Data Report:

Public Value Creation and the Aarhus Compass Survey 2023

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1. Introduction to the project

The creation of public value has become a key focus for public leadership research and a central aim for policy-makers and public leaders (O'Flynn 2021; Hartley et al. 2019; Bryson, Crosby, and Bloomberg 2014; Torfing et al. 2020). This project is about how people in public organizations engage in public value creation. Public value can generally be understood as people's evaluation of how the public impacts the satisfaction of their basic needs (Meynhardt 2009: 205). Public value creation is hence "every process that is shaping individual experiences concerning relationships to the public" (Meynhardt 2009: 211). And engagement in public value creation is people's efforts to create public value. The project examines two research questions:

1. How and to what degree is engagement for public value creation exercised in public organizations?

2. What factors determine how and to what degree engagement in public value is exercised?

By examining these questions, the project will produce knowledge about not only how engagement in public value creation plays out, but also how it relates to the distribution of leadership, the exercise of paradoxical and visionary leadership, individual factors like motivation and self-efficacy as wells as organisational features such as types of tasks and hierarchical level. Furthermore, it will distinguish between engagement in public value creation related to a formal governance concept (the Aarhus Compass) and a broader more informal ambition to create public value unrelated to a top-down governance concept.

1.1 The Aarhus Compass

The empirical setting of the project is Aarhus Municipality and in particular its ambition to create public value based on a supportive governance framework.

The supporting framework is the Aarhus Compass (Aarhus Kommune 2022), which is also a good description of the broader, informal ambition for public value creation. The ambition behind and expressed in the Aarhus Compass is to create public value in conjunction with co-creation and co-

production with citizens and civil society as well as a broad use of both quantitative and qualitative data for learning and development. These elements of the compass are presented in box 1.

The Aarhus Compass is a public value governance approach. The goal is to create and produce public value but with an explicit recognition of the dilemmas this entails. Some of the dilemmas arise from the combination of different modes of governance. They are illustrated in Box 2. That are for instance the dilemmas that arise when professional and legal standards meet anarchic processes of cocreation. Or when citizens define value, while the city council is responsible for overall goal setting. Or when accountability and budget-discipline are combined with an open policy process with many

Box 2. Illustration of Governance Dilemmas

"The classical demands to municipal governance or administration are of course still in effect: We must secure citizens' rights, homogenous levels of service (...), safe, efficient, and financially sustainable operations, as well as transparency through systematic follow ups

(...)

We must balance the classical governance focus on secure operations with a leadership approach that promotes risk-taking, innovation and co-creation" Box 1. The Pillars of the Aarhus Compass

Strengthened focus on value - Aarhus must be a good city for everyone The Aarhus Goals are our point of departure We expand our concept of effect into a concept of value We place value for our citizens and society at the very heart of things

Strengthened co-creation and co-production - We create value together with citizens and with society

'Rethinking Local Government' (Kommune Forfra) and the Active Citizenship Policy are our point of departure Value is something we create together The nature of the task determines who is best qualified to contribute

More knowledge-informed management and practice - We translate knowledge into value

We understand knowledge as data in a broad sense Goals and evaluations must make sense to the stakeholders involved in the co-creation of value

We supplement our managerial practices with a strong culture of learning

societal actors and perspectives. The Aarhus Compass as a framework for governance emphasizes a focus on both/and not just either/or when faced with dilemmas. The key idea is to create public value, while harvesting the virtues of different modes of governance.

The initiation of the Aarhus Compass follows a double strategy. The municipal organization

supports awareness and competence development. This is done through guides and courses into how to apply the principles of the Aarhus Compass in relation to goal setting (the Goal Compass) and co-creation (the Co-creation Compass), and by adapting procedures for political decision-making to the new procedures (how to assess consequences of proposals and which actors to involve). This is combined with a strategy to let the principles of the Aarhus Compass develop and emerge throughout the organization without any explicit link to the formal Aarhus Compass framework.

Knowledge and active use of the Aarhus Compass is, hence, not a goal in itself as long as its principles are used in practice. Still, the municipality sees itself as an actor with a key role in the initiation of the Aarhus Compass. This is especially so in relation to the perceived need to drive transformation, which is argued to require a high level of coordination (Aarhus Kommune 2022: 10): *"we – as politicians, managers and employees – are the ones who need to develop the most, and this must take place in a single coordinated movement"*. That is not the least the case with respect to the many dilemmas that are expected to arise when people are engaged in the creation of public value.

1.2 Research Design

The Danish municipality of Aarhus hence serves as a case to investigate our research questions. The cooperation with the municipality happens within a framework agreement between Aarhus Municipality and the Department of Political Science, Aarhus University.

Before we sent out the survey, we dedicated a lot of time to develop the questionnaire as many of the concepts either had no existing measures or the measures needed to be significantly adapted to the context of the Aarhus Compass. Accordingly, we tested our newly developed items among employees and managers in the municipality. We started out with focus groups with a group of leaders and received their feedback. After some adjustment, we presented the items in focus group interviews with employees. Once again, we evaluated the feedback and made some alterations to the items, before we sent out a pilot test and did the last small modifications to the items. The items used in the survey are presented in section 3 of this data report.

Aarhus Municipality provided us with data on all employees as well as various organizational characteristics. For each individual they provided information regarding the hierarchical level, nearest leader, and the individual's leadership function and leadership role. Moreover, the data also links each individual to his or her organizational unit and shows how each organizational unit is located in the hierarchy in the municipality. That is, for each individual we are able to follow the organizational chain from the top of each department to their own organizational unit. This allows us to investigate the role of engagement in public value creation taking the organizational structure into account. As it is standard, the project was registered in the AU protocol and furthermore we obtained ethical approval for the project.

2. Population, Sampling, and Response Rates

We received contact information on all employees in the municipality working 20 hours or more a week. In total, this amounted to 19,693 employees. Of those 413 had no assigned email address, meaning that our real population consists of 19,280 employees. We sent the survey to all 1,205 formal leaders in the municipality and a sample of employees with no formal leadership role. This group was selected randomly from 18,488 employees with no formal leadership role. Initially, 800 employees were selected, and they received the survey together with the formal leaders on April 11 2023. As the initial response rate among the employees was quite low, we decided to send the survey to an additional randomly selected sample of 2,000 employees April 27 2023. All survey-recipients received a reminder one week after the invitation to the survey and a second reminder two weeks after the invitation.

As the employees were selected to represent all employees in the municipality, we have investigated how the 2,800 employees in our sample represent the six different departments in the municipality; The Department of Social Affairs and Employment (SAE), The Department of Health and Care (HC), The Department of Technical Services and Environment (TSE), The Department of Culture and Citizens' Service (CSS), The Department of Children and Young People (CYP) and The Mayor's Department (MD). Figure 2.1 shows the share of employees across each department for the entire population (18,488) compared to the share of employees in our sample (2,800). The randomization seems to have worked as the share of employees across the departments in our sample to a high degree resembles the population.





Note: Share of employees by department in the entire population; SAE = 18.6%, HC = 22.7%, TSE = 4.0%, CSS = 3.4% CYP = 49.4%, MD = 1.8%. Share of employees by department in the sample; SAE = 19.0%, HC = 23.9%, TSE = 4.0%, CSS = 2.7%, CYP = 48.5%, MD = 2.0%.

We closed the survey on May 22. 2023. There were 471 (39.1%) full responses from leaders and 626 (22.4%) full responses from employees. The average overall response rate was 27.4%. A response is considered a full response if respondents have given valid answer to at least one item for each of the investigated concepts (disregarding background information). A partial response to the survey is when a respondent answers at least one item for one of the investigated concepts. We ended up with 629 (52.2%) partial responses from leaders and 924 (38.8%) partial responses from employees. The number of partial responses was 1,553 and the overall partial response rate was 38.8%. Figures 2.2 and 2.3 below show the response rate for leaders and employees across the different departments.







Table 2.3: Response rate employees

Common for both leaders and employees is that the response rate varies across departments. Interestingly, it is not the same departments that have the highest response rate, when comparing leaders and employees.

The different concepts in the survey are presented in table 2.1 below. The table presents the number of items belonging to each concept and presents whether both leaders and employees, or only the leaders, were asked to answer questions about a specific concept.

Table 2.4: List of concepts covered in the sur	vev
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Dimension	# items	Leaders	Employees
Engagement in Public Value Creation			
Direction of Engagement	5	Х	Х
Prioritization of Direction of Engagement	5	Х	Х
Citizen contact	1	Х	Х
Engagement in Public Value Creation in a citizen perspective			
Direct citizen contact	4	Х	Х
Indirect citizen contact	4	Х	Х
Public value leadership from a citizen perspective: Open text	2	Х	Х
Distribution of Engagement in Public Value Creation			
Perceived Engagement configuration	3	Х	Х
Alignment	4	Х	Х
Integration			
Engagement in Public Value Creation and Professionalism	4	Х	Х

Engagement in Public Value Creation and Rule Governance	3	Х	Х
Perceived Credibility of Value Ambition			
Expected Effort of Top Management	1	Х	
Expected Performance of Value Ambition	1	Х	
Perceived Supportiveness of Ambition			
Perceived Supportiveness of Ambition	1	Х	Х
Co-creation and Co-production			
Co-creation and Co-production	11	Х	X
The Aarhus Compass			
The Aarhus Compass	1	Х	X
Involvement	2	Х	Х
Use	3	Х	Х
Perceived Credibility of the Aarhus Compass			
Expected Effort of Top Management	1	Х	X
Expected Permanence of Aarhus Compass	1	Х	X
Perceived Supportiveness of Aarhus Compass	1	Х	X
Leadership			
Paradox Leadership	5	Х	Х
Visionary Leadership	4	Х	X
Climate Leadership	6	х	
Individual Work-related Factors			
Paradox Mindset	3	Х	Х
Occupational Self-efficacy	3	Х	Х
Work Motivation	4	Х	Х
Job satisfaction	1	Х	Х
Work Situation			
Experienced Tensions	4	Х	
Perceived Resource Scarcity	2	Х	
Red tape	1	Х	Х
Background information			
Background information*	7 (6)	x	x

Note: *Leaders received 7 questions regarding background information, while employees received 6 questions regarding background information.

3. Definitions, distributions, and loadings

In this section, we introduce the definitions of the measured concepts, the response distribution for each item and how the items load in a factor analysis. For non-validated concepts, we use exploratory factor analysis. For visionary leadership and self-efficacy, we use confirmatory factor analysis (CFA) as the measures we use for these concepts are already validated. Histograms are included to show how respondents are distributed on the indexes we construct. When presenting the response distributions for each item, we include the category "Do not know", but in the construction of indexes, respondents who chose the answer "Do not know" are excluded. The additive indexes are calculated based on the mean of the items belonging to that construct, and only respondents who answered at least 50% of the items for a given construct were included in the index for that specific construct.

For the exploratory factor analysis, loadings > 0.3 are seen as acceptable, while loadings > 0.6 are seen as high. Bartlett's test should be significant to indicate that the correlation matrix is significantly different from an uncorrelated matrix, i.e., that the variables are uncorrelated. If Bartlett's test is significant, it suggests a very low probability that the items are in fact uncorrelated in the population. Furthermore, we investigate the Kaiser-Meyer-Olkon (KMO) measure of sampling adequacy to examine the appropriateness of factor analysis. The value of the KMO-test should be > 0.6 to indicate that a satisfactory proportion of the variation could be caused by underlying factors. For the item-item analyses, Pearson's R correlations above > 0.3 are satisfactory. For the CFA's we want the standardized factor loadings to be at least 0.5 and ideally > 0.7. Moreover, we would like TLF and CFI to be > 0.95 and the RMSEA to be < 0.05.

3.1 Engagement in Public Value Creation

The main understanding of public value used in the survey is peoples' thoughts and feelings about the way the public impacts their basic needs. This is defined as "anything people put value to with regard to the public." (Meynhardt 2009: 205). Public value creation is hence "every process that is shaping individual experiences concerning relationships to the public" (Meynhardt 2009: 211). And engagement in public value creation is then any effort to further the joint creation of public value with citizens and other actors such as colleagues, subordinates, or civil society organizations.

Direction of Engagement

The direction of engagement is the stakeholder for which a person tries to create public value. The stakeholders examined are Aarhus as an Urban community (positive difference), citizens (value), immediate management (their expectations), colleagues (in relation to their professional view), and politicians (in relation to their political objectives). By focusing on politicians and formal leaders, we also use the more traditional understanding of public value as the realization of the collective aspirations as they are defined by "citizens and their representatives acting through the collective processes of government" (Moore 1994).

The items measuring the intensity of direction of engagement towards different stakeholders are shown in Table 3.1.1.

Table 3.1.1	Items	measurina	direction	of en	aaaement	
10010 0.1.1	iteriis i	measaring	ancetion	0, 01	gagement	

Leaders and employees: The following text was used to introduce the questions:										
The first question	s are about what you focus on in your work/ <i>De første spørgsmål handl</i>	ler om, hvad du								
fokuserer på i dit	arbejde.									
Leaders and emp	Leaders and employees: In my work, I focus on / Jeg har i mit arbejde fokus på at Source									
fokus_generel_1	making a positive difference for Aarhus as an urban community	Developed for								
	gøre en positiv forskel for Aarhus som bysamfund	this survey.								
fokus_generel_2	contributing to creating value for the citizens									
	medvirke til at skabe værdi for borgerne									
fokus_generel_3	meeting the expectations of my immediate management									
	leve op til forventningerne fra min nærmeste ledelse									
fokus_generel_4	ensuring that my colleagues think I do my job well professionally									
	mine kollegaer synes, jeg udfører mit arbejde fagligt godt									
fokus_generel_5	achieving the political objectives in my area of work									
	opnå de politiske målsætninger på mit arbejdsområde									
Note: Leaders and e	employees had the following options: Not at all (<i>slet ikke</i>) = 1, to a lesser exter	nt (<i>i lav grad</i>) = 2,								
to some extent (i no	ogen grad) = 3, to a large extent (<i>i høj grad</i>) = 4, to a very large extent = 5 (<i>i m</i>	eget høj grad), do								
not know (<i>ved ikke)</i>	= 99.									

Table 3.1.2 shows the response distribution among leaders on the items measuring the intensity of direction of engagement.

Table 3.1.2: Response	distribution, leaders
-----------------------	-----------------------

	Not at	То а	To some	То а	To a very	Do not	Total N
	all	lesser	extent	large	large	know	
		extent		extent	extent		
fokus_generel_1	2.26%	10.48%	29.52%	35.00%	18.71%	4.03%	620
(community)	(14)	(65)	(183)	(217)	(116)	(25)	
fokus_generel_2	0.32%	0.48%	4.94%	36.52%	57.58%	0.16%	627
(citizens)	(2)	(3)	(31)	(229)	(361)	(1)	
fokus_generel_3	0%	1.77%	14.15%	53.38%	30.23%	0.48%	622
(expectations)	(0)	(11)	(88)	(332)	(188)	(3)	
fokus_generel_4	1.13%	3.86%	19.00%	55.07%	17.87%	3.06%	621
(colleagues)	(7)	(24)	(118)	(342)	(111)	(19)	
fokus_generel_5	0.32%	2.08%	17.76%	50.24%	28.48%	1.12%	625
(political objectives)	(2)	(13)	(111)	(314)	(178)	(7)	
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.1.3 shows the inter-item correlations for leaders.

Table 3.1.3: Correlation matrix, leaders

	fokus_generel_ 1	fokus_generel_	fokus_generel_	fokus_generel_	fokus_generel_
	(community)	(citizens)	(expectations)	(colleagues)	(political objectives)
fokus_generel_ 1 (community)	1.00				
fokus_generel_ 2 (citizens)	0.28	1.00			
fokus_generel_ 3 (expectations)	0.24	0.14	1.00		
fokus_generel_ 4 (colleagues)	0.13	0.10	0.43	1.00	
fokus_generel_ 5 (political objectives)	0.32	0.22	0.38	0.15	1.00

For leaders, the inter-item correlations are relatively low. The highest correlation is between ensuring that their colleagues think they do their job well professionally and meeting the expectations of their immediate management.

Table 3.1.4 shows the response distribution among employees on the items measuring the intensity of direction of engagement.

	Not at all	То а	To some	To a large	To a very	Do not	Total N	
		lesser	extent	extent	large	know		
		extent			extent			
fokus_generel_1	7.60%	16.42%	25.47%	24.80%	17.09%	8.60%	895	
(community)	(68)	(147)	(228)	(222)	(153)	(77)		
fokus_generel_2	0.11%	1.53%	8.06%	30.07%	59.48%	0.76%	918	
(citizens)	(1)	(14)	(74)	(276)	(546)	(7)		
fokus_generel_3	0.55%	3.66%	16.87%	47.17%	30.30%	1.44%	901	
(expectations)	(5)	(33)	(152)	(425)	(273)	(13)		
fokus_generel_4	1.00%	3.67%	13.24%	48.83%	30.03%	3.23%	899	
(colleagues)	(9)	(33)	(119)	(439)	(270)	(29)		
fokus_generel_5	5.25%	13.41%	30.84%	28.16%	15.98%	6.37%	895	
(political objectives)	(47)	(120)	(276)	(252)	(143)	(57)		
Note: Percentages of observations in each category and number of observations in parentheses.								

Table 3.1.4: Response distribution, employees

The inter-item correlations for employees are shown in Table 3.1.5.

Table 3.1.5: Correlation matrix, employees

	fokus_generel_	fokus_generel_	fokus_generel_	fokus_generel_	fokus_generel_
	1	2	3	4	5
	(community)	(citizens)	(expectations)	(colleagues)	(political
					objectives)
fokus_generel_	1.00				
1					
(community)					
fokus_generel_	0.20	1.00			
2					
(citizens)					
fokus_generel_	0.20	0.14	1.00		
3					
(expectations)					
fokus_generel_	0.20	0.10	0.40	1.00	
4					
(colleagues)					
fokus_generel_	0.46	0.13	0.39	0.24	1.00
5					
(political					
objectives)					

The inter-item correlations among employees follow the same trend as among leaders. All correlations are positive.

Prioritization of Direction of Engagement

The respondents were also asked to rank (prioritize) the different stakeholders in their work. The following table shows the items measuring prioritization of direction of engagement.

