



Swedish Agency for Work
Environment Expertise

Organizational Change Competence in Workplaces

ORGANIZATIONAL CHANGE COMPETENCE IN WORKPLACES

Government commission to summarize knowledge about future working life

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Organizational Change Competence in Workplaces – a systematic review

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Foreword

In its 2018 letter of appropriation, the Swedish government mandated the Swedish Agency for Work Environment Expertise (SAWEE) with the task of compiling national and international research on working life in the future. Based on this compilation and analysis, the assignment was to formulate in-depth literature reviews in selected fields. The mandate also includes identifying knowledge gaps A2018/00929/ARM, A2018/00212/ARM (partially), A2018/00498/ARM (partially).

To carry out this government commission, the Agency tasked a number of researchers from various colleges and universities with producing knowledge summaries in four areas: work environment trends, digitalization, forms of employment and organizational change competence.

In this report we present the literature review in the area of organizational change competence. The literature review was prepared by Professor Emeritus Henrik Kock and Dr Cathrine Reineholm, MD, at Linköping University. Professor Jan Johansson of the Luleå University of Technology has quality-reviewed the literature review at the Agency's request, while librarian Malin Almstedt Jansson of the University College of Gävle and Maivor Hallén, head librarian of the Faculty of Engineering at Lund University, have assisted our outside experts in identifying and securing scientific documentation for the literature review.

By seeking out particularly important factors and conditions surrounding the use, maintenance and development of organization change competence, the researchers behind the Organizational Change Competence in Workplaces literature review have identified four different areas of particular relevance: management, managers and change agents; employee attitudes towards (incl. previous experiences with) change; information, communication and participation before, during and after change processes; and competence and learning opportunities in change processes.

The authors of the literature review personally chose their own theoretical and methodological starting points and are responsible for the results and conclusions presented herein.

I wish to express my tremendous gratitude to our outside researchers and quality reviewers, and to the Agency employees who contributed to the creation of this valuable literature review.

The literature review has been published on the Agency website, and in the Knowledge Summaries series.

Gävle, February 2020



Nader Ahmadi
Director-General

Our process model for systematic reviews

To support the researchers in their preparation of this literature review, the Swedish Agency for Work Environment Expertise developed a system for the systematic creation of literature compilations in its area of responsibility. It contains systems of preparation, literature search, relevance assessment, quality assurance and the presentation of studies and results. It also includes the Agency's process management and university library support, as well as external quality assurance.

At the Agency, first Helena Jahncke and later Annette Nylund have served as supervising process managers for preparing the literature review. Susanne Lind administered the process, while a team of communicators consisting of Pernilla Bjarne, Sverre Lundqvist, Liv Nilsson, Joakim Silfverberg and Camilla Wengelin has been responsible for the work of text management, layout, accessibility and the scheduling and planning of webinars and podcasts.

Summary

This report presents a literature review focused on research that has examined which factors are deemed important in creating a high level of change competence in workplaces. This literature review has been prepared at the behest of the Agency for Work Environment Expertise within the framework of a government commission intended to summarize knowledge concerning future working life. The purpose of the literature review is to determine which factors in empirical research are described as being important in applying, maintaining and increasing change competence. One important part of determining what organizational change competence comprises is the ability of the organization to utilize existing competence and, through learning (individual, group and organizational learning), to develop organizational change competence.

The literature review is based on a model created at the Agency for Work Environment Expertise. In a first step, the purpose and research questions were determined, and criteria were then formulated with regard to which studies should be included or excluded in the literature search. The inclusion criteria called for empirical studies of planned changes in organizations/workplaces, studies of existing competence and the ability to develop or apply competence, studies concerning learning at the individual, group and organization level, studies of individual wellbeing in the workplace, and studies of organizational productivity/efficiency. Further delimitations required that the studies consist of scientific articles in peer-reviewed international research journals published after 1990 and written in English, Swedish, Norwegian or Danish. The exclusion criteria included studies of emergent and gradual change, studies of competence with a focus on single individuals, studies of change resistance and studies that focused solely on poor health.

The searches were conducted in two databases, Scopus and Web of Science. There were 1,650 hits in Scopus and 944 in Web of Science. After duplicates were removed, 1,953 unique articles remained and were then screened by title and abstract. A total of 142 studies were considered to warrant a full-text review to determine whether they met the inclusion criteria. The full texts were then secured and reviewed for relevance. A total of 42 studies that met all the points of assessment for relevance then underwent a quality assessment based on accepted protocols for quantitative and qualitative studies. Of the 42 quality-reviewed studies, 27 were deemed to be of high or medium-high quality, of which 13 were quantitative studies, while two studies involved multiple methods and 12 were qualitative studies.

A total of 27 studies were thus included in the review. The quantitative studies were analysed via narrative analysis, while the qualitative studies were analysed using conventional content analysis.

In summary, the studies included in the literature review show that the following factors and conditions are described as being important in applying, maintaining and developing organizational change competence: management; managers and change agents; employee attitudes towards and previous experiences with change; information, communication and participation before, during and after change processes; and competence and opportunities for learning in change processes. Research on organizational change competence does not currently constitute a coherent area of research, but rather is spread across a number of areas and disciplines, particularly research about leadership and research about organizational change. The term organizational change competence lacks a more definite and generally accepted meaning within the research.

