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# Sociomoral Atmosphere and Prosocial and Democratic Value Orientations in Enterprises with Different Levels of Structurally Anchored Participation<sup>\*\*</sup>

This study examines effects of structurally anchored organisational democracy on perceived sociomoral atmosphere and on employees' prosocial, democratic behavioural orientations. Data result from the ODEM research project. Beside a description of the concept of sociomoral atmosphere, within this project, 30 small and medium sized enterprises from Austria, North Italy, South Germany, and Liechtenstein (542 participants) were surveyed with questionnaires, interviews, and document analyses. Based on organisational science criteria, several types of enterprises were derived and pooled into three groups of structurally anchored organisational democracy (no, medium, and high democracy). Multivariate group analyses show significant differences between those groups in parts of their prosocial and democratic behavioural orientations and in their sociomoral atmosphere.

## Soziomoralische Atmosphäre und prosoziale, demokratieförderliche Handlungsbereitschaften in Betrieben mit unterschiedlichen Demokratiegraden

Die vorliegende Arbeit fokussiert die Effekte strukturell verankerter organisationaler Demokratie auf die wahrgenommene soziomoralische Atmosphäre der Beschäftigten und auf deren soziale und demokratieförderliche Handlungsbereitschaften. Vorgestellt werden neben einem Konzeptvorschlag zur soziomoralischen Atmosphäre empirische Ergebnisse aus dem Forschungsprojekt ODEM, in welchem 30 KMUs aus dem deutschsprachigen Raum (542 Probanden) mittels standardisiertem Fragebogen, Experteninterviews und Dokumentenanalysen untersucht wurden. Zur Auswertung wurden – nach organisationswissenschaftlichen Kriterien gebildete – Unternehmenstypen theoriegeleitet zu drei Gruppen struktureller organisationaler Demokratie (keine, mittlere und hohe Demokratieausprägung) zusammengefasst. Multivariate Gruppenvergleiche zeigen signifikante Unterschiede zwischen diesen Gruppen hinsichtlich der soziomoralischen Atmosphäre sowie in Teilen der prosozialen und demokratischen Handlungsbereitschaften.

#### Key words: Participation, Organisational Democracy, Ethical Climate, Organisational Citizenship Behaviour, Value Orientations

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### 1. Introduction

Sociomoral atmosphere and democratic principles in organisations foster the readiness of employees to act socially responsible and democratically (Weber et al. 2007). It is assumed that sociomoral atmosphere and structurally anchored democratic principles in companies (organisational democracy) have an impact on the (further) development of employees' social and moral orientations. This socialisation hypothesis was the core of the research project ODEM<sup>1</sup> and the paper presented here is based on this frame-hypothesis. The authors pursue two intentions with this article:

- 1. The elaboration of the organisational concept of sociomoral atmosphere. We will describe the theoretical roots of this concept, its embeddedness in organisational climate theory, and a new quantitative measurement to survey employees' perceived sociomoral atmosphere.
- 2. Presentation of an empirical study that was realised within the ODEM-project. It was tested
  - whether the perceived sociomoral atmosphere differs in high-, medium-, and non-democratic enterprises;
  - whether work-related prosocial orientations and community-related value orientations of employees differ in high-, medium-, and non-democratic firms and
  - whether employees' work-related prosocial orientations and communityrelated value orientations are different in companies with low, medium, and high level of sociomoral atmosphere.

#### 2. Theoretical Framework

#### 2.1 The sociomoral atmosphere in organisations

As a sub-area of organisational climate, the *sociomoral atmosphere* represents specific criteria of organisational structure and organisational practices, in particular communication, teamwork, collective problem-solving, decision-making as well as leadership, which form a field of socialisation for prosocial, democratic, and moral orientations.

The concept of "moral atmosphere" was proposed by the Kohlberg group (Kohlberg 1984; Power/Higgins/Kohlberg 1989). They focused on the interplay of norms and value orientations as components of such an atmosphere, especially appraisal of the community, care for one another, integration, open communication, trust, participation, collective responsibility, respect of human dignity, procedural fairness, order (see, e.g. Power et al. 1989, 108, 125). They identified organisational criteria and educational principles in an Israeli kibbutz, that later were integrated in the conceptualisation of sociomoral atmosphere (Colby et al. 1987). Strongly influenced by this, they participated in creating a socialising field in democratically structured

<sup>&</sup>lt;sup>1</sup> The research project ODEM (Organisational Democracy - Resources for Social Dispositions Fostering Democracy) was funded within the Research Programme >node< (New Orientations for Democracy in Europe) by the Austrian Ministry of Education, Research, and Culture (Duration: March 2004 until Sept. 2006)

schools and in semi-autonomous school units, which were supposed to benefit the development of democracy-fostering behavioural orientations, such as a complex social perspective, moral judgement competency, and responsible action. In this school experiments the establishment of community meetings arose as a crucial element. These are assemblies in which discourses – moderated by pedagogues – about principled, just solutions to daily problems in school-life can be held and collective decisions about codes of conduct and problem solution can be made (*Just Community Approach:* Kohlberg 1984; Power et al. 1989; see also: Lind 2002; Oser/Althof 2001). On the basis of a research review, Power et al. (1989, 101) postulated the following features ("conditions for moral growth") constituting moral atmosphere:

- 1. Open discussion with a focus on fairness and morality,
- 2. Cognitive conflict stimulated by exposure to different points of view and higherstage reasoning,
- 3. Participation in rule making and the exercise of power and responsibility,
- 4. The development of community at a high stage.

While Kohlberg's conceptualisation concentrates more on *social psychological* criteria of organisational culture, in particular the development of common values and norms, the research group around Wolfgang Lempert (Hoff/Lempert/Lappe 1991) points out *conditions of socialisation*, such as practices of collective – especially discursive – behavioural regulation and practices of respectful interaction with each other as well as taking over responsibility. The Kohlberg group has described the structural dimension of the construct of sociomoral atmosphere only with a low degree of precision. We divide the construct of sociomoral atmosphere analytically in

- (a) The structural analysis of organisational democracy (see Weber 1999; Weber et al. 2007)
- (b) The analysis of the sociomoral atmosphere in the stricter sense.

Together with (moral) school culture, these two dimensions form an important part of a Just Community according to the publications of the Kohlberg group.

Following the studies of Hoff et al. (1991) and Lempert (1993) that were performed in a paid labour context we postulate six components that constitute a sociomoral atmosphere. These six components build the basis for the screening instrument used in the presented study (see section 3.2).

(1) Open confrontation of the workers with social problems, contradictions, and conflicts within and between interests, values, rules, and norms (with sufficiently convergent basic beliefs). This criterion of sociomoral atmosphere includes the basic willingness to participate in discourses about such conflicts. Involved persons are allowed to get information about the consequences of individual or collective behaviour and to treat one another respectfully.

(2) Reliable/constant appreciation, care, and support by supervisors and colleagues including recognition of the individual personality, demonstrated through trust, advancements (e.g. career prospects within the company) as well as adequate tolerance of making mistakes. In this context a "predictable inconsistency" is conducive, which

means (not to high) contrasts between appreciation and non-appreciation by different persons interacted with.

