



How organisational climate affects the leadership-health relationship in the face of change

Tim Schröder (schroeder.tim@baua.bund.de)
Project "Leadership and Organisation in a Changing
World", German Federal Institute for
Occupational Safety and Health (BAuA)

PEROSH-Conference "Wellbeing at Work in a Changing World - Challenges and Opportunities", 22-24 May 2019 (Paris)



1. Introduction

- Leadership styles and behaviour as predictors of employees' health well documented: positive effect of "good" leadership
- Health-promoting effect of "good" organisational climate moderately analysed
- Largely neglected:
 - Mediating and moderating (contextual) effects of organisational climate on the leadership-followers' health relations
 - Special importance of these effects in organisations facing change (esp. digitisation)



1. Introduction

Research Questions

- 1. How is organisational climate defined in contrast to culture, structure, social relations and individual behaviour?
- 2. How does climate mediate and moderate the effect of leadership behaviour on employee's health?
- 3. Are the effects of climate stronger when facing digitalisation?



2. Theoretical framework: Culture - common view

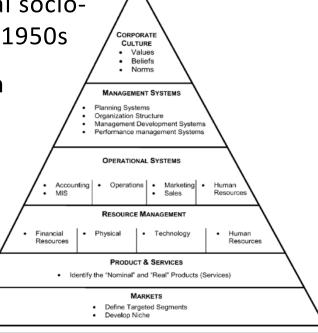
 "Organisational climate" often defined by the use of "culture" and "structure" → clear demarcation necessary – and possible

 Common definition of "organisational culture" as uniform "orders" of internalised, commonly shared "values" shaping cognition and action

 Definition constrained to tradition of "cultural sociological" and 'conservative' role theory of the 1950s

 Heterogeneous, non-consensual discourse on meaning of the concept "culture" in general not reflected

Above definition does not adequately reflect theory, and quantitative measures rely on biased premises





2. Theoretical framework: Culture – back to the roots

- Organisations "are" cultures, inclusion of what is not shared
- (Related) Subcultures, esp. countercultures, fragmented culture
- Latent "real" meaning of symbols (values), myths, rites, ceremonies ("rain dance"): unintended, unperceived "deep structure""below the surface" of manifest "intentions", "motives"
- Interactive constitution of meaning (values), cultural enactments: Institutionalism, social constructivism, symbolic interactionism, practice theory, micropolitics, organisational learning, social memory
- Qualitative, narrative approach: "Thick description"
- Quantitative scales should take points above into account...
- ...otherwise, use of the concept of culture not recommended



2. Theoretical framework: Three structural dimensions

- Formal (manifest) structure: e.g. hierarchy/chain of command, divisional organisation, specialisation, standardisation, formalisation, work design, control instruments
- "Positional" / "opportunity structure": Number, density, distribution, relation of elements (individuals, jobs) – implications:
- Technical infrastructure