The largest number of studies in the literature review are referable to the first area, i.e.

leadership, managers and change agents. In other words, organizational change competence within organizations appears to be strongly associated with the competence and behaviour of managers and change agents, rather than being seen as an organization's collective ability to drive planned change. Consistent with this assertion, there appears to be a corresponding lack of studies in which the capacity of employees to contribute is analysed. In the cases where that has been done, the focus is on employee change resistance and how it can be understood, rather than on employee motivation for change and how it can be developed. There are a number of studies that shed light on information, communication and participation before/during/after organizational change processes and as a part of organizational change competence. Providing information is important at every level of the organization, and the way that this issue is managed remains an important area for research, particularly on the basis of what is termed organizational sensemaking. A key element in our determination of what organizational change competence comprises is the ability of the organization to apply existing competence and, through learning (individual, group and organizational learning), to develop organizational change competence. This literature review shows that there are a limited number of studies in this area.

Based on our work on this review, a number of knowledge gaps have been identified. Some of them can be tied to the research methods used. In the case of quantitative studies, we see a lack of longitudinal studies, in which change is followed over time. Another deficiency we can see is low response rates, primarily in longitudinal studies. There is also a small number of studies that examined organizational change capacity on multiple levels. The analysis of the importance of context can be pushed farther in the case of those studies that were conducted within both public organizations and private companies. The qualitative research reviewed here exhibits methodological limitations in a number

of respects. In most cases this has to do with limited empirical data in terms of both the number of individuals and the number of organizations studied, and the case descriptions exhibit weaknesses such as inadequate descriptions of the organizational context. Case studies involving case control and duplications of earlier studies are not represented in the 27 studies reviewed. Studies involving multiple methods feature in only two of the studies. Studies of organizational change competence based on the content described above are also uncommon.

Some general advice is presented based on the literature review. All organizations have a more or less extensive history of planned changes, both successful and less so. Learning from history can be viewed as an important part of enhancing organizational change competence. Leaders and change agents are naturally important, not only to lead change, but also to visibilize and support the use of the competence that resides in other parts of the organization, and not least among its employees. Change resistance can be seen as a legitimate reaction to or necessary friction in all poorly executed or misconceived change processes, an opportunity to foster openness, the ability to exert influence and to apply knowledge and experience that is spread throughout the organization, and to thereby build change competence.

Participation in planning and implementation can increase motivation and contribute to more collective sensemaking, just as participation can be subject to pressures due to insufficient time or other factors that impose limitations. One important question to ask is how, and in what respects, active participation in change processes can be expected to contribute to favourable outcomes and, not least importantly, support participation in change process via, e.g., leadership that supports and enables employee participation. Strategies and policies are not everything. It takes more effort to develop methods and support the implementation of planned changes than it does to produce plans and strategies. Viewed from this perspective, one important element

of organizational change competence may be seen as the ability to assess and evaluate organizational changes, including the ability

to adapt and modify both plans and strategies and the methods and approaches used when changes are being implemented.

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1. Introduction

This literature review has been prepared based on a model for knowledge summaries devised by the Swedish Agency for Work Environment Expertise. The task involves the compilation of national and international research in the area of “organizational change competence” in a narrative literature review. It also includes the identification of knowledge gaps and offering of general advice.

One important element in a literature review is to try to identify the terms it contains. The key terms on which this summary is based have no preset definitions. The terms “competence”, “change competence” and the connective term “organizational change competence” consequently need to be assigned more clearly delimited definitions (see Section “Key terms”). Two of them, organizational change and competence, each separately constitutes a term that has been used extensively in earlier empirical research, while the composite term organizational change competence appears to only a limited extent. Research on organizational change competence does not constitute a coherent area of research, but rather the term is found in other areas of research, such as research on organizational change and research on learning and competence development. It thus seems possible to view research on organizational change competence as a subarea of a more established area of research, such as “organizational change”.

Disposition of the report

The report consists of five chapters. Chapter 1 describes its purpose, research questions and key terms. Chapter 2 offers a brief description of the method used to compile the literature review.

Appendix 1 offers a complete description of the method. Chapter 3 describes the results of the literature review at the micro-, meso- and macro-levels, and based on the study type (quantitative, multiple methods, qualitative). Chapter 4 discusses and assesses the results, and the discussion leads to the description of a number of knowledge gaps. The literature review ends with some general advice.

The report concludes with Chapter 5, which presents the conclusions drawn from the literature review.

Purpose and research question

The general purpose of this literature review is to expand our knowledge regarding organizational change competence. This purpose is expressed more specifically in the following research question:

Which factors in empirical research are described as important in applying, maintaining and increasing organizational change competence?

Key terms

A distinction is often made in research on organizational change between planned and continuous (emergent) change (“episodic and continuous change”, Weick & Quinn, 1999). The focus in this literature review is on planned change. According to Weick and Quinn, planned organizational change is characterized as intentional, discontinuous and less frequent. This perspective ties in to Lewin (1951), who describes organizations as finding themselves in a lack of equilibrium and then being changed, based on the familiar “unfreeze – change – refreeze” model.

Planned change is defined here as planned and intentional activities that encompass all or

parts of an organization for the purpose of changing all or parts of the organization from its current state to some desired future state (Stouten, Rousseau & De Cremer, 2018).

Organizational change is viewed as planned activities performed for the purpose of achieving a specific goal or different states, which can include various scales of change in which both internal and external organizational conditions, agents and (organizational) structures and different types of change processes are significant for both the planned and unplanned effects of change initiatives. This meaning of organizational change is tied to previously developed perspectives on organizational change (e.g. Pettigrew, 1987).