Table 3.1.6: Items measuring prioritization	of direction of engagement
---	----------------------------

	Leaders and employees: How do you prioritize the following in your	Source
	work?	
	1 is given to your highest priority, 5 is given to your lowest priority.	
	Drag each row to the desired position.	
	Hvordan prioriterer du følgende i dit arbejde?	
	1 gives til det, du prioriterer højest, 5 gives til det, du prioriterer	
	lavest.	
	Træk hver række til den ønskede position.	
fokus_generel_prio_1	Making a positive difference for Aarhus as an urban community/	Deve-
	At gøre en positiv forskel for Aarhus som bysamfund	loped for
fokus_generel_prio_2	Contributing to creating value for the citizens/	survey.
	At medvirke til at skabe værdi for borgerne	,
fokus_generel_prio_3	Meeting the expectations of my immediate management/	
	At leve op til forventningerne fra min nærmeste ledelse	
fokus_generel_prio_4	Ensuring that my colleagues think I do my job well professionally/	
	At mine kollegaer synes, jeg udfører mit arbejde fagligt godt	
fokus_generel_prio_5	Achieving the political objectives in my area of work/	
	At opnå de politiske målsætninger på mit arbejdsområde	
Note: Leaders and emplo most in their work, where	yees were asked to rank each item from 1-5. I was given to the item they priori eas 5 was given to the item they prioritize the least.	tize the

Figure 3.1.1 shows how leaders ranked each of the five items.



Figure 3.1.1: Distribution of items chosen as first priorities as reported by leaders

Figure 3.1.1 shows a clear pattern in what leaders prioritize. Most leaders (66%) agree that creating value for citizens is their first priority. A total of 81% of leaders have chosen this item as either their first or their second priority. Only 3% chose it as their fifth priority. Furthermore, Figure 3.1.1 shows that achieving political objectives in their area of work is a fairly high priority for leaders. Around one in eight leaders chose it as their first priority, and one in three chose it as their second. On average, achieving political objectives in their area of work is the item leaders prioritize the most after creating value for the citizens.

Figure 3.1.2 shows how employees ranked each of the five items.

Note: N = 561.



Figure 3.1.2: Distribution of first priorities as reported by employees

Note: N = 800.

The overall prioritization among employees is similar to the prioritization among leaders. Following the same trend as among leaders, employees also agree that contributing to creating value for the citizens is a top priority in their job, as around 80% chose it as their first or second priority. For employees, it is a relatively high priority that their colleagues think they do their jobs well professionally. Most employees chose it as their second (35%) or their third (27%) priority, whereas most leaders ranked it as their fourth or fifth priority. Achieving political objectives in their area of work is, however, not a top priority for employees. Less than 20% chose it as their first or second priority, while 67% chose it as their fourth of fifth priority.

Citizen contact

For leaders, citizen contact is a variable expressing whether a respondent manages employees where direct interactions with citizens are an essential part of their work. For employees, citizen contact is a variable expressing whether a respondent has direct interactions with citizens as an essential part of their work. Citizens are understood as any person outside of the municipal organization they interact with in that person's capacity as either a private citizen or as representing an organization. The items measuring citizen contact are shown in Table 3.1.7. All respondents should answer this question before they could continue answering the questionnaire.

Table 3.1.7: Items measuring citizen contact

Leaders:		Source
borgerkontakt	Are you a manager of employees where direct contact with citizens is	Developed
	an essential part of their work?	for this
	Er du leder for medarbejdere, hvor direkte kontakt med borgerne er en	survey.
	væsentlig del af deres arbejde?	
Employees:	·	Source
borgerkontakt	Is it an essential part of your work to have direct contact with citizens?	Developed
	Er det en væsentlig del af dit arbejde at have direkte kontakt med	for this
	borgerne?	survey.
Note: Both leader	s and employees had the following options: Yes (<i>ja</i>) = 1 and No (<i>nej</i>) = 2.	•

The distributions on the items measuring citizen contact among leaders and employees are shown in Table 3.1.8 and 3.1.9.

Table 3.1.8: Citizen contact, leaders

	Yes	No	Total N		
Borgerkontakt	75.32%	24.68%	616		
(citizen contact) (464) (152)					
Note: Percentages of observations in each category and number of observations in parentheses.					

Table 3.1.9: Citizen contact, employees

	Yes	No	Total N	
borgerkontakt	77.07%	22.93%	907	
(citizen contact)	(699)	(208)		
Note: Percentages of observations in each category and number of observations in parentheses.				

For the majority of both leaders and employees, citizen contact is an essential part of their work.

3.2 Engagement in Public Value Creation in a Citizen Perspective

Public value creation is a (1) process of co-production and co-consumption of the citizens' experiences of the impact of the public on citizens' basic needs satisfaction (Osborne, Nasi, and Powell 2021: 648; Meynhardt 2009: 211), which is based on (2) attempts to understand the value experiences of citizens (Nasi and Choi 2023: 5). Engagement in public value creation hence includes a practice of (a) listening to and

being (b) curios about what citizens find valuable as well as (c) furthering the co-creation of solutions and (d) their execution.

Direct citizen contact

Table 3.2.1 shows the items measuring direct engagement in public value creation in a citizen perspective.

Table 3.2.1: Items measuring engagement in public value creation in a citizen perspective

Leaders and employees	: In my work, I focus on the fact that we in the municipality	Source
/ Jeg har i mit arbejde	fokus på, at vi i kommunen	
fokus_borgerkontakt_1	listen to what citizens think is important	Developed for
	lytter til, hvad borgerne synes er vigtigt	this survey
fokus_borgerkontakt_2	are curious about what citizens find valuable	
	er nysgerrige på, hvad borgerne oplever er værdifuldt	
fokus_borgerkontakt_3	find solutions together with citizens	
	finder løsninger sammen med borgerne	
fokus_borgerkontakt_4	involve citizens in the execution of tasks	
	inddrager borgerne i udførelsen af opgaverne	
Note: The question was on Leaders and employees ha some extent (<i>i nogen grad</i> know (<i>ved ikke</i>) = 99.	ly given to respondents who answered "Yes" on the question borgerko d the following options: Not at all (<i>slet ikke</i>) = 1, to a lesser extent (<i>i la</i>) = 3, to a large extent (<i>i høj grad</i>) = 4, to a very large extent = 5 (<i>i mego</i>	ontakt. v grad) = 2, to et høj grad), do not

Table 3.2.2 shows how leaders responded on the items.

Table 3.2.2:	Response d	listribution,	leaders
--------------	------------	---------------	---------

	Not at	То а	To some	То а	To a very	Do not	Total
	all	lesser	extent	large	large	know	Ν
		extent		extent	extent		
fokus_borger_kontakt_1	0%	0.66%	8.52%	46.94%	43.45%	0.44%	458
(listen)	(0)	(3)	(39)	(215)	(199)	(2)	
fokus_borger_kontakt_2	0.22%	0.44%	7.21%	44.98%	46.29%	0.87%	458
(curious)	(1)	(2)	(33)	(206)	(212)	(4)	
fokus_borger_kontakt_3	0%	2.84%	15.28%	39.96%	41.48%	0.44%	458
(solutions)	(0)	(13)	(70)	(183)	(190)	(2)	
fokus_borger_kontakt_4	0.44%	4.38%	21.44%	35.67%	37.64%	0.44%	457
(involve)	(2)	(20)	(98)	(163)	(172)	(2)	
Note: Percentages of observations in each category and number of observations in parentheses.							

The inter-item correlations between items measuring direct engagement in public value creation in a citizen perspective for leaders are shown in the table below.

	fokus_borger_kont	fokus_borger_kont	fokus_borger_kont	fokus_borger_kont
	akt_1	akt_2	akt_3	akt_4
	(listen)	(curious)	(solutions)	(involve)
fokus_borger_kont	1.00			
akt_1				
(listen)				
fokus_borger_kont	0.65	1.00		
akt_2				
(curious)				
fokus_borger_kont	0.64	0.55	1.00	
akt_3				
(solutions)				
fokus_borger_kont	0.58	0.49	0.65	1.00
akt_4				
(involve)				

Table 3.2.3: Correlation matrix, leaders

For leaders, the inter-item correlations are fairly high as all correlations except one are above 0.5.

Table 3.2.4. Test of assumptions for factor analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.80
Bartlett's Test of Sphericity Chi Square		789.575
Degrees of freedom		6
	p-value	0.000

The p-value of the Bartlett's test is 0.000 which indicates that the correlation matrix is significantly different from an uncorrelated matrix. This suggests a very low probability that the items are uncorrelated in the population. The KMO-value of 0.8 indicates that an acceptable proportion of variation in the data could be caused by underlying variables.

Table 3.2.5: Exploratory factor analysis: Engagement in public value creation in a citizen perspective as reported by leaders

Pretext: In my work, I focus on the fact that we in the municipality	Loadings
Listen to what citizens think is important	0.798
Are curious about what citizens find valuable	0.713
Find solutions together with citizens	0.783
Involve citizens in the execution of tasks	0.727
Note: One factor with an Eigenvalue higher than 1.0 was extracted.	

The factor analysis extracts one factor, where all items exhibit high loadings above 0.7. All items are included in an additive index below.





Engagement in public value creation in a citizen perspective, leaders

Note: N = 456. Mean = 4.24, std. dev = 0.63, min = 2.5, max = 5, skewness = -0.45, kurtosis = 2.51. For respondents who had answered at least three items, the index is calculated based on the average score of the answered items. Cronbach's alpha = 0.844.

The distribution is left-skewed as two peaks can be seen at the value of 4 and at the maximum value of 5. The mean value (4.24) is above the midpoint and quite close to the maximum value. The alpha value of 0.844 indicates strong internal reliability. Table 3.2.6 shows the response distribution among employees on the items measuring direct engagement in public value creation in a citizen perspective.

	Not at	То а	To some	To a large	To a very	Do	Total
	all	lesser	extent	extent	large	not	Ν
		extent			extent	know	
fokus_borger_kontakt_1	0.15%	1.17%	9.06%	34.06%	54.68%	0.88%	684
(listen)	(1)	(8)	(62)	(233)	(374)	(6)	
fokus_borger_kontakt_2	0.15%	1.47%	10.70%	35.19%	51.61%	0.88%	682
(curious)	(1)	(10)	(73)	(240)	(352)	(6)	
fokus_borger_kontakt_3	0.29%	1.61%	17.42%	33.24%	46.27%	1.17%	683
(solutions)	(2)	(11)	(119)	(227)	(316)	(8)	
fokus_borger_kontakt_4	0.59%	4.83%	15.81%	32.36%	44.36%	2.05%	683
(involve)	(4)	(33)	(108)	(221)	(303)	(14)	
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.2.6: Response distribution, employees

The inter-item correlations for employees are shown in Table 3.2.7.

Table 3.2.7: Correlation matrix, employees

	fokus_borger_kont	fokus_borger_kont	fokus_borger_kont	fokus_borger_kont
	akt_1	akt_2	akt_3	akt_4
	(listen)	(curious)	(solutions)	(involve)
fokus_borger_kont	1.00			
akt_1				
(listen)				
fokus_borger_kont	0.65	1.00		
akt_2				
(curious)				
fokus_borger_kont	0.58	0.50	1.00	
akt_3				
(solutions)				
fokus_borger_kont	0.55	0.53	0.64	1.00
akt_4				
(involve)				

For employees, all inter-item correlations are above 0.5.

Table 3.2.8. Test of assumptions for factor analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.784
Bartlett's Test of Sphericity Chi Square Degrees of freedom		1084.886
		6
	p-value	0.000

Bartlett's test is significant which indicates that the result is significantly different from an uncorrelated matrix. The KMO-value (0.784) indicates that a satisfactory proportion of variation might be caused by underlying variables.

Table 3.2.9: Exploratory factor analysis: Engagement in public value creation in a citizen perspective as reported by employees

Pretext: In my work, I focus on the fact that we in the municipality	Loadings
Listen to what citizens think is important	0.773
Are curious about what citizens find valuable	0.719
Find solutions together with citizens	0.741
Involve citizens in the execution of tasks	0.739
Note: One factor with an Eigenvalue higher than 1.0 was extracted.	

All items exhibit fairly high loadings above 0.7, which suggests that they reflect the same latent dimension. All four items are used in an additive index.

Figure 3.2.2: Distribution of engagement in public value creation in a citizen perspective as reported by employees





Note: N = 673. Mean = 4.31, std. dev = 0.66, min = 2, max = 5, skewness = -0.72, kurtosis = 2.80. For respondents who had answered at least three items, the index is calculated based on the average score of the answered items. Cronbach's alpha = 0.84.

The distribution among employees is similar to the distribution among leaders. The distribution is leftskewed which is illustrated by the two peaks around the values 4 and 5. The mean value among employees is 4.31, slightly higher than the mean value among leaders, and figure 3.2.2 shows that most employees are grouped near the maximum value of 5. The alpha value of 0.84 indicates strong internal reliability.

Indirect citizen contact

Employees without direct citizen contact and their leaders can only be indirectly engaged in public value creation in a citizen perspective. They can only support that others in the municipality are engaged inpublic value creation in a citizen perspective. Table 3.2.10 shows the items measuring indirect engagement.

Leaders and employees: In	Source				
/ Jeg har i mit arbejde fok					
fokus_borger_ikkekon_1	us_borger_ikkekon_1 listen to what citizens think is important [
	lytter til, hvad borgerne synes er vigtigt	this survey			

Table 3.2.10 Items measuring engagement in public value creation in a citizen perspective

fokus_borger_ikkekon_2	are curious about what citizens find valuable	
	er nysgerrige på, hvad borgerne oplever er værdifuldt	
fokus_borger_ikkekon_3	find solutions together with citizens	
	finder løsninger sammen med borgerne	
fokus_borger_ikkekon_4	involve citizens in the execution of tasks	
	inddrager borgerne i udførelsen af opgaverne	
Note: The question was only gi	ven to respondents who answered "No" on the question borgerkont	takt. Leaders and

Note: The question was only given to respondents who answered "No" on the question *borgerkontakt*. Leaders and employees had the following options: Not at all (*slet ikke*) = 1, to a lesser extent (*25ocus grad*) = 2, to some extent (*i nogen grad*) = 3, to a large extent (*i høj grad*) = 4, to a very large extent (*i meget høj grad*), = 5, do not know (*ved ikke*) = 99.

Table 3.2.11 shows how leaders responded to the questions measuring indirect engagement in public value creation in a citizen perspective.

Table 3.2.11: Response distrib	ution, lead	lers

	Not at	То а	To some	То а	To a very	Do not	Total
	all	lesser	extent	large	large	know	Ν
		extent		extent	extent		
fokus_borger_ikkekon_1	6.08%	8.87%	29.05%	38.51%	16.22%	1.35%	148
(listen)	(9)	(13)	(43)	(57)	(24)	(2)	
fokus_borger_ikkekon_2	6.04%	7.38%	25.50%	40.27%	19.46%	1.34%	149
(curious)	(9)	(11)	(38)	(60)	(29)	(2)	
fokus_borger_ikkekon_3	9.40%	14.09%	31.54%	31.54%	11.41%	2.01%	149
(solutions)	(14)	(21)	(47)	(47)	(17)	(3)	
fokus_borger_ikkekon_4	12.75%	21.48%	32.89%	21.48%	10.07%	1.34%	149
(involve)	(19)	(32)	(49)	(32)	(15)	(2)	
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.2.12 shows how the items are correlated with each other.

Table 3.2.12: Correlation matrix, leaders

	fokus_borger_ikke	fokus_borger_ikke	fokus_borger_ikke	fokus_borger_ikke
	kon_1	kon_2	kon_3	kon_4
	(listen)	(curious)	(solutions)	(involve)
fokus_borger_ikke	1.00			
kon_1				
(listen)				
fokus_borger_ikke	0.84	1.00		
kon_2				
(curious)				
fokus_borger_ikke	0.85	0.75	1.00	
kon_3				

(solutions)				
fokus_borger_ikke	0.76	0.71	0.80	1.00
kon_4				
(involve)				

The correlation matrix for leaders shows that the inter-item correlations are high, as all are above 0.70. Two correlations are slightly higher than the rest. The highest correlation is seen between listening to what citizens think is important and finding solutions together with citizens. There is also a very high correlation between listening to what citizens think is important and being curious about what citizens find valuable.

Table 3.2.13. Test of assumptions for factor analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.831
Bartlett's Test of Sphericity Chi Square		512.366
Degrees of freedom		6
	p-value	0.000

The Bartlett's test is significant (p<0.001) which indicates that the correlation matrix is significantly different from an uncorrelated matrix. The KMO-value of 0.831 also indicates that a satisfactory proportion of the variation might be caused by underlying variables.

Table 3.2.14: Exploratory factor analysis: Engagement in public value creation in a citizen perspective as reported by leaders

Pretext: In my work, I focus on supporting that we in the municipality	Loadings
Listen to what citizens think is important	0.928
Are curious about what citizens find valuable	0.859
Find solutions together with citizens	0.902
Involve citizens in the execution of tasks	0.836
Note: One factor with an Eigenvalue higher than 1.0 was extracted.	

All items in the concept exhibit high loadings as all loadings are above 0.8. This indicates that they reflect the same latent dimension. The four items are, therefore, included in an additive index below.

Figure 3.2.3: Distribution of engagement in public value creation in a citizen perspective as reported by leaders



Engagement in public value creation in a citizen perspective, leaders

Note: N = 147. Mean = 3.31, std. dev = 1.02, min = 1, max = 5, skewness = -0.49, kurtosis = 2.77. For respondents who had answered at least three items, the index is calculated based on the average score of the answered items. Cronbach's alpha = 0.936.

The estimates are distributed across the entire scale with peaks around the values 3 and 4, and many observations (53%) are seen between these two values. The mean value of 3.31 is also just above the midpoint. The alpha value of 0.936 indicates very strong internal reliability.

Table 3.2.15 shows how employees responded to the questions measuring indirect engagement in public value creation in a citizen perspective.

Table 3.2.15: Response distribution, employees

	Not at	То а	To some	То а	To a very	Do not	Total
	all	lesser	extent	large	large	know	Ν
		extent		extent	extent		
fokus_borger_ikkekon_1	11.50%	17.50%	23.00%	26.00%	18.00%	4.00%	200
(listen)	(23)	(35)	(46)	(52)	(36)	(8)	
fokus_borger_ikkekon_2	9.50%	15.50%	27.00%	25.00%	18.50%	4.50%	200
(curious)	(19)	(31)	(54)	(50)	(37)	(9)	
fokus_borger_ikkekon_3	16.58%	24.62%	20.60%	19.60%	13.07%	5.53%	199
(solutions)	(33)	(49)	(41)	(39)	(26)	(11)	
fokus_borger_ikkekon_4	19.40%	24.38%	24.88%	12.94%	12.44%	5.97%	201
(involve)	(39)	(49)	(50)	(26)	(25)	(12)	
Note: Percentages of observations in each category and number of observations in parentheses.							

The inter-item correlations are shown in the table below.