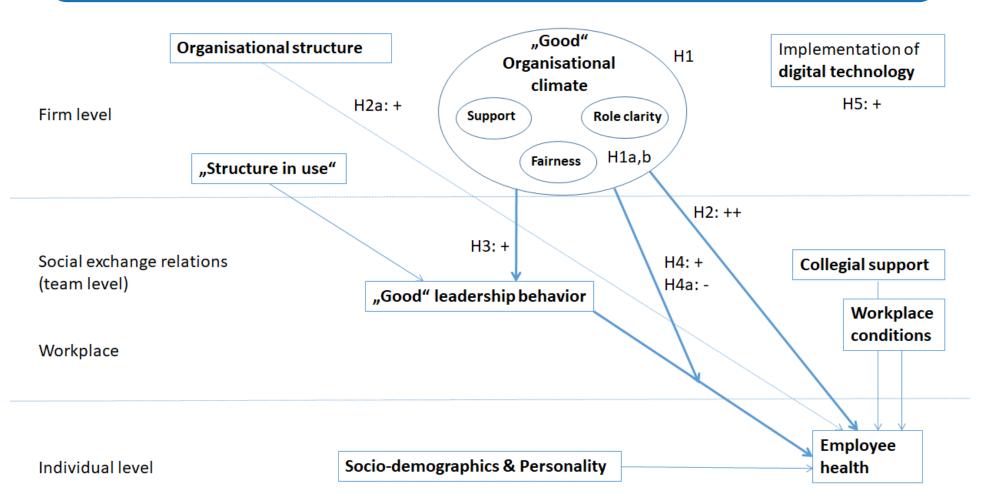


2. Theoretical framework: Climate

- Field-theoretical tradition, experiments in small-group settings
- "Surface manifestation of culture"
- "Intervening variable between the context of an organisation and the behaviour of its members"
- "Temporary", "consciously perceived", interpretation, ascription of meaning to context
- Emergent level of context: organisation (or teams) vs. exchange relations (LMX) / individual leadership behaviour
- Individual (psychological) vs. compositional organisational climate
- Multi-Foci
- Several climate facets theoretical status unclear



2. Theoretical Framework: effects of organizational climate on the relationship between leadership behaviour and health



H1: Measurement model, H2= Direct effect, H3= Mediation, H4= Moderation, H5=Multigroup-analysis



2. Theoretical framework: Hypotheses

- H1. A single latent variable 'good climate' can be identified
- **H1a.** A second-order latent 'climate'-variable is composed of three climate dimensions: supervisory support, role-clarity, fairness
- H1b. Three first-order (latent) climate dimensions can be identified
- **H2.** 'Good Climate' has a direct positive effect on the health of employees
- **H2a.** (auxiliary hypothesis). The direct effects of climate are stronger than the effects of structural measures
- **H3.** A large part of the positive leadership-health relationship is explained by climate
- H4. A 'good climate' promotes the leadership-health relationship
- H4a. A 'good climate' weakens the leadership-health relationship
- H5. The climate impact is stronger in establishments facing digitisation



3. Data and Methods: Linked Personnel-Panel (LPP)

- Funded by Federal Ministry of Labour and Social Affairs (BMAS) and Institute for Employment Research (IAB)
- Biennial linked employer-employee panel survey of
 - (Representatives of) German establishments, representative for private sector, 50+ employees
 - Employees subject to social security contributions, stratified random sample within above sample of establishments
- Here: 2nd wave, 2014/15, dependent employees, age: 25-59, 771 establishments, 4.624 employees
- EFA for H1 and SEM for H1-5
- Limited to "individual climate" (aggregation of individual responses not possible), however focus of items on organisation and climateitems from viewpoints of representatives and employees



3. Data and Methods: Operationalisation

Structure

- Certified health management audit
- Target agreements
- Performance assessments
- Standardised employee interviews
- Age/sex distribution

"Structure in use"

 Standardised employee interview conducted

Control Variables

- Collegial support by/of colleagues
- Working conditions (Work design questionnaire): job autonomy, unpleasant ambient conditions
- Sociodemografics / Personality: Age in years, sex, Big 5: Neuroticism

"Good" Climate (5-pt Likert scale) Representatives of organisation

 Management of poor performance: open discussion, personnel development, positional change, lay-off

Employees

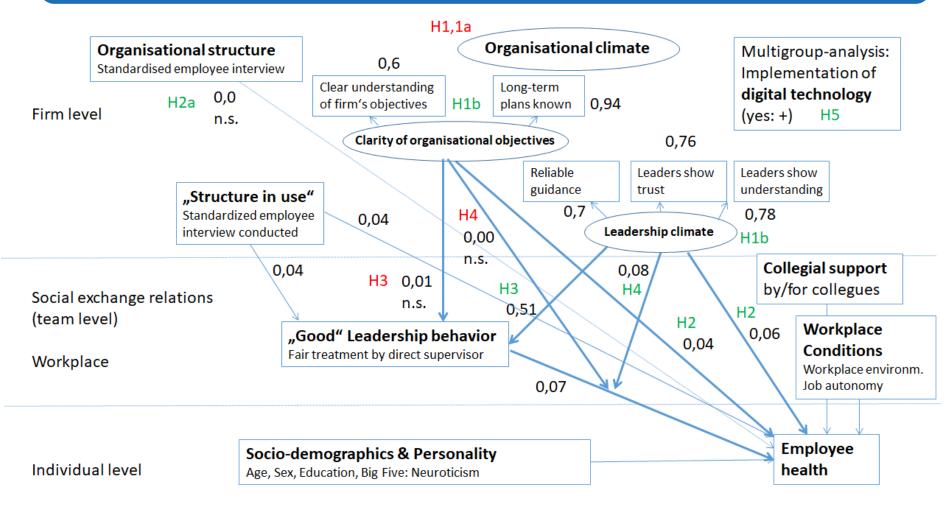
- Clarity of organisational goals, 2 items, OCM
- Supervisory support: 6 items, task-/relationsoriented, OCM
- Procedural justice: single item
- No discrimination: single item