(3) Open and free communication, also about the legitimacy of rules, norms, principles, and cultural values lived in the company. In this context it is beneficial if there are occasional discourses about the validity of such norms, values, etc. and there is not only harmony concerning these matters.

(4) Participative cooperation of all or at least most members of the organisation regarding the development of organisational and social rules, norms, principles, and values for the company. In this context it is desirable to find rules and solutions that – based on basic values such as justice, human dignity, considerateness, and personal freedom – can be approved and supported by most or all organisation members. It must be striven for to balance the individual interests, the interests of the company, and those of the society again and again.

(5) Trust-based assignment and allocation of responsibility for the well-being of persons within and outside the company. Here the question is central whether it is characteristic or not for a company, to put the responsibility on the employees (according to their capabilities, developmental stage, and their willingness) for the well-being of one's own and other people within and outside of the company as well as for the environment. This includes the attribution of corresponding activities. It is seen as beneficial if the delegated responsibility also contains requirements that are not easily compatible (e.g. responsibility for several people with competing needs) or are valued controversially within the company (such as controlling through heterogenic assessment criteria).

(6) Organisational respect for the individual. This component encompasses the extent to which representatives of the enterprise (e.g. supervisors) are willing to take over the perspective of individual members within an organisational community. This organisational respect which leads to helpful and supporting behaviours will presumably become a social model for the employees benefiting from it. This may also take effect on the latter to respect needs and concerns of others within and without the enterprise. This component was not conceptualised separately by the Lempert-Hoff group and is not included in our screening instrument.

From our point of view the concept of sociomoral atmosphere is part of the broader concept of *organisational climate*. Organisational climate defines and describes structures, principles, behaviour patterns, procedures, and practices that are characteristic for an organisation and are perceived congruently by more or less all organisation members (or members of a large organisational unit) (see representative definitions by Ashkanasy/Wilderom/Peterson 2000; Conrad/Sydow 1991; Dickson et al. 2001; Patterson et al. 2005; Rousseau 1988). This shared perception is also a precondition to survey the sociomoral atmosphere by means of a questionnaire. Characteristics of organisational structure (e.g. hierarchy vs. autonomy) which are associated with the concept of organisational climate like, for example, leadership style, interactional and communicational practices, role attributes, conflict management styles, systems of gratuity, form the organisational context, in which the members of the organisation act, communicate, and collaborate. Organisational climate criteria can affect socialisation processes that find their outcome in changes of individuals' attitudes and behaviours

(see also: Ashkanasy et al. 2000; Dickson et al. 2001; Trevino/ Butterfield/McCabe 1998). Climate criteria form an antecedent variable of conceptualisations, like the one presented here.

Similar concepts of sociomoral atmosphere e. g. *Ethical Climate* (Cullen/Victor/ Bronson 1993) or *Ethical Work Climate* (Babin/Boles/Robin 2000) also deal with ethical or moral constructs but they put emphasis on other components than the sociomoral atmosphere does. For example, the Ethical Climate Questionnaire identifies nine types of climate, but these nine types meet not the requirements of our operationalisation of the sociomoral atmosphere corresponding to the Kohlberg- and Lempert-groups.

#### 2.2 Organisational Democracy

As already mentioned in the introduction, beside the sociomoral atmosphere, organisational democracy is also assumed to contribute to the development of prosocial and community-related (including democratic) value orientations. In the present study organisational democracy is defined as different forms of structurally supported workers' substantive participation in strategic, tactical, or operational decision-making. This definition includes employees' institutionalised opportunities of direct or representative joint consultation, co-determination, or self-determination (see, also for the following, Heller et al. 1998; IDE International Research Group 1981; Vilmar/Weber 2004; Weber 1999). Seven types of democratic enterprises with different levels of structurally anchored participation (ranging from high to medium and to no democracy) are described more in detail in section 3.2.

Several studies indicate positive relationships between employees' direct or representative participation with the work climate (Heller et al. 1988; IDE International Research Group 1981), job involvement (IDE International Research Group 1981; Tannenbaum et al., 1974), and the need for and satisfaction with participation (Heller et al. 1988; IDE International Research Group 1981; Tannenbaum et al., 1974). It is also assumed that structurally anchored democratic decision-making in enterprises has positive effects on the development of sociomoral atmosphere. This especially applies to enterprises, in which forums for the direct democratic participation already exist, in which employees can interact on matters that concern their workaday life or future, develop proposals, discuss problems, and prepare decisions, which demand or motivate a high moral judgement competency (e.g. reduction of working hours or dismissals in the case of a prolonged crisis of the enterprise). The more employees take part in such forums of organisational democracy and the more complex the decisions they have to prepare or to make, the more likely attributes will emerge that resemble a Just Community (in the sense of Kohlberg 1984; Power et al. 1989).

These considerations lead us to Hypothesis 1. In the case of small companies structured in a basis democratic way, which have frequent plenary meetings with all employees to discuss and decide on strategic matters and also in the case of larger democratic reform enterprises that combine direct and representative participation (= high democracy, see also in the following section 3.2) a high level of sociomoral atmosphere can be expected.

In workers co-operatives and social partnership enterprises, in which the frequency and range of co-decisions are limited (= medium democracy), we expect a moderate level of sociomoral atmosphere and a low level in hierarchically structured enterprises (= no democracy).

*Hypothesis 1:* The stronger the democratic participation is structurally anchored in an enterprise, the stronger the extent of sociomoral atmosphere.

#### 2.3 Work-related prosocial orientations

Our concept of work-related prosocial orientations encompasses the indicators prosocial work behaviour, perspective-taking and empathy as well as solidarity at work. The theoretical basis refers to Brief and Motowidlo's outline of prosocial organisational behaviour (1986, 711): "Prosocial organizational behavior is behavior which is (a) performed by a member of an organization, (b) directed toward an individual, group, or organization with whom he or she interacts while carrying out his or her organizational role, and (c) performed with the intention of promoting the welfare of the individual, group, or organisation toward which it is directed." The enlargement of this conception through the readiness to act prosocially as well as through observable behaviours within the context of work and organisation is akin to various detailed concepts of organisational citizenship behaviour (OCB) and similar forms of prosocial work behaviours. Altruism and courtesy (Organ 1988) as well as helping (Moorman/Blakely 1995), or organisational citizenship behaviours that are oriented toward individuals (OCB-I) are wellknown examples. With the incorporation of the facet solidarity at work (Flodell 1989) the present study goes beyond the exclusively employer-oriented focus of OCB research. Employees characterised by solidarity consider their own behaviours as part of a communitarian network of collective action and respect work-related political interests of their peers, not only in their own firm but also in other enterprises. Solidarity also includes workers' readiness to participate together to oppose unfair treatment by the management, in case of need. The third facet of work-related prosocial orientations proposed here includes employees' cognitive and emotional perspective-taking. Several studies revealed substantial interrelations between empathy and prosocial behaviour (Eisenberg/Miller 1987; Kohlberg 1984; Power et al. 1989).

