Organisational culture and change: implementing person-centred care

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Abstract
Purpose – The purpose of this paper is to explore the connection between organisational cultures and the employee’s resistance to change at five hospital wards in Western Sweden. Staff had experienced extensive change during a research project implementing person-centred care (PCC) for patients with chronic heart failure.
Design/methodology/approach – Surveys were sent out to 170 nurses. The survey included two instruments – the Organisational Values Questionnaire (OVQ) and the Resistance to Change Scale (RTC).
Findings – The results indicate that a culture with a dominating focus on social competence decreases “routine seeking behaviour”, i.e. tendencies to uphold stable routines and a reluctance to give up old habits. The results indicate that a culture of flexibility, cohesion and trust negatively covariate with the overall need for a stable and well-defined framework.
Practical implications – An instrument that pinpoints the conditions of a particular healthcare setting can improve the results of a change project. Managers can use instruments such as the ones used in this study to investigate and plan for change processes.
Originality/value – Earlier studies of organisational culture and its impact on the performance of healthcare organisations have often investigated culture at the highest level of the organisation. In this study, the culture of the production units – i.e. the health workers in different hospital wards – was described. Hospital wards develop their own culture and the cultures of different wards are mirrored in the hospital.

Keywords Sweden, Hospitals, Nurses, Change management, Organizational culture, Person-centred care

Paper type Research paper

Introduction
Public healthcare organisations are considered to be difficult to change (Arrow, 1963). There are several examples of how professional territorialism and organisational inertia cause slow routines and long waiting times (Ouchi, 1977; Ouchi, 1980; Åhgren, 1999; Street and Blackford, 2001; Scott et al., 2003b). A critical challenge facing healthcare systems throughout the world is to meet the complex and costly care and treatment needs of the already large and growing population of persons with long-term illnesses. To effectively meet this challenge, healthcare systems must realign traditional clinical practices and organisations to better accommodate illness management as a central goal of care and treatment (Palmqvist and Lindell, 2000; Olofsson et al., 2009). However, new working models and new technology have been hindered by cultures that are resisting change processes (Holmberg, 1997; Benders and Van Hootegem, 1999).
Culture may be defined in a number of different ways, but an established and simple definition is that culture is the glue that makes up a common identity between different individuals (Smircich and Morgan, 1982; Smircich, 1983; Wilkins and Ouchi, 1980). The definition of culture in this paper is based on Vygotski (1978), who identifies culture as a link or transition between individual and collective behaviour. This refers to the idea that an organisational culture is “embodied” in individuals, but shared by the collective (Leontév, 1978; Vygotski, 1978, Valler, 2003; Miettinen and Virkunnen, 2005).

Established organisational cultures are expected to induce inertia, maintain social structures and promote unitarianism (Schein, 1985; Young, 1989; Borum and Pedersen, 1992). Despite this, organisational cultures have not always displayed the level of cohesion that has come to be expected. Harris and Ogbonna (1998) associate cultural influences with a low willingness to change, they also identified that subcultures can contribute to a translation of the culture into modifying values. Elwing (2005) has shown, for example, that a communicative culture and the feeling of belonging to a community had a favourable effect on readiness for change.

Different concepts of culture such as symbols, metaphors, anecdotes and artefacts have not proven to be the socialising tool that dissolves conflicts and other types of differentiation (Barker, 1993; Barner, 2006; Berlin and Carlström, 2010). These can take on certain values and make people act in a different way than expected (Smircich and Morgan, 1982; Smircich, 1983; Wilkins and Ouchi, 1983). The perception that concepts of organisational cultures are always closely connected to cohesion has therefore been criticised (Berry et al., 1995). They can even divide homogenous structures and promote organisational change (Hatch, 1993; Ford and Ford, 1994; Van de Ven and Poole, 1995).

Earlier studies of organisational culture and its impact on the performance of healthcare organisations have often investigated culture in management, i.e. the highest level of the organisation (Davies et al., 2007). The culture of middle and senior management from different hospital clinics and wards has often been generalised to hospital performance (Mannion et al., 2005; Davies et al., 2007). However, according to Michie and Williams (2003), hospital wards develop their own culture and the cultures of different wards can be mirrored in different parts of the hospital.

