Is the measured good quality of working life equivalent to strategically strong HRM system?

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Abstract

Implementation of HRM depends on the organization’s strategic constellation. However, there is a little empirical evidence about the actual relationships between this strategic constellation and HRM outcomes like the quality of working life (QWL) of personnel. By employing a large personnel survey from Finnish municipalities, decision-maker survey and municipalities’ strategic documents we aim to clarify the interrelationships between the strength of the strategic human resource management (SHRM) and different HR indices like involvement, renewal, trust, and QWL. We conclude, that bearing in mind the “fit” between organizational culture and adopted HRM strategy, applied QWL measure may be an adequate tool while assessing the success of organization’s HRM practices.

Keywords: Quality of working life, strategic human resource management, personnel involvement, evaluation

1. Introduction

Methodologically, human resource researchers often distinguish between the concepts or measurements, on the one hand, and praxis or “reality”, on the other. It is easy to claim, for example, that the way in which the human resource management (HRM) system is implemented in practice explains most of the variation between organizations’ performance and outcomes, such as the quality of working life of their personnel.

In our research concerning the local government reform presently underway in Finland we have arrived at the same conclusion also. Namely, there really is considerable variation in the level of the quality of working life
(QWL) of the personnel between different municipalities over time. However, this quite reliably shown variation could not have been explained by any independent variables used in our study, such as the municipalities’ size or structural organization. Instead, more significant has seemed to be the local human resource management system, the tradition and the organizational atmosphere (cf. Bowen & Ostroff 2004), and in broad terms, institutional factors (Brunsson & Olsen 1990), which are rather prevalent. Of course, the management style, the “soft” management or good change leadership in organizations has been seen to have some role as well (Stenvall et al. 2008).

From the strategic human resource management (SHRM) perspective the central question is, can we reliably show that HRM practices – e.g. the quality of strategic documents, involvement of personnel to ongoing reforms and strengthening of renewal potential of human resources – lead to better HR outcomes like the measured QWL and finally to the competitive advantage. There is a lack of empirical work that aims to establish the connections between different types and styles of HRM implementation. At the same time there is a gap in SHRM theory in a sense that it would explain why the suggested rationally strategic efforts in relation to human resources, as part of the core strategy, would produce better organizational performance than some other approaches. It is more than likely that HRM needs to be understood as practices of varying scale and depth in different institutional contexts and strategies, differently interpreted in private and public sector organizations as well as resonating differently with different kinds of working cultures and traditions.

In this article, we use the Finnish local government related data consisting of personnel survey, decision-maker survey and municipalities’ strategic documents in order to explore the interconnections between these and HR indices. We ask 1) what role has been given to the human resource issues in the municipalities’ strategic documents and how is this role related with municipalities’ 2) level of trust relations; 3) level of involvement of the personnel to the development activities, 4) level of renewal potential of the human resources and 5) level of overall quality of working life of the personnel.

2. Theoretical background

Strategic human resource management (SHRM) can be defined as ways of making most of the organization’s human resources to achieve the organization’s overall goals and strategies (Lundy 1994, Greer 2011). Perhaps it does not make much difference whether the organization is a private company or a public sector organization if the common goal is to use human resources more efficiently. However, empirical evidence of that is scarce; strategic human resource management research has mostly focused only on the private sector (e.g. Boxall-Purcell 2008). In this study we employ public sector data from 34 Finnish municipalities and their personnel on education, social and health sector and administration.

Another starting point of this research is a methodological one. Many studies have sought and proven causal links between different HRM modes and organizational performance. Many of the recent empirical studies have focused on, for example, participatory management (PM) and personnel’s attributes like organizational commitment (OC) (Shagholi et al. 2010), organizational climate (Arabaci 2010), job satisfaction (Oraman 2011), and productivity (Azarchehr-Sehat 2010).

Instead of asking whether there is a connection between HRM and organizational performance and HR indices (e.g. Boselie et al. 2005), Bowen and Ostroff (2004) have urged researchers to take into account also HRM processes. They distinguish distinctiveness, consistency and consensus concerning HR policies (ibid.). We consider this as a worthwhile argument, because human resource management is not an automaton but human process itself.