Although many organisational, task, dispositional, or leadership characteristics have been identified as possible preconditions of OCB, up to now, OCB and related prosocial behaviour research has neglected pronounced democratic practices in enterprises as possible antecedents (cf. Brief/Motowidlo 1986; LePine/Erez/Johnson 2002; Organ/Paine 1999; Podsakoff et al. 2000). As one of the few exceptions that we have found, Porter/Lawler/Hackman (1996) reported on a positive interrelation between participation in decision-making and aspects of OCB. This supports the empirical observation of Power et al. (1989) that there is a tendency within democratic organisational forums to enhance prosocial and moral competencies (Hypothesis 2, see below).

Theoretical references do also exist to the concept of psychological ownership, namely (within the context of work) a psychological state of employees that is characterised by experiencing the enterprise in which one works as an object that belongs to one's own identity (see Höge 2006, for a review from a perspective of organisational democracy research). Within their theoretical conceptualisation, Pierce/Kostova/

Dirks (2001) have identified three antecedents of psychological ownership: (1) a substantial amount of control that an employee has over a particular organisational factor, (2) an intimate knowledge of an organisational factor, and (3) a substantial extent of self-investment of the worker into an organisational target. Considering these antecedents it becomes plausible that democratic decision-making builds a solid base for the development of psychological ownership. Similar to empirical findings of the Kohlberg-group (see section 2.3) studies of Vandewalle/vanDyne/Kostova (1995) and vanDyne/Pearce (2004) demonstrate interrelations between psychological ownership and prosocial behaviours towards individuals within the organisation that builds the object of one's identification. This supports our Hypothesis 2 (see below).

#### 2.4 Community-related value orientations

*Community-related value orientations* of employees can be subsumed under the societal tradition of the democratic core values Freedom, Equality, and Brotherhood/Sisterhood, for example protecting human dignity, tolerance towards differing opinions and ways of life, active political participation, shared responsibility for collective governance, readiness to reflect and to legitimate one's own acting, accordance with fair treatments to regulate conflicts, moral courage, fight against existential poverty, and engagement against social discrimination (see several studies reported by Klicperová-Baker 1998). In the present study three facets of community-related value orientations were taken into account: *humanistic-egalitarian, social responsibility* emphasising value orientations of organisational members, a *willingness to engage oneself for democratic concerns* in the society, and the experience of *self-efficacy* concerning ones own contribution *for more justice in the world* (see section 3.2 and in detail: Weber et al. 2007).

European and North-American democratic theorists or social philosophers (e.g. Barber 1984; Habermas 1983; Moldaschl 2004; Ulrich 2001; for a review see Jurschitz 2008) or developmental psychologists (Damon 1998; Eisenberg/Miller 1987; Hoffman 1989; Lind 2002; Power et al. 1989) hypothesise that work-related prosocial orientations and community-related value orientations can be seen as conducive for a democratic society: A development throughout the whole life-span is assumed, which starts with the development of empathy and prosocial behaviour within direct interactions in childhood and youth and goes on in cosmopolitan, humanistic behavioural orientations in adolescence and adulthood, which refer to the more abstract community.

These humanistic and democratic value orientations can roughly be related to Kohlberg's 'formal' level of moral judgement. Such a reference was carried out in Kohlberg's late work and also by his followers (see more on the form-content debate e.g. Kohlberg 1984; Power et al. 1989). They regarded democratic schools and democratic co-operatives as fractals of the – more complex – democratic society. According to Power et al. (1989) the structural features of *moral atmosphere* (democratic decision-making, open dialogue) have positive effects on the developmental level of *moral culture* in schools as well as on the level of individual *political-moral judgement-performance* and the individual *willingness to act socially responsible* (not only the competence to do so!).

The described process of the development of work-related as well as communityrelated value orientations within organisations characterised by a high level of structurally anchored democracy and sociomoral atmosphere can also be derived from classical social learning theory (Bandura, 1979). In democratic organisational environments that include forums where discourses on social and moral dilemmas occur individuals are confronted with positive social models (e.g. experienced co-workers, superiors) for an adoption of the outlined prosocial work- and community related values and behaviours. This may be realised through observational learning, feedback by multiple sources, and self-reflexion.

Considering the features of reliable appreciation and support from supervisors and colleagues and, to a limited degree, free communication and participation, there is some conceptual overlap between procedural or interpersonal justice and sociomoral atmosphere. Thus, some results of organisational justice research can provide empirical support to our hypothetical framework. All in all, direct or mediated correlations between procedural or interpersonal justice that workers experience and organisational citizenship behaviours, especially helping, are widely documented (Colquitt et al. 2001; Konovsky 2000; Podsakoff et al. 2000). This refers to Hypothesis 3 (see below).

It is likely that beside individuals' first (by family) and second (by school and peers) socialisation a democratic organisational structure (see Hypothesis 2) and a strong sociomoral atmosphere (see Hypothesis 3) can have an important *additional* effect on work-related prosocial orientations and community-related value orientations (see section 5).

Against this background we propose the following two hypotheses:

*Hypothesis 2:* Employees from enterprises with a high level of structurally anchored organisational democracy show a higher degree of work-related prosocial orientations and community-related value orientations than employees from enterprises characterised by a medium level of democracy as well as employees of enterprises with no democratic structure (who demonstrate the lowest level of prosocial and democratic orientations).

*Hypothesis 3:* Correspondingly, employees from enterprises with a stronger sociomoral atmosphere report a higher level of work-related prosocial orientations and community-related value orientations than employees from enterprises characterised by a weaker sociomoral atmosphere.

#### 3. Method

#### 3.1 Sample

To test these hypotheses, 881 questionnaires were handed out to German speaking employees in 30 enterprises with different organisational and legal structures. 542 questionnaires were returned and included into the sample (response rate = 61.52 %). The data were collected in Austria, South Germany, South Tyrol, and Liechtenstein. Only small and medium-sized companies, with sizes between 4 and 250 employees, were surveyed. The sample was spread over 12 craft and commercial (trading) enterprises (N = 222), 11 service enterprises, incl. socio-economical (non-profit) enterprises (N = 186), and 7 innovative technological enterprises (N = 134).

31% of participants were female and 69% were male. Almost half of the participants (47%) had an educational career without a high school diploma or an equivalent.

30% went to high school with a diploma (Matura/Abitur) and 23% had a university grade. The age structure of the participants was as follows: 29% were 30 years and under, 21% over 45 years and 50% were the 30 to 45 year olds. Most employees (79%) worked fulltime and 21% part-time (at least 20 hours/week). The average job tenure was 9.1 years. 34% declared holding capital shares of their company (from partner or shareholder status up to co-ownership). More than half (54%) of the participating persons reported having a present function in a body of organisational participation, co-determination, or self-government. The high proportion of participants who hold shares of their company or who are engaged in a body of organisational participation is a consequence of our sampling procedure: most of the data were collected within a research project focussing on organisations with relatively uncommon legal structures (e.g. co-operatives, labor managed firms, self-governed firms etc.) and therefore a lot of the employees participated in democratic forums like general assemblies etc.