Table 3.2.16: Correlation matrix, employees

	fokus_borger_ikke	fokus_borger_ikke	fokus_borger_ikke	fokus_borger_ikke
	kon_1	kon_2	kon_3	kon_4
	(listen)	(curious)	(solutions)	(involve)
fokus_borger_ikke	1.00			
kon_1				
(listen)				
fokus_borger_ikke	0.80	1.00		
kon_2				
(curious)				
fokus_borger_ikke	0.81	0.73	1.00	
kon_3				
(solutions)				
fokus_borger_ikke	0.77	0.72	0.82	1.00
kon_4				
(involve)				

The correlation matrix shows high inter-item correlations, ranging from 0.72 to 0.82. This is very similar to the inter-item correlations among leaders.

Table 3.2.17. Test of assumptions for factor analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.839
Bartlett's Test of Sphericity Chi Square Degrees of freedom		619.963
		6
	p-value	0.000

The Bartlett's test indicates that the result is significantly different from an uncorrelated matrix, which suggests a very low probability that the items are in fact uncorrelated. The KMO-value of 0.839 shows that an acceptable proportion of the variation could be caused by underlying factors.

Table 3.2.18: Exploratory factor analysis: Engagement in public value creation in a citizen perspective as reported by employees

Pretext: In my work, I focus on supporting that we in the municipality	Loadings	
Listen to what citizens think is important	0.895	
Are curious about what citizens find valuable	0.836	
Find solutions together with citizens	0.897	
Involve citizens in the execution of tasks	0.866	
Note: One factor with an Eigenvalue higher than 1.0 was extracted.		

All items exhibit high loadings above 0.8 and are included in an additive index below.



Figure 3.2.4: Distribution of engagement in public value creation in a citizen perspective, employees

Engagement in public value creation in a citizen perspective, employees

Note: N = 190. Mean = 3.03, std. dev = 1.18, min = 1, max = 5, skewness = -0.06, kurtosis = 2.05. For respondents who had answered at least three items, the index is calculated based on the average score of the answered items. Cronbach's alpha = 0.933.

Figure 3.2.4 shows that the observations are spread quite evenly across the scale. The mean value of 3.03 is very close to the midpoint and slightly lower than among leaders. The standard deviation is relatively large, which reflects a large degree of variability in the answers given by employees. The alpha value of 0.933 indicates very strong internal reliability.

Public value leadership from a citizen perspective: Open text

There are many potential factors either supporting or hindering employees and leaders with direct citizen contact being engaged in public value creation in a citizen perspective. Table 3.2.19 presents the open questions that were used to measure public value leadership from a citizen perspective. These questions were only asked to respondents with direct citizen contact.

Table 3.2.19: Open questions measuring public value leadership from a citizen perspective (direct citizen contact)

Leaders and employees: In your work, you can be curious about what citizens find			
valuable	e. It is about putting yourself in their place.		
Du kan i	dit arbejde være nysgerrig på, hvad borgerne oplever er værdifuldt. Det handler		
om at sa	ette sig i borgernes sted.		
åben_	What makes it easy for you to be curious about what citizens find valuable?	Developed	
nem	Hvad gør det nemt for dig at være nysgerrig på, hvad borgerne oplever er	for this	
	værdifuldt?	survey	
åben_	What makes it difficult for you to be curious about what citizens find valuable?		
svær	Hvad gør det svært for dig at være nysgerrig på, hvad borgerne oplever er		
	værdifuldt?		
Note: The questions were only given to respondents who answered "Yes" on the question borgerkontakt.			

Table 3.2.20 and Table 3.2.21 show the number of leaders and employees who chose to answer the open questions.

Table 3.2.20: Number of leaders who answered the open questions

	Number of respondents
åben_nem	352
(easy)	
åben_svær	340
(difficult)	

Table 3.2.21: Number of employees who answered the open questions

	Number of respondents
åben_nem	495
(easy)	
åben_svær	476
(difficult)	

For employees and leaders with only indirect citizen contact, there are also many potential factors supporting and hindering how they can support others being engaged in public value creation in a citizen perspective. Table 3.2.22 presents the open questions that were used to measure public value leadership from a citizen perspective. These questions were only asked to respondents with indirect citizen contact.

Table 3.2.22: Open questions measuring public value leadership from a citizen perspective (indirect citizencontact)

Leaders: In your work, you can be curious about what citizens find valuable. It is about			
putting yourself in their place.			
Even if you are not m	nanaging employees where direct contact with citizens is an essential		
part of their work, yo	ou can still support this, for example, through leadership, well-		
functioning administ	rative processes, and IT.		
Man kan i sit arbejde	e være nysgerrig på, hvad borgerne oplever er værdifuldt. Det handler		
om at sætte sig i borg	gernes sted.		
Selvom du ikke er led	ler for medarbejdere, hvor direkte kontakt med borgerne er en		
væsentlig del af dere	s arbejde, kan du stadig understøtte dette. Det kan fx være gennem		
ledelse, velfungerende administrative processer og IT.			
åben_nem_ikkekon	What makes it easy for you to support curiousness about what	Developed	
	citizens find valuable?	for this	
	Hvad gør det nemt for dig at understøtte nysgerrighed på, hvad	survey	
borgerne oplever er værdifuldt?			
åben_svær_ikkekon	What makes it difficult for you to be curious about what citizens find		
	valuable?		
	Hvad gør det svært for dig at understøtte nysgerrighed på, hvad		
	borgerne oplever er værdifuldt?		

Employees: In your v	work, you can be curious about what citizens find valuable. It is about	Source
putting yourself in th	eir place.	
Even if direct contact	t with citizens is not an essential part of your work, you can still support	
this, for example, thr	ough leadership, well-functioning administrative processes, and IT.	
Man kan i sit arbejde	e være nysgerrig på, hvad borgerne oplever er værdifuldt. Det handler	
om at sætte sig i borg	gernes sted.	
Selvom direkte konta	kt med borgerne ikke er en væsentlig del af dit arbejde, kan du stadig	
understøtte dette. De	et kan fx være gennem ledelse, velfungerende administrative processer	
og IT.		
åben_nem_ikkekon	What makes it easy for you to support curiousness about what	Developed
	citizens find valuable?	for this
	Hvad gør det nemt for dig at understøtte nysgerrighed på, hvad	survey
	borgerne oplever er værdifuldt?	
åben_svær_ikkekon	What makes it difficult for you to be curious about what citizens find	
	valuable?	
	Hvad gør det svært for dig at understøtte nysgerrighed på, hvad	
	borgerne oplever er værdifuldt?	

Table 3.2.23 and 3.2.24 show the number of leaders and employees who chose to answer the open questions.

Table 3.2.23: Number of leaders who answered the open questions

	Number of respondents
åben_nem_ikkekon	93
(easy)	
åben_svær_ikkekon	94
(difficult)	

Table 3.2.24: Number of employees who answered the open questions

	Number of respondents
åben_nem_ikkekon	122
(easy)	
åben_svær_ikkekon	123
(difficult)	

3.2 Distribution of Engagement in Public Value Creation

Distributed leadership is "the phenomenon that leadership tasks and functions are distributed among employees with the aim to organize social, conjoint actions between or within organizational levels" (Jønsson et al. 2016). Leadership can in this context be any factors that contribute to direction, alignment, and commitment (Drath et al. 2008). In this measure, leadership and engagement are seen as the same phenomenon relating to organizational efforts to be curious about what citizens find valuable.

Perceived Engagement Configuration

An engagement (or leadership) configuration is "a pattern or an arrangement of practice" of this engagement (Gronn 2009: 383). This pattern can be perceived to be dominated by different stakeholder groups like the political leadership, administrative top management, and leaders and employees working close to the citizens. The table below shows which items were used to measure the perceived leadership or engagement configuration.

-		
Leaders and	Source	
about what		
Hvem bidra	ger til, at I i Aarhus Kommune er nysgerrige på, hvad borgerne oplever er	
værdifuldt?		
bidrager_1	The political leadership in the municipality	Developed for
	Den politiske ledelse i kommunen	this survey
bidrager_2	The administrative top management in the municipality	
	Den administrative topledelse i kommunen	
bidrager_3	Employees and managers who work closely with citizens	
	Medarbejdere og ledere som arbejder tæt på borgerne	
Note: Leaders and employees had the following options: Not at all (<i>slet ikke</i>) = 1, to a lesser extent (<i>i lav grad</i>) = 2, to some extent (<i>i nogen grad</i>) = 3, to a large extent (<i>i høj grad</i>) = 4, to a very large extent (<i>i meget høj grad</i>) = 5, do not know (<i>ved ikke</i>) = 99.		

Table 3 3 1 · Ite	ms measuring	nerceived	leadershin	lenaaaement	configuration
<i>TUDIE 5.5.1. ILE</i>	ms meusuring	perceiveu	ieuueisiiip/	engugement	conjiguration

Table 3.3.2 shows how leaders responded to the items.

	Not at all	To a lesser	To some	To a large	To a very	Do not	Total N
		extent	extent	extent	large	know	
					extent		
bidrager_1	2.26%	14.98%	38.85%	26.83%	11.32%	5.75%	574
(political)	(13)	(86)	(223)	(154)	(65)	(33)	
bidrager_2	4.18%	18.47%	37.63%	23.17%	8.71%	7.84%	574
(administrative)	(24)	(106)	(216)	(133)	(50)	(45)	
bidrager_3	0%	0.52%	8.33%	34.38%	55.56%	1.22%	576
(employees	(0)	(3)	(48)	(198)	(320)	(7)	
and leaders)							
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.3.2: Response distribution, leaders

In general, leaders believe that employees and leaders who work closely with citizens contribute to being curious about what citizens find valuable to a large or very large extent. The political leadership and the administrative top management are perceived to contribute less than employees and leaders. Most leaders believe that the political leadership and administrative top management contribute to being curious about what citizens find valuable to some extent or to a large extent. 15% also believe that the political leadership only contributes to a lesser extent, and 18% also believe that the administrative top management only contributes to a lesser extent.

Table 3.3.3: Response distribution, employees

	Not at all	To a lesser	To some	To a large	To a very	Do not	Total N
		extent	extent	extent	large	know	
					extent		
bidrager_1	8.50%	21.25%	28.38%	16.12%	6.88%	18.88%	800
(political)	(68)	(170)	(227)	(129)	(55)	(151)	
bidrager_2	9.85%	23.57%	26.93%	14.46%	4.36%	20.82%	802
(administrative)	(79)	(189)	(216)	(116)	(35)	(167)	
bidrager_3	0%	0.86%	10.82%	33.83%	48.95%	5.54%	812
(employees	(0)	(7)	(88)	(275)	(398)	(45)	
and leaders)							
Note: Percentages of observations in each category and number of observations in parentheses.							

The response distribution among employees is relatively similar to the distribution among leaders. Employees and leaders working closely with citizens are perceived to contribute to being curious about what citizens find valuable to a large or a very large extent, while the political leadership and administrative top management are perceived to contribute to a lesser or to some extent. Among employees, a relatively large number of respondents answer that they do not know to what extent the political leadership and the administrative top managements contribute to being curious about what citizens find valuable.

Alignment

Distributed engagement or leadership is more likely to contribute positively to organizational goal attainment if there is agreement about the direction and principles for the joint work as well as the necessary supporting conditions (Leithwood et al. 2007). Such alignment is constituted by shared understanding of direction as well as methods and means, but also the necessary resources and practices of collaboration (Kjeldsen et al. 2020). The items measuring alignment are shown in table 3.3.4.

Table 3.3.4: Items measuring alignment

Leaders and employees: In the work of being curious about what citizens find valuable, we						
have in my work area / I arbejdet med at være nysgerrig på hvad borgerne oplever er						
værdifuldt, har vi på mit arbejdsområde						
fælles_forståelse_1 a shared understanding of what this means						
	en fælles forståelse af, hvad dette vil sige	from Kieldsen et				
fælles_forståelse_2	a shared understanding of the relevant methods and approaches	al. (2020)				
	en fælles forståelse af de relevante metoder og tilgange					
fælles_forståelse_3	åelse_3 the necessary conditions and resources					
de nødvendige rammer og ressourcer						
fælles_forståelse_4	good collaboration between the relevant actors					
	et godt samarbejde mellem de relevante aktører					
Note: Leaders and employees had the following options: Not at all (<i>slet ikke</i>) = 1, to a lesser extent (<i>i lav grad</i>) = 2,						
to some extent (<i>i nogen grad</i>) = 3, to a large extent (<i>i nøj grad</i>) = 4, to a very large extent (<i>i meget nøj grad</i>) = 5, do not know (<i>ved ikke</i>) = 99.						

The response distribution among leaders on the items' measuring alignment is shown in Table 3.3.5.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
fælles_forståelse_1	0%	6.17%	26.63%	49.38%	14.29%	3.53%	567
(what this means)	(0)	(35)	(151)	(280)	(81)	(20)	
fælles_forståelse_2	0.35%	8.13%	28.27%	48.41%	12.19%	2.65%	566
(methods and	(2)	(46)	(160)	(274)	(69)	(15)	
approaches)							
fælles_forståelse_3	5.64%	29.45%	33.33%	23.46%	5.64%	2.47%	567
(conditions and	(32)	(167)	(189)	(133)	(32)	(14)	
resources)							
fælles_forståelse_4	0%	2.65%	20.46%	56.26%	17.11%	3.53%	567
(collaboration)	(0)	(15)	(116)	(319)	(97)	(20)	
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.3.5: Response distribution, leaders

Table 3.3.6 shows how the items measuring alignment are correlated with each other.

Table 3.3.6: Correlation matrix, leaders

	fælles_forståelse_	fælles_forståelse_	fælles_forståelse_	fælles_forståelse_
	1	2	3	4
	(what this means)	(methods and	(frames and	(collaboration
		approaches)	resources)	
fælles_forståelse_	1.00			
1				
(what this means)				
fælles_forståelse_	0.56	1.00		
2				
(methods and				
approaches)				
fælles_forståelse_	0.22	0.31	1.00	
3				
(conditions and				
resources)				
fælles_forståelse_	0.35	0.39	0.30	1.00
4				
(collaboration)				

The inter-item correlations vary in strength. The correlation between having a shared understanding of what this means and having the necessary conditions and resources is low.

Table 3.3.7 shows the response distribution among employees on the items measuring alignment.
	Totally	Disagee	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
fælles_forståelse_1	2.41%	6.60%	21.83%	45.94%	16.24%	6.98%	788
(what this means)	(19)	(52)	(172)	(362)	(128)	(55)	
fælles_forståelse_2	2.03%	8.86%	23.42%	45.06%	13.67%	6.96%	790
(methods and	(16)	(70)	(185)	(356)	(108)	(55)	
approaches)							
fælles_forståelse_3	7.89%	23.28%	26.08%	27.86%	8.52%	6.36%	786
(frames and	(62)	(183)	(205)	(219)	(67)	(50)	
resources)							
fælles_forståelse_4	0.89%	4.32%	18.04%	55.40%	14.99%	6.35%	787
(collaboration)	(7)	(34)	(142)	(436)	(118)	(50)	
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.3.7: Response distribution, employees

Table 3.3.8 shows the inter-item correlations.

Table 3.3.8: Correlation matrix, employees

	fælles_forståelse_	fælles_forståelse_	fælles_forståelse_	fælles_forståelse_
	1	2	3	4
	(what this means)	(methods and	(frames and	(collaboration)
		approaches)	resources)	
fælles_forståelse_	1.00			
1				
(what this means)				
fælles_forståelse_	0.65	1.00		
2				
(methods and				
approaches)				
fælles_forståelse_	0.34	0.44	1.00	
3				
(frames and				
resources)				
fælles_forståelse_	0.45	0.57	0.42	1.00
4				
(collaboration)				

Among employees, the inter-item correlations are higher than among leaders.

3.4 Integration

Engagement in public value creation happens in an environment where there are other paradigms emphasizing different logics and behaviors. Respondents can try to integrate public value creation with these logics, so they are pursued jointly.

Engagement in Public Value Creation and Professionalism

Integration of public value creation with professionalism is a practice of pursuing public value creation through professional development leadership. That is leadership aimed at the facilitation and realization of a joint understanding of professional quality as well as actions to develop and activate professional norms and knowledge directed at alignment with organizational goals (Lund 2022). The items measuring engagement in public value creation and professionalism are presented in the table below.

Table 3.4.1: Items measuring engagement in public value creation and professionalism

Leaders and employees: The following text was used to introduce the questions.					
The next questions ar	e about professionalism, rules, and citizens' perception of	what is valuable.			
De næste spørgsmål i	handler om faglighed, regler og borgernes oplevelse af, hva	id der er værdifuldt.			
Leaders and employe	ees: Please indicate how much you disagree or agree with	Source			
the following stateme	ents:				
I make an active effor	t to ensure that citizens' perception of what is valuable				
Angiv venligst hvor u	enig eller enig du er i følgende udsagn:				
Jeg gør en aktiv indso	ts for, at borgernes oplevelse af, hvad der er værdifuldt,				
integration_faglig_1	goes hand in hand with our professional standards	Developed for this			
	går hånd i hånd med vores faglige standarder	survey			
integration_faglig_2	is part of our understanding of professional quality				
	er en del af vores forståelse af faglig kvalitet				
integration_faglig_3	guides our development of professional knowledge				
guider vores udvikling af faglig viden					
integration_faglig_4	inform our professional assessments				
informerer vores faglige vurderinger					
Note: Leaders and emp neither disagree nor ag	loyees had the following options: Totally disagree (<i>helt uenig</i>) = 1 ree (<i>hverken uenig eller enig</i>) = 3, agree (<i>enig</i>) = 4, totally agree (., disagree (uenig) = 2, helt enig) = 5.			

Table 3.4.2 shows how leaders responded to the items measuring engagement in public value creation and professionalism.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
integration_faglig_1	0%	1.26%	22.66%	49.46%	19.96%	6.65%	556
(standards)	(0)	(7)	(126)	(275)	(111)	(37)	
integration_faglig_2	0%	0.72%	12.05%	53.24%	28.42%	5.58%	556
(quality)	(0)	(4)	(67)	(296)	(158)	(31)	
integration_faglig_3	0.18%	0.72%	19.06%	52.70%	18.71%	8.63%	556
(knowledge)	(1)	(4)	(106)	(293)	(104)	(48)	
integration_faglig_4	0.18%	0.54%	15.11%	51.80%	18.88%	13.49%	556
(assessments)	(1)	(3)	(84)	(288)	(105)	(75)	
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.4.2: Response distribution, leaders

Table 3.4.3 shows how the items are correlated with each other.

Table 3.4.3: Correlation matrix, leaders

	integration_faglig_	integration_faglig_	integration_faglig_	integration_faglig_
	1	2	3	4
	(standards)	(quality)	(knowledge)	(assessments)
integration_faglig_	1.00			
1				
(standards)				
integration_faglig_	0.54	1.00		
2				
(quality)				
integration_faglig_	0.50	0.61	1.00	
3				
(knowledge)				
integration_faglig_	0.49	0.50	0.57	1.00
4				
(assessments)				

The inter-item correlations are positive as expected and above the acceptable level of 0.3.

