

Appendix to Public managers' role in creating workplace social capital (WSC) and its effect on employees' well-being and health – a protocol of a longitudinal cohort study (PUMA-WSC)

Workplace Social Capital (WSC)		
Index	Cronbach's Alpha	Items
Bonding	0.82	In our group, we help colleagues who have too much to do In our group, we agree on what is most important in our work tasks I trust the group's ability to do the work well There is a sense of unity and cohesion in my group
Bridging	0.83	Our group and other groups / departments recognize each other's contribution to solving the tasks at work We agree on the main goals of our work across the departments of the organization Other groups provide us with the information we need for our work to be done well Other groups have a great understanding of the work we do in our group
Linking	0.91	Our immediate manager considers our needs and point of view when making decisions The immediate manager helps solve specific problems we face during the workday Our immediate manager has great understanding of the work we are doing The relationship between our group and our immediate manager is characterized by mutual respect and recognition
Organizational	0.78	Employees are involved in decisions about changes of the workplace There is a common understanding between management and employees about how to perform the work tasks In our group we feel a strong connection to our workplace

Note: Each question is answered using a five-point Likert scale (1 = very low degree to 5 = very high degree). The items' and indices are validated by Borg et al. 2014. Documentation and psychometric properties can be found in [1]. We use WSC both as a global measure and the different types as indices in the analyses.

Stress

Index	Cronbach's Alpha	Items
Stress	0.88	How often have you had problems relaxing? How often have you been irritable? How often have you been tense? How often have you been stressed?

Note: Each question is answered using a five-point Likert scale (1 = not at all to 5 = all the time). The items' and index stems from Copenhagen Psychosocial Questionnaire II validated by Bjorner and Pejtersen (2010). Documentation and psychometric properties can be found in [2]. We handle well-being as an index in the analyses

Public service motivation

Single items	Dimension	Items
Public service motivation	Self-sacrifice	I am willing to risk personal loss to help society
	Compassion	It is difficult for me to contain my feelings when I see people in distress
	Attraction to public policy	The give and take of public policy making does appeal to me
	Commitment to the public interest	It is important for me that public services contribute to the common good

Note: Each question is answered using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). In favor of parsimony, we use a global PSM measure consisting of four items, each reflecting one PSM dimension. The measure is similar to the scale proposed by Vandenberg and de Vries in [3].

Organizational commitment

Index	Cronbach's Alpha	Items
Organizational commitment	0.84	To my friends I praise this organization a great place to work My values are very similar to the organization's values This organization really inspires me to give my very best job performance

Note: Each question is answered using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The items are developed by Mowday, Steers and Porter (1979) [4] and the index is further validated in QPS-Nordic by Wännström et al. (2009). Documentation and psychometric properties can be found in [5]. We handle organizational commitment as an index in the analyses.

All the above described measures are included in the survey on job satisfaction and psychosocial work environment. Cronbach's alpha has been calculated on the bases of the 2017 job-satisfaction survey. The questionnaire has been and will be sent to all employees who receive a monthly salary from Esbjerg Municipality. Therefore, the sample do not include:

- Hourly-paid employees (typically temporary staff and student assistants).
- Foster families in the Municipality.

- Trainees and students in short-term employment.
- Members of councils and boards (e.g., city council, grant board).
- Employees of the joint fire service (which run in collaboration with other municipalities).

Management behavior

Index	Cronbach's Alpha	Items
		<i>The leader ...</i>
Strategic management	0.93	Is good at being assertive upwards in the system
		Contributes to a good collaboration between different units (e.g. institutions, departments, divisions and units) in the municipality
		States clear goals for the workplace
		Supports the municipality's visions and policies
		Shows the direction of the unit's long-term development
Personnel management	0.96	Lead the way for changes we have to endure
		Makes use of staff competencies and resources
		Inspires and motivates the employees to do their best
		Contributes to a work environment characterized by learning and development
		Recognizes employees' successes and achievements
Professional management	0.95	Takes care of conflicts in a constructive way
		Actively contributes to the well-being in the unit
		Focuses on involving citizens and collaborators (e.g. users, parents, relatives, companies) to solve the cores task of the workplace
		Strives for high professional quality of the unit's services
		Motivates employees to find new and better ways to solve work tasks
Management of Finances & Operations	0.95	Does one's best to ensure employees in the unit have the proper competencies
		Contributes to a constructive cooperation within the unit
		Appropriately delegates relevant tasks
		Sets clear and distinct financial goals
		Follows up on the unit's goal fulfilment
Personal management	0.93	Seeks new ways to improve the performance of the unit
		Appropriately prioritizes work tasks of the unit
		Is good at coordinating the unit's work tasks
		Is working to create an effective unit
		Emphasizes one's management responsibilities clearly and distinctly
		Is good at making decisions
		Shares relevant information and knowledge
		Listens to employees' ideas and point of views
		Is trustworthy
		Continually strives to become a better leader

Note: The questionnaire is sent to all managers (and their subordinates, peers and top manager) who have been employed for three months or longer. Each question is answered using a seven-point Likert scale (1 = strongly

disagree to 7 = strongly agree). The items were developed with inspiration from classical management literature [6] by a steering group (consisting of HR experts and managers in Esbjerg Municipality). They were subsequently tested by a user group of selected managers in order to test the face validity. Furthermore, cognitive interviews have been performed to ensure correct context sensitive wordings, and the questionnaire were adjusted accordingly. Cronbach's alpha is calculated from subordinates' survey-responses in 2016. We will code the open-ended questions in the management evaluations using deductive thematic coding technics.[7] We do the coding in Nvivo.

REFERENCES

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