#### 3.2 Measures

Following the suggestions of Podsakoff et al. (2003), we tried to reduce the problem of common method variance, by using different measurement methods (structured interview and standardised questionnaire). Furthermore, we guaranteed participants complete anonymity and did not collect any individual and assignable data.

#### Sociomoral atmosphere

For the survey of sociomoral atmosphere a screening instrument was developed in the frame of the ODEM-project (see paragraph 2.1 as well as Appendix). Four components of sociomoral atmosphere were measured with each four items on a 6-point Likert scale: (1) Open confrontation with social problems and conflicts; (2) reliable/constant appreciation, care, and support; (3) open and free communication and participative cooperation; (4) trust-based, adequate assignment of responsibility for one's own and the others' well-being.

The formulation of the items is condition-related and refers to features of the whole enterprise and not only to the individual, subjective perception of the respondent, since sociomoral atmosphere is conceptualised as an organisation-level construct. To verify the assumption that sociomoral atmosphere is perceived by the employees within the organisation in a similar way, intraclass-correlations were calculated. The calculation modus applied was the "Two-Way-Mixed-Effect-Model" for absolute correlation (ICC [3, k], see Shrout/Fleiss, 1979; Yaffee 1998). This modus is used when every k rater (participating employees of the enterprises) assesses all n target criteria (items of sociomoral atmosphere) and the rater do not represent a random selection.

In 16 enterprises (378 raters) the interrater-correlation (agreement) was very good (r = .804 to .943). In 10 organisations the intra-class correlation reached an acceptable level (r = .635 to .782). Because of the stringent measure (absolute agreement) the coefficients (r = .409 to .463) in the other four enterprises (59 raters) can still be seen as adequate. However, four other enterprises had to be excluded because of to marginal interrater-agreement. According to these findings, sociomoral atmosphere is perceived similar within one and the same organisation in most cases (but not in all).

#### Levels of democracy

Seven differing types of democratic company structure were defined following Weber (1999) to inquire on the level of organisational democracy (see Table 1). The degree of influence of employees in tactical and strategic decision-making increases from the type E1 to E7. Type E4 was divided into two subtypes E4a and E4b because of insight through the testing of this typology by interraters (see below). In the following we will give a short characteristic of the seven types.

E1 Enterprises of a co-operative encompassing several independent producers: A producers' co-operative is an association of several independent entrepreneurs who possess own firms. This type of co-operative intends an economic use of common resources (e.g. purchase, marketing, and processing of products and storage). The workers in enterprises of such a co-operative network are not members of the co-operative. The members of the co-operative decide directly or through the board of directors about the management leading the respective enterprise.

E2 Social partnership enterprises with capital shares of or profit-sharing through the employees: These firms are characterised through participation of members on tactical decisions, which is realised in direct form or, in some cases, through a participation committee (this means an agency in charge of proposing, counselling, or putting a veto, e.g. advisory board, economic board).

E3 Large-scale enterprises with legal co-determination: These firms are characteristically German mining enterprises (full parity) or large-scale enterprises with more than 2000 employees (limited co-determination based on equal representation) in which the employees have representative rights of co-determination: Appointment of half of the members of the supervisory board, appointment of the work director in the executive committee as well as co-determination about tactical affairs through the workers council.

E4 Conventional employee-owned enterprises or conventional workers co-operatives: This type encompasses employee-owned enterprises (without regard of their legal form, e.g. GmbH, OHG, employee-stock company, workers cooperative) with a hierarchical setup and process organisation and led by a board or a chief executive with a far-reaching decisional authority. But unlike conventional enterprises the financially participating staff has the possibility to decide on certain strategic affairs at the share holders assembly (typically an annual meeting). In some cases, this type of enterprise was developed out of an employee-buy-out. Based on the empirical data, this type was divided into type E4a and E4b. Type 4a is characterised by a percentage of less than 50% of the employees holding share on the company funds. In type E4b the majority of the employees hold a share on the company. Companies of the type E4a are similar to the ones described under type E2 and firms of the type E4b share several characteristics with those of type E6.

E5 Democratic reform enterprises: Firms of this type combine direct participation of the employees about tactical affairs and representative co-determination (e.g. through an advisory board, economic board, or a supervisory board with representatives of the employees) about strategic questions. The employees often hold shares in the capital, but the majority of the equity capital is owned by an employer (e.g. family ownership of the founders).

E6 Self-governed employee-owned enterprises or self-governed workers co-operatives: In enterprises of this type, which usually are small enterprises (under 50 employees), the employees who own the enterprise decide directly on tactical and strategic affairs in plenary meetings (basis democracy). Occasionally, enterprises of this type have the legal form of a workers co-operative (incl. craft, trade, or other service co-operatives). The equity owners/members of the co-operative work in the company themselves and make up for a majority of the staff.

 Table 1: Classification criteria of enterprises with regard to structurally anchored organisational democracy

 Type E1
 Type E2
 Type E3
 Type 4
 Type E5
 Type E6
 Type E6

	Type E1 Enterprises of a pro- ducers' co- operative <sup>2</sup>	Type E2 Social partnership enterprises	Type E3 Large- scale enterprises with legal co-determi- nation <sup>3</sup>	Conventiona ow enterprise	be 4 al employee- ned es/workers eratives Type E4b	Type E5 Democratic reform en- terprises	Type E6 Self-gover- ned em- ployee- owned firms/ workers co- operatives	Type E7 Communi- tarian living and work communi- ties/ Traditional Kibbutzim
Scope: substantial participa- tion in strategic (s) and tactical (t) affairs <sup>4</sup>	(t)	t	t (s)	(s)	(s)	t / s <sup>5</sup>	s	s
Participation form: (also) direct (d) or only representative (r) participation	(r)	d (r) <sup>6</sup>	r	(d) r	(d) r	d / r	d	d
Degree of participation: Opinion (1), voice (2), joint/collective decision- making (3)	(1) (2) ?7	2	2 (3)	(2) (3)	(2) (3)	3	3	3
Direct participation or co- determination typical not only in the annual meeting?		yes	no	no	no	t: yes	yes	yes
Identity principle: percentage of employees holding share on the companies' equity capital		varies		minority	majority	varies	majority	majority
Employee ownership? Proportion of employee owned capital of the company's equity capital		low		high	high	varies (minority proportion)	high	100 %
Employee profit-sharing / sharing of gain / possibly sharing of loss		yes		varies	varies	varies	varies	
Integration in a communitarian community	no	no	no	no	no	no	no	yes

<sup>2</sup> Enterprises of a producers co-operative (e.g. dairies) belong to the members of the co-operative (e.g. the farmers). These employ employees who do not have the status of a co-operative member. The employees of co-operative banks, however, can hold shares – as customers of the bank – in the co-operatives. The latter case had to be assigned to type E4a, according to the status and participation possibilities of the employees.

<sup>3</sup> The German respectively the Austrian industrial relations law as well as the according byelaws build the basis for this type of representative participation.

<sup>4</sup> substantial: (1) a meeting every ¼ year at least; (2) joint/collective decision-making in 3 strategic decisions and 3 tactical decisions.