The overall aim of this study is to identify the impact of the underlying culture of a health organisation during a process of change from a disease and medical focus to a person-centred and patient-focused care.

The purpose is specifically to explore the co-variation between different organisational cultures and the employee’s willingness to participate in change processes. This includes the presumption that certain organisational cultures can, whether they are stable or not, contribute to the development of an organisation.

Background

Stabilising cultures

Cultures developed in organisations function as stabilisers in order to resist change (Schein, 1993). Change represents a situation of imbalance and is considered a threat (Appelbaum and Wohl, 2000). This relationship is especially evident in public organisations. Public organisations are often state financed monopolies and are therefore stable and rarely threatened by bankruptcy (Knudsen, 2002). Appelbaum and
Wohl (2000) maintain that healthcare workers are more skilled at reinforcing the status quo than they are at implementing something new. The development of cultures in healthcare settings is often driven by professionals who share similar values and goals (Edmondsson, 2003). Foucault (1969) describes in his analysis of the birth of modern medicine how healthcare was organised in accordance with natural scientific principles, without considering the complexity of human relations and behaviours. In line with this, Davies (2002) has shown how subgroups of various medical subspecialties dominate cultural values starting during education and training.

Cultures in public healthcare are therefore characterised by collective path dependency meaning that they represent an accepted, conventional behaviour and a standardisation, which creates a dominant and collectively accepted opinion (Rutherford, 1984). Sweden has one of the world’s oldest comprehensive public healthcare organisations. Its roots date back to the sixteenth century (Gustafsson, 1989) and though it is modern and well-developed it has been identified by slow sequential working methods as an effect of deeply rooted traditions (Axelsson, 2000; Brorström and Siverbo, 2004).

Symbolic values are considered to play an important role when it comes to maintaining traditions. It is well known that cultural values that preserve the values of conservative traditions can maintain a strong influence over long periods of time. Gagliardi (1990) exemplifies this with a company which, having been owned by the same family and located in the same geographical location for a long time, can develop strange salient features. The routines become “set in stone”, the organisation fossilises, unaffected by the external world. Such organisations also tend to demand loyal, uniform behaviour from their employees. Schein (1985) uses the expression “anxiety-avoidance” when he describes conservative, cultural forces in organisations.

Collectives in healthcare organisations also tend to preserve their distinctive character. This happens both internally and externally. The internal distinctive character consists of the organisation’s culture and the external distinctive character of its image. On the one side, an organisation’s members interact with each other and, on the other side, these members externalise their identity outwards (Wenger, 1998). Toseland et al. (1986) believe that healthcare organisations, i.e. hospital wards, often signal a stable identity. When a team from a certain ward meets with a patient for only a short period of time, a confidence-boosting culture can function as a substitute for personal acquaintance (Rozakis, 2007). They can consist of behaviour, equipment and clothing that signal reliability (Meyerson et al., 1996; Davison and Sloan, 2003).

The culture is deeply rooted in assumptions that are hard to identify and grasp to the newcomer (Hatch and Schultz, 2002; Hatch and Cunliffe, 2006). If the organisation’s newer members display well-known artefacts to their more experienced colleagues, it increases their chances of being accepted. They signal stable values to the world (Alchian, 1977; Weick, 1996; Rozakis, 2007). Specific languages with intern terms and expressions constitute a culture that symbolises affiliation (Davison and Hyland, 2002). Terms signalling familiarity are repeated by team members and become a part of the culture. Competence and ability are signalled when the right words are used (Czarniawska-Joerges, 1988; Czarniawska-Joerges and Joerges, 1990). Language codes can be uttered in order to establish sorting, evaluating, and caretaking. They also signal inclusion or exclusion to the healthcare team (Davison and Hyland, 2002).
Organisational culture supporting change

Sinclair (1991) emphasises that even if no “excellent model” of managing organisational change exists, cultures can influence organisations in various and not necessarily negative ways. A study of the implementation of an electronic medical record system showed that a cooperative culture combined with a consensus-building leadership led to effective adoption decisions (Scott et al., 2005). According to Erez and Gati (2004) the interplay between different levels of cultures is a dynamic entity in change processes.