Table 3.4.4: Test of assumptions for factor analysis

Kaiser-Meyer-Olkin Measure of Sam	0.793	
Bartlett's Test of Sphericity	tlett's Test of Sphericity Chi Square	
	Degrees of freedom	6
	p-value	0.000

The Bartlett's test is significant which indicates that the result is significantly different from an uncorrelated matrix. The KMO-value of 0.793 shows that an acceptable proportion of the variation could be caused by underlying factors.

Table 3.4.5: Exploratory factor analysis: Engagement in public value creation and professionalism as reported by leaders

Pretext: I make an active effort to ensure that citizens' perception of what is valuable	Loadings
Goes hand in hand with our professional standards	0.669
Is part of our understanding of professional quality	0.741
Guides our development of professional knowledge	0.759
Inform our professional assessments	0.686
Note: One factor with an Eigenvalue higher than 1.0 was extracted.	

All items in the concept exhibit high loadings above 0.6, which indicates that they reflect the same latent concept. Therefore, all items are included in an additive index.

Figure 3.4.1: Distribution of engagement in public value creation and professionalism as reported by leaders



Engagement in public value creation and professionalism, leaders

Note: N = 513. Mean = 4.03, std. dev = 0.55, min = 2.5, max = 5, skewness = -0.04, kurtosis = 2.75. For respondents who had answered at least three items, the index is calculated based on the average score of the answered items. Cronbach's alpha = 0.82.

Figure 3.4.1 shows that the index is approaching a normal distribution with a peak at the value 4. The mean of 4.03 is also relatively high which suggests that there is a high degree of accordance between the leaders' professionalism and what citizens find valuable. The alpha value suggests good internal reliability.

Table 3.4.6 shows the response distribution among employees on items measuring engagement in public value creation and professionalism.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor				
			agree				
integration_faglig_1	0.65%	3.12%	17.58%	46.61%	20.96%	11.07%	768
(standards)	(5)	(24)	(135)	(358)	(161)	(85)	
integration_faglig_2	0.78%	1.82%	10.91%	50.91%	24.81%	10.78%	770
(quality)	(6)	(14)	(84)	(392)	(191)	83)	
integration_faglig_3	1.17%	2.86%	18.23%	46.22%	17.84%	13.67%	768
(knowledge)	(9)	(22)	(140)	(355)	(137)	(105)	
integration_faglig_4	0.78%	2.47%	15.58%	43.64%	20.52%	17.01%	770
(assessments)	(6)	(19)	(120)	(336)	(158)	(131)	
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.4.6: Response distribution, employees

The inter-item correlations are shown in table 3.4.7.

Table 3.4.7: Correlation matrix, employees

	integration_faglig_	integration_faglig_	integration_faglig_	integration_faglig_
	1	2	3	4
	(standards)	(quality)	(knowledge)	(assessments)
integration_faglig_	1.00			
1				
(standards)				
integration_faglig_	0.67	1.00		
2				
(quality)				
integration_faglig_	0.61	0.68	1.00	
3				
(knowledge)				
integration_faglig_	0.61	0.66	0.62	1.00
4				
(assessments)				

The inter-item correlations are fairly high as all correlations are above 0.6.

Table 3.4.8: Test of assumptions for factor analysis

Kaiser-Meyer-Olkin Measure of San	0.835	
Bartlett's Test of Sphericity	Chi Square	1208.248
	Degrees of freedom	6
	p-value	0.000

The Bartlett's test is significant with a p-value <0.001, which suggests very low probability that the items are uncorrelated in the population. The KMO-value indicates that an acceptable proportion of the variation could be caused by underlying variables.

Table 3.4.9: Exploratory factor analysis: Engagement in public value creation and professionalism as reported by employees

Pretext: I make an active effort to ensure that citizens' perception of what is valuable	Loadings			
Goes hand in hand with our professional standards	0.770			
Is part of our understanding of professional quality	0.830			
Guides our development of professional knowledge	0.780			
Inform our professional assessments	0.761			
Note: One factor with an Eigenvalue higher than 1.0 was extracted.				

All items exhibit high loadings above 0.7, and therefore they are included in an additive index below.

Figure 3.4.2. Distribution of engagement in public value creation and professionalism as reported by employees



Engagement in public value creation and professionalism, employees

Note: N = 663. Mean = 3.98, std. dev = 0.67, min = 1, max = 5, skewness = -0.80, kurtosis = 5.38. For respondents who had answered at least three items, the index is calculated based on the average score of the answered items. Cronbach's alpha = 0.873.

The mean value of 3.98 suggests that employees believe that there is a relatively high degree of accordance between their professionalism and what citizens find valuable.

Engagement in Public Value Creation and Rule Governance

Integration of public value creation with bureaucracy is a practice of pursuing public value creation through leadership that encourages "employees to act in accordance with governmental rules and regulations" (Tummers and Knies 2016). Table 3.4.10 presents the items measuring engagement in public value creation and rule governance.

Leaders and employe	Leaders and employees: I make an active effort to ensure that citizens' Source			
perception of what is	valuable / Jeg gør en aktiv indsats for, at borgernes			
oplevelse af, hvad der	er værdifuldt,			
integration_regler_1	goes hand in hand with guidelines	Developed for this		
	går hånd i hånd med retningslinjer	survey		
integration_regler_2	is united with compliance of rules			
bliver forenet med overholdelsen af regler				
integration_regler_3	is not overridden by rules and procedures			
ikke tilsidesættes af regler og procedurer				
Note: Leaders and employees had the following options: Totally disagree (<i>helt uenig</i>) = 1, disagree (<i>uenig</i>) = 2, neither disagree nor agree (<i>hverken uenig eller enig</i>) = 3, agree (<i>enig</i>) = 4, totally agree (<i>helt enig</i>) = 5.				

Table 3.4.10 Items measuring engagement in public value creation and rule governance

Table 3.4.11 shows the response distribution among leaders.

Table 3.4.11: Response distribution, leaders

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
integration_regler_1	0.18%	2.00%	18.18%	59.82%	13.27%	6.55%	550
(guidelines)	(1)	(11)	(100)	(329)	(73)	(36)	
integration_regler_2	0.18%	1.45%	17.42%	56.08%	17.97%	6.90%	551
(united)	(1)	(8)	(96)	(309)	(99)	(38)	
integration_regler_3	0.54%	7.44%	28.68%	44.65%	12.89%	5.81%	551
(rules and	(3)	(41)	(158)	(246)	(71)	(32)	
procedures)							
Note: Percentages of observations in each category and number of observations in parentheses.							

The correlations between the items measuring engagement in public value creation and rule governance are shown in Table 3.4.12.

Table 3.4.12: Correlation matrix, leaders

	integration_regler_1 (guidelines)	integration_regler_2 (united)	integration_regler_3 (rules and procedures)
integration_regler_1 (guidelines)	1.00		
integration_regler_2 (united)	0.61	1.00	
integration_regler_3 (rules and procedures)	0.32	0.30	1.00

The inter-item correlations vary in strength, but all are above the acceptable limit of 0.3. There is a fairly high correlation between ensuring that citizens' perception of what is valuable goes hand in hand with guidelines and ensuring that citizens' perception of what is valuable is united with compliance of rules.

Table 3.4.13: Test of assumptions for factor analysis

Kaiser-Meyer-Olkin Measure of Sa	0.601	
Bartlett's Test of Sphericity Chi Square		295.120
Degrees of freedom		3
	0.000	

The significant Bartlett's test indicates that the matrix is significantly different from an uncorrelated matrix. The value of the KMO-test is just above the acceptable level of 0.6, which indicates that a satisfactory proportion of the variation might be caused by underlying variables.

Table 3.4.14: Exploratory factor analysis: Engagement in public value creation and rule governance as reported by leaders

Pretext: I make an active effort to ensure that citizens' perception of what is valuable	Loadings				
Goes hand in hand with guidelines	0.715				
Is united with compliance of rules	0.505				
Is not overridden by rules and procedures	0.826				
Note: One factor with an Eigenvalue higher than 1.0 was extracted.					

While the first and the third item exhibit fairly high loadings, the second item is slightly lower. All items in the concept exhibit acceptable loadings and are included in an additive index below.



Figure 3.4.3: Distribution of engagement in public value creation and rule governance as reported by leaders



Note: N = 519. Mean = 3.84, std. dev = 0.56, min = 1.67, max = 5, skewness = -0.08, kurtosis = 3.38. For respondents who had answered at least two items, the index is calculated based on the average score of the answered items. Cronbach's alpha = 0.655.

The distribution has a large peak around the value 4, and the mean value of 3.84 is also higher than the midpoint of the scale. This suggests that leaders experience a relatively high degree of accordance between rules and regulations and citizens' perception of what is valuable. The alpha-value suggests that the internal reliability is acceptable.

Table 3.4.15 presents the response distribution among employees.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
integration_regler_1	0.66%	3.69%	18.71%	51.65%	15.68%	9.62%	759
(guidelines)	(5)	(28)	(142)	(392)	(119)	(73)	
integration_regler_2	0.66%	2.38%	17.59%	50.40%	19.31%	9.66%	756
(united)	(5)	(18)	(133)	(381)	(146)	(73)	
integration_regler_3	1.45%	7.27%	24.57%	40.42%	15.85%	10.44%	757
(rules and	(11)	(55)	(186)	(306)	(120)	(79)	
procedures)							
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.4.15: Response distribution, employees

The inter-item correlations are shown in the correlation matrix below.

	integration_regler_1	integration_regler_2	integration_regler_3
	(guidelines)	(united)	(rules and procedures)
integration_regler_1	1.00		
(guidelines)			
integration_regler_2	0.70	1.00	
(united)			
integration_regler_3	0.37	0.42	1.00
(rules and procedures)			

Table 3.4.16. Correlation matrix, employees

The correlation matrix for employees shows that the inter-item correlations vary in strength, although all correlations are above the acceptable level of 0.3. Two items are particularly strongly correlated. The two items are ensuring that citizens' perception of what is valuable goes hand in hand with guidelines and ensuring that citizens' perception of what is valuable is united with compliance of rules.

Table 3.4.17: Test of assumptions for factor analysis

Kaiser-Meyer-Olkin Measure of Sa	0.622	
Bartlett's Test of Sphericity	Test of Sphericity Chi Square	
Degrees of freedom		3
	p-value	0.000

The Bartlett's test is significant which indicates that the correlation matrix is significantly different from an uncorrelated matrix. The KMO-value also suggests that an acceptable proportion of the variation might be caused by underlying variables.

Table 3.4.18: Exploratory factor analysis: Engagement in public value creation and rule governance as reported by employees

Pretext: I make an active effort to ensure that citizens' perception of what is valuable	Loadings
Goes hand in hand with guidelines	0.769
Is united with compliance of rules	0.792
Is not overridden by rules and procedures	0.485
Note: One factor with an Eigenvalue higher than 1.0 was extracted.	

All items exhibit acceptable loadings, although the loading for the third item is lower. This is different to the factor analysis for leaders, where the loading for the second item was slightly lower. All three items are used in an additive index below.



Figure 3.4.4. Distribution of engagement in public value creation and rule governance as reported by employees



Note: N = 688. Mean = 3.84, std. dev = 0.66, min = 1, max = 5, skewness = -0.68, kurtosis = 4.97. For respondents who had answered at least two items, the index is calculated based on the average score of the answered items. Cronbach's alpha = 0.734.

The distribution among employees is very similar to the distribution among leaders. There is a large peak around the value 4 and the mean value of 3.84 is slightly above the midpoint of the scale. This suggests that employees perceive a relatively high degree of accordance between rules and regulations and citizens' perception of what is valuable. The degree of variability is a bit larger in the answers given by employees than by leaders. The alpha value of 0.734 suggests high internal reliability.

3.5 Perceived Credibility of Value Ambition

Perceived credibility of an initiative is "The plausibility followers assign to a given leadership initiative being realized" (Jakobsen, Andersen, and van Luttervelt 2022). In this case it is the value ambition underlying the Aarhus Compass.

Expected Effort of Top Management

One factor behind perceived credibility is how much the top management is willing to expend and sacrifice to make the ambition a reality. Table 3.5.1 shows the item used to measure the expected effort of the top management. Only leaders received the following question.

Table 3.5.1: Items measuring expected effort of top management

Leaders: The followin	Leaders: The following text was used to introduce the question:					
Aarhus Municipality h	has an ambition to be curious about what citizens find valuable. The nex	t questions				
are about this ambitic	on.					
Der er i Aarhus Komm	nune en ambition om at være nysgerrig på, hvad borgerne oplever er væ	rdifuldt. De				
næste spørgsmål han	dler om denne ambition.					
troværdighed_værdi	How much do you disagree or agree with the following statements:	Developed				
		for this				
	I expect that the political and administrative top management in	survey				
	Aarhus Municipality will do everything to make this ambition a					
reality – even when it is difficult.						
Hvor uenig eller enig er du i følgende udsagn:						
Jeg forventer, at den politiske og administrative topledelse i Aarhus						
Kommune vil gøre alt for, at ambitionen bliver til virkelighed - også						
når det er svært.						
Note: Leaders had the fe agree (hverken uenig ell	ollowing options: Totally disagree (<i>helt uenig</i>) = 1, disagree (<i>uenig</i>) = 2, neither <i>ler enig</i>) = 3, agree (<i>enig</i>) = 4, totally agree (<i>helt enig</i>) = 5, don't know (<i>ved ikke</i>)	disagree nor) = 99.				

Table 3.5.2 shows how leaders responded to the question about the expected effort of the top management.

Table 3.5.2: Response distribution, leaders

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
troværdighed_værdi	1.10%	4.95%	15.41%	42.39%	33.21%	2.94%	545
(top management's	(6)	(27)	(84)	(231)	(181)	(16)	
effort)							
Note: Percentages of observations in each category and number of observations in parentheses.							

Leaders generally expect that the political and the administrative top management in Aarhus Municipality will do everything to make the ambition a reality – even when it is difficult.

Expected Permanence of Value Ambition

Another aspect of credibility is how permanent people expect an initiative to be. Table 3.5.3 presents the question used to measure the expected permanence of the value ambition. Again, only leaders received the question.

Table 3.5.3: Items measuring expected	d permanence of value ambition
---------------------------------------	--------------------------------

Only leaders received	Source	
døgnflue_værdi	The ambition to be curious about citizens' perception	Developed for this
	of what is valuable is a fad that will disappear quickly.	survey
	Ambitionen om at være nysgerrig på borgernes	
	modefænomen, som hurtigt forsvinder igen.	
Note: Leaders had the fo	ollowing options: Totally disagree (<i>helt uenig</i>) = 1, disagree (<i>uenig</i>)	g) = 2, neither disagree nor
agree (hverken uenig ell	er enig) = 3, agree (enig) = 4, totally agree (helt enig) = 5, do not	: know (<i>ved ikke</i>) = 99.

The response distribution is shown in table 3.5.4.

Table 3.5.4: Response	distribution, leaders
-----------------------	-----------------------

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
døgnflue_værdi	29.00%	47.77%	12.64%	5.20%	1.30%	4.09%	538
(fad)	(156)	(257)	(68)	(28)	(7)	(22)	
Note: Percentages of observations in each category and number of observations in parentheses.							

In general, leaders disagree that the ambition to be curious about citizens' perception is a fad that will disappear quickly.

3.6 Perceived Supportiveness of Ambition

Governance initiatives like the value ambition can be perceived as more or less supporting or controlling of work. It reflects the degree to which external governance concepts are perceived as aligned with individual needs for self-determination (Mikkelsen, Jacobsen, and Andersen 2014; Frey and Jegen 2001). The following table shows the item measuring perceived supportiveness of the value ambition.

Both leaders and en	nployees received the following question:	Source
opfattelse_værdi	Below are two different statements. They both relate to the	Developed
	ambition to be curious about what citizens find valuable. Please	for this
	indicate whether you agree more with statement A or B.	survey
	A: The ambition supports my work.	
	B: Ambition is an unnecessary interference in my work.	
	Nedenfor præsenteres to forskellige udsagn. De vedrører begge	
	ambitionen om at være nysgerrig på, hvad borgerne oplever er	
	værdifuldt. Angiv, om du er mest enig med udsagn A eller B.	
	A: Ambitionen understøtter mit arbejde.	
	B: Ambitionen er en unødvendig indblanding i mit arbejde.	
Note: Both leaders and (Udelukkende enig me know (ved ikke) = 99.	d employees answered the question on a scale from 0 to 10. 0 = Only agree with d), 5 = Agree Equally (<i>Lige enig</i>), 10 = Only agree with A (<i>Udelukkende enig med</i>	h B A). Do not

Table 3.6.1: Items measuring perceived supportiveness of ambition

Figures 3.6.1 and 3.6.2 show the response distributions among leaders and employees.



Figure 3.6.1 Distribution of perceived supportiveness of ambition as reported by leaders



Note: N = 507. Mean = 7.45, std. dev = 2.13, min = 0, max = 10, skewness = -0.86, kurtosis = 3.72.

Most leaders believe that the ambition supports their work. This is reflected in the relatively high mean value (7.45) and in the fact that there are peaks in the distribution at the values 7, 8 and 10. Only 6,3% of leaders chose low values that indicate that this ambition is an unnecessary interference in their work.



Figure 3.6.2: Distribution of perceived supportiveness of ambition as reported by employees

Perceived supportiveness of ambition, employees

Note: N = 634. Mean = 7.31, std. dev = 2.45, min = 0, max = 10, skewness = -0.82, kurtosis = 3.15.

The distribution among employees is similar to the distribution among leaders, as most employees also believe this ambition supports their work. The mean value among employees is slightly lower than among leaders.

3.7 Co-creation and Co-production

In a broad sense co-production is "the voluntary or involuntary involvement of public service users in any of the design, management, delivery and or evaluation of public services" (Osborne, Radnor, and Strokosch 2016: 640). This includes co-production in a narrow sense as delivering services as well as co-creation as developing new solutions. It is, however, all about corporation with external actors. Table 3.7.1 presents the items measuring co-creation and co-production.