The meaning of the term competence as described below is based in large measure on research concerning competence and learning in various organizational contexts, and which has proven to be useful therein (Ellström & Kock, 2009; Kock & Ellström, 2011; Kock, 2002). Competence is seen here as a potential ability to successfully (according to specific criteria) manage tasks, situations or problems and utilize and potentially expand the room for interpretation, action and assessment that exists in relation to a given task/problem/situation.

According to this view, competence resides not just in individuals, but rather we can speak correspondingly of competence in groups, or in organizations. Furthermore, competence is a potential ability, i.e. an ability that is not self-evidently accommodated in a planned change. From an individual perspective, competence may be described as a set of skills, knowledge, personal traits, attitudes and values. Competence is enhanced through learning, which can include formal learning (e.g. courses) as well as informal learning acquired, e.g., through experience gained from having actively participated in organizational change processes.

The Swedish term *organisatorisk förändringskompetens* has no direct equivalent in English. “Organizational change competence” appears to be a term that is used to a limited extent. In our literature searches the term

appears in only one source (Birgitte, Ingstad & Bakke Finne, 2009), and even then with a partially different meaning. Other terms lie closer to the meaning ascribed to the term in this literature review, such as “dynamic capabilities” (Teece, Pisano & Shuen, 1997), “absorptive capacity” (Cohen & Levinthal, 1990), “corporate competencies” (Dunphy, Turner & Crawford, 1997) and “organizational learning” (Argyris & Schön, 1978). However, the term that is considered to accord best with *organisatorisk förändringskompetens* is “organizational change capacity” (Judge, Naoumova & Douglas, 2009; Soparnot, 2011). Soparnot develops a definition that ties into Pettigrew’s (1987) view on organizational change in three dimensions, i.e. “content” (what is being changed), “process” (how it is being changed) and “context” (why the change is being made). Soparnot describes yet another dimension, namely a learning dimension (“the learning dimension of change capacity”), which is based in large measure on the capacity for organizational learning.

Against this background, the definition of organizational change competence is described as the ability of an organization to utilize both existing competence within the organization and the ability to apply and develop competence in order to meet (externally or internally generated) needs for change.

Organizational change competence can be related to different levels within the organization, i.e. individuals (micro), groups (meso), or the organization in its entirety, including its surroundings (macro). An organization’s change competence depends in large measure on its ability to apply existing competence and, through learning (individual, group and organizational learning), to develop organizational competence.

We believe that this definition paves the way for a view in which the focus is not only on the change competence of single individuals or groups (often change agents and leaders), but also on the change competence that is spread throughout various parts of the organization, at various levels (micro, meso, macro) in the organization.

Table 1 presents the journals in which the studies were published. There is a total of 27 articles, published in 20 journals. The spread of articles across journals is extensive. In other words, it appears that studies of organizational change competence appear in a broad range of

journals. Only one journal, the Journal of Applied Behavioral Science, offered a large number of such articles. One possible interpretation of this broad spread may be related to the lack of commonly accepted terms in the area of organizational change competence.

2. Method

This literature review has proceeded based on the model devised at the Swedish Agency for Work Environment Expertise. The model can be characterized as a narrative literature review (Werkmeister Rozas & Klein, 2010). Such a review is said to offer advantages in terms of describing emergent areas of research based on empirical studies that employ various methods, such as quantitative studies, qualitative studies and studies that use multiple methods (Werkmeister et al., 2010). In a first step we proceeded based on the purpose of the study and defined the study in terms of its focus, content and delimitations. We then formulated inclusion and exclusion criteria based on the PEO model (People, Exposure, Outcome).

In brief, the inclusion criteria were as follows: workplaces/organizations and

planned organizational changes (People), the ability to apply existing competence, the ability to develop new change competence (Exposure), and individual wellbeing, productivity, learning and innovation (Outcome). In brief, the exclusion criteria were as follows: emergent and gradual changes (People), competence linked to single individuals, change resistance, reactive change competence (Exposure), and individual quality of life outside the workplace, plus studies focused solely on poor health (Outcome). Additional criteria required that the studies had to have been published since 1990 in peer-reviewed journals, be empirical and be written in English, Swedish, Norwegian or Danish. The method is described in detail in Appendix 1.

3. Results

This chapter presents the studies included in the literature review. The chapter begins with a description of how the studies were grouped under three general headings, i.e. micro level, meso level and macro level.

The journals in which the research was published are then identified. The results from the studies are described in three sections, i.e. quantitative studies, studies with multiple methods, and qualitative studies. The chapter concludes with a summary of the results from the quantitative and qualitative studies.

Earlier empirical studies of organizational change focused in large measure on employee attitudes and reactions to change (Oreg, Valkula & Armenakis, 2011), on the implementation and use of new routines and working methods, and on the extent to which the planned effects had been achieved (Stouten et al., 2018). Based on the results that have emerged in the literature review, we have chosen to report them as follows: 1) micro studies of individuals, particularly those who are recipients of or directly affected by the change (“change recipients”), 2) meso studies of interpersonal phenomena, group phenomena and inter-group phenomena, and 3) macro studies of phenomena at the organization level (Stouten et al., 2018). This breakdown into micro–meso–macro is of course not razor-sharp, but rather there are a number of grey areas between micro/meso and meso/macro. The connection to each respective level may be direct in some studies, while it may be more indirect in others. The same applies to the degree to which it is possible to tie organizational change competence to each level. Furthermore, some of the reported studies have a more pronounced focus on the change processes reported under macro. Leaders are reported under meso, as they are often seen as belonging to a given group or level, rather than being treated in the studies as individuals. Table 2 presents

the number of publications broken down by design, sector and geographical area. Most of the studies were conducted in Europe (14), or Canada and the USA (9). The preponderance of the studies is within the public sector (19). Case studies represent the most common method (12), six of which are longitudinal case studies.