Contextual research in the field of the HRM is also quite rare. Even though we already know a great deal about the general importance of HRM, one thing that is often referred to is that the way of implementing human resource policies and strategies matters the most (Bowen & Ostroff 2004, Delmotte et al. 2012). This means that any HRM practice is not a mechanically repeatable operation but a set of unique social acts and interactions and subjective interpretations of, for example, a company’s strategy, and these interpretations form the organizational climate (Bowen & Ostroff 2004). Understandably, the measurement of the success of the HRM system is highly debatable in literature (ibid., Lepak et al. 2006).

Hence, in addition to survey data, we employ strategic documents in order to qualitatively distinguish between municipal organizations with “strong” or “weak” strategic human resource management orientation. We then proceed to examine the possibility to interpret the measurements of the quality of working life of the personnel as an indicator of a strong strategic HRM orientation, and also how the involvement of the personnel and renewal of
human resources condition human resource strategies. In addition, the empirical findings are interpreted in the framework of the ongoing reform of local government and services in Finland.

Bowen and Ostroff (2004, 206) distinguish between HRM content and process, and state that these should be integrated effectively in order for HRM actually linking to (explaining) firm performance.

“Given a desired content of the HRM system, the HRM system may still not elicit appropriate collective behaviors and attitudes needed for effectiveness, because individuals may interpret the HRM practices idiosyncratically, leading to variability in psychological climate perceptions.” (Ibid.)

While Bowen and Ostroff (2004) claim that the strength of HRM system depends on metafeatures of HRM system like visibility, understandability, legitimacy, relevance, instrumentality, validity, and consistency of HRM practices as well as on consensus and fairness, we will focus on the link between the strategic HRM orientation as expressed in the strategic documents and the different HR indices

Quality of working life (QWL) is an old concept from the 1970s (Davis & Cherns 1975). While being under continuing debate (e.g. Martel & Dupuis 2006), QWL comprises two important features: it operationalizes the two-way interaction between an organization and an employee, and also attempts to create generally understandable criteria for the good conditions of HRM.

An integral part of strategic human resource management is the involvement of personnel in development and decision making (e.g. Gratton & Truss 2003). Using our data we examine how the involvement index as well as the renewal potential of human resources index covariate with QWL, on the one hand, and SHRM orientation, on the other. Also, we will shed light on the interrelationship between these and the nature of the municipal trust relationships. In organizations, social systems are complex and we have therefore considered it important to study potential HRM outcomes from different points of view at the same time.

High-involvement organization theory (Lawler 1992) stresses that the involvement of personnel should be thorough in the sense that employees should be given real power in relation to the decision-making and structures of the organization. The theory acknowledges that this is a demand that most of the managers might see somehow threatening (ibid., 327–329). In this article we attempt to go beyond the mere “work influence” of employees by examining the strategic thought given to human resources as an important prerequisite to “real” work influence.

Finally, according to our experience, the measurements done by HRM departments in organizations are often left aside and underutilized, even though they would contain interesting information from the strategic perspective of the company. This may be due to fact that “doing” is often perceived as a more important practical HRM function than “knowing” which is seen solely as a responsibility of higher management. In addition, measuring work done by the organizations’ HRM does not get much support from the mainstream research either, which tends to be statistically oriented and filled with abstract concepts. Still, measuring is an integral part of the development processes of HRM practices, and identifying the most important and usable measures and indicators should be better supported by research.

Hence, there is a great need for new research innovations that would help organizations to bridge the gap between core management and HRM. In strategic sense the organization should use the inputs of the personnel in the core strategy and management, and vice versa. This interaction could be strengthened through integrating “knowing” and “doing” in the HRM practices and measurements.

3. Methods and data

We employ three independent empirical data sets to explore the interconnectedness of 1) the quality of working life of the personnel (QWL) in municipal organizations, 2) the involvement of the personnel in the reform process, 3) the renewal potential of human resources, 4) trust and collaboration level, and 5) strategic orientation towards human resource issue.