Fair treatment by supervisor (5pt-Likert)

Perceived state of health (5pt-Likert)



4. Empirical Results



Best Model Fit, all goodness-of-fit measures above/below cutoff-criteria documented by Hu&Bentler (1999)



5. Summary

- Organisational climate can and should be distinguished from culture, structure, exchange relations and individual behaviour
- Two climate dimensions
 - a) clarity of organizational objectives
 - b) supportive leadership climate
- (Only) supportive leadership climate partially explains the health effect of fair leadership behaviour
- Supportive leadership climate strengthens positive health effect of fair leadership behavior
- Mediating and moderating climate-effects especially strong in organisations facing change (digitisation)



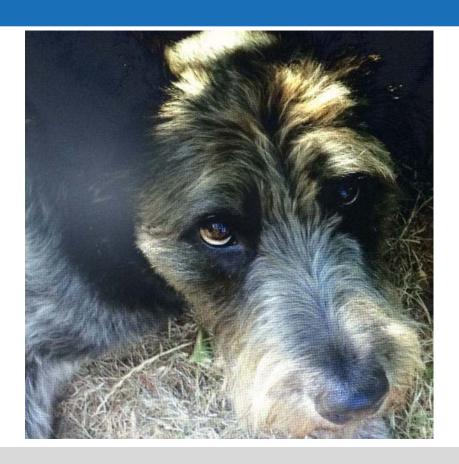
5. Implications, limitations and future tasks

- Good climate, less structure, is health-promoting by supporting fair leadership and thus helps to implement organisational change
- However, variance in health only partially explained and health effect of climate fully mediated by job satisfaction – job demands-resources model: dual-process explanations?
- Research Gaps
 - Causality: Use of longitudinal information
 - Multi-level research design
 - Qualitative analyses of organizational culture
- All gaps addressed in BAuA-project: "Leadership and organisation in the changing world" (2018-2021)



Thank you for your attention!

Contact: schroeder.tim@baua.bund.de fowa@baua.bund.de





- Alexander, J. C., & Smith, P. (1998[2003]). The Strong Programm in Cultural Sociology. Elements of a Structural Hermeneutics. In J. C. Alexander (Ed.), The Meanings of Social Life. A Cultural Sociology (pp. 11-26). Oxford and others: Oxford University Press.
- Argyris, Chris/Schön, Donald A. (1978) Organizational learning. A theory of action perspective; Reading: Addison-Wesley
- Ashkanasy, Neal M. (2009): Thick or thin? A fundamental question in organizational behavior. S. 61-67 in: Yammarino, Francis J., und Fred Dansereau (Hg.), Multi-Level Issues in Organizational Behavior and Leadership. Research in Multi Level Issues. Emerald Group Publishing Limited.
- Ashkanasy, N. M., Wilderom, C. P. M., & Peterson, M. F. (Eds.). (2011). The handbook of organizational culture and climate. Los Angelese and others: Sage.
- Bakker, Arnold B. und Evangelia Demerouti (2017): Job demands-resources theory: Taking stock and looking forward. Journal of Occupational Health Psychology 22 3: 273-285.
- Bass, B. M., & Bass, R. R. (2008). The Bass handbook of leadership: theory, research, and managerial applications (4th ed. ed.). New York: Free Press.
- Blau, P. M. (1960). Structural Effects. AMERICAN SOCIOLOGICAL REVIEW, 25(2), 178-193.
- Blau, P. M., & Schoenherr, R. A. (1971). The Structure of Organizations. New York and London: Basic Books.
- Blau, P. M. (1977). A Macrosociological Theory of Social Structure. The American Journal of Sociology, 83(1), 26-54.
- Braun, Susanne, Claudia Peus, Silke Weisweiler und Dieter Frey (2013): Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. The Leadership Quarterly 24 1: 270-283. http://www.sciencedirect.com/science/article/pii/S1048984312001075.