Description of quantitative studies

This section presents the quantitative studies included in the literature review, broken down into the headings micro-, meso- and macro-level. A total of 13 studies that were considered to meet the relevance and quality criteria are included. The studies have different foci; seven of them study the importance of leadership in connection with change, the leader’s attitude towards change or how fair the leader is; two address employee attitudes towards change, one focuses on the conditions surrounding change, one on the importance of autonomy in connection with change, one on organizational learning in connection with change, and one investigates how organizations and leaders can manage change resistance over time. An overview of the included studies is presented in Tables 3, 4 and 5.

Organizational change competence – micro level

Of the five micro-level studies, four are longitudinal and one is a cross-sectional study. Three of the studies are from the USA, one from Australia and one from Sweden. All the studies were within the public sector, four in healthcare and one in a municipal enterprise.

The Swedish study by Augustsson et al. (2017) examines employee openness to a competence initiative in the areas of communication and information technology, mainly at the individual level, but also at the group level. The purpose of the study is to investigate

Table 1: Number of publications per journal

Journal	
Academy of Management Journal	2
American Review of Public Administration	1
British Journal of Management	2
Employee Relations	1
European Journal of Work and Organizational Psychology	1
Group and Organization Management	1
Journal of Business and Psychology	1
Journal of Change Management	1
Journal of Management	1
Journal of Management Studies	1
Journal of Organizational Change Management	2
Journal of Workplace Learning	2
Leadership in Health Services	1
Leadership Quarterly	2
Organization Studies	1
Personnel Review	1
Research in Organizational Change and Development	1
Studies in Continuing Education	1
The Journal of Applied Behavioral Science	4
Total	27

how openness to change, viewed in relation to the change content and process, affects participation in exercises and training, and thus leads to increase use of the communication and information systems. Openness to change is measured in terms of the degree to which employees welcome the change/intervention and feel that they will utilize and benefit from it. The analysis is conducted via SEM, based on a theoretically grounded model.

At the individual level the results showed that openness to the change process at t1 predicted both higher competence and a higher

degree of use of the systems at t2. Openness to the content of the change predicted greater use of the systems at t2, but not higher competence. The results at the group level showed that openness to the content of the change predicted a higher degree of use of the systems, as well as higher competence (almost significant, $p = .06$). The study points out the importance of both individual and group openness to change. Openness to change and the way in which a change is implemented predict how well new competence will be assimilated and used.

Table 2: Number of publications per geographic area, sector and study design

Approach	Design	Private sector	Public sector	Private and public sector	Sweden	Rest of Nordic region	Väst-europa	West-ern Europe	Rest of world
Quantitative	Longitudinal		6		1			3	2
	Cross-sectional	2	5			2	2	2	1
Multiple methods	Longitudinal		1						1
	Cross-sectional		1					1	
Qualitative	Case study	2	3	2	1	1	4	1	
	Longitudinal case study	2	3		1	2		2	
Total		6	19	2	3	5	6	9	4

Jimmieson, Peach and White (2008) study the degree to which attitudes, subjective norms and perceived behavioural control predict individual intentions to support organizational change based on a behavioural theory, the Theory of Planned Behavior. According to this theory, an individual's intentions (attitude, subjective norms and perceived behavioural control) are the proximal determinants in predicting individual behaviour. With the addition of social identity theory, the authors study how group norms can predict intentions to be willing to participate in change work, the relationship between the degree of information provided and participation in change work, and whether the perception of participation in the change work can predict individual intentions. The study, which was conducted in a local government body in Australia, is analysed using hierarchical regressions.

The results show that the revised theory of planned behaviour can explain the main mediating and moderating effects on employee intentions to participate in organizational change and activities that support change initiatives. Attitudes, norms and perceived behavioural control predict individual intentions to support an organizational change, but the norms of the group also have additional signi-

ficance, as individuals who identify strongly with their group will follow its intentions to a greater degree. Information, good communication and participation are also indicative of stronger intentions to support activities and participate in the organizational change.

The three American studies (Hornung & Rousseau, 2007; Jones & van de Ven, 2016; Kim, Hornung & Rousseau 2011) were conducted in a healthcare and nursing context, using various staff categories. Hornung and Rousseau (2007) examine how employees at two hospitals perceive their degree of autonomy, the importance autonomy has for proactivity and the decision to support change. The sample consists of three groups. At baseline (t1), data were collected from two groups, one from each hospital (cross-sectional). The third group consists of respondents from both hospitals, who responded at both baseline and follow-up (longitudinal). SEM analysis was performed on all cases. As the number of longitudinal respondents was low (n = 74), a single SEM analysis was performed in this group. The results show the importance of autonomy in everyday work, which in turn has a positive effect on self-efficacy, personal initiative and actively support and participate in structural organizational changes.