The data is collected within the framework of a broad evaluation study called ARTTU. The evaluation study as a whole relates to the project to restructure local government and services in Finland (“Paras”, 2005–2012). The evaluation programme consists of six research modules: 1) local democracy and leadership, 2) municipal services, 3) municipal personnel, 4) municipal and regional economy, 5) community structure in the urban regions, and 6) evaluation of the execution of the reform. As stated in the Paras-ARTTU programme brochure,
“(t)he project to restructure local government and services in Finland is the biggest project since the free-community reform at the end of 1980's and in the beginning of 1990's. This so called PARAS-project aims to create a system, which ensures high-quality municipal services for all in the future, and focuses on the possibilities of local authorities to provide services, i.e. on the structural and financial foundation of the system. The PARAS-reform will most likely affect significantly on the ways of providing municipal services, inter-municipal co-operation, municipal structures as well as local democracy. Therefore it is highly motivated to start an extensive evaluation research programme which will reinforce the evaluation made by state civil servants and by the Association of Finnish Local and Regional Authorities (AFLRA).” (ALFRA 2009.)

Firstly, we have a large survey data of municipality personnel from education, social and health sector and administration, collected in 2009 and 2011 (n=3710 and n=4618 respectively, response percentages 60 and 52). This survey consists of items related to the quality of working life, comprising five subdimensions of the total QWL (alpha coefficient=0.79): intrinsic rewards of work (alpha=0.85), work influence (alpha=0.83), social openness at workplace (alpha=0.86), open ways to solve work conflicts (alpha=0.89) and supervisory work (alpha=0.94). In addition, the survey contains 8 items comprising the social capital sum variable (alpha=0.89). The survey was conducted in 38 municipalities taking part in the evaluation research programme “ARTTU”, in which the impacts of local government and services reform (“Paras”) were examined in 2007–2012.

This survey includes also items concerning the participation of personnel in the ongoing reform and renewal potential related questions about the way in which an organization is training, developing and making most of its personnel’s potentials. On the basis of these we have formed the involvement index and the renewal potential index, and these two are examined also on the aggregate level of municipalities.

In addition to QWL (varying between 1 and 5), the involvement and renewal of personnel indices (varying between 1 and 3) we use trust and collaboration index (varying between 1 and 6), which has been formed on the basis of the mentioned survey and another study on the conceptions of decision-makers (Sandberg 2012). In other words, this index is combined of the social capital index used in our study and the cooperation index from Sandberg (2012).

The contents of each sum variable index are presented in detail in Appendix.

Municipal strategies and personnel strategies of varying nature from municipalities under study were analysed by using qualitative categorization method. While in some of these municipalities such strategic documents did not exist at all, in a few cases they were quite detailed and naturally related to each other. Hence, we classified the municipalities according to the interconnectedness of overall municipal strategies and personnel strategies into three categories: a) no interconnection, b) formal interconnection, and c) intrinsic interconnection. The typology and the amount of municipalities in each category is presented in Figure 1.

<table>
<thead>
<tr>
<th>Personnel strategy</th>
<th>Municipal strategy</th>
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<tbody>
<tr>
<td>No reference to municipal strategy</td>
<td>No reference to human resources exists</td>
</tr>
<tr>
<td></td>
<td>Reference to human resources exists</td>
</tr>
<tr>
<td>Reference to municipal strategy exists</td>
<td>No interconnection (n=9)</td>
</tr>
<tr>
<td></td>
<td>No interconnection / formal interconnection</td>
</tr>
<tr>
<td></td>
<td>Formal interconnection (n=20)</td>
</tr>
<tr>
<td></td>
<td>Intrinsic interconnection (n=5)</td>
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</tbody>
</table>

Figure 1. The SHRM orientation typology.

Intrinsic interconnection means that the municipality strategy includes a view of human resources as a strategic resource and as a tool for a municipality to achieve its strategic goals, such as being an attractive employer and producing better services. In its prototypical form this intrinsic interconnection is expressed in the following paragraph written by the Finnish Local Government Employers, which could be found as different variations in both municipal strategies and personnel strategies.
“While the organizations are going through restructuration, new organizations’ employer and personnel policies need to be redefined. The largest municipality units are able to provide developed human resource services, invest in the personnel competences and recruiting and also systematically market a positive employer image. Because local government is a very labour-intensive sector, there is a need for sufficient and able personnel to produce the municipal services.” (Local Government Employers 2012.)

Formal interconnection refers to the usual case of reference from one strategy to another, but the textual context reveals that these references are not much more than words. Or, it might be that the human resource strategy is quite developed of its strategic orientation, but actual municipality strategy is very scarce in relation to human resources.