- Broszeit, Sandra, Philipp Grunau und Stefanie Wolter (2016): LPP Linked Personnel Panel 1415. Quality of work and economic success: longitudinal study in German establishments (data documentation on the second wave) FDZ data report 06/2016.
- Cameron, K. S., & Quinn, R. E. (1999[2006]). Diagnosing and changing organizational culture: Based on the competing values framework (Revised edition ed.). Reading, MA: Addison-Wesley.
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. Journal of Applied Psychology, 83(2), 234-246. doi:10.1037/0021-9010.83.2.234
- Chandler, A. D. (1962). Strategy and Structure. Chapters in the History of the Industrial Empire. Cambridge, Mass.: The M.I.T. Press.
- Colville, I. D., Waterman, R. H., & Weick, K. E. (1999). Organizing and the Search for Excellence: Making Sense of the Times in Theory and Practice. 6(1), 129-148. doi:10.1177/135050849961006
- Crozier, M., & Friedberg, E. (1979). Macht und Organisation. Die Zwänge kollektiven Handelns. Berlin:
 Athenäum.
- Deal, T. E., & Kennedy, A. A. (1982). Corporate Cultures: The Rites and Rituals of Corporate Life. Readin, Mass, and others: Addison-Wesley.
- Denison, D. R. (1996). What is the Difference between Organizational Culture and Organizational Climate? A
 Native's Point of View on a Decade of Paradigm Wars. The Academy of Management Review, 21(3), 619-654.
 doi:10.2307/258997
- Durkheim, É. (1895[1984]). Die Regeln der soziologischen Methode (1995 ed.). Frankfurt/M.: Suhrkamp.
- Durkheim, É. (1912[1981]). Die elementaren Formen des religiösen Lebens. Frankfurt/M.: Suhrkamp.
- Edwards, J. R., & Cooper, C. L. (2013). The Person-Environment Fit Approach to Stress: Recurring Problems and Some Suggested Solutions. In C. L. Cooper (Ed.), From Stress to Wellbeing Volume 1: The Theory and Research on Occupational Stress and Wellbeing (pp. 91-108). London: Palgrave Macmillan UK.



- Feldman, M. S., & Orlikowski, W. J. (2011). Theorizing Practice and Practicing Theory. Organization Science, 22(5), 1240-1253. doi:10.1287/orsc.1100.0612
- Flamholz, E. (2001). Corporate Culture and the Bottom Line. European Management Journal, 19(3), 268-275.
- Geertz, C. (1973). The Interpretation of Cultures. Selected Essays. New York: Basic Books.
- Geertz, C. (2000). The World in Pieces: Culture and Politics at the End of the Century. In Ders. (Ed.), Available light: anthropological reflections on philosophical topics (pp. 218-263). Princeton, NJ: Princeton University Press.
- Glisson, C., & James, L. R. (2002). The cross-level effects of culture and climate in human service teams.
 Journal of Organizational Behavior, 23(6), 767-794. doi:10.1002/job.162
- Hackman, J. R. (2003). Learning more by crossing levels: evidence from airplanes, hospitals, and orchestras.
 Journal of Organizational Behavior, 24(8), 905-922. doi:doi:10.1002/job.226
- Hu, Li-Tze und Peter M. Bentler (1999): Cutoff criteria for fit indexes in covariance structure analysis:
 Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal 6 1: 1-55. https://doi.org/10.1080/10705519909540118.
- James, L. R., & Jones, A. P. (1974). Organizational climate: a review of theory and research. Psychological Bulletin, 81, 1096-1112.
- Kampkötter, P., Mohrenweiser, J., Sliwka, D., Steffes, S., & Wolter, S. (2015). Measuring the use of human resources practices and employee attitudes. The Linked Personnel Panel. IAB Discussion Paper, 35/2015.
- Kanter, R. M. (1977). Some Effects of Proportions on Group Life: Skewed Sex Ratios and Responses to Token Women. The American Journal of Sociology, 82(5), 965-990.
- Kim, T.-Y., & Leung, K. (2007). Forming and reacting to overall fairness: A cross-cultural comparison.
 Organizational Behavior and Human Decision Processes, 104(1), 83-95.
 doi:https://doi.org/10.1016/j.obhdp.2007.01.004



- Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations:
 Contextual, temporal, and emergent processes. In Multilevel theory, research, and methods in organizations:
 Foundations, extensions, and new directions. (pp. 3-90). San Francisco, CA, US: Jossey-Bass.
- Kroeber, A. L., & Kluckhohn, C. (1952). Culture: A Critical Review of Concepts and Definitions. Cambridge, MA:
 Peabody Museum.
- Kroeber, A. L., & Parsons, T. (1958). The Concepts of Culture and of Social System. American Sociological Review, 23(5), 582-583.
- Lévi-Strauss, C. (1949[1969]). The Elementary Structures of Kinship. Boston: Beacon Press.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of Aggressive Behavior in Experimentally Created "Social Climates". The Journal of Social Psychology, 10(2), 269-299. doi:10.1080/00224545.1939.9713366
- Luhmann, N. (2000). Organisation und Entscheidung. Opladen: Westdeutscher Verlag.
- Martin, J., & Siehl, C. (1983). Organizational culture and counterculture: An uneasy symbiosis. Organizational Dynamics, 12(2), 52-64. doi:https://doi.org/10.1016/0090-2616(83)90033-5
- Martin, J. (2001). Organizational culture: Mapping the Terrain. Thousand Oaks London New Delhi: Sage.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony.
 American Journal of Sociology, 83(2), 340-363.
- Montano, D., Reeske, A., Franke, F., & Hüffmeier, J. (2017). Leadership, followers' mental health and job performance in organizations: A comprehensive meta-analysis from an occupational health perspective. Journal of Organizational Behavior, 38(3), S. 327–350. doi:10.1002/job.2124
- Morgeson, F. P. und S. E. Humphrey (2006): The Work Design Questionnaire (WDQ): developing and validating a comprehensive measure for assessing job design and the nature of work. Journal of Applied Psychology 91 6: 1321-39.
- Mumford, Michael D., Jay J. Caughron, Tamara L. Friedrich und Samuel T. Hunter (2009): Charismatic, ideological, and pragmatic leadership: An examination of multi-level influences on emergence and performance.
 S. 79-116 in: Yammarino, Francis J., und Fred Dansereau (Hg.), Multi-Level Issues in Organizational Behavior and Leadership. Emerald.



- Oldham, G. R., & Hackman, J. R. (1981). Relationships Between Organizational Structure and Employee Reactions: Comparing Alternative Frameworks. Administrative Science Quarterly, 26(1), 66-83. doi:10.2307/2392600
- Parsons, T., & Shils, E. A. (1951[1962]). Toward a General Theory of Action (2nd edition ed.): Harvard University Press.
- Patterson, M. G., West, M. A., Shackleton, V. J., Dawson, J. F., Lawthom, R., Maitlis, S., . . . Wallace, A. M. (2005). Validating the organizational climate measure: links to managerial practices, productivity and innovation. Journal of Organizational Behavior, 26(4), 379-408. doi:doi:10.1002/job.312
- Peters, T. J., & Waterman, R. H. J. (1982). In Search of Excellence. New York: Harper & Row.
- Pettigrew, A. M. (1979). On Studying Organizational Cultures. Administrative Science Quarterly, 24(4), 570-581.
 doi:10.2307/2392363
- Porter, L. W., & Lawler III., E. (1964). The effects of "tall" versus "flat" organization structures on managerial job satisfaction. Personnel Psychology, 17(2), 135-148. doi:doi:10.1111/j.1744-6570.1964.tb00057.x
- Pugh, D. S., Hickson, D. J., Hinings, C. R., & Turner, C. (1968). Dimensions of Organization Structure.
 Administrative Science Quarterly, 13(1), 65-105.
- Radcliffe-Brown, A. (1940[1952]). On Social Structure. In Ders. (Ed.), Structure and Function in Primitive Society (pp. 188-204). Glencoe, III.: The Free Press.
- Riketta, Michael und Rolf Van Dick (2005): Foci of attachment in organizations: A meta-analytic comparison of the strength and correlates of workgroup versus organizational identification and commitment. Journal of Vocational Behavior 67 3: 490-510.
- Schminke, M., Ambrose, M. L., & Cropanzano, R. S. (2000). The effect of organizational structure on perceptions of procedural fairness. Journal of Applied Psychology, 85(2), 294-304. doi:10.1037/0021-9010.85.2.294
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational Climate and Culture. 64(1), 361-388.
 doi:10.1146/annurev-psych-113011-143809