Martin (1992) articulates three different perspectives of organisational cultures supporting change. The first one, the integration perspective corresponds to the traditional view of culture promoting strong and conservative consensus and maintaining social structures. The two other types; the differentiation and fragmentation perspectives describe culture as a collection of subcultures of contradiction and ambiguity. Such diverse cultures contribute to conflicts and play a central role in change processes (Hatch, 1993). A diversity of organisational cultures has been registered in public healthcare settings and has been proven to produce various types of effects. They can, on the one hand contribute to conservatism and organisational inertia, but on the other hand improve communication, collaboration and coordination of activities (Berlin and Carlström, 2008). The ability of cultural artefacts to improve safety has been studied, as well as their central role in promoting change. Xiao et al. (2001, 2004) describes for example that integrative cultural components have supported rapid and dynamic collaboration in hospital teams. According to Firth-Cozens (2001), a supportive culture in teams is a powerful source that benefits change processes between different professions.

Cultural variables are also involved in organisational development and the creation of new behaviours. They have been shown to be of strategic importance during changes (Pfeffer, 1981). For example, within industry, artefacts have been considered as development tools in production processes. This can be a question of classic design, or equipment details comprising rudimentary vestiges from previous products, and which no longer fulfil a practical function (Bertelsen, 2000). Another example of cultural change is Thorne’s (2000) description of physicians, whom she calls cultural chameleons. She describes their evolution from medical representatives to administrators through a multicultural transition phase. Thorne (2000) has shown how physicians have undergone hybridisation and thereby developed a new identity, which has made its mark on generations of new colleagues (Kurunnäki, 2004). They have been influenced by economists and they have toned down the medical imperatives that previously characterised the profession (Stone, 1997; Kurunnäki and Miller, 2006).

In a study by Miller and Xiao (2007), culture had a central role in accomplishing resilience during high trauma patient cases. It simplified the workflow and facilitated the decision-making process. New technology in the form of printed graphs, wall charts, request books, and whiteboards supported social interaction among staff. Gauthereau (2004) shows how cultures in hospital wards can develop patient safety. A culture of flexibility improved the ability to adjust the caretaking processes to local situations.

The symbolic values, as a consequence, can be both conservative and contributive to the development.
Theoretical framework
This study is based on the two concepts of “organisational culture” and “resistance to change”. The covariation between these two concepts is measured by questionnaires based on theories of organisational culture and resistance to change.

Organisational culture
The concept of organisational culture in this paper rests upon a theoretical model, the Competing Values Framework (Quinn and Rohrbaugh, 1981, 1983; Scott et al., 2003a). The model is developed on the idea that organisational culture consists of opposite values (Quinn, 1988). Quinn and Rohrbaugh (1983) have shown how effective organisations display apparently inconsistent cultures simultaneously. The framework is based on two dimensions:

1. internal/external; and
2. flexibility/control.

“Internal” refers to the wellbeing and development of the members of an organisation; “external” refers to the wellbeing and development of the organisation itself. The other dimension of flexibility control refers to structural polarities that consist of adaptability, innovation and initiative on the one hand, and management control, command and authority on the other hand. From these two dimensions, an instrument has been developed that mapped organisations in four different settings (see Figure 1). They are:

1. Human Relations (HR);
2. Open Systems (OS);
3. Rational Goal (RG); and
4. Internal Processes (IP).

HR is characterised by flexibility, cohesion, trust and belongingness. OS is an extrovert outgoing organisational character. It is characterised by benchmarking, experiments and the ability to run projects independently. RG favours planning, goal setting and

![Figure 1](image.png)

Source: Authors’ own creation based on Cameron and Quinn (1999)
economy in order to improve effectiveness and efficiency. It is characterised by competitive behaviour with an emphasis on winning. An IP organisation seeks stability and continuity by maintaining control, routines, rules and hierarchies (Cameron and Quinn, 1999). These dimensions are the cornerstones in the instrument used in this study. The Organisation Values Questionnaire (OVQ) instrument is based on the concepts of Competing Values Framework (Reino et al., 2007).