In the case in which the municipality strategy is very detailed also in relation to human resources, the categorization eventually depends on the quality of the personnel strategy. The third category means that no explicit interconnection between these two types of strategies can be found.

The analysis then proceeds with the calculation of the statistical connections between the mentioned sum indices, and finally, with the examination of their relationship with the SHRM orientation typology.

4. Results

4.1 The SHRM orientation in municipal strategies

While the municipalities’ human resource strategies were typically quite thoughtfully written, only few contained explicit reference to the municipality strategy and overall structural and service-related expectations that the personnel was to fulfil. Well-written and reflective personnel strategies / reports were interpreted by researchers as the most important sign of strategic orientation towards human resources in the municipality in question, and it was rather easy to categorize the level of their strategic connections.

More complicated was the nature of the municipalities’ overall strategies. From the researcher’s point of view, they were all more or less advertising-type documents that did not actually contain much information in relation to the human resources. Actually there were three different types of municipality strategies to be found. Firstly, there were very scarce strategies including only slogan-type definitions for the municipality’s main values and visions, and only a list of various “good goals”. The personnel were either included or not in the list.

Of another type were the documents which included a clear framework for the personnel strategy, most typically based on balanced scorecard related thinking (cf. Kaplan & Norton 1992). There were “slots” defined for different dimensions of human resources like productivity, well-being and competences. Even though in some cases this kind of strategy did seem to be really thoughtful, we concluded that the connection with human resources was only formal in most cases – no details really existed and the slots provided by the framework remained “empty”.

Very rare were the type of municipal strategies that maybe did not seem very elegant but that included explicit references to the human resource strategy and to the significance of human resources as part of the service strategy or the employer image, for example. These documents also contained some intrinsic definitions for the strategic personnel goals and even indicators for monitoring changes.

The main problem encountered in the categorization of the municipalities was that the municipal strategies were typically much “weaker” than the personnel strategies. Especially in the case of formal municipality strategies, it seemed that they more often resembled summaries of sector-specific issues rather than municipal level strategic thinking.

4.2 Interrelationships between the SHRM orientation and HR indices

There was a connection between the SHRM orientation and the quality of working life of the personnel, although the results are only indicative due to a low amount of observation units (see Table 1). The QWL mean was 3.60 (on the scale of 1–5) in the “intrinsic interconnection” category and 3.46 in the “no interconnection” category. Also the involvement of the personnel and renewal potential were highest in the “intrinsic” category (2.08 and 2.63 respectively, on the scale of 1–3).
Table 1. The QWL means, involvement, renewal potential and trust index in different strategic human resource management type categories in the ARTTU research municipalities.

<table>
<thead>
<tr>
<th>SHRM orientation</th>
<th>QWL (1-5)</th>
<th>Involvement of personnel (1–3)</th>
<th>Renewal potential (1–3)</th>
<th>Trust and collaboration (1–6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No interconnection (n=9)</td>
<td>3.46</td>
<td>2.02</td>
<td>2.50</td>
<td>4.00</td>
</tr>
<tr>
<td>Formal interconnection (n=20)</td>
<td>3.50</td>
<td>1.98</td>
<td>2.56</td>
<td>4.06</td>
</tr>
<tr>
<td>Intrinsic interconnection (n=5)</td>
<td>3.60</td>
<td>2.08</td>
<td>2.63</td>
<td>3.60</td>
</tr>
</tbody>
</table>

However, the trust and collaboration index did not follow the same pattern, being lowest (3.60, on the scale of 2–6) in the “intrinsic” category. Figure 2 points to that the interconnectedness of QWL, the SHRM orientation and the trust and collaboration index is case sensitive. It seems that, in some cases, QWL is related to SHRM orientation, while, in most cases, QWL is explained by the level of trust and collaboration. The involvement and renewal potential indices are roughly following the level of QWL. This may be partly due to some autocorrelation between these sum variables and the total QWL (see Appendix).

Hence, on the basis of this data, it is possible to interpret that the SHRM orientation, on the one hand, and trust and a collaborative atmosphere, on the other, are somewhat alternative dimensions. In less than half of the municipalities the SHRM orientation and the trust index covariate. For example, it is quite possible for a municipality to have “intrinsic” interconnection between strategies and a low level of QWL, or a strong trust level and low QWL. However, both a low level of trust or lack of interconnectedness of strategies are connected to a low level of QWL.

