexity of indicators applied to measure this latent construct on the other hand, we suggest to consider this result not being reducible to a method effect, exclusively (cf. also Wagner, Leana, Locke & Schweiger, 1997, p.58). Furthermore, the relation between participation and behavioral orientations is also likely to be influenced by difficulties that can arise in the participation process, as were reported in the structured interviews conducted with the firms' CEOs. Market-induced time pressure can endanger collective discussions and development of consensus. Democratic decision-making can be time consuming. Conflicting interests surface between employee-owners and paid workers and between longstanding and new employee-shareholders especially regarding short- versus long-term capital accumulation, investment, and return. Lastly, conflicts can emerge during the establishment of a fair wage-scale.

#### *Study limitations and direction for future research*

Our cross-sectional design does not permit establishment of causality. Future research should explore the effects of employees' socialization factors outside the workplace on their behavioral orientations, including factors such as close relationships, friendships, or joint leisure activities.

Self-selection effects should be considered, and controlled where possible, in future research. For example, it is likely that prosocial and community-related orientations that employees may have developed before entering their organization (e.g., in family, school, etc.) influence the results. The finding that educational level has an effect on prosocial and community-related orientations supports this claim. However, on the basis of existing longitudinal studies on occupational socialization, we can make the assumption that the effects identified within our study *also* represent socialization effects that go beyond selection

factors. For example, a 10-years German longitudinal study by Hoff et al. (1991) indicated that, depending on their level, the components of the socio-moral climate foster or hinder the moral judgement competency of younger employees (whereas a conceptually related 2-years longitudinal study by Beck, Dransfeld, Minnameier & Wuttke [2002] indicated ambiguous results referring to the socializing potential of the socialmoral climate). A longitudinal study by Schooler et al. (2004) revealed reciprocal effects between characteristics of occupational self-direction (including complex work tasks requiring challenging decision-making processes from the worker) on the one hand, and intellectual functioning and self-directed orientations (including specific features of personally responsible morality), on the other hand. Furthermore, Rosenstiel (1989) has demonstrated that the development of occupational value orientations (among them 'alternative engagement orientation' similar to humanitarian-egalitarian ethic and democratic engagement orientation) of German employees was influenced by an interrelation between self-selection, external selection, and socialization in the job during the year of the transition from academic education to professional work.

Considering the comparison between our initial model and Model E, in which organizational commitment influences the individual perception of organizational democracy and socio-moral climate, the fit of both models is identical. Though, in our view, the hypothesized effect leading from democratic decision-making (or socio-moral climate) to employee commitment seems more plausible than the reverse effect given existing research. Those employees who exhibit affective commitment to a great extent may tend to assess the socio-moral climate of their company and their involvement in organizational participation more positive than the less committed workers (e.g., because of striving for cognitive consistency). Nevertheless, Model E leaves the question how affective commitment is generated. Although the described positive feedback effect of commitment seems plausible existing research does not justify an exclusion of participation in decision-making and socio-moral climate as antecedents of commitment. However, due to the lack of an experimental or longitudinal design, we cannot refute the alternative model.

A further limitation of this study is the use of single-source data. This may pose a problem especially in regard to the relationships with prosocial and community-related orientations. In the future, direct observation or separation over time of measures of behavioral orientations may help to clarify the nature of the underlying relationships between these variables. In particular, Power et al. (1989) and Hoff et al. (1991) have provided important methodological proposals for such projects.

Finally, the 14-item scale developed by the authors measured socio-moral climate reliably yet as indicated by the CFA, it requires further development. Additionally, the rather small sample of companies may have limited our statistical power. Nonetheless, our sample possesses considerable variance in company size, mission statement, type of participative and democratic organization, and industry.

#### *Practical implications*

Practical consequences of this study can be drawn on the societal and the organizational level. On the societal level, there is a reason to believe that democratically structured companies may enhance societal cohesion in the long run since, based on results of this study, the democratic engagement of employees is substantially related to civic virtues. Such virtues, like mutual aid, prosocial perspective-taking, solidarity, humanitarian values, and cosmopolitan activities are vital for the maintenance of a democratic society.