Resistance to change
Piderit (2000) argues that the individuals’ resistance to change is a multidimensional concept comprising affective, cognitive and behavioural domains. Oreg (2003) has identified the following four sources of resistance to change:

1. routine seeking (RS);
2. emotional reaction to imposed change (ER);
3. short-term focus (SF); and
4. cognitive rigidity (CR).

These dimensions are based on seven studies and represent a four-facet structure of resistance to change (Oreg, 2003). RS corresponds to a reluctance to give up old habits. Organisational members prefer to act within a well-defined and familiar framework. In the ER dimension, change is a stressor. Individuals with a high ER score suffer from a lack of resilience and are reluctant to participate in change processes. The SF focus identifies an individual’s ability to adjust to new situations. A high score can indicate a resistance to change because it involves more work in the short-term. CR corresponds to dogmatism. Dogmatic individuals resist change because of rigidity and a closed mindset. Oreg (2003) underpins that the dimensions can be used to select and involve parts of an organisation with the necessary qualifications of contribution to the implementation of a new model.

Method
Surveys were sent out during the autumn of 2009 to 170 nurses at five hospital wards within one clinic in a hospital in Western Sweden. A key inclusion criterion was that staff had experienced extensive change.

The context of the survey
The aim of the particular project was to investigate if the implementation of a person-centred care (PCC) model could enhance the effectiveness and efficiency of the care. The hospital wards included had all been subject to a research project implementing PCC for patients with chronic heart failure. The staff went from standardised care based on diagnose specific flowcharts and a sequential distribution of work to care based with individually shaped care plans and daily team decisions.

The health care system in Sweden has increased the patient turnover and decreased the amount of hospital beds. To accomplish this standard operating proceedings have developed to be an essential part of the health industry. The diagnosis has become the point of departure for standardising treatment, performance and length of stay. The unique situation of the patient including aspects of family, a patient’s home, a social network and potential collaboration during the care process are, however, often
neglected (Wolf et al., 2008). This has been proven to make the patient passive and institutionalised. They tend to be pressed for time, under-informed and disregarded (Anthony and Hudson-Barr, 2008).

To break this pattern, the PCC model includes a new type of introduction during registration, a realistic plan based on the patient’s resources and an agreement of collaboration between the patient and the staff. The staff and the patient pledge to follow an individualised plan. This embraces far-reaching changes of working routines that influence all of the health workers’ daily routines since it reinforces the central role of the patient as a person in the clinical encounter (Coleman et al., 2004). This necessitates a change from standard practice values to a commitment to patient-centred care (Davies, 2002).

Features of PCC take its care beyond a somatic disorder model into a biopsychosocial one. The biopsychosocial model recognises that biological, psychological, and sociocultural factors all interact and bear on the pathogenesis and course of most disorders (Engel, 1977; Mead, 2000). The model has proven to reduce the average length of stay (Olsson et al., 2006, 2007). It has also been proven to reduce the frequency of discharge to long-term care, rehospitalisation (Coleman et al., 2004), increase patient-satisfaction and quality of care (Wolf et al., 2008).

**Procedures**
The survey included registered and assistant nurses. Supervisors, physicians and personnel connected to more than one hospital ward or other parts of the hospital were excluded from the survey. Informed consent was obtained from the head of the clinic before the study started and each nurse was given written information and could choose whether or not they would participate in the survey.

The nurse managers of the wards were contacted and informed about the study and in addition to this letters explaining the aim of the study together with a self-administered questionnaire collecting descriptive data were sent out. Response envelopes labelled with a code for each ward were included in the letters. The answered questionnaires were sent anonymously back to one of the authors. One reminder note was sent out after three weeks.

Since there was no Swedish version of the OVQ instrument, it was translated and back-translated according to recommended scientific procedures (Polit and Beck, 2008). The OVQ scale was translated into Swedish by a native Estonian-speaking professional translator. This version was scrutinised by a team of three senior lecturers. Minor adjustments where then made to the first Swedish draft. Another native Estonian-speaking professional translator back-translated the Swedish draft. The questionnaire was then sent to Anne Reino, the originator of the instrument (Reino et al., 2007). Her comments on the questionnaire were considered by the team and a few more adjustments were made. After that a semantic interpretation was performed by a professional linguist and a few more minor adjustments were made.