Table 3: Overview of quantitative studies at micro level

Author(s) and year	Country and organization	Focus	Methods and samples
Augustsson et al., 2017	Sweden 78 primary health care centres	Studies attitudes to change at individual and group level based on change content and process	Longitudinal study. Questionnaires (n = 1 042, 41%), all staff categories at care centres
Hornung & Rousseau 2007	USA Two Hospitals	Studies importance of autonomy for employee proactivity, and the effects it can have on employee support for change	Longitudinal study. Questionnaires (t1: n = 166, 47% and: n = 133, 33%; t2: n = 74, 18%) to various staff categories at hospitals
Jimmieson et al., 2008	Australia Local government	Studies how attitudes, norms and individual behaviour, as well as the interactive effect of group norms and identity, predict willingness to participate in change	Cross-sectional study. Questionnaires (n = 151, 84%) to various staff categories in 18 different departments within a municipality
Jones & van de Ven 2016	USA 40 hospital clinics, care centres and home healthcare providers	Studies relation between change resistance, its consequences and how potential causes are strengthened or weakened over time	Longitudinal study. Questionnaires (n = 289, 33%) to various staff categories at hospitals, care centres and in-home healthcare
Kim et al., 2011	USA Hospital	Studies conditions or factors that can lead to change-supporting behaviour and how they can vary during a change	Longitudinal study. Questionnaires (t1: n = 166, 47%; t2: n = 207, 52%) to various staff categories at a hospital

Kim et al. (2011) study various conditions regarding positive change behaviour, i.e. actively participating in, facilitating and contributing to change. Questionnaires were sent out on two occasions to employees at a hospital that had undergone a structural change, i.e. 18 months (t1) and 24 months (t2) after the change. Data were analysed by SEM analysis. The results show that different conditions are of different importance over time. At baseline (t1) the anticipated benefits exhibited a positive correlation with support for change, while on the follow-up (t2) a positive correlation was found between the quality of the employment relationship and whether the person had chosen to support the change. The study shows that different conditions differ in importance over time

during a change process, and that employers need to actively support their employees and get them involved in the change.

Jones and van de Ven (2016) investigate change resistance and whether the reasons for such resistance vary during a long-term change process, for which data were collected over three years. Even though this study, as opposed to those noted above, is more “negatively” disposed towards change, the results (resistance) were interpreted based on how organizations handle that resistance. The population consists of various staff categories in healthcare and nursing at 40 clinics/departments, i.e. hospitals, primary care centres and home healthcare providers. Questionnaires containing questions regarding change resistance, the reasons for or conditions surround-

ding such resistance and its consequences were sent out over three years. Data were analysed via linear regression in five different steps or models, based on a factor analysis. The result of the study shows that there is a relation between employee resistance to change, diminished organizational engagement and lower self-assessed efficiency.

This relation proved to grow stronger over time. A relation was also found between supportive leadership and reduced change resistance. Supportive leadership can reduce or mitigate resistance, mainly during the latter part of a change process. During the early phase of a change process the results show that organizational fairness can impact change resistance negatively, i.e. reduce it. All in all, the study shows that even though change resistance can reduce employee engagement and degrade performance over time, leaders can work actively to support their employees throughout the entire change process, and thereby mitigate the resistance.

Organizational change competence – meso level

Of the six studies included at the meso level, five were cross-sectional studies and two were longitudinal studies. Two of the studies are American, one is from the Netherlands, one from Finland, one from Australia and one from Portugal.

The populations in the studies vary: four were conducted in a public enterprise, one in a manufacturing industry and one concerns a graduate school. The majority have to do with the subject of leadership or managers. The competence of leaders or their ability to lead or run organizational change are the focus of the studies by Neves (2011), Szabla, Stefanchin and Warner (2014) and van der Voet (2016).

Neves (2011) studies how employees in two public organizations in Portugal perceive their leader's competence and support during a change, and the relation to their organizational commitment. Both organizations underwent a major change, and the numbers of respondents and respon-

se rates were similar. The data underwent SEM analysis.

The results show that perceived support from a manager/leader has a mediating effect on the leader's perceived competence and commitment to change. Employees who perceive their manager/leader as competent also experience greater support from them, while the leader's perceived competence has a (direct) negative relation to long-term or continuous commitment to change. According to Neves (2011) this can be explained by the fact that a leader's competence can ameliorate fears of a change and what it may entail more than support can. In summary, the study shows that leaders who are considered to be highly competent and supportive during change enhance employee commitment to the change.

Another competence of a leader is their ability to choose the right strategy for different types of changes, as is elucidated in the study by Szabla et al. (2014). The study was conducted at a graduate school in Human Resource Development (HRD) at which some of the respondents were PhD students, while others had completed their doctoral studies and were out in working life.

The questionnaire included questions about how change recipients act in the face of different types of changes and change strategies. The data underwent variance analysis. The results showed to some extent that different change strategies are needed depending on whether a change is planned or continuous, which is a common assumption. The study also shows that there appear to be a number of factors that influence which strategy a leader chooses, and that the ability to interpret or understand and decide which strategy to adopt is a key competence for a leader.