Table 3.7.1: Items measuring	co-creation and c	co-production
------------------------------	-------------------	---------------

Leaders and employees: The following text was used to introduce the questions:					
The next questions a	re about who you work with.				
De næste spørgsmål	handler om, hvem du samarbejder med.				
	Leaders and employees: In my work, I collaborate	Source			
	with / I mit arbejde samarbejder jeg med				
samskabelse_1	volunteers	Developed for this			
	frivillige	survey			
samskabelse_2	voluntary associations (e.g. scouts, football club)				
	frivillige foreninger (fx spejder, fodboldklub)				
samskabelse_3	citizens				
	borgere				
samskabelse_4	my immediate management				
	min nærmeste ledelse				
samskabelse_5	my immediate colleagues (including people I manage)				
	mine nærmeste kollegaer (inklusiv personer jeg er				
	leder for)				
samskabelse_6	colleagues from other parts of the municipality				
	kollegaer fra andre dele af kommunen				
samskabelse_7	other public actors (e.g. hospitals, police or other				
	municipalities)				
	andre offentlige aktører (fx sygehuse, politi eller				
	andre kommuner)				
samskabelse_8	private companies				
	private virksomheder				
samskabelse_9	politicians in the city council				
	politikere i byrådet				
samskabelse_10	trade unions (e.g. BUPL, DLF, FOA)				
	fagforeninger (fx BUPL, DLF, FOA)				
samskabelse_11	others – who?				
	andre – hvem?				

samskabelse_åbent	Open text				
Note: Leaders and employees had the following options: Every day (<i>hver dag</i>) = 1, several days a week (<i>flere dage om ugen</i>) = 2, weekly (<i>ugentligt</i>) = 3, monthly (<i>månedligt</i>) = 4, less than monthly (<i>mindre end månedligt</i>) = 5, never (<i>aldrig</i>) = 6, do not know (<i>ved ikke</i>) = 99					

Table 3.7.2 shows the response distribution among leaders and Table 3.7.3 shows how many leaders answered the open question.

	Every	Several	Weekly	Monthly	Less	Never	Do not	Total N
	day	days a			than		know	
		week			monthly			
samskabelse_1	1.69%	4.52%	10.73%	14.50%	34.09%	32.39%	2.07%	531
(volunteers)	(9)	(24)	(57)	(77)	(181)	(172)	(11)	
samskabelse_2	1.33%	2.47%	4.93%	12.33%	29.98%	46.30%	2.66%	527
(voluntary	(7)	(13)	(26)	(65)	(158)	(244)	(14)	
associations)								
samskabelse_3	36.40%	11.63%	13.88%	14.07%	15.01%	8.07%	0.94%	533
(citizens)	(194)	(62)	(74)	(75)	(80)	(43)	(5)	
samskabelse_4	37.80%	26.26%	26.82%	7.64%	0.74%	0.56%	0.19%	537
(management)	(203)	(141)	(144)	(41)	(4)	(3)	(1)	
samskabelse_5	80.89%	12.62%	5.01%	0.93%	0.37%	0%	0.19%	539
(colleagues)	(436)	(68)	(27)	(5)	(2)	(0)	(1)	
samskabelse_6	14.29%	28.39%	26.16%	19.11%	9.46%	2.23%	0.37%	539
(colleagues from	(77)	(153)	(141)	(103)	(51)	(12)	(2)	
other parts of the								
municipality)								
samskabelse_7	3.18%	10.28%	15.70%	33.46%	28.04%	8.22%	1.12%	535
(other public	(17)	(55)	(84)	(179)	(150)	(44)	(6)	
actors)								
samskabelse_8	2.24%	4.30%	9.35%	19.25%	38.32%	24.67%	1.87%	535
(private	(12)	(23)	(50)	(103)	(205)	(132)	(10)	
companies)								

Table 3.7.2: Response distribution, leaders

samskabelse_9	0.93%	2.99%	3.55%	15.33%	37.57%	37.20%	2.43%	535
(politicians)	(5)	(16)	(19)	(82)	(201)	(199)	(13)	
samskabelse_10	0.93%	2.06%	6.17%	25.61%	51.96%	12.34%	0.93%	535
(trade unions)	(5)	(11)	(33)	(137)	(278)	(66)	(5)	
samskabelse_11	3.14%	7.17%	5.83%	9.87%	2.24%	8.07%	63.68%	223
others – who?	(7)	(16)	(13)	(22)	(5)	(18)	(142)	
(open answer)								
Note: Percentages of	Note: Percentages of observations in each category and number of observations in parentheses.							

Leaders express that they often cooperate with their immediate colleagues, their immediate management, and citizens.

Table 3.7.3: Number of leaders who answered the open question samskabelse_åbent

	Number of respondents
samskabelse_åbent	72
(open answer)	

Table 3.7.4 shows the response distribution among employees, and table 3.7.5 shows how many employees answered the open question.

Table 3.7.4: Response distribution, employees

	Every	Several	Weekly	Monthly	Less	Never	Do not	Total N
	day	days a			than		know	
		week			monthly			
samskabelse_1	0.56%	3.66%	6.62%	9.72%	30.28%	46.76%	2.39%	710
(volunteers)	(4)	(26)	(47)	(69)	(215)	(332)	(17)	
samskabelse_2	0.57%	1.56%	3.27%	4.83%	27.13%	59.52%	3.12%	704
(voluntary	(4)	(11)	(23)	(34)	(191)	(419)	(22)	
associations)								
samskabelse_3	57.34%	10.97%	4.53%	6.04%	8.92%	10.43%	1.78%	729
(citizens)	(418)	(80)	(33)	(44)	(65)	(76)	(13)	
samskabelse_4	35.02%	29.55%	25.03%	7.11%	1.50%	0.27%	1.50%	731
(management)	(256)	(216)	(183)	(52)	(11)	(2)	(11)	
samskabelse_5	79.43%	14.88%	4.06%	0.27%	0.41%	0.27%	0.68%	739
(colleagues)	(587)	(110)	(30)	(2)	(3)	(2)	(5)	
samskabelse_6	9.74%	19.89%	21.54%	20.99%	18.11%	7.96%	1.78%	729
(colleagues from	(71)	(145)	(157)	(153)	(132)	(58)	(13)	
other parts of the								
municipality)								
samskabelse_7	3.99%	9.90%	13.07%	23.52%	30.54%	16.64%	2.34%	727
(other public	(29)	(72)	(95)	(171)	(222)	(121)	(17)	
actors)								
samskabelse_8	3.47%	4.58%	9.99%	13.73%	26.21%	37.45%	4.58%	721
(private	(25)	(33)	(72)	(99)	(189)	(270)	(33)	
companies)								
samskabelse_9	0.42%	0.56%	0.56%	5.28%	18.06%	71.25%	3.89%	720
(politicians)	(3)	(4)	(4)	(38)	(130)	(513)	(28)	
samskabelse_10	1.10%	2.62%	2.07%	8.41%	30.21%	51.31%	4.28%	725
(trade unions)	(8)	(19)	(15)	(61)	(219)	(372)	(31)	
samskabelse_11	4.29%	3.54%	4.29%	6.06%	5.30%	22.98%	53.54%	396
(open answer)	(17)	(14)	(17)	(24)	(21)	(91)	(212)	
Note: Percentages of observations in each category and number of observations in parentheses								

Like leaders, employees also express that they often cooperate with their immediate colleagues, their immediate management, and citizens. As expected, the response distributions suggest that employees cooperate more with citizens on a daily basis than leaders do.

Table 3.7.5: Number of employees who answered the open question samskabelse_åbent

	Number of respondents
samskabelse_åbent	11
(open answer)	

3.8 The Aarhus Compass

The concept of the Aarhus Compass can be known and used in a quite explicit way. Table 3.8.1 shows the question that was used to measure leaders' and employees' knowledge of the Aarhus Compass.

Table 3.8.1: Items	measuring	knowledge	of the Aarhus	Compass
	J		· , · · · · · · · ·	

Leaders and employees: The following text was used to introduce the questions:				
The following quest	ions are about the Aarhus Compass. Regardless of whether you are familiar with the			
Aarhus Compass, w	e would like to ask you to answer the questions.			
De følgende spørgs	mål handler om Aarhuskompasset. Uanset om du kender Aarhuskompasset, vil vi bede			
dig om at svare på s	spørgsmålene.			
kendskab_kompas	Before you received and completed this questionnaire, how familiar were you with			
	the Aarhus Compass?			
	Før du modtog og udfyldte dette spørgeskema, hvilket kendskab havde du da til			
Aarhuskompasset?				
Note: Leaders and employees had the following options: I did not know about it (<i>jeg kendte det ikke</i>) = 1, I had heard about it (<i>jeg havde hørt om det</i>) = 2, I had some knowledge of it (<i>Jeg havde et vist kendskab til det</i>) = 3, I had a good knowledge of it (<i>Jeg havde et godt kendskab til det</i>) = 4, do not know (<i>ved ikke</i>) = 99.				

Table 3.8.2 shows the response distribution among leaders on the question measuring their knowledge of the Aarhus Compass.

Table 3.8.2: Response distribution, leaders

	I did not	I had heard	I had some	I had a	Do not	Total N
	know about	about it	knowledge of	good	know	
	it		it	knowledge		
				of it		
kendskab_kompas	2.81%	13.86%	38.01%	44.94%	0.37%	534
(familiar)	(15)	(74)	(203)	(240)	(2)	
Note: Percentages of observations in each category and number of observations in parentheses.						

Most leaders either had some knowledge or a good knowledge of the Aarhus Compass, before they answered the questionnaire.

Table 3.8.3 shows the response distribution among employees on the question measuring their knowledge of the Aarhus Compass.

Table 3.8.3: Response distribution, employees

	I did not	I had heard	I had some	I had a	Do not	Total N
	know about	about it	knowledge of	good	know	
	it		it	knowledge		
				of it		
kendskab_kompas	36.02%	25.78%	22.10%	14.05%	2.05%	733
(familiar)	(264)	(189)	(162)	(103)	(15)	
Note: Percentages of observations in each category and number of observations in parentheses.						

The most frequent answer among employees was that they did not know about the Aarhus Compass. Below 50% of employees had either heard about it or had some knowledge of it before they answered the questionnaire, while 14% had a good knowledge of it.

Involvement

The items measuring involvement are shown in Table 3.8.4.

Table 3.8.4: Items measuring involvement in the Aarhus Compass

Leaders and emplo	yees: Have you / Har du	Source	
involv_kompas_1	participated in workshop(s) in relation to the Aarhus Compass?	Developed for	
	deltaget i workshop(s) med relation til Aarhuskompasset?	this survey	
involv_kompas_2	participated in presentations about the Aarhus Compass?		
	deltaget i oplæg om Aarhuskompasset?		
Note: Both leaders and employees had the following options: Yes (<i>ja</i>) = 1, no (<i>nej</i>) = 2, do not know (<i>ved ikke</i>) = 99.			

The response distributions among leaders and employees are shown in Table 3.8.5 and 3.8.6.

Table 3.8.5: Response distribution, leaders

	Yes	No	Do not know	Total N		
involv_kompas_1	42.37% (222)	56.30% (295)	1.34% (7)	524		
(workshops)						
involv_kompas_2	63.79% (340)	35.65% (190)	0.56% (3)	533		
(presentations)						
Note: Percentages of observations in each category and number of observations in parentheses.						

Table 3.8.6: Response distribution, employees

	Yes	No	Do not know	Total N		
involv_kompas_1	12.09% (88)	84.89% (618)	3.02% (22)	728		
(workshops)						
involv_kompas_2	24.25% (177)	71.51% (522)	4.25% (31)	730		
(presentations)						
Note: Percentages of observations in each category and number of observations in parentheses.						

Use

The following table presents the items measuring use of the Aarhus Compass.

Table 3.8.7: Items measuring use of the Aarhus Compass

Leaders and employ	yees: To what extent / I hvilket omfang	Source
anvend_kompas_1	have you and your colleagues discussed the relevance of the	Developed for
	Aarhus Compass to your work?	this survey
	har du sammen med kollegaer drøftet relevansen af	
	Aarhuskompasset for jeres arbejde?	
anvend_kompas_2	do you use the Aarhus Compass reference points in your work?	
	anvender du Aarhuskompassets holdepunkter i dit arbejde?	
anvend_kompas_3	did you use the Aarhus Compass reference points in your work	
	even before it was developed?	
	anvendte du Aarhuskompassets holdepunkter i dit arbejde,	
	allerede før det blev udviklet?	
Note: Leaders and em	ployees had the following options: Not at all (slet ikke) = 1, to a lesser extent	(i lav grad) = 2,

Note: Leaders and employees had the following options: Not at all (*slet ikke*) = 1, to a lesser extent (*i lav grad*) = 2, to some extent (*i nogen grad*) = 3, to a large extent (*i høj grad*) = 4, to a very large extent (*i meget høj grad*), = 5, do not know (*ved ikke*) = 99.

Table 3.8.8 and Table 3.8.9 show how leaders and employees responded to the questions measuring their

use of the Aarhus Compass.

Table 3.8.8: Response distribution, leaders

	Not at all	То а	To some	To a large	To a very	Do not	Total N
		lesser	extent	extent	large	know	
		extent			extent		
anvend_kompas_1	15.23%	24.81%	34.77%	18.61%	5.83%	0.75% (4)	532
(discuss relevance)	(81)	(132)	(185)	(99)	(31)		
anvend_kompas_2	10.34%	19.92%	34.77%	25.94%	5.08%	3.95%	532
(do you use the	(55)	(106)	(185)	(138)	(27)	(21)	
Aarhus Compass)							
anvend_kompas_3	9.21%	12.78%	40.60%	21.62%	5.08%	10.71%	532
(did you use the	(49)	(68)	(216)	(115)	(27)	(57)	
Aarhus Compass)							
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.8.9: Response distribution, employees

	Not at all	То а	To some	To a large	To a very	Do not	Total N
		lesser	extent	extent	large	know	
		extent			extent		
anvend_kompas_1	58.66%	17.87%	11.46%	5.46%	1.91%	4.64%	733
(discuss relevance)	(430)	(131)	(84)	(40)	(14)	(34)	
anvend_kompas_2	43.01%	13.15%	15.62%	13.56%	2.05%	12.60%	730
(do you use the	(314)	(96)	(114)	(99)	(15)	(92)	
Aarhus Compass)							
anvend_kompas_3	37.67%	6.99%	15.62%	15.07%	4.38%	20.27%	730
(did you use the	(275)	(51)	(114)	(110)	(32)	(148)	
Aarhus Compass)							
Note: Percentages of observations in each category and number of observations in parentheses.							

Perceived Credibility of the Aarhus Compass

Like the value ambition the respondents also have a perception of the credibility of the Aarhus Compass.

Expected Effort of Top Management

Table 3.8.10 presents the item measuring the expected effort of the top management. Only leaders received the following question.

Leaders: The following text was used to introduce the question:					
The next questions ar	The next questions are about your perceptions of the Aarhus Compass.				
De næste spørgsmål h	nandler om dine opfattelser af Aarhuskompasset.				
troværdig_kompas	How much do you disagree or agree with the following	Developed for this			
	statements:	survey			
	I expect that the political and administrative top				
	management in Aarhus Municipality will do everything				
	to make the Aarhus Compass a reality – even when it is				
	difficult.				
	Jeg forventer, at den politiske og administrative				
	topledelse i Aarhus Kommune vil gøre alt for, at				
	Aarhuskompasset bliver til virkelighed – også når det er				
svært.					
Note: Leaders had the for agree (hverken uenig ell	ollowing options: Totally disagree (<i>helt uenig</i>) = 1, disagree (<i>uenig</i> <i>er enig</i>) = 3, agree (<i>enig</i>) = 4, totally agree (<i>helt enig</i>) = 5, don't k	g) = 2, neither disagree nor now (<i>ved ikke</i>) = 99.			

Table 3.8.10: Items measuring expected effort of top management

Table 3.8.11 shows the response distribution among leaders.

Table 3.8.11: Response distribution, leaders

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
troværdig_kompas	0.57%	5.28%	20.57%	40.19%	25.66%	7.74%	530
(top management's	(3)	(28)	(109)	(213)	(136)	(41)	
effort)							
Note: Percentages of observations in each category and number of observations in parentheses							

Leaders generally agree that they expect that the political and the administrative top management in Aarhus Municipality will do everything to make the ambition a reality – even when it is difficult. One in five leaders neither disagree nor agree with the statement.

Expected Permanence of Aarhus Compass

Table 3.8.12 presents the question measuring the expected permanence of the Aarhus Compass.

Table 3.8.12: Items measuring expected permanence of the Aarhus Compass

Only leaders received	Source				
døgnflue_kompas	The Aarhus Compass is a fad that will disappear quickly.	Developed for this			
	/ Aarhuskompasset er et modefænomen, som hurtigt	survey			
	forsvinder igen.				
Note: Leaders had the following options: Totally disagree (<i>helt uenig</i>) = 1, disagree (<i>uenig</i>) = 2, neither disagree nor					
agree (hverken uenig ell	agree (hverken uenig eller enig) = 3, agree (enig) = 4, totally agree (helt enig) = 5, do not know (ved ikke) = 99.				

Table 3.8.13 shows how leaders responded to the question.

Table 3.8.13: Response distribution, leaders

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
døgnflue_kompas	16.42%	31.70%	28.87%	8.49%	2.64%	11.89%	530
(fad)	(87)	(168)	(153)	(45)	(14)	(63)	
Note: Percentages of observations in each category and number of observations in parentheses.							

In general leaders do not perceive the Aarhus Compass as a fad that will disappear quickly. Nearly 50% of leaders disagree that the Aarhus Compass is a fad that will disappear quickly, while nearly 30% neither agree nor disagree with the statement.

Perceived Supportiveness of Aarhus Compass

Leaders and employees also received a question about the perceived supportiveness of the Aarhus

Compass. This question is presented in Table 3.8.14.

Both leaders and em	ployees received the following question:	Source
opfattelse_kompas	Below are two different statements about the Aarhus	Developed for this
	Compass. Please indicate whether you agree more with	survey
	statement A or B.	
	A: The Aarhus Compass supports my work.	
	B: The Aarhus Compass is an unnecessary interference	
	in my work.	
	Nedenfor præsenteres to forskellige udsagn om	
	Aarhuskompasset. Angiv, om du er mest enig med	
	udsagn A eller B.	
	A: Aarhuskompasset understøtter mit arbejde.	
	B: Aarhuskompasset er en unødvendig indblanding i	
	mit arbejde.	
Note: Both leaders and	employees answered the question on a scale from 0 to $10.0 = 0$	only agree with B
(Udelukkende enig med know (ved ikke) = 99.	<i>i B</i>), 5 = Agree equally (<i>Lige enig</i>), 10 = Only agree with A (<i>Udeluk</i>	kenae enig med A). Do not

Table 3.8.14: Items measuring perceived supportiveness of the Aarhus Compass

Figures 3.8.1 and 3.8.2 present the response distributions among leaders and employees.



Figure 3.8.1: Distribution of perceived supportiveness of the Aarhus Compass as reported by leaders

Perceived supportiveness of the Aarhus Compass, leaders

Note: N = 486. Mean = 7.12, std. dev = 2.15, min = 0, max = 10, skewness = -0.59, kurtosis = 3.12.

In general, leaders believe that the Aarhus Compass supports their work. This is reflected in the mean value of 7.12 and in the fact that most leaders chose values above 5, indicating that the Aarhus Compass supports their work.