To assure the conceptual equivalence of the translated questionnaire, the survey was validated through two pilot studies. First, a committee reviewed the conceptual and measurement issues of the survey qualitatively. After that, eight experienced nurses tested the questions. This led to a small adjustment to clarify some of the question structuring (Trost, 2001).
The homogeneity of the items of the subscales was analysed through a calculation of Cronbach’s $\alpha$. The results varied between 0.67 and 0.84, which, according to Brace et al. (2006), is considered to be satisfactory. The surveys were numbered and variables were defined in the computer program Statistical Package for the Social Sciences 17.0 (SPSS). Statistical significance was established at $p < 0.05$ and all tests were two-tailed (Altman, 1991). The analysis stems primarily from descriptive data and regressions (bivariate and multiple). Means and standard deviations were used for descriptive purposes.

The survey
The survey included the two instruments – i.e. the Organisational Values Questionnaire (OVQ) developed by Reino (Reino et al., 2007) and the Resistance to Change Scale (RTC) developed by Oreg (2003). The two instruments used different Likert-type scaling. They were converted to a common six-point scale by linear transformation (Daves, 2008). OVQ was based on the Competing Values Framework (CVF) measuring the four dimensions of HR, OS, RG and IP. It contained 52 items primarily with alternative answers of the Likert type ranging from strongly disagree to strongly agree. The dispositional Resistance to Change Scale (RTC) (Oreg, 2003) was used to assess the nurses’ reactions to change. The 17 items of the RTC scale are divided into the following four dimensions; RS, ER, SF and CD. Each item was answered on a Likert scale ranging from strongly disagree to strongly agree. Averages were calculated for the total OVQ and RTC scale and for each subscale; a high score indicates strong agreement.

Results
Participants
A total of 117 nurses (69 per cent), 105 (89 per cent) women and 12 (11 per cent) men, agreed to participate by answering the questionnaire. The response rate was 69 per cent. Their ages ranged from 23 to 63 years ($M = 38.9, SD = 9.9$). Seventy-two (59 per cent) of the participants were registered nurses and 45 (36 per cent) were assistant nurses. As many as 34 nurses answered the questionnaire in ward number five; of these, 56 per cent were assistant nurses (AN). In ward number two, 26 nurses participated (54 per cent AN) and in ward number four 23 nurses (65 per cent AN) answered the questionnaire. In ward number three only 18 nurses participated (44 per cent AN), and in ward number one as few as 16 nurses (63 per cent AN) participated. The nurses’ professional experience had a range of 37.5 years from 0.5 to 38 years in service ($M = 11.5, SD = 10.2$). The nurses’ hours of duty were from 20 to 40 hours per week ($M = 35.2, SD = 14.1$) and their average number of years working on the same hospital ward was 6.6 with a range of 29.5 years ($SD = 7.7$).

Fifty-three nurses (31 per cent) did not respond and two of them returned the envelope unanswered without explanation. A total of 15 items were not answered in the 117 returned questionnaires.

Resistance to change
The nurses’ mean resistance to change, reported on the six-point RTC scale, was as low as 2.72 ($SD = 1.14$). The mean for the four RTC subscales ranged from 2.49 to 3.27. The nurses strongly disagreed with Short-term focus (SF) ($M = 1.99, SD = 0.98$). This
result reveals that the group of nurses was ready to endure a period of learning and change to adjust to the new situation implementing PCC. The Emotional reaction (ER), i.e. stress during a change process as an effect of lack of resilience, was slightly higher (M = 2.49, SD = 1.4) than the SF. This subscale is based on the presumption that less resilient individuals are reluctant to make changes. These two subscales were closely followed by RS and CR (Table I).