At the organizational level, democratic companies are more likely than their less participative counterparts to promote civic virtues and in turn reap the benefit of an actively engaged, prosocial workforce. Indeed the present study suggests that future research on employee commitment and prosocial contributions pay closer attention to the role that democratic processes play in shaping these employee responses (cf. Coyle-Shapiro, 2002) and the development of psychological contracts within different types of democratic firms (cf. Rousseau & Shperling, 2003). It is likely that democratic practices in firms will increase in companies engaged in information and communication technology, in the field of media, in high-tech domains, and in certain service sectors (e.g. knowledge management, social services). In a North American review, Rousseau and Shperling (2003) have described that more employee participation in democratic decision making and ownership are founded in the above mentioned sectors. Simultaneously, the amount of capital funds held by employees is growing in large enterprises. Based on our findings it can be assumed that participative and democratic practices may enhance prosocial work orientation, as well as identification with the organization and employee commitment. Enhancement of such important organizational resources should be an attractive incentive for conventional small and medium-sized enterprises whose owners want to preserve the autonomy of their firm, at least in the Northern and Central-European context of socially regulated market economies.

Last but not least, the present study provides some evidence that different forms of unconventional organizations do indeed exist and that they succeed in social and economical operating for a length of time. (On average, the 22 partner firms of the ODEM project have existed 29 years. They have practiced models of organizational democracy for 17 years, on

average.) The practice of collective decision-making principles together with pronounced humanistic maxims instead of profit maximization may be two of the reasons for their relative success. This leads to the empirically supported possibility that within *social* market economies, as they are represented through Austria, Germany, and Italy, there *is* an alternative to former British prime minister Maggie Thatcher's neo-classical TINA doctrine of economy ("*There is no alternative*").

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Table 1. Description of the enterprises participated in the study.

Type of company	Economic sector	Country	Size	Environment	Participants
E1	Service sector	A	50	Urban	42
E1	Innovative engineering firms	GER	100	Rural	23
E1	Service sector	I	9	Rural	7
E2a	Industrial production, trade, and handcraft	A	100	Rural	17
E2a	Industrial production, trade, and handcraft	GER	10	Urban	5
E2a	Industrial production, trade, and handcraft	I	31	Rural	25
E2b	Innovative engineering firms	GER	28	Rural	7
E2b	Service sector	I	20	Rural	19
E3	Service sector	A	16	Urban	9
E3	Industrial production, trade, and handcraft	A	20	Rural	13
E3	Service sector	A	14	Urban	8
E3	Industrial production, trade, and handcraft	GER	17	Urban	17
E3	Industrial production, trade, and handcraft	GER	15	Urban	6
E3	Innovative engineering firms	GER	150	Rural	64
E3	Industrial production, trade, and handcraft	I	4	Rural	4
E4	Service sector	GER	10	Urban	10
E4	Industrial production, trade, and handcraft	GER	5	Urban	4
E4	Service sector	GER	8	Urban	8
E4	Service sector	GER	25	Urban	6
E4	Service sector	GER	30	Urban	19
E4	Innovative engineering firms	GER	22	Urban	5
E4	Industrial production, trade, and handcraft	I	7	Rural	7

*Notes.* E1 = Social partnership enterprises (employees participate in tactical but not in strategic decisions and in profit-sharing, the owner holds the capital stock); E2 = Democratic workers' co-operatives (capital funds belong to those employees who are members of the co-operative, they decide at the annual assembly on strategic issues); E2a = E2 but only a minority of the employees are members of the co-operative and, correspondingly, collective owner the company; E2b = E2 but the majority of the employees are members of the co-operative and, correspondingly, collective owner of the company; E3 = Democratic reform enterprises with advanced co-determination (employees participate direct on tactical issues and indirect on strategic issues e. g. through advisory board; employees may be stockholders, the majority of the capital fund is held by the owner); E4 = Self-governed enterprises, largely employee-owned (small-sized firms; the majority of the employees hold the capital funds and decide on tactical and strategic issues in plenary meetings). A = Austria; GER = Southern Germany; I = Northern Italy.