Figure 3.8.2: Distribution of perceived supportiveness of the Aarhus Compass as reported by employees

Perceived supportiveness of the Aarhus Compass, employees

Note: N = 452. Mean = 6.33, std. dev = 2.71, min = 0, max = 10, skewness = -0.60, kurtosis = 2.85.

The distribution among employees looks different to the distribution among leaders. A large share of employees express that they agree equally that the Aarhus Compass supports their work and that it is an unnecessary interference in their work. The mean value of 6.33 suggests that employees, like leaders, agree more with statement A than with statement B.

3.9 Dyad Leadership

Dyad leadership is leadership between a leader and a follower. However, as leadership is increasingly exercised collectively, we focus on how a respondent's immediate leadership (which can be exercised by several leaders) is perceived.

Paradoxical Leadership

Paradoxical leadership is "leader behaviors that are seemingly competing yet interrelated, to simultaneously and over time meet competing workplace demands" (Zhang et al. 2015). Table 3.9.1 shows the items measuring paradox leadership.

Table 3.9.1: Items measuring paradox leadership

Leaders and employees: The following text was used to introduce the questions:

The next questions are about how your immediate management **deals with** possible workplace conflicts.

De næste spørgsmål handler om, hvordan din nærmeste ledelse **forholder sig** til mulige modsætninger i arbejdet.

Leaders and employees: My immediate management shows me why it is Source							
important to both	important to both / Min nærmeste ledelse viser mig, hvorfor det er vigtigt						
både at							
paradoksledelse_1	make a difference for the individual citizen AND make	Adapted from Sparr et					
	a difference for society	al. (2022)					
	gøre en forskel for den enkelte borger OG gøre en						
	forskel for samfundet						
paradoksledelse_2	be oriented towards tasks AND relationships with	Adapted from Sparr et					
	citizens	al. (2022)					
	være orienteret mod opgaver OG relationer til						
	borgere						
paradoksledelse_3	create value for citizens AND comply with rules and	Developed for this					
	procedures	survey					
	skabe værdi for borgere OG leve op til regler og						
	procedurer						
paradoksledelse_4	draw on what has worked in the past AND do things in	Sparr et al. (2022)					
	new ways						
	trække på det, der tidligere har virket, OG gøre ting						
	på nye måder						
paradoksledelse_5	promote different perspectives in the work AND be a	Sparr et al. (2022)					
	cohesive unit						
	fremme forskellige perspektiver i arbejdet OG være						
	en samlet enhed						
Note: Leaders and employees had the following options: Not at all (<i>slet ikke</i>) = 1, to a lesser extent (<i>i lav grad</i>) = 2, to some extent (<i>i nogen grad</i>) = 3, to a large extent (<i>i høj grad</i>) = 4, to a very large extent (<i>i meget høj grad</i>), = 5, do not know (<i>ved ikke</i>) = 99.							

The response distribution among leaders is shown in Table 3.9.2 below.

	Not at all	То а	To some	To a large	To a very	Do not	Total N
		lesser	extent	extent	large	know	
		extent			extent		
paradoksledelse_1	0.95%	10.44%	30.17%	40.04%	10.82%	7.49%	527
(citizen and society)	(5)	(55)	(159)	(211)	(57)	(40)	
paradoksledelse_2	1.33%	9.49%	24.86%	47.25%	11.57%	5.50%	527
(tasks and	(7)	(50)	(131)	(249)	(61)	(29)	
relationships)							
paradoksledelse_3	1.14%	5.12%	28.46%	48.77%	11.39%	5.12%	527
(citizens and rules)	(6)	(27)	(150)	(257)	(60)	(27)	
paradoksledelse_4	1.33%	5.88%	28.08%	45.35%	12.71%	6.64%	527
(past and new	(7)	(31)	(148)	(239)	(67)	(35)	
ways)							
paradoksledelse_5	0.38%	7.21%	24.86%	50.28%	11.76%	5.50%	527
(different	(2)	(38)	(131)	(265)	(62)	(29)	
perspectives and a							
unit)							
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.9.2: Response distribution, leaders

Table 3.9.3 shows the correlations between the items measuring paradoxical leadership.

Table 3.9.3: Correlation matrix, leaders

	paradoksledels	paradoksledels	paradoksledels	paradoksledels	paradoksledels
	e_1	e_2	e_3	e_4	e_5
	(citizen and	(tasks and	(citizens and	(past and new	(different
	society)	relationships)	rules)	ways)	perspectives
					and a unit)
paradoksledels	1.00				
e_1					
(citizen and					
society)					
paradoksledels	0.68	1.00			
e_2					
(tasks and					
relationships)					
paradoksledels	0.66	0.66	1.00		
e_3					
(citizens and					
rules)					
paradoksledels	0.57	0.58	0.60	1.00	
e_4					
(past and new					
ways)					
paradoksledels	0.52	0.59	0.58	0.63	1.00
e_5					
(different					
perspectives					
and a unit)					

All inter-item correlations are above the acceptable level of 0.3.

Table 3.9.4: Test of assumptions for factor analysis

Kaiser-Meyer-Olkin Measure of Sa	0.869	
Bartlett's Test of Sphericity	Chi Square	1196.706
	Degrees of freedom	10
	0.000	

Bartlett's test is significant which suggests a low probability that the items are in fact uncorrelated in the population. The KMO-value of 0.869 indicates that a satisfactory proportion of the variation in the data could be explained by underlying variables.

Pretext: My immediate management shows me why it is important to both	Loadings
Make a difference for the individual citizen AND make a difference for society	0.773
Be oriented towards tasks AND relationships with citizens	0.802
Create value for citizens AND comply with rules and procedures	0.795
Draw on what has worked in the past AND do things in new ways	0.748
Promote different perspectives in the work AND be a cohesive unit	0.732
Note: One factor with an Eigenvalue higher than 1.0 was extracted.	

Table 3.9.5: Exploratory factor analysis: Paradoxical leadership as reported by leaders

All items exhibit high loadings, suggesting that they reflect the same latent dimension. Therefore, all items are included in an additive index.





Paradox leadership, leaders

Note: N = 501. Mean = 3.64, std. dev = 0.70, min = 1, max = 5, skewness = -0.52, kurtosis = 3.62. For respondents who had answered at least three items, the index is calculated based on the average score of the answered items. Cronbach's alpha = 0.885.

The distribution among leaders is slightly left-skewed. This is also reflected in the mean value (3.64) which is slightly higher than the midpoint of the scale. The alpha value suggests very strong internal reliability.

Table 3.9.6 shows how employees are distributed on the items measuring paradox

leadership.

	Not at all	То а	To some	To a large	To a very	Do not	Total N
		lesser	extent	extent	large	know	
		extent			extent		
paradoksledelse_1	5.98%	14.88%	30.04%	29.62%	9.60%	9.87%	719
(citizen and society)	(43)	(107)	(216)	(213)	(69)	(71)	
paradoksledelse_2	3.89%	8.90%	25.73%	37.13%	15.99%	8.34%	719
(tasks and	(28)	(64)	(185)	(267)	(115)	(60)	
relationships)							
paradoksledelse_3	2.92%	7.09%	26.01%	40.61%	15.44%	7.93%	719
(citizens and rules)	(21)	(51)	(187)	(292)	(111)	(57)	
paradoksledelse_4	3.20%	10.29%	26.56%	39.64%	12.80%	7.51%	719
(past and new	(23)	(74)	(191)	(285)	(92)	(54)	
ways)							
paradoksledelse_5	3.62%	9.60%	28.09%	36.16%	13.21%	9.32%	719
(different	(26)	(69)	(202)	(260)	(95)	(67)	
perspectives and a							
unit)							
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.9.6: Response distribution, employees

The inter-item correlations among employees are shown in the correlation matrix below.

Table 3.9.7: Correlation matrix, employees

	paradoksledels	paradoksledels	paradoksledels	paradoksledels	paradoksledels
	e_1	e_2	e_3	e_4	e_5
	(citizen and	(tasks and	(citizens and	(past and new	(different
	community)	relationships)	rules)	ways)	perspectives
					and a unit)
paradoksledels	1.00				
e_1					
(citizen and					
society)					
paradoksledels	0.65	1.00			
e_2					
(tasks and					
relationships)					
paradoksledels	0.68	0.72	1.00		
e_3					
(citizens and					
rules)					
paradoksledels	0.60	0.67	0.64	1.00	
e_4					
(past and new					
ways)					
paradoksledels	0.60	0.69	0.67	0.70	1.00
e_5					
(different					
perspectives					
and a unit)					

The correlation matrix for employees also shows fairly high inter-item correlations as no correlations fall below 0.6.

Table 3.9.8: Test of assumptions for factor analysis

Kaiser-Meyer-Olkin Measure of Sar	0.887	
Bartlett's Test of Sphericity Chi Square		1876.847
	Degrees of freedom	10
	p-value	0.000

The significant Bartlett's test indicates that the correlation matrix is significantly different from an uncorrelated matrix. The KMO-value also shows that a satisfactory proportion of the variation in the data could be caused by underlying variables.
Pretext: My immediate management shows me why it is important to both	Loadings
Make a difference for the individual citizen AND make a difference for society	0.760
Be oriented towards tasks AND relationships with citizens	0.837
Create value for citizens AND comply with rules and procedures	0.827
Draw on what has worked in the past AND do things in new ways	0.790
Promote different perspectives in the work AND be a cohesive unit	0.814
Note: One factor with an Eigenvalue higher than 1.0 was extracted.	

Table 3.9.9: Exploratory factor analysis: Paradoxical leadership as reported by employees

All items exhibit fairly high loadings, and therefore they are included in an additive index below.

Figure 3.9.2: Distribution of paradox leadership as reported by employees



Note: N = 669. Mean = 3.50, std. dev = 0.85, min = 1, max = 5, skewness = -0.52, kurtosis = 3.19. For respondents who had answered at least three items, the index is calculated based on the average score of the answered items. Cronbach's alpha = 0.903.

In the distribution among employees, the observations are slightly more spread across the scale than in the distribution for leaders. The alpha value suggests very strong internal reliability.

Visionary Leadership

Visionary leadership are "behaviors that seek to develop, share, and sustain a vision" (Jensen et al. 2019: 10). The items measuring visionary leadership are presented in Table 3.9.10.

Table 3.9.10	: Items	measuring	visionary	leadership
		5		

	easaning visionary reductsinp				
Leaders and employ	Leaders and employees: The following text was used to introduce the questions:				
These questions are	about your immediate managements use of vision and go	als. Visions are concrete			
pictures of what to	work towards.				
Disse spørgsmål har	ndler om din nærmeste ledelses brug af visioner og mål . Vis	ioner er konkrete billeder			
af, hvad der skal arb	nejdes hen imod.				
Leaders and employ	yees: My immediate management / Min nærmeste	Source			
ledelse					
visionsledelse_1	concretizes a clear vision for the future	Adapted from Jensen et			
	konkretiserer en klar vision for fremtiden	al. (2019)			
visionsledelse_2	seeks to get people to engage in the common goals				
	forsøger at få folk til at engagere sig i de fælles mål				
visionsledelse_3	strives to get people to work together in the direction				
	of the vision				
	gør en løbende indsats for at få folk til at arbejde				
	sammen i retning af visionen				
visionsledelse_4	strives to clarify for people how they can contribute to				
	achieving goals				
	bestræber sig på at gøre det klart for folk, hvordan de				
	kan bidrage til at opnå mål				
Note: Leaders and em to some extent (<i>i noge</i> not know (<i>ved ikke</i>) =	ployees had the following options: Not at all (<i>slet ikke</i>) = 1, to a le en grad) = 3, to a large extent (<i>i høj grad</i>) = 4, to a very large exter 99.	sser extent (<i>i lav grad</i>) = 2, ht (<i>i meget høj grad</i>), = 5, do			

Table 3.9.11 shows how leaders are distributed on the items measuring visionary leadership.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
visionsledelse_1	0.76%	8.41%	26.00%	49.90%	11.47%	3.44%	523
(clear vision)	(4)	(44)	(136)	(261)	(60)	(18)	
visionsledelse_2	0.19%	3.24%	12.98%	59.73%	21.56%	2.29%	524
(engage)	(1)	(17)	(68)	(313)	(113)	(12)	
visionsledelse_3	0.19%	4.58%	15.84%	57.06%	19.47%	2.86%	524
(work together)	(1)	(24)	(83)	(299)	(102)	(15)	
visionsledelse_4	0.95% (5)	5.53%	26.34%	52.29%	11.26%	3.63%	524
(contribute)		(29)	(138)	(274)	(59)	(19)	
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.9.11: Response distribution, leaders

Table 3.9.12: Confirmatory factor analysis: Visionary leadership as reported by leaders

Pretext: My immediate management	Loadings	R ²				
Concretizes a clear vision for the future	0.755***	0.57				
	(0.024)					
Seeks to get people to engage in the common goals	0.767***	0.59				
	(0.023)					
Strives to get people to work together in the direction of the vision	0.814***	0.66				
	(0.020)					
Strives to clarify for people how they can contribute to achieving goals	0.816***	0.67				
	(0.020)					
Note: Standardized coefficients from the SEM-regression of each item on the predicted factor. N = 513. *p<0.05,						
** p <0.01, *** p <0.001. Fit statistics for the model: X ² (model vs. saturated) = 3.59, p = 0.166, degrees of freedom = 2,						
CFI = 0.998, TLI = 0.995, RMSEA = 0.039. Cronbach's alpha = 0.868.						

All loadings are high and above 0.7 which indicates that the items reflect the same latent dimension. The alpha value suggests strong internal reliability.



Figure 3.9.3: Distribution of visionary leadership as reported by leaders

Note: N = 510. Mean = 3.82, std. dev = 0.65, min = 1, max = 5, skewness = -0.65, kurtosis = 4.12. For respondents who had answered at least three items, the index is calculated based on the average score of the answered items.

The observations of leaders are spread across the scale, but they are mostly concentrated between the values 2.5 and 5. The mean value of 3.82 is a bit higher than the midpoint of the scale, which suggests that leaders perceive their immediate management to enact visionary leadership to a relatively large degree.

Table 3.9.13 shows the response distribution among employees on the items measuring visionary leadership.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
visionsledelse_1	5.05%	11.50%	29.17%	34.78%	12.76%	6.73%	713
(clear vision)	(36)	(82)	(208)	(248)	(91)	(48)	
visionsledelse_2	1.96%	4.48%	16.08%	53.29%	19.44%	4.76%	715
(engage)	(14)	(32)	(115)	(381)	(139)	(34)	
visionsledelse_3	2.51%	6.14%	19.25%	48.95%	17.71%	5.44%	717
(work together)	(18)	(44)	(138)	(351)	(127)	(39)	
visionsledelse_4	2.10%	8.95%	23.92%	45.17%	13.15%	6.71%	715
(contribute)	(15)	(64)	(171)	(323)	(94)	(48)	
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.9.13: Response distribution, employees

Pretext: My immediate management	Loadings	R ²				
Concretizes a clear vision for the future	0.808***	0.65				
	(0.016)					
Seeks to get people to engage in the common goals	0.868***	0.75				
	(0.013)					
Strives to get people to work together in the direction of the vision	0.846***	0.72				
	(0.014)					
Strives to clarify for people how they can contribute to achieving goals	0.838***	0.70				
	(0.014)					
Note: Standardized coefficients from the SEM-regression of each item on the predicted factor. N = 696. $*p<0.05$,						
p<0.01, *p<0.001. Fit statistics for the model: X ² (model vs. saturated) = 27.48, p = 0.000, degrees of freedom =						
2, CFI = 0.985, TLI = 0.956, RMSEA = 0.135. Cronbach's alpha = 0.904.						

Table 3.9.14: Confirmatory factor analysis: Visionary leadership as reported by employees

All items exhibit high loadings above 0.8 which suggests that they reflect the same dimension. The alpha value suggests very strong internal reliability.

Figure 3.9.4: Distribution of visionary leadership as reported by leaders



Visionary leadership, employees

Note: N = 674. Mean = 3.67, std. dev = 0.83, min = 1, max = 5, skewness = -0.75, kurtosis = 3.77. For respondents who had answered at least three items, the index is calculated based on the average score of the answered items.

The distribution of visionary leadership among employees is very similar to the distribution among leaders. There is a large peak at the value 4, indicating that one in four employees believe that their immediate management enacts visionary leadership to a relatively large degree. The mean value is slightly lower among employees than among leaders, but it is still above the midpoint of the scale.

3.10 Individual Work-related Factors

There are also a number of important factors relating to people's capacities for their work as well as their perceptions of their work environment.

Paradox Mindset

A paradox mindset is a mindset that "tend to value, accept and feel comfortable with tensions" (Miron-Spektor et al. 2018). Table 3.10.1 shows the items measuring paradox mindset. Only leaders received the following questions.

Leaders: The following	g text was used to introduce the questions:			
The next questions are	e about how you experience different aspects of your work.	Source		
De næste spørgsmål h	andler om, hvordan du oplever forskellige aspekter af dit arbejde.			
mindset_paradoks_1	I get a better understanding of my tasks when I see them from	Adapted		
	different angles	from Miron-		
	Jeg får en bedre forståelse af mine opgaver, når jeg ser dem fra	Spektor et al. (2018)		
	forskellige vinkler	()		
mindset_paradoks_2	I am comfortable with conflicting expectations			
	Jeg har det fint med forventninger, der strider mod hinanden			
mindset_paradoks_3	I am energized by dealing with challenges that seem impossible			
	to solve simultaneously			
	Jeg får energi af at håndtere udfordringer, der virker umulige at			
	løse samtidig			
Note: Leaders had the following options: Totally disagree (<i>helt uenig</i>) = 1, disagree (<i>uenig</i>) = 2, neither disagree nor agree (<i>herken uenig eller enig</i>) = 3, agree (<i>enig</i>) = 4, totally agree (<i>helt enig</i>) = 5, do not know (<i>ved ikke</i>) = 99.				

Table 3.10.2 shows the response distributions among leaders.

Table 3.10.2: Response distribution, leaders

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
mindset_paradoks_1	0%	0%	4.00%	56.00%	39.62%	0.38%	525
(different angles)	(0)	(0)	(21)	(294)	(208)	(2)	
mindset_paradoks_2	2.48%	15.65%	30.53%	43.13%	7.82%	0.38%	524
(conflicting	(13)	(82)	(160)	(226)	(41)	(2)	
expectations)							
mindset_paradoks_3	1.34% (7)	8.59%	26.72%	48.28%	14.89%	0.19%	524
(challenges impossible		(45)	(140)	(253)	(78)	(1)	
to solve							
simultaneously)							
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.10.3: Correlation matrix, leaders

	mindset_paradoks_1	mindset_paradoks_2	mindset_paradoks_3
	(different angles)	(conflicting	(challenges impossible
		expectations)	to solve simultaneously)
mindset_paradoks_1	1.00		
(different angles)			
mindset_paradoks_2	0.18	1.00	
(conflicting			
expectations)			
mindset_paradoks_3	0.25	0.39	1.00
(challenges impossible			
to solve simultaneously)			

The inter-item correlations are fairly low as two correlations fall below the acceptable limit of 0.3. The correlation between feeling energized when dealing with challenges that seem impossible to solve simultaneously and being comfortable with conflicting expectations is above 0.3 and therefore acceptable.