Organisational culture
The dimension of Human relations (HR) dominated the hospital wards (M = 4.28, SD = 0.69) and was closely followed by Rational Goal (RG) (M = 3.82, SD = 0.59), Open Systems (OS) (M = 3.58, SD = 0.70) and Internal Processes (M = 3.57, SD = 0.49). This reveals that cultures of flexibility, cohesion, trust and belongingness were dominant among the health workers. There was however a slight difference between the wards. Two of them (ward 4 and 5) were strongly dominated by HR and one of the wards (ward 1) was slightly dominated by RG, i.e. planning, goal setting, focus on economy and efficiency. The rest of the wards had an almost equal mix of the four different cultures (Table II).

Bivariate and multiple regressions
The effect of HR, OS, RG and IP cultures on change resistance behaviours was tested in a number of bivariate and multiple regressions. Either OS, RG or IP were however significantly correlated to RTC, and HR was not significantly correlated to the RTC dimensions of “short-term focus” (SF) and “cognitive rigidity” (CR). The only significant correlation was between the OVQ dimension of HR and the RTC dimensions of “routine seeking” (RS) and “emotional reaction” (ER).

The HR view that “social competence was important” contributed to a decreased RS ($R = -0.28, R^2 = 0.08$). The same was true for “tolerance to make mistakes” ($R = -0.20, R^2 = 0.04$). An open-minded, “informal culture” ($R = -0.20, R^2 = 0.04$) combined with “flat non-hierarchical structures” ($R = -0.18, R^2 = 0.04$) contributed to a low RS as well. The ability to “take part in joint events” ($R = -0.17, R^2 = 0.03$) and to

<table>
<thead>
<tr>
<th>RTC subscale</th>
<th>Ward 1</th>
<th>Ward 2</th>
<th>Ward 3</th>
<th>Ward 4</th>
<th>Ward 5</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine seeking</td>
<td>2.69</td>
<td>2.60</td>
<td>3.41</td>
<td>3.56</td>
<td>3.38</td>
<td>3.13</td>
</tr>
<tr>
<td>Emotional reaction</td>
<td>2.53</td>
<td>2.16</td>
<td>3.05</td>
<td>2.22</td>
<td>2.51</td>
<td>2.49</td>
</tr>
<tr>
<td>Short-term focus</td>
<td>2.01</td>
<td>1.59</td>
<td>2.36</td>
<td>2.11</td>
<td>1.91</td>
<td>1.99</td>
</tr>
<tr>
<td>Cognitive rigidity</td>
<td>3.30</td>
<td>3.18</td>
<td>3.2</td>
<td>3.47</td>
<td>3.21</td>
<td>3.27</td>
</tr>
<tr>
<td>All</td>
<td>2.63</td>
<td>2.38</td>
<td>3.0</td>
<td>2.84</td>
<td>2.75</td>
<td></td>
</tr>
</tbody>
</table>

Table I. Mean values for the 117 nurses answering the RTC scale, divided into subscales and hospital wards ($n = 117$)

<table>
<thead>
<tr>
<th>OVQ subscale</th>
<th>Ward 1</th>
<th>Ward 2</th>
<th>Ward 3</th>
<th>Ward 4</th>
<th>Ward 5</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human relations</td>
<td>4.11</td>
<td>3.87</td>
<td>4.05</td>
<td>4.86</td>
<td>4.50</td>
<td>4.28</td>
</tr>
<tr>
<td>Open systems</td>
<td>3.01</td>
<td>3.21</td>
<td>3.75</td>
<td>4.33</td>
<td>3.64</td>
<td>3.58</td>
</tr>
<tr>
<td>Rational goal</td>
<td>4.18</td>
<td>3.65</td>
<td>3.67</td>
<td>3.97</td>
<td>3.69</td>
<td>3.82</td>
</tr>
<tr>
<td>Internal process</td>
<td>3.92</td>
<td>3.37</td>
<td>3.65</td>
<td>3.52</td>
<td>3.39</td>
<td>3.57</td>
</tr>
<tr>
<td>All</td>
<td>3.81</td>
<td>3.53</td>
<td>3.78</td>
<td>4.17</td>
<td>3.81</td>
<td></td>
</tr>
</tbody>
</table>

Table II. Mean values for the nurses answering the OVQ scale, divided in subscales and hospital wards ($n = 117$)
be “helpful to each other” ($R = -0.15, R^2 = 0.03$), however, showed a somewhat weaker impact on RS (Table III). The only covariation of significance between HR and ER was in the HR-item “there is a tolerance to mistakes” ($R = -0.22, R^2 = 0.05$).