<sup>5</sup> Characteristic for type E5 is that also employees without financial shares can co-decide directly on tactical affairs (and co-decide representatively about strategic affairs, e.g. election of delegates in the company board, while the employees holding capital shares can codecide directly about strategic affairs, e.g. in the shareholder/partner meeting).

<sup>6</sup> Information in parenthesis means that the according dimension of this criterion occurs seldom

<sup>7</sup> Type E1 and E3 was not found in the ODEM-Sample and must be identified by means of documents.

<sup>---</sup> This criterion is not relevant for this type.

*E7 Communitarian living and work communities or traditional Kibbutzim:* This type of enterprise is characterised through basis-democratic structures. The members are equally involved in all areas of decision; they are the owners of the enterprise and integrated in a communitarian community, which belongs to them all.

With help of structured interviews with the chief executives (or other representatives of the firms) and document analyses two independent raters assigned the 21 democratic enterprises to the described categories of the classification profile. The criteria used are shown in Table 1. With a congruence of 90% five (including the subdivision in type 4a and 4b) types of enterprises could be identified (compare Table 2): Four companies were classified as E2 (social partnership enterprises), four further ones as E4a (workers co-operative/employee-owned firms with minority percentage of employees as shareholders), two as E4b (workers co-operatives/employee-owned firms with majority percentage of employees as shareholders), six as E5 (democratic reform enterprises), and five as E6 (self-governed employee-owned firms). Companies of the types E1, E3, or E7 do not exist in the present study. In addition to the companies with differing levels of democracy, nine traditional hierarchically structured enterprises, without any signs of democracy participation – in terms of a structurally anchored participation of employees in tactical and/or strategic decision-making and without ownership or profit-sharing by the employees – were included into the study.

To perform a variance-analytical comparison between types, all 30 enterprises were pooled in three groups (see Table 2).

Types of enterprises		Number of enterprises	Number of participants	(Variance- analytical) Group	Structurally an- chored organisa- tional democracy	
	Hierarchical Enterprises	9	198	1	no	
E2	Social partnership enterprises	4	86	2	medium	
E4a	Conventional employee-owned enterprises / workers co-operatives	4	72	2	medium	
E4b	Democratic employee-owned enterprises / workers co-operatives	2	26	3	high	
E5	Democratic reform enterprises	6	112	3	high	
E6	Self-governed employee-owned enterprises / basis democratic workers co-operatives	5	48	3	high	

Table 2: Classification of the enterprises participating in the study

Group 1 contains the hierarchically organised companies without any structurally anchored participation of employees in ownership and in tactical/strategic decision-making. Group 2 encompasses social partnership enterprises and conventional employee-owned firms/workers cooperatives (E2 + E4a), and group 3 represents employee-owned firms/workers co-operatives with components of direct democracy, democratic reform enterprises, and self-governed enterprises (E4b, E5 + E6). The level of organisational democracy is causal for the assignment of the types of enterprises to the three groups. From group 1 to group 3 the structurally anchored organisational democracy increases from a *no* democracy (group 1: hierarchical enterprises), over a *medium* level (group 2: social partnership enterprises, conventional employee-owned enterprises) to a *bigb* level (group 3: democratic employee-owned enterprises, reform enterprises).

#### Work-related prosocial orientations

Work-related Prosocial Orientations were analysed by three indicators. Prosocial work behaviours were measured by ten items from the scales Cooperativeness and Considerateness out of the Organisational Citizenship Behaviour questionnaire by Staufenbiel/Hartz (2000).

The second indicator, Perspective-taking/Empathy (10 items) is based on a German scale developed by Holz-Ebeling/Steinmetz (1995), that also includes items from Davis (1980). This scale was validated in an Austrian study by Leibetseder et al. (2001).

The third indicator, Solidarity at Work (Flodell 1989), consists of items with positive and negative indicators of solidarity vs. competition and egoism. A projective technique is used asking the respondent to give advice to a new colleague with respect to solidarity at the workplace on a 4-point Likert scale. In the present study, 11 items from Flodell's scale were used. Two additional items refer to the willingness to defend colleagues who are treated unfairly by superiors and to support colleagues from other companies who are having troubles.

#### Community-related value orientations

Community-related value orientations were analysed with three measures. The Humanitarian-Egalitarian-Ethic scale was translated into German by Doll/Dick (2000, original by Katz/Hass 1988) and measures the disposition to act according to moral commitment. In the present study, 8 of the 12 items were used. The second indicator scale is the Democratic Engagement Orientation Scale by Bibouche (2003) that describes the tendency of respondents to act in community-oriented ways, by supporting the poor as well as minorities in gaining more justice in daily life. Finally, we selected five items from Mohiyeddini's and Montada's (1998) scale Self-Efficacy to Promote Justice in the World measuring the individual belief in one's own capabilities to contribute to a world with more justice and fairness.

With one exception, 6-point Likert scales were used as response scales.

#### 3.3 Reliability and discriminant validity

Descriptive statistics as well as the reliability coefficients of the questionnaire scales are shown in Table 3.

questionnaire seales				
	М	SD	Cronbach's α	N
Sociomoral atmosphere	4.23	0.89	0.904	509
Prosocial work behaviours	4.74	0.67	0.872	482
Perspective-taking/Empathy	4.50	0.63	0.754	489
Solidarity at work	3.21	0.40	0.774	431
Humanitarian-egalitarian ethic	4.79	0.71	0.841	431
Democratic engagement orientation	4.54	0.69	0.790	423
Self-efficacy to promote justice in the world	3.63	0.99	0.859	350

# Table 3: Mean values, standard deviation, and internal consistency (α) of the questionnaire scales

Note. Differences in the number of respondents (N) are due to missing values and an incomplete study design. Not all measures could be applied in all companies for practical reasons.

The scales reached a satisfactory up to very good internal consistency (lowest coefficient  $\alpha = .75$ ). Only two items from the scale Sociomoral Atmosphere had to be eliminated because of insufficient psychometric properties (see Appendix).

Several indicator variables of work-related prosocial orientations and of community-related value orientations showed strong inter-correlations. For example, the correlations between Solidarity at Work and Democratic Engagement Orientation was r = .57 and between Humanitarian Ethics and Solidarity at work was r = .55. From a theoretical point of view, these indicator variables were not expected to be independent, because they represent content-related constructs. However, the correlations are not high enough to demonstrate a severe lack of discriminant validity.

#### Results

Hypothesis 1: The stronger democratic participation is structurally anchored in an enterprise, the stronger is the sociomoral atmosphere within the organisation.

To test Hypothesis 1, the individual-level data of sociomoral atmosphere were aggregated by computing a mean for each enterprise. Against the background of the reported intra-class coefficients (see 2.2) this is an adequate procedure.

In the following, the influence of the three groups of enterprises (1. "no organisational democracy"; 2. "medium level of organisational democracy"; 3. "high level of organisational democracy"; see Table 2) on sociomoral atmosphere was determined by means of a one-way analysis of variance. Group 1 reached a mean of sociomoral atmosphere of 3.79 (SD = 0.50), group 2 a mean of 4.26 (SD = 0.47), and group 3 a mean of 4.71 (SD = 0.33).