Leadership in public and often bureaucratic organizations is the focus of the study by van der Voet (2016). A leader in a bureaucratic organization often runs an organizational change that entails cutbacks, and the study examines the relation between change leadership from leaders and employee commitment to change. A factor analysis was perfor-

Table 4: Overview of quantitative studies at meso level

Author(s) and year	Country and organization	Focus	Methods and samples
Griffin et al., 2004	Australia Public organization	Studies whether organizational change has different effects on group leadership and morale depending on who (at what level) initiates the change	Longitudinal study. Questionnaires (t1: n = 3,355, 73%; t2: n = 3,314, 72%) to various staff categories within a public organization
Koivisto et al., 2013	Finland Public organization	Studies the significance of whether the organization and leaders are perceived as fair during a change	Cross-sectional study. Questionnaires (n = 109, 54%) to all employees in a public organization
Neves 2011	Portugal 2 public organizations	Studies how commitment to change develops and the importance of the competence and support of the leadership or leader	Cross-sectional study. Questionnaires (n = 122, 77% and n = 88, 77%) to all employees in 2 public organizations that underwent major changes (town hall and university)
Rubin et al., 2009	USA 7 factories/industries	Studies how the leader's attitude towards change affects employees' attitudes towards change	Cross-sectional study. Questionnaires to managers at various hierarchical levels (n = 106, 80%) and their employees (n = 933) at 7 different factories
Szabla et al., 2014	USA Graduate school	Studies managers' competence in selecting the correct action strategy depending on the nature of the change	Cross-sectional study. Questionnaires (n = 88, 33%) to doctoral students and PhDs at an HRD graduate school
van der Voet 2016	The Netherlands Municipal department	Studies the relation between immediate supervisor's change leadership and employee willingness or commitment prior to change in bureaucratic (public) organizations	Cross-sectional study, Questionnaires (n = 515, 36%) to employees in 2 municipal entities (administrative staff excepted)

med to ensure that the variables fell in under the prospective factors in a SEM model that would then be used for the actual analysis. The results show indirect relations via relevant communication and the level of participation. The results also show that support from one's immediate supervisor is important, even as change leadership is needed at every level in the organization.

Koivisto, Jukka and Platow (2013) study the importance of fairness during change. One leadership trait that is examined relates to whether both the leader and the organization are perceived as fair by the employees. The study consists of two substudies, the first of which is based solely on relations, while the second builds further upon the relations found in the first substudy. The second sub-

study was conducted in a different population, university students, where it proceeded on the basis of a scenario. The students had to answer a questionnaire concerning five fictitious events, and report on how they would react in various work situations. The results were analysed using variance analysis, which showed that when employees perceive that their leader is treating everyone in the work group fairly, they feel less threatened by change.

The ways in which the leader's own attitudes towards change affect the attitudes of the employees was studied by Rubin et al. (2009). Both employees and managers took part in the study. The employees also had to answer questions about and evaluate their supervisors. The results underwent SEM analysis. The results show that leaders who have a cynical attitude towards change have a negative impact on employee attitudes, and degrade their performance. A cynical attitude towards change is also negative for the leader himself, as management and higher-ranking executives will rate that leader's performance and commitment as low. Rubin et al. (2009) further believe that the results also indicate the opposite, i.e. that a leader who believes that a positive change is possible is more transformative in his/her leadership and is productive, which in turn has a positive effect on the employees.

Griffin, Rafferty and Mason (2004) study differences in group attitudes towards leadership and morale during organizational change as a function of which hierarchical level in the organization initiated the change. The study is longitudinal and is based on two public organizations that are undergoing a major change. The number of respondents exceeds 3,000, with a response rate above 70% (t1 and t2), and analyses were performed using SEM. The results show that the hierarchical level on which a change is initiated will have different effects on how that change is received. Change initiated by a supervisor or lower level manager receives more support and positive response from the work group than if the change comes from the executive level.

Organizational change competence – macro level

Two macro-level studies have been included, one from Norway and one from the Philippines. The studies have different foci, with Lines' (2005) study examining organizational change from a learning perspective, while the study by Bordia et al. (2011) examines how organizational and change leadership can be related to employee attitudes and mobility at a university in the Philippines.

The study by Bordia et al. (2011) is based on a model, Poor Change Management History (PCMH), which was developed by the authors and tested empirically in the study. The study examines the effects of PCMH on job satisfaction, trust, willingness to change jobs and openness to change, as well as whether this can affect actual turnover in the long run. The study begins by describing the creation of the model and its variables. The model is then tested empirically on two measurement occasions via SEM analysis. The results of the study show that previous experience gained from poorly implemented changes in the organization (the PCMH model) leads to lower trust, lower job satisfaction and less openness to (new) changes, greater cynicism, increased willingness to change jobs, and predicted actual turnover two years later.

The Norwegian study by Lines (2005) examines how social accounts (social values or policies in effect throughout a company) and participation during change affect organizational learning. The author developed a model based on literature summaries, and analysis was performed using hierarchical regression. The results show that social accounts have a direct positive relationship with organizational learning.

This applies to participation as well, although Lines (2005) believes that increased participation can at the same time reduce the significance of social accounts in organizational learning, i.e. social accounts become less significant. According to Lines (2005), this may indicate the significance of clarifying and working with the company's values and expertise, thereby involving the employees in order

Table 5: Overview of quantitative studies at macro level^a

Author(s) and year	Country and organization	Focus	Methods and samples
Bordia m.fl. 2011	The Philippines University	Studies how poor change leadership can affect employee attitudes (trust, job satisfaction, cynicism, openness to change) and actual turnover, and tests a model	Longitudinal study. Questionnaires to employees (n = 124, 62%) in various academic departments
Lines 2005	Bordia et al., 2011	Studies how different types of organizational changes can lead to organizational learning	Cross-sectional study. Questionnaires to middle managers (n = 88, 48%) in banking, insurance, shipbuilding and furniture-making who participated in a leadership programme

to foster greater understanding throughout the entire change process.