In a multiple regression it was seen that statistically significant HR factors together explained 21 per cent ($R^2 = 0.21$) of the decreased routine seeking behaviour. It meant that 79 per cent was still accounted for. One variable was still significant – “social competence is important”. The remaining variables displayed low t-values and were lacking significance on their own. The reason could be that they covariate or that they were present as an earlier link in connection to the cause. The result indicates that an HR culture, i.e. a hospital ward with a dominating focus on social competence, decreases “routine seeking behaviour”, i.e. tendencies to “uphold stable routines”, the idea that “change is not good” and “appreciation of the same old things” (Table IV). The results indicate that a culture of flexibility, cohesion and trust negatively covariate

<table>
<thead>
<tr>
<th>Independent variables (HR items)</th>
<th>Pearson’s $R$</th>
<th>$R^2$</th>
<th>$F$-value</th>
<th>$t$-value</th>
<th>Sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. We are helpful to each other</td>
<td>-0.15</td>
<td>0.03</td>
<td>2.94</td>
<td>8.62</td>
<td>0.05</td>
</tr>
<tr>
<td>2. It is a flat, non-hierarchical structure here</td>
<td>-0.18</td>
<td>0.04</td>
<td>3.78</td>
<td>15.60</td>
<td>0.03</td>
</tr>
<tr>
<td>3. We are proud of belonging to this ward</td>
<td>-0.04</td>
<td>0.01</td>
<td>0.19</td>
<td>8.68</td>
<td>0.66</td>
</tr>
<tr>
<td>4. Internal co-operation is important</td>
<td>-0.04</td>
<td>0.02</td>
<td>0.19</td>
<td>8.21</td>
<td>0.65</td>
</tr>
<tr>
<td>5. Different duties are no strictly divided</td>
<td>-0.11</td>
<td>0.01</td>
<td>1.44</td>
<td>11.07</td>
<td>0.23</td>
</tr>
<tr>
<td>6. There is a tolerance to mistakes</td>
<td>-0.20</td>
<td>0.04</td>
<td>4.33</td>
<td>11.72</td>
<td>0.04</td>
</tr>
<tr>
<td>7. We gladly take part in joint events</td>
<td>-0.17</td>
<td>0.03</td>
<td>3.42</td>
<td>9.22</td>
<td>0.05</td>
</tr>
<tr>
<td>8. We see each other after working hours</td>
<td>-0.18</td>
<td>0.00</td>
<td>0.03</td>
<td>9.26</td>
<td>0.84</td>
</tr>
<tr>
<td>9. The management trusts us</td>
<td>-0.14</td>
<td>0.02</td>
<td>2.25</td>
<td>10.11</td>
<td>0.09</td>
</tr>
<tr>
<td>10. We are like one big family</td>
<td>-0.06</td>
<td>0.00</td>
<td>0.43</td>
<td>13.53</td>
<td>0.50</td>
</tr>
<tr>
<td>11. We often talk about our private issues</td>
<td>-0.19</td>
<td>0.04</td>
<td>4.15</td>
<td>10.04</td>
<td>0.04</td>
</tr>
<tr>
<td>12. Social competence is important here</td>
<td>-0.28</td>
<td>0.08</td>
<td>9.40</td>
<td>10.74</td>
<td>0.00</td>
</tr>
<tr>
<td>13. Working here induces confidence</td>
<td>-0.25</td>
<td>0.01</td>
<td>0.07</td>
<td>9.76</td>
<td>0.78</td>
</tr>
</tbody>
</table>