Kaiser-Meyer-Olkin Measure of Sam	0.581	
Bartlett's Test of Sphericity	Chi Square	120.414
	Degrees of freedom	3
p-value		0.000

The significant Bartlett's test suggests that it is highly unlikely that the items are in fact uncorrelated in the population. The KMO-value approaches a satisfactory value but falls just below the satisfactory level of 0.6.

	Loadings
I get a better understanding of my tasks when I see them from different angles	0.362
I am comfortable with conflicting expectations	0.514
I am energized by dealing with challenges that seem impossible to solve	0.552
simultaneously	
Note: No factors with an Eigenvalue higher than 1.0 were extracted. The extracted factor only has	an Eigenvalue of
0.7.	

Table 3.10.5: Exploratory factor analysis: Paradox mindset as reported by leaders

The factor analysis did not extract any factors with an Eigenvalue above 1.0. However, we still extracted a factor with an Eigenvalue of 0.7. As is seen in Table 3.10.5, all items exhibit acceptable loadings. This suggests that they reflect the same latent dimension to a sufficient degree. They are included in an additive index below.





Note: N = 523. Mean = 3.80, std. dev = 0.59, min = 1, max = 5, skewness = -0.36, kurtosis = 3.44. For respondents who had answered at least two items, the index is calculated based on the average score of the answered items.

The distribution approaches a normal distribution with a peak at 4. The mean is above the midpoint of the scale, which suggests that leaders value, accept and feel comfortable with tensions in their work to a relatively large degree.

Occupational Self-efficacy

Occupational self-efficacy is "the competence that a person feels concerning the ability to successfully fulfill the tasks involved in his or her job" (Rigotti, Schyns, and Mohr 2008: 239). The items measuring occupational self-efficacy are shown in Table 3.10.6.

	Table	3.10.6:	Items	measuring	occupational	self-efficacy
--	-------	---------	-------	-----------	--------------	---------------

Leaders and employees: The following text was used to introduce the questions:					
The next statements a	The next statements are about how you experience your skills in your work. Source				
De næste udsagn hand	dler om, hvordan du oplever dine kompetencer i dit				
arbejde.					
self_efficacy_1	I can handle difficulties in my work because I trust my	Rigotti et al. (2008)			
	abilities				
	Jeg kan håndtere vanskeligheder i mit arbejde, fordi jeg				
	stoler på mine evner				
self_efficacy_2	When I encounter a problem in my work, I can usually				
	find multiple solutions				
	Når jeg møder et problem i mit arbejde, kan jeg som				
	regel finde flere løsningsmuligheder				
self_efficacy_3	Whatever happens in my work, I can usually handle it				
	Uanset hvad der sker i mit arbejde, kan jeg som regel				
håndtere det					
Note: Leaders and employees had the following options: Totally disagree (<i>helt uenig</i>) = 1, disagree (<i>uenig</i>) = 2, neither disagree nor agree (<i>hverken uenig eller enig</i>) = 3, agree (<i>enig</i>) = 4, totally agree (<i>helt enig</i>) = 5, do not know (<i>ved ikke</i>) = 99.					

Table 3.10.7 presents the response distribution among leaders.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
self_efficacy_1	0%	0.38%	4.40%	65.20%	30.02%	0%	523
(trust)	(0)	(2)	(23)	(341)	(157)	(0)	
self_efficacy_2	0%	0.38%	3.07%	68.58%	27.97%	0%	522
(multiple	(0)	(2)	(16)	(358)	(146)	(0)	
solutions)							
self_efficacy_3	0%	0.76%	8.60%	63.86%	26.58%	0.19%	523
(handle)	(0)	(4)	(45)	(334)	(139)	(1)	
Note: Percentages	of observation	s in each categ	ory and numb	er of observat	ions in parentl	neses.	

Table 3.10.7: Response distribution, leaders

Table 3.10.8: Confirmatory factor analysis: Self-efficacy as reported by leaders

Pretext: The next statements are about how you experience your skills in your work.	Loadings	R ²			
I can handle difficulties in my work because I trust my abilities	0.747***	0.56			
	(0.033)				
When I encounter a problem in my work, I can usually find multiple solutions	0.641***	0.41			
	(0.034)				
Whatever happens in my work, I can usually handle it	0.776***	0.60			
	(0.032)				
Note: Standardized coefficients from the SEM-regression of each item on the predicted factor. N = 523. *p<0.05,					
p<0.01, *p<0.001. Model fit data is not available for a CFA with 3 items. Cronbach's alpha	= 0.764.				

All loadings reach a minimum of 0.6, which is seen as satisfactory. The alpha value also indicates strong internal reliability.

Figure 3.10.2: Distribution of self-efficacy as reported by leaders



Self-efficacy, leaders

Note: N = 523. Mean = 4.22, std. dev = 0.46, min = 2, max = 5, skewness = 0.05, kurtosis = 3.62. For respondents who had answered at least two items, the index is calculated based on the average score of the answered items.

The distribution has a large peak at the value 4, as almost 50% of all observations are placed here. The mean value is high which suggests that leaders feel they have the skills and ability to fulfill their tasks successfully.

Table 3.10.9 shows how employees responded to the items measuring occupational self-efficacy.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
self_efficacy_1	0.28% (2)	0.42% (3)	5.33% (38)	52.88%	39.97%	1.12% (8)	713
(trust)				(377)	(285)		
self_efficacy_2	0.28% (2)	0.56% 4)	6.17% (44)	54.84%	36.75%	1.40%	713
(multiple				(391)	(262)	(10)	
solutions)							
self_efficacy_3	0.42% (3)	2.24% (16)	6.73% (48)	54.56%	34.92%	1.12% (8)	713
(handle)				(389)	(249)		
Note: Percentages	of observation	s in each categ	ory and numbe	er of observati	ions in parent	heses.	

Table 3.10.9: Response distribution, employees

Pretext: The next statements are about how you experience your skills in your work.	Loadings	R ²			
I can handle difficulties in my work because I trust my abilities	0.845***	0.71			
	(0.020)				
When I encounter a problem in my work, I can usually find multiple solutions	0.777***	0.60			
	(0.021)				
Whatever happens in my work, I can usually handle it	0.757***	0.57			
	(0.021)				
Note: Standardized coefficients from the SEM-regression of each item on the predicted factor. N = 709. *p<0.05, **p<0.01, ***p<0.001. Model fit data is not available for a CFA with 3 items. Cronbach's alpha = 0.832.					

Table 3.10.10: Confirmatory factor analysis: Self-efficacy as reported by employees

All items exhibit high loadings above 0.7, and the alpha value also suggests strong internal reliability. The loadings and the alpha value are higher among employees than among leaders.





Self-efficacy, employees

Note: N = 706. Mean = 4.28, std. dev = 0.57, min = 1, max = 5, skewness = -0.81 kurtosis = 5.68. For respondents who had answered at least two items, the index is calculated based on the average score of the answered items.

The distribution of self-efficacy among employees shows that employees in general believe they have the ability to successfully fulfill their tasks. The mean value is very high, and most data is grouped between the peak at the value 4 and the maximum value.

Work Motivation

Work motivation is "a set of energetic forces that originates both within as well as beyond an individual's being, to initiate work-related behavior, and to determine its form, direction, intensity, and duration." (Pinder 1998: 11). We distinguish between controlled-extrinsic motivation (income), autonomous-extrinsic (making good for society and individual citizens) and intrinsic motivation (independence) (Ryan and Deci 2020; Vandenabeele 2007) The items measuring work motivation are shown in Table 3.10.11.

Table 3.10.11: Items measuring work motivation

Leaders and employees: The following text was used to introduce the questions:							
The next questions are about your motivation and satisfaction.							
De næste spørgsmo	De næste spørgsmål handler om din motivation og tilfredshed.						
	Leaders and employees:	Source					
	Please indicate how much you disagree or agree with						
	the following statements:						
	It is important that my work						
	Angiv venligst hvor uenig eller enig du er i følgende						
udsagn:							
	Det er vigtigt, at mit arbejde						
motivation_1	provides a high income	Adapted from Frank &					
	giver en høj indkomst	Lewis (2004)					
motivation_2	provides the opportunity to work independently						
	giver mulighed for at arbejde selvstændigt						
motivation_3	provides an opportunity to help other people						
	giver mulighed for at hjælpe andre mennesker						
motivation_4	is useful for society						
	er nyttigt for samfundet						
Note: Leaders and en neither disagree nor (ved ikke) = 99.	nployees had the following options: Totally disagree (<i>helt uenig</i>) = agree (<i>hverken uenig eller enig</i>) = 3, agree (<i>enig</i>) = 4, totally agree	1, disagree (<i>uenig</i>) = 2, (<i>helt enig</i>) = 5, do not know					

The following table shows the response distribution among leaders.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
motivation_1	1.53%	7.65% (40)	34.03%	45.12%	10.52%	1.15%	523
(income)	(8)		(178)	(236)	(55)	(6)	
motivation_2	0.19%	2.10% (11)	8.40% (44)	47.52%	41.60%	0.19% (1)	524
(independently)	(1)			(249)	(218)		
motivation_3	0%	0.19%	6.87% (36)	46.56%	45.80%	0.57% (3)	524
(help)	(0)	(1)		(244)	(240)		
motivation_4	0.19%	0.76%	10.31%	49.05%	39.50%	0.19%	524
(society)	(1)	(4)	(54)	(257)	(207)	(1)	
Note: Percentages	of observation	s in each categ	ory and numbe	er of observati	ons in parent	heses.	

Table 3.10.12: Response distribution, leaders

Table 3.10.13 shows the inter-item correlations among leaders.

Table 3.10.13: Correlation matrix, leaders

	motivation_1	motivation_2	motivation_3	motivation_4
	(income)	(independently)	(help)	(society)
motivation_1	1.00			
(income)				
motivation_2	0.20	1.00		
(independently)				
motivation_3	0.02	0.22	1.00	
(help)				
motivation_4	0.13	0.22	0.35	1.00
(society)				

The highest correlation is between the motivation to help other people and to have a job that is useful for society. This is not surprising as both questions tap into individuals' beliefs that they can contribute to the welfare of other people and of society through their work.

The response distribution among employees is presented in the table below.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
motivation_1	5.31%	9.50% (68)	37.57%	32.82%	12.71%	2.09%	716
(income)	(38)		(269)	(235)	(91)	(15)	
motivation_2	0.28% (2)	1.95% (14)	9.07% (65)	43.24%	44.91%	0.56% (4)	717
(independently)				(310)	(322)		
motivation_3	0.56%	0.42%	5.29% (38)	38.39%	54.94%	0.42% (3)	719
(help)	(4)	(3)		(276)	(395)		
motivation_4	0.56%	1.12%	13.15%	49.09%	34.97%	1.12%	715
(society)	(4)	(8)	(94)	(351)	(250)	(8)	
Note: Percentages	of observation	s in each categ	ory and numb	er of observat	ions in parent	heses.	

Table 3.10.14: Response distribution, employees

Table 3.10.15 shows the correlations between the items measuring work motivation among employees.

Table 3.10.15: Correlation matrix, employees

	motivation_1	motivation_2	motivation_3	motivation_4
	(income)	(independently)	(help)	(society)
motivation_1	1.00			
(income)				
motivation_2	0.22	1.00		
(independently)				
motivation_3	0.07	0.20	1.00	
(help)				
motivation_4	0.14	0.23	0.33	1.00
(society)				

Job satisfaction

Job satisfaction is "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values." (Locke 1969: 316). Table 3.10.16 presents the question measuring job satisfaction.

Table 3.10.16:	Items	measuring	job	satisfaction.
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Leaders and employees:					
Jobtilfredshed	Overall, on a scale of 0-10, how satisfied are you with your current job?				
	Samlet set, på en skala fra 0-10, hvor tilfreds er du med dit nuværende job?				
Note: Leaders and employees answered the question on a scale from 0-10. 0 = Very unsatisfied (Meget utilfreds),					
10 = Very satisfied (Mege	10 = Very satisfied (<i>Meget tilfreds</i>). Do not know (<i>ved ikke</i>) = 99.				

Figures 3.10.4 and 3.10.5 show the response distributions among leaders and employees.



Figure 3.10.4: Distribution of job satisfaction as reported by leaders

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Job satisfaction, leaders

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Note: N = 523. Mean: = 7.91, std. dev = 1.43, min = 0, max = 10, skewness = -1.18, kurtosis = 5.98

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The distribution of job satisfaction among leaders is highly left-skewed as very few leaders are in the bottom half of the scale. The mean value is 7.9. This indicates that the average leader is very satisfied with their job.

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Figure 3.10.5: Distribution of job satisfaction as reported by employees

Note: N = 717. Mean: = 7.77, std. dev = 1.76, min = 0, max = 10, skewness = -1.35, kurtosis = 5.58

Figure 3.10.5 also suggests that employees are satisfied with their current job, although the mean is slightly lower than among leaders. Most observations are seen between the values 7 and 10.

3.10 Work Situation

Experienced Tensions

Tensions are "competing elements, such as contradictory demands, goals, interests, and perspectives." (Miron-Spektor et al. 2018: 27-28). Experienced tensions are "awareness of existing tensions" (Smith and Lewis 2011). The items measuring experiences tensions are shown in Table 3.10.1. Only leaders received the following questions.

Table 3.10.1: Items measuring experienced tensions

Leaders: The following text was used to introduce the questions:				
The next statements a	re about how you experience your work and your	Source		
workplace.				
De næste udsagn hand	dler om, hvordan du oplever dit arbejde og din			
arbejdsplads.				
modsætninger_1	I often experience competing demands that need to be	Adapted from Miron-		
	managed at the same time	Spektor et al. (2018)		
	Jeg oplever ofte konkurrerende krav, der skal			
	håndteres på samme tid			
modsætninger_2	I often experience conflicting goals			
	Jeg oplever ofte mål, der strider mod hinanden			
modsætninger_3	I often have to choose between options that point in			
	opposite directions			
	Jeg er ofte nødt til at vælge mellem muligheder, der			
	peger i hver sin retning			
modsætninger_4	My work is full of contradictions			
	Mit arbejde er fyldt med modsætninger			
Note: Leaders had the fo	ollowing options: Totally disagree (<i>helt uenig</i>) = 1, disagree (<i>uenig</i>) er enig) = 3, agree (enig) = 4, totally agree (<i>helt enig</i>) = 5, do not	g) = 2, neither disagree nor know (<i>ved ikke</i>) = 99.		

Table 3.10.2 shows the response distribution.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
modsætninger_1	0.96%	11.15%	18.65%	51.73%	16.15%	1.35%	520
(demands)	(5)	(58)	(97)	(269)	(84)	(7)	
modsætninger_2	1.15%	16.89%	27.26%	43.57%	10.75%	0.38%	521
(goals)	(6)	(88)	(142)	(227)	(56)	(2)	
modsætninger_3	1.92%	17.27%	28.21%	42.03%	9.02%	1.54%	521
(opposite directions)	(10)	(90)	(147)	(219)	(47)	(8)	
modsætninger_4	1.34%	11.90%	23.03%	45.68%	17.47%	0.58%	521
(contradictions)	(7)	(62)	(120)	(238)	(91)	(3)	
Note: Percentages of observations in each category and number of observations in parentheses.							

The inter-item correlations are presented in Table 3.10.3.

Table 3.10.3: Correlation matrix, leaders

	modsætninger_1 (demands)	modsætninger_2 (goals)	modsætninger_3 (opposite	modsætninger_4 (contradictions)
			directions)	
modsætninger_1	1.00			
(demands)				
modsætninger_2	0.60	1.00		
(goals)				
modsætninger_3	0.63	0.68	1.00	
(opposite				
directions)				
modsætninger_4	0.58	0.63	0.70	1.00
(contradictions)				

The correlation matrix shows that all inter-item correlations are above 0.5 and therefore acceptable.

Table 3.10.4: Test of assumptions for factor analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.830
Bartlett's Test of Sphericity Chi Square		1015.028
Degrees of freedom		6
	p-value	

The Bartlett's test is significant which suggests a low probability that the items are uncorrelated in the population. The KMO-value of 0.83 indicates that an acceptable proportion of the variation in data could be caused by underlying variables.

Table 3.10.5: Exploratory factor analysis: Experienced tensions as reported by leaders

Pretext: The next statements are about how you experience your work and your workplace.	Loadings
I often experience competing demands that need to be managed at the same time	0.728
l often experience conflicting goals	0.782
I often have to choose between options that point in opposite directions	0.839
My work is full of contradictions	0.784
Note: One factor with an Eigenvalue higher than 1.0 was extracted.	

The exploratory factor analysis extracted one factor. All items included exhibit high loadings, which suggests that they reflect the same latent dimension. They are included in an additive index below.

Figure 3.10.1: Distribution of experiences tensions as reported by leaders



Note: N = 518. Mean = 3.56, std. dev = 0.79, min = 1, max = 5, skewness = -0.42, kurtosis = 3.03. For respondents who had answered at least three items, the index is calculated based on the average score of the answered items.

The distribution is left-skewed. The mean value is 3.56, which indicates that leaders do experience tensions in their work.

Perceived Resource Scarcity

Resource scarcity is "limited time and funding" (Miron-Spektor et al. 2018: 29). Table 3.10.6 shows the items measuring perceived resource scarcity. Only leaders received the following questions.

Table 3.10.6: Items measuring perceived resource scarcity

Leaders: Please indicat	Source			
statements. / Angiv venligst hvor uenig eller enig du er i følgende udsagn.				
ressourcemangel_1	I have too much to do in too little time	Adapted from Miron-		
	Jeg har for meget at lave på for lidt tid	Spektor et al. (2018)		
ressourcemangel_2	I have adequate resources to complete my tasks			
Jeg har passende ressourcer til at udføre mine opgaver				
Note: Leaders had the fol agree (hverken uenig elle	lowing options: Totally disagree (<i>helt uenig</i>) = 1, disagree (<i>uenig</i> r <i>enig</i>) = 3, agree (<i>enig</i>) = 4, totally agree (<i>helt enig</i>) = 5, do not H	r) = 2, neither disagree nor know (<i>ved ikke</i>) = 99.		