Summary of the quantitative studies

This literature review regarding change competence includes thirteen quantitative studies, seven cross-sectional studies and six longitudinal studies. Five studies are at the micro level, six at the meso level and two at the macro level. Three studies are Scandinavian (one is from Sweden), two studies are from Western Europe, two are from Australia, five from the USA and one is from the Philippines. The studies were published from 2004 to 2017. Based on our definition of organizational competence (an organization's ability to apply both existing competence within the organization and the ability to develop competence in order to meet needs associated with change), the quantitative studies described above qualify on the basis of a relevance and quality review. The studies have slightly different foci, but there are some common denominators among them:

- a. Common to just over half of the studies is the importance of leadership during a change to run or “navigate” correctly through the change and avoid or mitigate resistance or obstacles.
- b. Employee attitudes towards change, which are often affected by the leader's attitude.

- c. The conditions surrounding change, where autonomy, participation, information and communication are noted as key factors in relation to change.
- d. Competence and organizational learning in relation to change.

The majority of the quantitative studies emphasize the importance of leadership in relation to change. One key trait noted in the study by Szabla et al. (2014) is that leaders should be able to interpret, understand and decide which strategy is best suited at various times during a change. The leader's attitude towards change can also affect that of the employees. A leader who is positively disposed towards change also has a positive effect on employee attitudes (Rubin et al., 2009). However, Griffin et al. (2004) note hierarchical differences, where the results indicate that changes initiated by lower-level managers receive more support and response from employees than do changes coming from upper management. Favourable traits in a leader during change are identified in a number of studies. A leader should be fair (Koivisto et al., 2013), informative, give support and promote participation (van der Voet, 2016). A leader who actively works with and supports their employees can thereby mitigate change resistance (Jones & van de Ven, 2016). This can be important, as Bordia et al. (2011) stress

the importance of the outcomes of earlier changes in the organization.

Employee attitudes towards change also have a major impact in terms of whether a change will be successful or not. Augustsson et al. (2017) study how openness to change affects participation in a training initiative prior to a change. Openness to change and how the change is implemented are good predictors of how well new competence will be assimilated and used. The ways in which employee attitudes and norms predict their intentions to support an organizational change were examined in the study by Jimmieson et al. (2008). The authors also note the importance of group norms, as many identify with their group. The study mentions information, good communication and participation as significant factors that can enhance intentions to support activities and participate in the change work.

The conditions surrounding change are addressed in several of the studies. Which of the aforementioned factors have positive significance for employees during a change? The study by Hornung and Rousseau (2007) points to the importance of autonomy in one's everyday work. Autonomy has a positive effect in terms of self-efficacy, in taking the initiative and in actively supporting and taking part in the change. Kim et al. (2011) believe that different conditions have different significance over time. Employers consequently need to actively support their employees and involve them throughout the entire change process.

Competence and organizational learning in relation to change are examined in two of the studies. Szabla et al. (2014) emphasize the importance of a leader's competence in terms of choosing the right strategy for different types of changes, and the ability to interpret and understand what is happening and then choose the right tactic or strategy. Neves (2011) believes that employees who consider their leader competent also perceive a higher degree of support from him/her. Leaders who are considered to be highly competent and supportive during a change in turn enhance employee commitment to the

change (Neves, 2011). Lines' (2005) study of organizational learning during change shows that social accounts and participation each relate positively with organizational learning, but that the importance of social accounts decreases with increased participation. Companies should consequently clarify and work with their values and involve their employees in order to achieve greater understanding throughout the entire change process.

Description of studies using multiple methods

The two studies included in the literature review in which multiple methods were used are presented in the following section. Both studies availed themselves of both quantitative and qualitative data. An overview of the included studies is presented in Table 6.

The study by Bartunek et al. (2006) examines how a change is received by those who have to implement change that others have initiated. The population consists of nurses at an American hospital who are undergoing change at the behest of a government agency.

The change entails that the nurses will have greater opportunity to influence and control their work, more responsibility, greater trust and a means of participating in decision-making processes. The data consist of archival data from the nursing association/nursing council (membership), opinions from experts/researchers who monitored the change process, and questionnaires provided to the nurses. The questionnaires consisted in part of open questions. The results show that the nurses perceived the change as positive or consistent. The changes of which they were informed or the significance they would have for their jobs were highly consistent. Their positive expectations were assimilated, as they were given more responsibility and allowed greater involvement in decisions. The statistical analyses that were conducted (logistic and multiple linear regressions, SEM) showed that the implementation of shared management was perceived to offer both advantages and disadvantages, but in differing amounts,

depending on how participatory the individual had been in the change. This shows how important it is for leaders or change agents to offer a holistic picture of the change and how it is to be implemented, so as to increase understanding and insight into the advantages and disadvantages that the change will bring.