	Sum of squares	df	Mean squares	F	р	η
Type of Enterprise	4.523	2	2.262	12.404	.000	.479
Within Groups	4.923	27	.182			
Total	9.447	29				

Table 4: One-way ANOVA: Type of enterprise → Sociomoral Atmosphere

Dependent variable: Sociomoral Atmosphere, R-Square =0.479 (R-Square corrected = 0.40)

Accordingly, the type of enterprise showed a significant main effect on sociomoral atmosphere (Table 4). The type of enterprise with respect to the level of structurally anchored organisational democracy explains 47.9% of the variance of the sociomoral atmosphere. Post-hoc-tests (Scheffé) enable more detailed conclusions. Employees in hierarchical companies (group 1) experienced sociomoral atmosphere significantly less positive (p = 0.000) than employees in democratic employee-owned enterprises, reform-enterprises, and self-governed enterprises (group 3). No significant difference but a statistical tendency was found (p = 0.101) between hierarchical enterprises (group 1) and social partnership enterprises/conventional employee-owned solution in the differences between social partnership enterprises/conventional employee-owned matching workers between social partnership enterprises/conventional employee-owned solution in the differences between social partnership enterprises/conventional employee-owned solution in the differences between social partnership enterprises/conventional employee-owned solution in the differences between social partnership enterprises/conventional employee-owned solution in the differences between social partnership enterprises/conventional employee-owned solution in the differences between social partnership enterprises/conventional employee-owned solution in the differences between social partnership enterprises/conventional employee-owned solution in the differences between social partnership enterprises/conventional employee-owned solution.

firms (group 2) and democratic workers co-operatives/reform enterprises/self-governed enterprises (group 3).

We conclude that the distribution of the mean values, the significant main effect, and the single comparisons, as well as the high explained variance support Hypothesis 1.

Hypothesis 2: Employees from enterprises with a high level of structurally anchored organisational democracy show a higher degree of work-related prosocial orientations and community-related value orientations than employees from enterprises characterised by a medium level of democracy as well as members from enterprises with no democratic structure (who show the lowest degree of such orientations).

To test Hypothesis 2, two one-way multivariate analyses of variance were conducted. Table 5 depicts the results for the work-related prosocial orientations and Table 6 the results for the community-related orientations.

	Dependent Variable	Sum of squares	df	Mean squares	F	р	η²
Type of Enterprise	Prosocial work behaviours	1.820ª	2	.910	2.034	.132	.009
	Perspective-taking	1.286 <sup>b</sup>	2	.643	1.596	.204	.007
	Solidarity at work	10.777°	2	5.389	37.909	.000	.145
Within Groups	Prosocial work behaviours	199.940	447	.447			
	Perspective-taking	180.136	447	.403			
	Solidarity at work	63.539	447	.142			
Total	Prosocial work behaviours	201.760	449				
	Perspective-taking	181.422	449				
	Solidarity at work	74.316	449				

Table 5: One way MANOVA: Type of enterprise  $\rightarrow$  Work-related prosocial orientations

Dependent variables: Prosocial Work Behaviours, Perspective-taking/Empathy, Solidarity at Work

a R-Square = .009 (R-Square corrected = .005)

b R-Square = .007 (R-Square corrected = .003)

c R-Square = .145 (R-Square corrected = .141)

The analysis of variance of the work-related prosocial orientations only revealed a significant main effect of the type of enterprise (no democracy, medium, or high level of organisational democracy) on Solidarity at Work. Employees of different democratically structured companies did not differ significantly in their prosocial work behaviours and in perspective-taking, but they differed in their solidarity at work. 14.5% of the variance of the latter can be explained by the type of enterprise.

The post-hoc-tests (Scheffé) demonstrated that employees in hierarchically structured enterprises (group 1) report a significant lower level of solidarity at work (p = 0.001) than employees in social partnership enterprises/conventional employeeowned firms (group 2) and members of democratic employee-owned enterprises/democratic reform/self-governed enterprises (group 3). The employees in partnership enterprises/conventional workers co-operatives also showed significant lower values in solidarity at work (p = 0.000) than employees in democratic employeeowned/reform/self-governed enterprises. Consequently the degree of solidarity at work increased linearly with the increasing level of democratic organisational structure.

Concerning the community-related value orientations the one-way multivariate analysis of variance revealed significant main effects for all three variables. The type of enterprise had the strongest impact on employees' democratic forms of engagement (17.1 % explained variance), followed by humanitarian-egalitarian ethic (7.4 % explained variance) and self-efficacy to promote justice in the world (2.4 % explained variance).

	Dependent Variable	Sum of squares	df	Mean squares	F	р	η2
Type of Enterprise	Humanitarian-egalitarian ethic	12.109ª	2	6.055	14.327	.000	.074
	Democr. engagement orientation	26.792 <sup>b</sup>	2	13.396	37.202	.000	.171
	Self-efficacy (justice in the world)	8.551°	2	4.275	4.421	.013	.024
Within Groups	Humanitarian-egalitarian ethic	152.143	360	.423			
	Democr. engagement orientation	129.634	360	.360			
	Self-efficacy (justice in the world)	348.140	360	.967			
Total	Humanitarian-egalitarian ethic	164.253	362				
	Democr. engagement orientation	156.426	362				
	Self-efficacy (justice in the world)	356.691	362				

Table 6: One way MANOVA: Type of enterprise → Community-related value orientation

Dependent variables: Humanitarian-Egalitarian Ethic, Democratic Engagement Orientation, Self-Efficacy (just world) a R-Square = .074 (R-Square corrected = .069)

b R-Square = .171 (R-Square corrected = .167)

c R-Square = .024 (R-Square corrected = .019)

The Scheffé-tests showed that the means of humanitarian-egalitarian ethics in hierarchical enterprises (group 1; p = 0.001) and in social partnership enterprises/conventional employee-owned firms (group 2; p = 0.000) differ significantly from those of democratic employee-owned/reform/self-governed enterprises (group 3). Employees in hierarchical enterprises and partnership enterprises/conventional employeeowned enterprises showed significant lower values of humanitarian-egalitarian ethic than those in democratic employee-owned/reform/self-governed enterprises. The differences between hierarchical enterprises and partnership enterprises/conventional employee-owned firms are not significant.

Concerning the differences in the democratic engagement orientation of the workers between hierarchical enterprises (group 1; p = 0.000) as well as social partnership enterprises/conventional employee-owned firms (group 2; p = 0.000) and democratic employee-owned/reform/self-governed enterprises (group 3) the post-hoc tests (Scheffé) showed the same picture. The employees in the latter (group 3) distinguish themselves from the other two types of enterprises through higher values in democratic engagement.

Regarding self-efficacy concerning the creation and preservation of a just world, the post-hoc-tests (Scheffé) only showed corresponding significant differences between social partnership enterprises/conventional employee-owned firms (group 2) and democratic employee-owned/reform/self-governed enterprises (group 3; p = 0.021).