Figure 2. The quality of working life (QWL) in the SHRM orientation categories and trust and collaboration index (abbreviations for municipalities).

5. Discussion

In this article, we sought to shed light on how strategic orientation towards human resources in Finnish municipalities is connected to different HR indices. These indices include high-involvement practices (Lawler 1992)
like personnel participation in the ongoing local government reform and the focus on developing personnel’s renewal potential in municipalities as well as the quality of working life (QWL) of employees. We analysed the interconnectedness of municipal overall strategies and human resource strategies. These are considered to be some of the key questions in SHRM research from the resource-based point of view (Colbert 2004). Also, from the systemic perspective in the complex, living systems there is a need to acknowledge the importance of organizational HRM processes as social action (ibid.) relying on experienced trust and collaboration within the organizational climate (Russel 1976).

On the basis of the quantitative comparisons with the municipality level data (n=38) we arrived at the conclusion that a connection could be found between the QWL and both the SHRM orientation and the trust and collaboration level in municipality. The existence of a good level of either one was a prerequisite to QWL to score average or better. However, which one of these dimensions was more important was a case-sensitive matter. It appeared that it was rare to have both “intrinsic” strategic orientation and strong level of trust and collaboration in the same municipality. The results were independent of the municipality’s population size, structural reform type, and power centralization index (Sandberg 2012). This latter index refers to the distribution of the council seats between different political parties in the municipal councils (cf. Laakso & Taagepera 1979).

The results of our study indicate that the way in which the municipal overall strategy and human resource strategy are interconnected (not at all, formally or intrinsically) has a bearing on the level of the quality of working life of the personnel. This condition lets us assume that in these municipalities where QWL is good, HRM must be doing quite well – or at least it is doing something right. This could be implementing high-involvement practices and strengthening the renewal potential of personnel through training, for example; the indices measuring these were highest in the intrinsic SHRM category.

In the literature, the strategic human resource management tradition has become more and more aware of the importance of “fit” between the applied HRM practices and certain organizational context and implementation characteristics (Lawler 1992, Colbert 2004, Gratton & Truss 2003, Bowen & Ostroff 2004, Delmotte et al. 2012). While there are theories and empirical evidence about the content of the HRM practices, less is known about how to actually identify or measure the relevant characteristics of the processes of the HRM at any given time (Bowen & Ostroff 2004). This is also a very practical question from the point of view of professional developers and HR experts, who might implement different kinds of measures and measurements in their organizations without clearly knowing how to interpret and communicate them in their specific and maybe contradictory context.

Hence, we could conclude also that HR practitioners could rely – with some common sense – on the QWL measurement, while assessing the success of their practices. However, another thing stands out. The trust and collaboration index also seemed to explain the level of QWL, and this was partially an independent dimension from the SHRM orientation. So the result may have the most to do with the qualitative categorization criteria used in assessing the SHRM orientation of municipalities. After all, only strategic documents and their explicit references to each other were taken into account.

The qualitative categorization criteria emphasize the rational, (even new public) managerial way of thinking in the municipalities, while the trust and collaboration index focuses maybe more on informal management emphasizing the importance of relationships. Four alternative combinations of SHRM orientation and its (managerial) implementation context emerge that might explain the results having different implications considering the use of QWL measure:

1. “Rationality fit”.
   - Municipality has a strong (new public) managerial culture. (Implementation level)
   - SHRM thinking is strong as seen in the documents (intrinsic connection between strategies). (Strategy level)
   - QWL reflects well the success of the HRM because there is a “rationality fit” between formal HRM strategy and managerial implementation culture, and the QWL related items in the personnel survey are likely to be identified rather similarly by the personnel.
     ➔ This may be the case especially in such large municipalities which have gone through long-term organizational development efforts.
2. “Informality fit”.
   - Municipality has an informal managerial culture emphasizing relationships (high level of trust and collaboration). (Implementation level)
   - SHRM orientation is not strong as seen in the documents (no or formal interconnection of strategies). (Strategy level)
   - QWL reflects well the success of the HRM because there is an “informality fit” between the informal managerial culture and HRM strategy, and the QWL related items in the personnel survey are likely to be identified rather similarly by the personnel.
     ➔ This kind of condition may prevail especially in the small municipalities which have not had major organizational restructuring.