Table 2. Means (M), standard deviations (SD), number of items, and intercorrelations among variables

Variable	<i>M</i>	<i>SD</i>	Number of Items	1	2	3	4	5	6	7	8	9	10
1. Organisational democracy (index)	3.34	1.18	43	(0.98)									
2. Sociomoral climate (index)	4.54	0.80	14	0.47***	(0.89)								
3. Prosocial work orientation	4.73	0.68	10	0.22***	0.37***	(0.88)							
4. Perspective taking	4.50	0.62	10	0.16**	0.27***	0.50***	(0.76)						
5. Solidarity at work	3.28	0.39	13	0.26***	0.28***	0.47***	0.51***	(0.78)					
6. Humanitarian-egalitarian ethic	4.89	0.66	8	0.28***	0.22***	0.47***	0.52***	0.58***	(0.85)				
7. Democratic engagement orientation	4.67	0.66	10	0.40***	0.32***	0.39***	0.50***	0.61***	0.77***	(0.80)			
8. Self-efficacy (justice in the world)	3.64	0.97	5	0.32***	0.20***	0.31***	0.40***	0.32***	0.44***	0.51***	(0.85)		
9. Affective commitment	4.96	0.99	4	0.48***	0.60***	0.37***	0.32***	0.29***	0.22***	0.27***	0.25***	(0.86)	
10. Normative commitment	3.46	1.27	4	0.34***	0.25***	0.16**	0.14*	0.05	0.07	0.07	0.14**	0.43***	(0.83)

Note. Cronbach alpha reliabilities appear in parentheses along the diagonal.  $N = 325$ .

\* $p < 0.05$ . \*\* $p < 0.01$ . \*\*\* $p < 0.001$ .

Table 3 Confirmatory factor analyses of organizational democracy, sociomoral climate, prosocial and community-related behavioral orientations, and organizational commitment

Latent variable	Number of indicator scales	Number of items	$\chi^2$	<i>Df</i>	<i>TLI</i>	<i>CFI</i>	<i>RMSEA</i>
Organisational democracy	3	43	2224.76	829	.911	.918	.072
Sociomoral climate	4	14	276.07	68	.856	.892	.097
Prosocial and community-related behavioral orientations	6	56	2786.69	1453	.801	.812	.053
Organizational commitment	2	8	41.50	18	.970	.981	.063

*Notes.* TLI = Tucker-Lewis index; CFI = comparative fit index. RMSEA = root mean square error of approximation.

It was necessary to add on residual correlations to reach adequate model fits.

Table 4. Intra class correlations, number of respondents, and company numbers

Company Number	202	211	209	109	203	105	212	201	208	204	302
Respondents	64	17	19	42	7	9	5	23	6	4	7
ICC(3, k)	.925	.905	.890	.874	.855	.845	.835	.834	.765	.757	.742
Company Number	305	301	205	206	104	303	210	106	306	207	103
Respondents	7	19	10	8	8	25	5	17	4	6	13
ICC(3, k)	.688	.686	.667	.667	.639	.494	.463	.315	.301	.039	-.002