Our results support Hypothesis 2 to a limited degree. The three groups of enterprises differ in all community-related value orientations, but not in all work-related prosocial orientations (the type of enterprise only has an impact on the solidarity at work).

Hypothesis 3: Employees from enterprises with a stronger sociomoral atmosphere report a higher level of work-related prosocial orientations and community-related value orientations than employees from enterprises characterised by a weaker sociomoral atmosphere.

To carry out a variance-analytical comparison, the 30 analysed companies were pooled into three groups according to the companies mean values of sociomoral atmosphere (see Hypothesis 1). The classification was based on the semantics of the verbal response categories (from 1 = disagree strongly to 6 = strongly agree, cf. Appendix): nine companies with rather low sociomoral atmosphere (range: 1 to 3.99), eight companies with a medium sociomoral atmosphere (range: 4.00 to 4.49) and 13 companies with a strong sociomoral atmosphere (range: 4.5 to 6). This classification served as basis for the calculation of two one-way multivariate analyses of variance encompassing work-related prosocial orientations and community-related value orientations as dependent variables (see Tables 7 and 8).

	Dependent Variable	Sum of squares	df	Mean squares	F	р	η2
Sociomor. Atmo.	Prosocial work behaviours	3.578ª	2	1.789	4.035	.018	.018
	Perspective-taking	2.744 <sup>b</sup>	2	1.372	3.432	.033	.015
	Solidarity at work	7.614°	2	3.807	25.513	.000	.102
Within Groups	Prosocial work behaviours	198.182	447	.443			
	Perspective-taking	178.679	447	.400			
	Solidarity at work	66.702	447	.149			
Total	Prosocial work behaviours	201.760	449				
	Perspective-taking	181.422	449				
	Solidarity at work	74.316	449				

Table 7: One way MANOVA: Sociomoral Atmosphere → Work-related prosocial orientations

Dependent variables: Prosocial Work Behaviours, Perspective-taking/Empathy, Solidarity at Work

a R-Square = .018 (R-Square corrected = .013)

b R-Square = .015 (R-Square corrected = .011)

c R-Square = .102 (R-Square corrected = .098)

Main effects existed for all three dependent variables.

Post-hoc-tests (Scheffé) showed that employees in companies with a very strong sociomoral atmosphere had significant higher values in solidarity at work (10.2% explained variance) than employees in companies with low sociomoral atmosphere (p = 0.000). But also in companies with a medium sociomoral atmosphere the employees showed a higher solidarity at work than in companies with a low sociomoral atmosphere (p = 0.000).

Concerning the prosocial work behaviours (1.8% explained variance) the posthoc-tests (Tamhane-Tests) indicated that only the employees in companies with low sociomoral atmosphere differed negatively from those in firms with a strong sociomoral atmosphere (p = 0.019). The post-hoc-tests (Scheffé) concerning perspectivetaking (1.5% explained variance) revealed that workers in companies with a medium/acceptable sociomoral atmosphere showed a higher level of perspective-taking than people working in companies with a low sociomoral atmosphere (p = 0.049).

	Dependent Variable	Sum of squares	df	Mean squares	F	р	η2
Sociomor. Atmo.	Democr. engagement orientation	6.728ª	2	3.364	8.089	.000	.043
	Humanitarian-egalitarian ethic	1.416 <sup>b</sup>	2	.708	1.566	.210	.009
	Self-efficacy (justice in the world)	3.112 <sup>₅</sup>	2	1.556	1.584	.207	.009
Within Groups	Democr. engagement orientation	149.699	360	.416			
	Humanitarian-egalitarian ethic	162.836	360	.452			
	Self-efficacy (justice in the world)	353.579	360	.982			
Total	Democr. engagement orientation	156.426	362				
	Humanitarian-egalitarian ethic	164.253	362				
	Self-efficacy (justice in the world)	356.691	362				

Table 8: One way MANOVA: Sociomoral Atmosphere → Community-re	lated value
orientation	

Dependent variables: Democratic Engagement Orientation, Humanitarian-Egalitarian Ethic, Self-Efficacy (just world) a R-Square = .043 (R-Square corrected = .038)

b R-Square = .009 (R-Square corrected = .003)

Concerning community-related value orientations our results only give evidence for a main effect of sociomoral atmosphere on the democratic engagement orientation (explained variance 4.3%). Scheffé-tests indicate that employees from companies with low sociomoral atmosphere had lower values in democratic engagement orientation than employees in companies with a medium sociomoral atmosphere (p = 0.013) and in enterprises with a strong sociomoral atmosphere (p = 0.000).

In summary, Hypothesis 3 can only be confirmed partially. The perceived sociomoral atmosphere within a company has a positive effect on all work-related prosocial orientations but only on one community-related value orientation, namely the democratic engagement orientation.

#### **Discussion and perspectives**

The results support the hypothetical model of the ODEM-project (see in detail: Weber et al. 2007) by and large, but not in every assumption. The strongest effect found concerns the interrelation between type of enterprise and sociomoral atmosphere: Even though data concerning the structure of organisational democracy (structured interviews with managers) and the sociomoral atmosphere (questionnaire individually answered by the employees) were collected independently - and by doing this, no common method variance, that increases effects artificially could have an effect - the level of sociomoral atmosphere increases with increasing democratic structures. The type of enterprise (in regard to organisational democracy) and the level of sociomoral atmosphere have a substantial statistical influence in a similar direction on solidarity among the organisation members in their particular working areas, as well as on the tendency of the employees to engage themselves for democratic affairs, e.g. the defence of parliamentary democracy and protection of minorities. Furthermore, specific effects of the predictors become visible: The willingness of employees to stand in for humanistic values, for example to put their own needs into perspective compared with cosmopolitan goals and to take over the latter as their own, increases with an increase in organisational democracy. The sociomoral atmosphere seems to have at least a weak influence on the willingness to act prosocially at work and to take on others perspectives, whereas this is not the case for the type of enterprise (i.e. level of organisational democracy) as a direct factor of influence. The latter seems to influence employees thinking, only on a small range, about their possible contribution to more justice in the world. Unfortunately, a combined post-hoc grouping of the enterprise type (i.e. level of structural anchored organisational democracy; predictor 1) and the level of sociomoral atmosphere (predictor 2) was not realisable. We had to do without a two-way MANOVA and a corresponding interpretation of interaction effects because the types of enterprises and the level of sociomoral atmosphere were not independent from each other (see Table 4). According to this, some combinations of factor stages (e.g. "high level of structurally anchored participation", group 3, and "low level of sociomoral atmosphere", group 1) did not exist within our sample. Therefore, a two-way multivariate analysis of variance could not be computed because of empty cells.