3. “Subordinate HRM”.
   - Municipality has a strong (new public) managerial culture. (Implementation level)
   - SHRM thinking is weak as seen in the documents (no or formal interconnection of strategies). (Strategy level)
   - QWL does not reflect well the success of HRM because it is subordinate to the overall strategy, and strategic operations have not (yet) tackled the HR issue.
     ➔ A great deal of “change resistance” is likely to appear among the personnel which would unevenly weigh down the QWL scores.
     ➔ This was actually the case in many of the Finnish municipalities amidst the reform of local government and services.

4. “Outgrown HRM”.
   - Municipality has an informal managerial culture (high level of trust and collaboration). (Implementation level)
   - SHRM thinking is strong as seen in the documents (intrinsic connection between strategies). (Strategy level)
   - QWL does not reflect well the success of the HRM because it has either withdrawn or grown out from the actual implementation level and the personnel is not likely to identify with the themes and items presented in the QWL type of survey, knowing that they are really not on the municipality’s agenda, even though one might expect so on the basis of “political speeches”.
     ➔ This experience was actually written out by some of the respondents of our surveys, leading to withdrawing of personnel from the reforms.

Even though we acknowledge the limitations of the data and the heuristic nature of these interpretations, we assume that, because the strategic value given to human resource issue in particular is a very complicated empirical question, this kind of multi-variable and multi-method design may be well justified. The QWL measure seems to reflect well the status and change of the personnel’s experiences overall, and the state of work place atmosphere is reflected well by the trust relations index combined from two separate studies. A more important question from the practical and implementation perspective is, however, how far we can rely on such measures when assessing the strength and ability of the HRM system to produce good quality of working life, on the one hand, and good organizational performance, on the other; that is, how reliable an indicator QWL is for the performance of human resource management in varying institutional contexts.

To summarize: The QWL type of a (survey-based) measurement result level might be interpreted as equivalent to the strength of the HRM system only as far as there doesn’t exist a great contradiction between the actual managerial culture and the HRM practices and ideologies. However, contradiction is often the case amidst great changes and reforms, and case sensitive analysis is needed in order to assess the limitations of the QWL measurement. From the point of view of the “living-systems” (Colbert 2004) the defined content of QWL and other
indices may differ from the prevalent conceptions in organizations and the interpretation of the results cannot therefore be as straightforward as presented in the title of this article.

Lawler (1992) has made propositions concerning the strengthening of high-involvement practices as prerequisites to a developing organization. These propositions include operating “without the hierarchical approval processes, written suggestions, and bureaucratic trappings” (ibid., 327) and represent “a giant step beyond the bureaucratic model of organizing” (ibid. 328). He also emphasizes the personal role of managers (ibid., 331) and the responsibility of employees (ibid., 332) among other things. Further, Lawler (ibid., 327) states that high-involvement is not an all-purpose solution and that other approaches (like total quality management) “can lead to just the kinds of improvements in organizational performance that are needed” in more hierarchical management approach organizations. Only where high-involvement fits the strategy of an organization, it can offer a substantial competitive advantage. (Ibid., 328.)

Our observations indicate that it is not so much the involvement as such but the degree of “fit” between the adopted HRM approach and the (actual) organizational culture that matters most – in terms of QWL, involvement and renewal potential at least. SHRM orientation as expressed in strategic documents reflects only one possible strategic HRM path in rational management culture, while another kind of, also strategic, path may take place in more informal organizational cultures that emphasizes trust relationships but which cannot be seen in the written strategies.

Acknowledgements

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References


Appendix

Quality of working life (QWL, alfa = .79) sum variables and items (personnel surveys 2009 and 2011).

Intrinsic rewards of work (alfa = .85)
K2107 Work develops the worker.
K2105 Work is interesting.
K2106 Work requires me to learn new things.
K2109 Work is varied.
K2112 One can use one’s know-how in work.
K2111 One can achieve one’s goals in work.
K2110 Work requires responsibility.

Work influence (alfa = .83)
K1003 On pace of the work.
K1002 On order of your tasks.
K1001 On what is included into your tasks.
K1004 On your working methods.
K1005 On how work is being divided among people.
K1006 On whom you are working with.