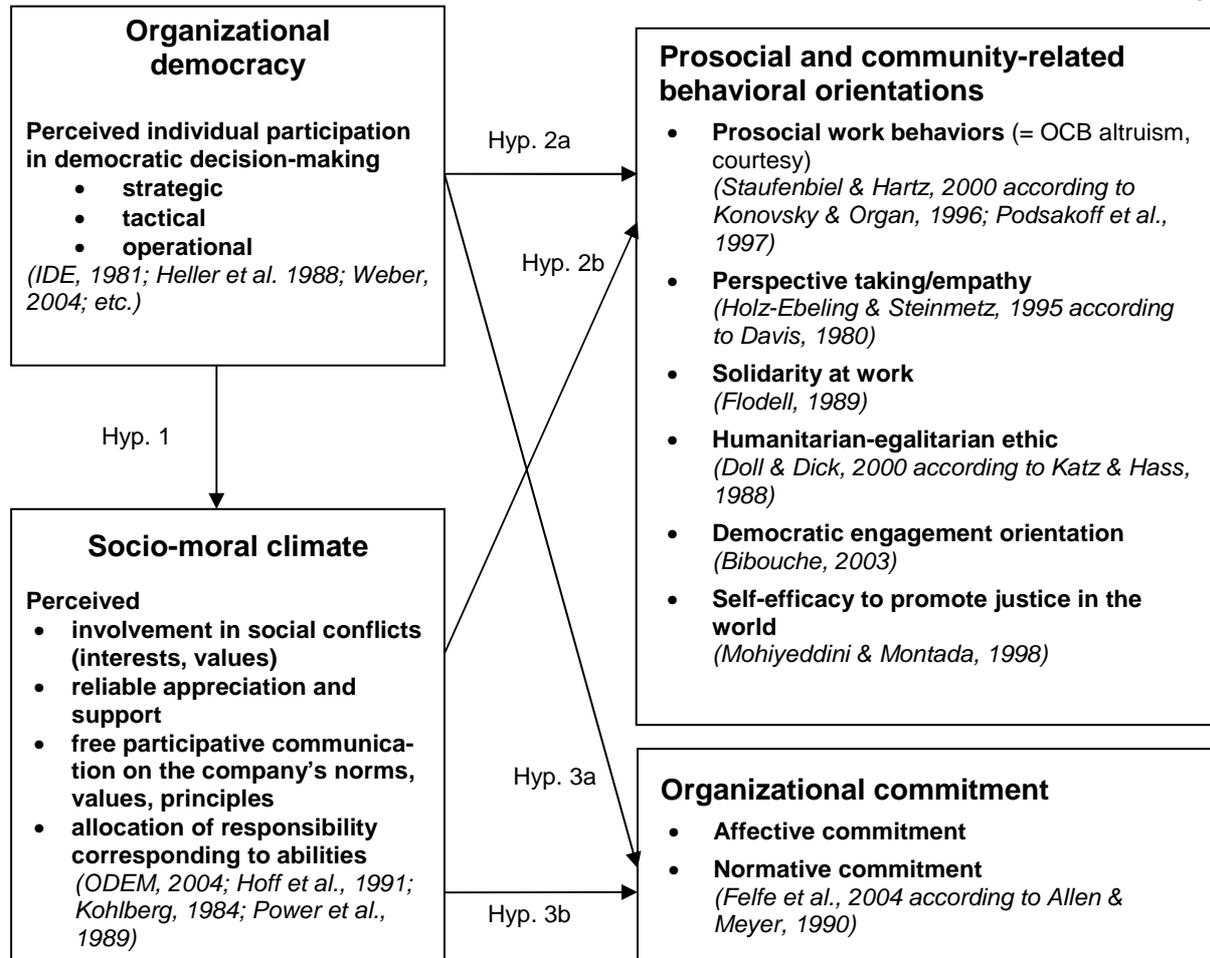


Figure 1. Hypothesized conceptual framework

Notes. Hypothesis 2c concerns the mediation effect of socio-moral climate on the relationship between organizational democracy and prosocial and community-related behavioral orientations. Hypothesis 3c concerns the mediation effect of socio-moral climate on the relationship between organizational democracy and organizational commitment.