The following table shows how leaders responded to the two items.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
ressourcemangel_1	1.15%	11.88%	26.82%	36.40%	23.18%	0.57%	522
(time)	(6)	(62)	(140)	(190)	(121)	(3)	
ressourcemangel_2	10.02%	30.44%	26.97%	28.13%	3.85%	0.58%	519
(resources)	(52)	(158)	(140)	(146)	(20)	(3)	
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.10.7: Response distribution, leaders

Only 1/8 leaders disagree that they have too much to do in too little time, while 60% of leaders agree that this is the case. 40% of leaders believe that they do not have adequate resources to complete their tasks, while 30% believe that they do.

Red tape

Red tape is the perception that rules and procedures (formalization) in an organization are detrimental to organizational performance (Pandey and Kingsley 2000). Table 3.10.8 presents the question used to measure red tape.

Table	3.10.8:	Items	measurina	red	tape
	0.20.0.				

Leaders and employees: The following text was used to introduce the questions:					
The next question is a	The next question is about unnecessary bureaucracy , that is, rules and Source				
procedures that do no	ot support the purpose of your work.				
Det næste spørgsmål	handler om unødigt bureaukrati . Det vil sige regler og				
procedurer, der ikke understøtter formålet med dit arbejde.					
unød_bureaukrati	Leaders and employees: How would you rate the level Adapted from Ja				
	of unnecessary bureaucracy in your workplace?	& Mortensen (2014)			
Hvordan vurderer du graden af unødigt bureaukrati på and Bozeman & Feeney					
din arbejdsplads? (2011)					
Note: Leaders and employees answered the question on a scale from 0-10. (0 = No unnecessary bureaucracy, 10= Nothing but unnecessary bureaucracy). Do not know (<i>ved ikke</i>) = 99					

Figures 3.10.2 and 3.10.3 show how leaders and employees perceive the level of unnecessary bureaucracy in their workplace.

Figure 3.10.2: Distribution of red tape as reported by leaders



Note: N = 515. Mean = 5.90, std. dev = 1.89, min = 0, max = 10, skewness = -0.54, kurtosis = 2.76.

The distribution for leaders is slightly left-skewed. There is a peak at the value 7, which shows that more than one in four leaders chose this value when they answered the question.



Figure 3.10.3: Distribution of red tape as reported by employees

Note: N = 650. Mean = 5.57, std. dev = 2.17, min = 0, max = 10, skewness = -0.45, kurtosis = 2.68.

The distribution is also slightly left-skewed. It approaches a normal distribution, but there is a rather large peak around the value 7. The mean is slightly lower than among leaders, but still above the midpoint of the scale.

3.11 Background information

Table 3.11.1 shows the items included to measure background information.

Table 3.11.1: Items measuring background information.

Leaders and employees: The following text was used to introduce the questions:					
Before the questionnaire is complete, we have a few background questions					
Før spørgeskemaet er færdigt, har vi et par enkelte baggrundsspørgsmål					
Leaders and employees:					
udd	What is your highest level of education completed?				
	Hvad er dit højest gennemførte uddannelsesniveau?				
Participants could choose between 14 different educations: Primary school/youth					
	education (Grundskole/ungdomsuddannelse), "Municipal or private apprenticeship"				

	(Kommunal eller privat elevuddannelse), "Police or defense training" (Uddannelse				
	inden for politiet eller forsvaret), "Short higher education" (Kort videregående				
	uddannelse), "Medium higher education in the humanities" (Mellemlang				
	videregående humanistisk uddannelse), "Medium higher education in pedagogy"				
	(Mellemlang videregående pædagogisk uddannelse), "Intermediate higher social				
	science or mercantile education" (Mellemlang videregående samfundsvidenskabelig				
	eller merkantil uddannelse), "Intermediate higher healthcare education"				
	(Mellemlang videregående sundhedsfaglig uddannelse), "Medium higher				
	technical/scientific education" (Mellemlang videregående				
	teknisk/naturvidenskabelig uddannelse), "Long-term higher education in the				
	humanities" (Lang videregående humanistisk uddannelse), "Long-term higher				
	education in pedagogy" (Lang videregående pædagogisk uddannelse), "Long-term				
	higher education in social sciences or business studies" (Lang videregående				
	samfundsvidenskabelig eller merkantil uddannelse), "Long-term higher education in				
	the health sector" (Lang videregående sundhedsfaglig uddannelse) and "Long-term				
	higher technical/scientific education" (Lang videregående teknisk/naturvidenskabelig				
	uddannelse). They also had the options "Do not wish to disclose" (Ønsker ikke at				
	oplyse) and "Other education (write which one)" (Anden uddannelse, skriv hvilken).				
udd_år	In what year did you complete your education?				
	Hvilket år blev du færdiguddannet? (Angiv venligst årstal)				
	Participants could select the year they completed their education from a dropdown-				
	menu.				
køn	Please specify your gender				
	Angiv venligst dit køn				
	Respondents had the following four options: Man (mand), woman (kvinde), Do not				
	wish to disclose (Ønsker ikke at oplyse) or an open text where respondents could				
	describe their gender (<i>Beskriv selv</i>).				
alder	What year are you born?				
	Hvilket år er du født?				
	Participants could select their year of birth from a dropdown-menu.				

Tables 3.11.2 and 3.11.3 present leaders' and employees' highest levels of education.

Table 3.11.2: Highest completed education, leaders

Municipal or	Short higher	Intermediate	Long-term	Other	Do not wish
private	education	higher education	higher	education	to disclose
apprenticeship			education		
1.94%	3.88%	51.65%	31.84%	8.54%	2.14%
(10)	(20)	(266)	(164)	(44)	(11)
Note: N = 515. Percentages of observations in each category and number of observations in parentheses. 41 leaders					
answered the open question and described their highest completed education.					

Table 3.11.3: Highest completed education, employees

Primary	Municipal or	Short higher	Intermediate	Long-term	Other	Do not wish
school/youth	private	education	higher	higher	education	to disclose
education	apprenticeship		education	education		
2.79%	4.19%	10.47%	51.12%	21.09%	6.98%	3.35%
(20)	(30)	(75)	(366)	(151)	(50)	(24)
Note: N = 716. Percentages of observations in each category and number of observations in parentheses. 47 leaders						
answered the open question and described their highest completed education.						

Tables 3.11.4 and 3.11.5 show the areas in which leaders and employees are educated. The "other" category includes primary school/youth education, municipal or private apprenticeship, police or defense training, short higher education, other education, do not wish to disclose.

Table 3.11.4: Area of education, leaders

Education in	Education in	Education in	Healthcare	Technical/scientific	Other
the humanities	pedagogy	social sciences	education	education	
		or business			
		studies			
7.38%	32.04%	23.88%	14.56%	5.63%	16.50%
(38)	(165)	(123)	(75)	(29)	(85)
Note: N = 515.	•	•	•	·	•

Table 3.11.5: Area of education, employees

Education in	Education in	Education in	Healthcare	Technical/scientific	Other
the humanities	pedagogy	social sciences	education	education	
		or business			
		studies			
7.68%	29.19%	14.39%	13.83%	7.12%	27.78%
(55)	(209)	(103)	(99)	(51)	(199)
Note: N = 716.					

Figures 3.11.1 and 3.11.2 show when respondents completed their education.

Figure 3.11.1: Year of completed education, leaders



Note: N = 456.



Figure 3.11.2: Year of completed education, employees



The following tables show the gender of respondents.

	Man	Woman	Total N	
køn	36.06%	63.94%	501	
(gender)	(181)	(321)		
Note: Percentages of observations in each category and number of observations in parentheses. 18 leaders chose				
the open answer option or the "Do not wish to disclose" option and they have been excluded from the analysis.				

Table 3.11.7: Gender of employees

	Man	Woman	Total N	
køn	29.33%	70.67%	699	
(gender)	(205)	(494)		
Note: Percentages of observations in each category and number of observations in parentheses. 20 employees chose the open answer option or the "Do not wish to disclose" option and they have been excluded from the analysis.				

Figure 3.11.3 presents the distribution among leaders on the question measuring year of birth.





Note: N = 486.







Year of birth, employees

Note: N = 635.

We also included an item measuring whether or not leaders have a management degree. Leaders could choose between 7 management degrees: Basic vocational management training (*Grundlæggende lederuddannelse i AMU-regi*), Individual modules in management from academy profession, diploma or master's programs (*Enkelte moduler i ledelse inden for HD-, akademi-, diplom- eller masteruddannelse*), Academy profession degree in management (*Akademiuddannelse i ledelse*), Diploma in management (*Diplomuddannelse i ledelse*), Master's degree in management (*Masteruddannelse i ledelse*), Course in public management (*Kursus i offentlig ledelse*), Other internal or external management training (Øvrig *intern eller ekstern lederuddannelse*). They also had the options No management training (*Ingen lederuddannelse*) and Do not wish to disclose (Ønsker ikke at oplyse). The question is presented in Table 3.11.8.

Table 3.11.8: Item measuring management degree

Only leaders received the following question:		
lederuddannelse	Do you have a management degree? It is possible to select more than one category.	
	Har du en lederuddannelse? Det er muligt at markere mere end én kategori.	

The percentage of leaders who have a management degree is shown in the table below.

	Have a management	Do not have a	Do not wish to disclose	Total N		
degree management degree 84.51% 14.31% (431) (73)		management degree				
		14.31%	1.18%	510		
		(73)	(6)			
	Note: Percentages of observations in each category and number of observations in parentheses.					

Table 3.11.9: Percentage of leaders who have a management degree

Table 3.11.10 shows two items measuring the respondent's experience working in Aarhus Municipality and experience working in their current position.

Leaders and emplo	Source	
erfaring_aak	How long have you worked in Aarhus Municipality overall?	Developed for this
	(Please specify number of years)	survey
	Hvor lang tid har du arbejdet i Aarhus Kommune samlet	
	set? (Angiv venligst antal år)	
erfaring_stilling	How long have you worked in your current position in	Developed for this
	Aarhus Municipality? (Please specify number of years)	survey
	Hvor lang tid har du arbejdet i din nuværende stilling i	
	Aarhus Kommune? (Angiv venligst antal år)	

Table 3.11.10: Items measuring experience working in Aarhus Municipality

Figures 3.11.5 and 3.11.6 show how many years of experience respondents have working in Aarhus Municipality, while figures 3.11.7 and 3.11.8 show how many years of experience they have working in their current position in Aarhus Municipality.





Note: N = 521. Mean = 15.38, std. dev = 10.64.



Figure 3.11.6: Years of experience in Aarhus Municipality, employees

Note: N = 712. Mean = 12.25, std. dev = 10.18.





Note: N = 516. Mean = 5.56, std. dev = 5.91.



Figure 3.11.8: Years of experience in current position, employees

Note: N = 715. Mean = 7.88, std. dev = 8.12.

3.12 Climate Leadership

The items measuring climate leadership are shown in Table 3.12.1. Only leaders received the following questions about climate efforts of Aarhus Municipality.

Table 3.12.1: Items measuring climate leadership

Leaders: The following text was used to introduce the questions:

Finally, we would like to ask you a few questions about Aarhus Municipality's climate action. The goal is for Aarhus Municipality as an urban community and as a workplace to be carbon neutral by 2030 (cf. <u>the municipality's climate strategy</u>).

For citizens, private companies and public organizations, this means behavioral changes such as using more renewable energy, changing and reducing consumption and using means of transport with lower CO2 emissions. It also means that companies in the municipality must invest in technology and work processes that reduce their climate footprint. Climate and sustainability is one of the issues that the Aarhus Compass is designed to support.

Afslutningsvis vil vi gerne stille dig nogle få spørgsmål om Aarhus Kommunes klimaindsats. Målet er, at Aarhus Kommune som bysamfund og som arbejdsplads skal være CO2-neutral inden 2030 (jf. <u>kommunens klimastrategi</u>). For borgere, private virksomheder og offentlige organisationer indebærer det adfærdsændringer såsom at bruge mere vedvarende energi, omlægge og reducere forbrug samt at bruge transportmidler med mindre udledning af CO2. Endvidere indebærer det, at virksomheder i kommunen investerer i teknologi og arbejdsprocesser, der reducerer deres klimaaftryk. Klima og bæredygtighed er en af de problemstillinger, som Aarhuskompasset skal understøtte.

Leaders and emplo	Source					
klima_1	My management focuses on contributing to climate action/	Developed for				
	Jeg har i min ledelse fokus på at bidrage til klimaindsatsen					
klima_2	My own immediate management actively shows appreciation					
	for managers and employees who contribute to climate action/	this survey				
	Min egen nærmeste ledelse viser aktivt sin påskønnelse af					
	ledere og medarbejdere, der bidrager til klimaindsatsen					
klima_3	lima_3 In my work area, the organization supports that we can					
	contribute to climate action/	this survey				
	På mit arbejdsområde understøtter organisationen , at vi kan					
	bidrage til klimaindsatsen					
klima_4	I trust the other departments in the municipality to do their	Developed for				
	part in climate action/					
	Jeg stoler på, at de andre afdelinger i kommunen løfter deres del					
	af klimaindsatsen					
klima_5	In my work area, we collaborate with colleagues in other					
	departments in the municipality to contribute to climate action/ På mit arbejdsområde samarbejder vi med kollegaer i andre					
	afdelinger i kommunen om at bidrage til klimaindsatsen					
klima_6	In my area of work, we collaborate with actors in the	Developed for				
	environment to contribute to climate action (e.g. citizens,					
	service users, companies and associations)/					
	På mit arbejdsområde samarbejder vi med aktører i					
	omgivelserne om at bidrage til klimaindsatsen (fx borgere,					
	brugere, virksomheder og foreninger)					
Note: Leaders had the following options: Totally disagree (<i>helt uenig</i>) = 1, disagree (<i>uenig</i>) = 2, neither disagree nor agree (<i>hverken uenig eller enig</i>) = 3, agree (<i>enig</i>) = 4, totally agree (<i>helt enig</i>) = 5, do not know (<i>ved ikke</i>) = 99.						

Table 3.12.2 shows how leaders responded to the questions about the climate effort in Aarhus Municipality.

	Totally	Disagree	Neither	Agree	Totally	Do not	Total N
	disagree		disagree		agree	know	
			nor agree				
klima_1	3.28%	10.04%	37.84%	37.45%	8.88%	2.51%	518
(focus)	(17)	(52)	(196)	(194)	(46)	(13)	
klima_2	4.82%	23.12%	36.03%	21.97%	5.20%	8.86%	519
(appreciation)	(25)	(120)	(187)	(114)	(27)	(46)	
klima_3	3.09%	11.58%	32.43%	37.26%	9.27%	6.37%	518
(organization)	(16)	(60)	(168)	(193)	(48)	(33)	
klima_4	0.77%	5.61%	28.63%	48.16%	6.96%	9.86%	517
(other	(4)	(29)	(148)	(249)	(36)	(51)	
departments)							
klima_5	6.00%	18.18%	29.59%	29.21%	8.12%	8.90%	517
(collaborate with	(31)	(94)	(153)	(151)	(42)	(46)	
colleagues)							
klima_6	5.43%	21.32%	30.04%	26.16%	8.33%	8.72%	516
(collaborate with	(28)	(110)	(155)	(135)	(43)	(45)	
actors in the							
environment)							
Note: Percentages of observations in each category and number of observations in parentheses.							

Table 3.12.2: Response distribution, leader

Table 3.12.3 presents the inter-item correlations.

Table 3.12.3: Correlation matrix, leaders

	klima_1	klima_2	klima_3	klima_4	klima_5	klima_6
	(focus)	(appreciation)	(organization)	(other	(collaborate	(collaborate
				departments)	with	with actors in
					colleagues)	the
						environment)
klima_1	1.00					
(focus)						
klima_2	0.51	1.00				
(appreciation)						
klima_3	0.53	0.50	1.00			
(organization)						
klima_4	0.29	0.26	0.41	1.00		
(other						
departments)						
klima_5	0.59	0.44	0.60	0.32	1.00	
(collaborate						
with						
colleagues)						
klima_6	0.59	0.49	0.51	0.29	0.71	1.00
(collaborate						
with actors in						
the						
environment)						

As table 3.12.3 shows, the inter-item correlations vary a lot in strength.
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Appendix A- Navigation

In order to work probably with the Aarhuskompas-dataset it is crucial to be able to navigate in the data. Below, we list the key variables for sorting the data.

Name	Deskription
AU_medarbejder_id	Unique id for each respondent
AU_leder_id	Unique id for each leader
AU_org_id	Unique id for each organization. NB! This is the lowest level that the
	individual belongs.
faggruppe_2	Occupational category (string) obtained from Aarhus Municipality
faggruppe_3	Detailed occupational category (string) obtained from Aarhus Municipality
ansættelsestæller	The working hours for each individual (string) obtained from Aarhus
	Municipality
leder	Leader dummy (string) obtained from Aarhus Municipality. NB!
	Some individuals coded as leaders [1 =leader, 0=else] do not have
	formal personnel responsibility. See the variable <i>leder_au_tjek</i> .
niveau	Shows at which hierarchical level each individual is employed
	(string). This variable is obtained from Aarhus Municipality.
leder_niveau	Shows at which hierarchical level the leader of each individual is
	employed (string).
nærmeste_leder_id	Nearest leader for each individual (string). This variable is obtained
	from Aarhus Municipality.
	The nearest leader is identified by a unique id, which resembles
	<i>their AU_leder_id.</i> E.g. if a leader has "Leder_999" as their
	<i>AU_leder_id</i> then his or her employees has the value "999" in
	nærmeste_leder_id
id_enhedsniveauyderste_niveau_	Id of the hierarchical level each individual is employed (string). This
	variable is obtained from Aarhus Municipality.
id_niveau2	Id of hierarchical level 2 (string) obtained from Aarhus Municipality
id_niveau3	Id of hierarchical level 3 (string) obtained from Aarhus Municipality
id_niveau4	Id of hierarchical level 4 (string) obtained from Aarhus Municipality
id_niveau5	Id of hierarchical level 5 (string) obtained from Aarhus Municipality
id_niveau6	Id of hierarchical level 6 (string) obtained from Aarhus Municipality
id_niveau7	Id of hierarchical level 7 (string) obtained from Aarhus Municipality

id_niveau8	Id of hierarchical level 8 (string) obtained from Aarhus Municipality
lederfunktion	Indicates whether a leader is a leader of leaders, leader of
	employees or leader of both employees and leaders (string). This
	variable is obtained from Aarhus Municipality.
lederorientering	Indicates whether a leader is a strategic leader or operational leader
	(string). This variable is obtained from Aarhus Municipality.
leder_au_tjek	Variable indicating if the respondent is a leader with personal
	responsibility (=1, else = .)
append	Indicates whether the response is from the leader survey, the
	original employee survey, or the additional employee survey,