- Schneider, B., & Barbera, K. M. (Eds.). (2014). The Oxford Handbuch of Organizational Climate and Culture.
 New York: Oxford University Press.
- Schneider, B., Gonzalez-Roma, V., Ostroff, C., & West, M. A. (2017). Organizational climate and culture:
 Reflections on the history of the constructs in the Journal of Applied Psychology. Journal of Applied Psychology, 102(3), 468-482. doi:10.1037/apl0000090
- Schröder, T. (2016). Das Gedächtnis betrieblicher Beschäftigungssysteme [The memory of firm employment systems]. In N. Leonhard, O. Dimbath, H. Haag, & G. Sebald (Eds.), Organisation und Gedächtnis. Über die Vergangenheit der Organisation und die Organisation der Vergangenheit (pp. 159-180). Wiesbaden: Springer VS.
- Schütz, A. (1932[1981]). Der sinnhafte Aufbau der sozialen Welt. Frankfurt/M.: Suhrkamp.
- Senge, P. M. (1990[1994]). The Fifth Discipline. The Art and Practice of the Learning Organization. New York and others: Currency Doubleday.
- Sojo, V. E., Wood, R. E., & Genat, A. E. (2016). Harmful workplace experiences and women's occupational well-being: A meta-analysis. Psychology of Women Quarterly, 40(1), 10-40. doi:10.1177/0361684315599346
- Sørensen, A. B. (1983). Processes of Allocation to Open and Closed Positions in Social Structure. Zeitschrift fur Soziologie, 12(3), 203-224.
- Steidelmüller, C. & Wittmers, A. (2019): Organisational structure, climate and culture as predictors for leaders' behavior and leadership style – what constructs matter? BAuA. Working Paper, mimeo.
- Tönnies, F. (1887). Gemeinschaft und Gesellschaft. Abhandlung des Communismus und Socialismus als empirischer Kulturformen: Fues Verlag.
- Weber, M. (1904[1985]). Die ,Objektivität' sozialwissenschaftlicher und sozialpolitischer Erkenntnis. In J.
 Winckelmann (Ed.), Max Weber: Gesammelte Aufsätze zur Wissenschaftslehre (6. Auflage ed., pp. 146-214).
 Tübingen: Mohr.



- Weber, M. (1904/05[1986]). Die protestantische Ethik und der Geist des Kapitalismus. In J. Winkelmann (Ed.),
 Max Weber: Gesammelte Aufsätze zur Religionssoziologie. Band 1 (8. Auflage ed., pp. 17-206). Tübingen:
 Mohr.
- Weick, Karl E. (1995): Sensemaking in Organizations. Foundations for Organizational Science. London: Sage.
- Willness, C. R., Steel, P., & Lee, K. (2007). A meta-analysis of the antecedents and consequences of workplace sexual harassment. Personnel Psychology, 60(1), 127-162. doi:10.1111/j.1744-6570.2007.00067.x
- Yammarino, Francis J. und Fred Dansereau (2008): Multi-level nature of and multi-level approaches to leadership. The Leadership Quarterly 19 2: 135-141. http://www.sciencedirect.com/science/article/pii/S1048984308000027.
- Yammarino, Francis J. und Fred Dansereau (Hg.) (2009): Multi-Level Issues in Organizational Behavior and Leadership: Emerald.



4. Empirical Results

H1. A clear-cut latent variable 'good climate' can be identified Refuted

H1a. A second-order latent 'climate'-variable is composed of three climate dimensions: supervisory support, role-clarity, fairness

Refuted

H1b. Three first-order (latent) climate dimensions can be identified Partially confirmed

- > Two climate dimensions identified:
 - Clarity of organisational goals
 - > Supportive leadership climate



4. Empirical Results

H2. 'Good Climate' has a direct positive effect on the health of employees Confirmed

H2a (auxiliary hypothesis). The direct effects of climate are stronger than the effects of structural measures

Confirmed

H3. A large part of the positive leadership-health relationship is explained by climate

Partially confirmed for leadership climate

H4. A 'good climate' promotes the leadership-health relationship Partially confirmed for leadership climate

H4a. A 'good climate' weakens the leadership-health relationship Refuted

H5. The climate impact is stronger in establishments facing digitisation Confirmed