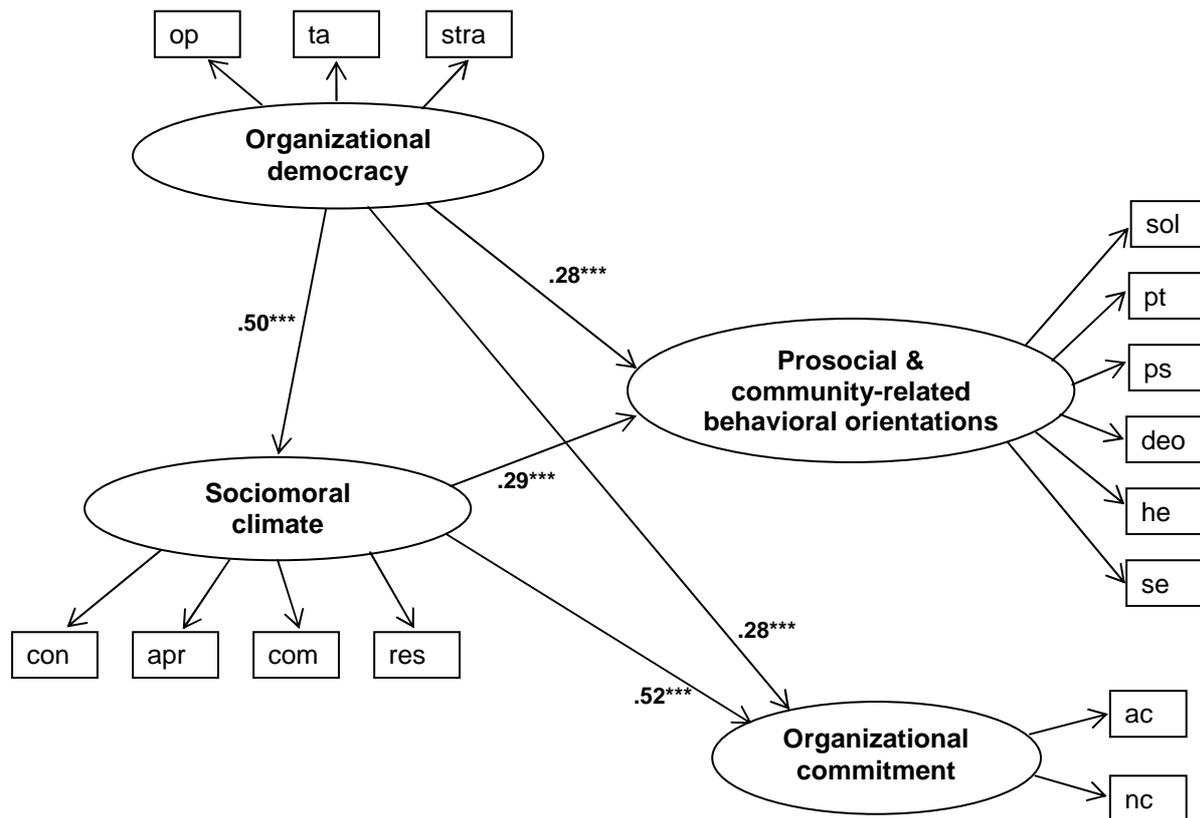


Figure 2. Test of the hypothesized structural model

*Notes.* *op* = operational decisions; *ta* = tactical decisions; *stra* = strategic decisions; *con* = involvement in social conflicts of interests; *apr* = reliable appreciation; *com* = free, participative communication; *res* = allocation of responsibility; *se* = self-efficacy (justice in the world); *he* = humanitarian-egalitarian ethic; *deo* = Democratic engagement orientation; *ps* = prosocial work orientation; *pt* = perspective-taking/empathy; *sol* = solidarity at work; *ac* = affective commitment; *nc* = normative commitment.

Table 5. Results of model comparisons

<i>Model</i>	$\chi^2$	<i>df</i>	$\chi^2 / df$	$\Delta\chi^2$	$\Delta df$	TLI	CFI	RMSEA
A: Hypothetical model	212.41	83	2.559	---	---	0.934	0.948	0.071
B: Controlling for Common method factor	124.41	70	1.777	88.00 (A vs. B)	13	0.967	0.978	0.050
C: Model including control variables	385.10	128	3.009	172.69 (A vs. C)	45	0.870	0.902	0.081
D: Deleting the path Democracy → PCO	231.10	84	2.751	18.69 (A vs. D)	1	0.926	0.941	0.076
E: Alternative commitment model	212.41	83	2.559	0 (A vs. E)	0	0.934	0.948	0.071

*Notes.* TLI = Tucker-Lewis index; CFI = comparative fit index. RMSEA = root mean square error of approximation. PCO = prosocial and community-related behavioral orientations. It was necessary to add on residual correlations to reach adequate model fits.

Table 6. Parameter estimates (standardized path coefficients) for four models

Path description	Hypothesized Model (A)	Controlling for common method factor (B)	Controlling for education, gender, and age (C)	Alternative commitment model (E)
Democracy → Socio-moral climate	0.495***	0.447***	0.495***	0.197*
Democracy → Prosocial / community-related orientations	0.284***	0.324 tendency	0.176**	0.284***
Democracy → Org. commitment	0.282***	0.307***	0.281***	0.539*** (reversed path)
Socio-moral climate → Prosocial /community-related orientations	0.286***	0.052	0.276***	0.286***
Sociomoral climate → Org. commitment	0.519***	0.447***	0.521***	0.553*** (reversed path)

Note. \* $p < 0.05$ . \*\* $p < 0.01$ . \*\*\* $p < 0.001$ .

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