Social openness at workplace (alfa = .86)
K1106 Atmosphere on our working place is encouraging.
K1107 Tasks on our working place are well organized.
K1109 Know-how is being appreciated on our working place.
K1104 Information is being transmitted openly on our working place.
K1108 There is positive attitude towards changes on our working place.
K1102 People can really be trusted on our working place.

Open ways to solve work conflicts (alfa = .89)
K2307 Conflicts are being discussed openly at the work place and we try to find a solution which benefits all.
K2306 When conflict appears, we try to find a compromise solution which satisfies all.
K2308 When conflict appears, we search for a reasonable solution which is based on expertise.
K2304 Open coming up of conflicts is being encouraged.

Supervisory work (alfa = .94)
K2411 My supervisor builds up trust.
K2408 My supervisor supports and encourages me.
K2412 My supervisor acts fair and equal.
K2402 My supervisor is inspiring.
K2410 My supervisor appreciates my know-how.
K2407 My supervisor shares responsibilities in a reasonable way among workers.
K2403 My supervisor tells openly about all work-related matters.
K2404 My supervisor trusts her workers.
K2409 My supervisor knows my tasks well.
K2406 My supervisor encourages workers to educate themselves and develop in their work.

**Trust and collaboration index sum variables and items.**

Personnel survey:
Social capital (alfa = .89)
K2413 Our supervisor treats us with kindness and consideration.
K2414 Our supervisor shows concern for our rights as an employee.
K2415 We can trust our supervisor.
K2501 People keep each other informed about work-related issues in the work unit.
K2502 We have a ’we are together’ attitude.
K2503 People feel understood and accepted by each other.
K2504 People in the work unit cooperate in order to help develop and apply new ideas
K2505 Do members of the work unit build on each other’s ideas in order to achieve the best possible outcome?

Decision-maker survey 2011 (Sandberg 2012, 78) (abbreviations for municipalities):

<table>
<thead>
<tr>
<th>Atmosphere in the relationships between municipality and outside agents</th>
<th>Atmosphere inside the municipal organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contradictory</td>
<td>Co-operative</td>
</tr>
<tr>
<td>Kuu, Kar, Kir, Sip, Tur, Raa, Mus, Sal, Vaa, Por, Ham, Kot, Sod, Kuo, Vim, Oul</td>
<td>Hal, Kit, Kem, Lap, Häm, Kaj</td>
</tr>
<tr>
<td>Co-operative</td>
<td>Hau, Pud, Lie, Aän, Hir</td>
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</tbody>
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<thead>
<tr>
<th>Involvement of personnel sum variable items (personnel surveys 2009 and 2011).</th>
</tr>
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<tbody>
<tr>
<td>K1008 Work influence on the goals of work place.</td>
</tr>
<tr>
<td>K1009 Work influence on the educational contents.</td>
</tr>
<tr>
<td>K1200 How early do you get information about changes in your work?</td>
</tr>
<tr>
<td>K1500 What kind of participation possibilities do you have in the development of your work place?</td>
</tr>
<tr>
<td>K2501 Claim: I feel that I have enough participation possibilities in the planning of the reform in our municipality.</td>
</tr>
<tr>
<td>K2503 Claim: The personnel of our work place is committed to implementing the reform.</td>
</tr>
<tr>
<td>K2510 Claim: The goals of the reform are clear and adequate.</td>
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<tr>
<th>Renewal potential of personnel sum variable items (personnel surveys 2009 and 2011).</th>
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<tbody>
<tr>
<td>K1104 Information is being transmitted openly at our work place.</td>
</tr>
<tr>
<td>K1106 Atmosphere on our working place is encouraging.</td>
</tr>
<tr>
<td>K1108 There is positive attitude towards changes on our working place.</td>
</tr>
<tr>
<td>K1109 Know-how is being appreciated on our working place.</td>
</tr>
<tr>
<td>K1110 My own goals are aligned with my employer’s goals.</td>
</tr>
<tr>
<td>K1400 How good professional education possibilities do you have on your work place?</td>
</tr>
<tr>
<td>K2106 Work requires me to learn new things.</td>
</tr>
<tr>
<td>K2107 Work develops the worker.</td>
</tr>
<tr>
<td>K2112 One can use one’s know-how in work.</td>
</tr>
<tr>
<td>K2406 My supervisor encourages workers to educate themselves and develop in their work.</td>
</tr>
</tbody>
</table>