**Table III.**
Bivariate regression of items of the HR dimension and the RTC scale (sign = $p < 0.05$)

**Notes:** Dependent variable: routine seeking; $n = 117$

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Bivariate regression standardised $\beta$</th>
<th>Multiple regression standardised $\beta$</th>
<th>Difference</th>
<th>$t$-value</th>
<th>Sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. We are helpful to each other</td>
<td>0.15</td>
<td>0.00</td>
<td>0.15</td>
<td>0.36</td>
<td>0.42</td>
</tr>
<tr>
<td>2. It is a flat, non-hierarchical structure here</td>
<td>0.18</td>
<td>0.15</td>
<td>0.03</td>
<td>1.52</td>
<td>0.13</td>
</tr>
<tr>
<td>6. There is a tolerance to mistakes</td>
<td>0.20</td>
<td>0.09</td>
<td>0.11</td>
<td>0.89</td>
<td>0.37</td>
</tr>
<tr>
<td>7. We gladly take part in joint events</td>
<td>0.17</td>
<td>0.05</td>
<td>0.12</td>
<td>0.52</td>
<td>0.60</td>
</tr>
<tr>
<td>11. We often talk about our private issues</td>
<td>0.28</td>
<td>0.08</td>
<td>0.20</td>
<td>0.52</td>
<td>0.47</td>
</tr>
<tr>
<td>12. Social competence is important here</td>
<td>0.25</td>
<td>0.18</td>
<td>0.15</td>
<td>1.98</td>
<td>0.05</td>
</tr>
</tbody>
</table>

**Table IV.**
Multiple regression of items of the HR dimension and the RTC scale (sign = $p < 0.05$)

**Notes:** Dependent variable: routine seeking; $n = 117; R = -0.35, R-square = 0.21
with the overall need for a stable and well-defined framework. A human-relation type of culture improves the ability to cope with change.

**Discussion**

Organisational theorists have emphasised the importance of being aware of the culture in an organisation in order to obtain success in change processes (Peters and Waterman, 1982; Wilkins and Ouchi, 1983; Denison, 1996; Hemmelgarn et al., 2006).

In this study, culture was measured in the staff of five hospital wards within one clinic in a hospital. The study reveals that a culture of HR decreases change resistant routine seeking behaviours. The results also showed that flat hierarchal structures and social competence contributed to a decreasing tendency to resist change to the care of PCC. This supports the idea that change is induced by cooperative and supportive cultures (Firth-Cozens, 2001; Scott et al., 2005). HR stands out in contrast to the other three types of organisational culture, OS, RG and IP, as the only one that reached a level of significance.

Even if the development of cultures is driven by professionals who share similar values and goals (Edmondsson, 2003), hospital wards do develop their own culture (Michie and Williams, 2003). Wards characterised by a rational goal culture with competitive behaviour can, according to Dutton et al. (1997) induce rivalry. This points to the fact that change processes need broad collaboration and an awareness of common values and ideologies (Tedeshi, 1981; Schneider, 1981; Schlenker and Weigold, 1992).

HR stands out as the most important culture in order to facilitate an organisation from inertia and path-dependent routines to the acceptance of new standards. This is especially evident when the HR culture consists of a high tolerance to mistakes and flat hierarchical structures. The opposite, i.e. a low tolerance and steep hierarchies, can induce fear in the collective, which restrains change processes and hinders the dissemination of innovations in healthcare (Berwick, 2003).

A greater insight of organisational culture as an important factor on change processes will influence the selection of hospital wards into change projects because the underlying culture of an organisation is considered to have considerable impact (Fischer et al., 2005). An instrument that pinpoints the conditions of a particular healthcare setting can improve the results of a change project. Furthermore, managers who are aware of the organisational culture in their wards can use instruments such as the ones used in this study to investigate and plan for change processes.

A HR culture stands out in contrast to the other three types of organisational culture, and the different wards showed a surprisingly low resistance to change. Results from the present study therefore indicate that, even in an old public health care based on long traditions and characterised of standardised care models carry possibilities for changes towards an individualised humanistic care where the patient, as an individual, is at the centre and not the pathological processes or the disease itself.

**References**


Cameron, K.S. and Quinn, R.E. (1999), *Diagnosing and Changing Organisational Culture Based on the Competing Values Framework*, Addison-Wesley, Reading, MA.


Further reading

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