Looking at the comparisons of the mean values, it is noticeable that the group of social partnership enterprises and conventional employee-owned firms resembles the group of hierarchically structured enterprises more concerning the socialisation potential for democracy-encouraging behavioural orientations of the employees than the group of democratically structured employee-owned firms, reform enterprises, and basis-democratic self-governed enterprises. This might be ascribed to the form of participation of the employees in the capital stock of the enterprise: In employee-owned firms of type E4a only a minority of the employees hold shares of their company (see Table 1) and this minority is participating in democratic decisions only infrequently (in workers cooperatives and similar firms of type E4a only at the annual general assembly). Within other employee-owned firms the majority of the staff holds shares on the capital and frequent possibilities for collective decision-making are given (type E6). This corresponds with a higher level of community-related value orientation of the

employees. Using multiple regressions, Weber/Höge (2008) demonstrated that, on the level of the individual, democratic decision-making as well as sociomoral atmosphere have much stronger effects on several prosocial orientations and community-related value orientations than financial participation of the employees in the company's assets. According to our view, this corroborates theoretical proposals concerning the importance of democratic organisational structures as well as the significance of collective discourses on democratic forums that we have derived from the moral education approach, organisational democracy research, and from the concept of psychological ownership (see section 2).

It is difficult to assess why only weak influences of the level of organisational democracy as well as of the sociomoral atmosphere on the readiness to take the perspective of others, to show empathy, and to act prosocially at work – with exception of the Solidarity indicator – were found. If one considers the corresponding correlations at the level of the individual (see Weber et al. 2007), it has to be acknowledged that the indicator Perspective-Taking only has a weak correlation with the two predictors. This could mean that, contrary to other democracy-fostering behavioural orientations, both perspective-taking and empathy often are already solidified in earlier phases of life. Concerning the indicator of Prosocial Work Behaviours there might exist a masking effect, indicated by the strong influence of the level of organisational democracy and sociomoral atmosphere on solidarity at work that shows a medium-sized correlation with prosocial work behaviours.

On the basis of existing longitudinal studies on occupational socialisation (for an overview see e.g. Hoff et al. 1991; Schooler/Mulatu/Oates 2004; Ulich 2005) we presume that the identified effects also represent socialisation effects in the sense of the theoretical assumptions, besides self-selection and external selection effects. However, we can not validate this, since this is only a cross-sectional study. Furthermore, the moderate degrees of explained variance let assume that pre-occupational socialisation effects within family, school, and leisure activities may play a considerable role regarding the development of prosocial and democratic orientations (see Alwin 1989; Lind 2002). Furthermore, the identified influences of the predictors on those behavioural orientations should also be cross-validated with help of observational interview methods which are applied to observed, real behaviour of employees in democratic versus hierarchical firms. This is a goal of the successor of the ODEM project.

Despite these limitations and against the background of these results, it seems justified if enterprises try to make a substantial contribution to human resources development that would also improve societal cohesion by using a democratic organisational structure and ethical principles of leadership and intra-organisational communication.

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## Appendix

English Translation of Sociomoral Atmosphere - Screening (SMA-S)

On the following pages you'll find different statements concerning organisational procedures and organisational atmosphere. Would you agree or disagree with these statements?

Response scale:	1 = disagree strongly,	2 = disagree somewhat,	3 = disagree slightly,
	4 = agree slightly,	5 = agree somewhat,	6 = agree strongly

- In our company we deal with conflicts and clashing interests frankly. (sa1) 1.
- 2. It is possible to make mistakes without getting punished. (sa5)
- In our firm you do not have to visualise awkward consequences when you criticise. (sa9) 3.
- 4. Problems and conflicts are brushed under the carpet. (FOGO)\* (sa2 u)
- Our employees are held in respect even if they have opposed opinions to the company. (sa6) 5.
- 6. We barely have "holy cows". It is possible to question principles into when they are no longer appropriate for a joint success or an effective cooperation. (sa10)
- 7 Contradictory economic interests between the employees and the enterprise are discussed frankly. (sa3)
- Everybody receives attention, we are not indifferent toward one another. (sa7) 8. 9 In our enterprise also people of different nationalities, confessions, political attitudes, etc. have the chance to get ahead.
- (sa11)
- 10. Our job makes a big contribution to the environmental protection. (sa15)
- 11. Conflicts in between teams/departments are negotiated at the "round table". (sa4)
- Our employees are held in respect regardless of their education and qualification. (sa8) 12.
- 13. Staff members have also a voice in large-scale organisational changes. (sa12)
- 14. To fulfil all the needs of the colleagues poses a real challenge and responsibility. (sa16)
- 15. In our company we have the responsibility for other people's healthiness. (sa14)\*
- In our company we feel responsible for other people's well-being. (sa13)\* 16

Validated original German version of Sociomoral Atmosphere - Screening (SMA-S) Bitte beurteilen Sie anhand der folgenden Aussagen, in wie weit diese für Ihr Unternehmen und Ihre Arbeit zutreffen.

\*

Antwortformat:	1 = trifft überhaupt nicht zu	2 = trifft kaum zu	3 = trifft eher nicht zu		
	4 = trifft eher zu	5 = trifft weitgehend zu	6 = trifft voll und ganz zu		

In unserem Unternehmen geht man offen mit Konflikten und Interessensgegensätzen um. (sa1) 1.

- Man kann bei uns auch Fehler machen, ohne dafür bestraft zu werden. (sa5) 2.
- 3 Bei uns ist es möglich Kritik zu üben, ohne dafür mit unangenehmen Konsequenzen rechnen zu müssen. (sa9)
- Probleme und Konflikte werden bei uns unter den Teppich gekehrt. (FOGO)\* (sa2 u) 4.
- Bei uns wird man auch dann geachtet, wenn man andere Ansichten oder Überzeugungen vertritt. (sa6) 5
- Bei uns gibt es kaum "heilige Kühe". Es ist möglich, Prinzipien in Frage zu stellen, falls sie für den gemeinsamen Erfolg 6. oder die gute Zusammenarbeit nicht mehr taugen. (sa10)
- 7. Widersprüchliche wirtschaftliche Interessen zwischen den MitarbeiterInnen und dem Unternehmen werden offen diskutiert. (sa3)
- 8 Bei uns findet jede und jeder Beachtung. Man ist sich nicht gleichgültig. (sa7)
- In unserem Unternehmen hat auch jemand einer anderen Nationalität, Konfession, politischen Überzeugung usw. echte 9. Karrierechancen. (sa11)
- Unsere Arbeit leistet einen hohen Beitrag zum Schutze unserer Umwelt. (sa15) 10.
- Konflikte zwischen Abteilungen / Teams werden am "Runden Tisch" ausgehandelt. (sa4) 11.
- MitarbeiterInnen werden unabhängig von der Ausbildung und Qualifikation geachtet. (sa8) 12.
- 13 Auch bei weit reichenden Veränderungen im Unternehmen, haben die MitarbeiterInnen ein Wörtchen mitzureden. (sa12)
- 14 Allen Bedürfnissen der KollegInnen gerecht zu werden ist eine echte Herausforderung und Verantwortung. (sa16)
- 15. In unserem Unternehmen trägt man Verantwortung für die Gesundheit anderer Menschen. (sa14)\*\* 16.
- In unserem Unternehmen fühlt man sich für das Wohl anderer Personen verantwortlich. (sa13)\*
- \* = FOGO: This item stems from the FOGO guestionnaire (Gebert/Boerner/Matiaske 1998).
- \*\* = Based on item-analyses these two items were reformulated.