Kavanagh and Ashkanasy (2006) study the importance of leadership and the leader's change strategies for organizational culture and employee acceptance of change during mergers of several departments or schools at three different universities in Australia. The authors follow the change process at the three universities over a seven-year period, and data are collected on five different occasions, i.e. questionnaires sent to various staff groups (t1 and t2), interviews with three people at the school level, questionnaires sent to various staff groups (t3) and 60 interviews with various staff groups. The questionnaires were sent out every other year over a period of six years, and included questions about the organizational culture (power, roles, tasks/performance, support). Data were analysed using variance analysis. Interviews were conducted in years six and seven. Three interviews were conducted in year six with one person from each university who was involved in the change, while 60 interviews were conducted with various staff groups in year seven. The interview questions were posed with various response options or ratings, and analysed quantitatively. The results show that the impact on the organizational culture and thus on employee perceptions of autonomy and limitations or control varies depending on the leader's choice of which change strategy to employ. The study shows the importance of a leader's ability to run or lead a change process. In connection with consolidations and mergers the change is often forced upon the leader, and it takes time to bring about a change in the organizational culture. Important traits in a leader thus include sympathy towards the employees and communicating to ensure that the change process is transparent.

Summary of studies with multiple methods

Both the studies track a strategic change initiated at the agency or management level. The studies show that a major change with a view to altering the culture of an organization and/or its working methods takes time. Important factors in promoting participation include offering a holistic picture of the change, providing information and communication. Kavanagh and Ashkanasy (2006) also show the importance of a leader's ability to switch between different leadership strategies during a change. Bartunek et al. (2006) believe that the ways in which a change is communicated, how it will proceed, and its advantages and disadvantages increase the understanding of why it is being made.

Description of qualitative studies

The qualitative studies included in the literature review are described below. They are presented based on the headings micro, meso and macro level. A total of 12 qualitative studies have been included, one of which (Valleala et al., 2015) is included at both the micro and macro level, as it presents results at both levels. With respect to qualitative studies there is no pronounced interest in examining and proving causal links, but rather such studies often have to do with examining an area of research, testing different theories and verifying or disproving theories via, e.g., case studies. Qualitative studies are further characterized in that they have exploratory and descriptive aims, as opposed to quantitative studies, which often have clarificational aims (Silverman, 2015).

Organization change competence

– micro-level

Here we present the micro-level qualitative studies that were included in the literature review. There are six studies that meet the established relevance and quality criteria, i.e. (Hetzner et al., 2008; Huy, 2002; Rowland, et al., 2018; Stensåker, Falkenberg, & Grønhaug, 2008; Stensåker & Meyer, 2012; Valleala et al., 2015). The studies differ: four of them focus

Table 6: Overview of studies using multiple methods

Author(s) and year	Country and organization	Focus	Methods and samples
Bartunek et al., 2006	USA Hospital	Studies how change initiatives are received by "the recipients" (in this study nurses)	Cross-sectional study. Data consist of archival data, expert opinions (n = 4) and questionnaires (n = 501, 48.5%).
Kavanagh & Ashkanasy 2006	Australia 3 universities	Studies the importance of leadership and change strategies for organizational culture and how individuals accept change (a departmental consolidation)	Longitudinal study, triangulation, 5 data-gathering occasions; 3 Quantitative (questionnaires (t1: n = 203, 38%; t2: n = 152, 73% of 203; t3: n = 123, 81% of 152)) and 2 Qualitative (3 and 60 interviews with employees at all campuses).

on employee reactions to planned changes, one addresses the importance of middle managers in change processes, and one deals with learning in the relationship between healthcare staff and patients in planned changes. An overview of the included studies is presented in Table 7.

Four of the included micro-level studies deal with change competence, i.e. Hetzner et al., 2009; Stensåker et al., 2008, Stensåker and Meyer 2012 and Valleala et al., 2015.

The first of these (Hetzner et al., 2009) studies employee perceptions of planned changes in their workplace, opportunities for learning in change processes and which factors support/limit such learning opportunities. The change in question has to do with the introduction of a new standardized working method for client consultations. The study is based on interviews with banking advisers at a German banking office. One key theoretical starting point is that changes in the workplace and changes in job duties are seen as being closely tied to learning.

The change affected the advisers' jobs in a number of ways. Following the change, the work was perceived as more routine-based, (time-) intensive and complex. The change also entailed certain opportunities for learning, e.g. a new computer programme, and opportunity to immerse themselves in a new

service offering for their clients. Part of this learning led to greater interaction between the advisers. What important supportive/limiting factors emerged? Four different groups of factors are described:

- a. The importance of participation in the change. Most of the advisers did not feel that they had participated.
- b. Access to support and competence. Because the internal support in the bank functioned poorly, the advisers instead drew support from one another to move forward in the new working method. The brief training that was conducted were perceived as inadequate.
- c. Similarities in perceived effects of the change. Most of the advisers felt that they were affected in roughly the same ways, which contributed to greater cooperation among them.
- d. Job performance assessments. The change led to adviser job performance being assessed individually to a greater degree, which resulted in greater competition within the group, which in turn hampered learning.

The second study (Stensåker et al., 2008) examines how employees are affected by planned change, particularly in terms of sensemaking

Table 7: Overview of qualitative studies at micro level

Author(s) and year	Country and organization	Focus	Methods and samples
Hetzner et al., 2009	Germany Bank	Studies how employees perceive planned change and learning opportunities	Interviews with 10 client advisers
Huy 2002	USA Units in a major IT company	Studies how middle managers can contribute to employees maintaining an emotional balance during radical changes	Longitudinal case study, snowball sample, 265 interviews with multiple staff categories, mostly upper and middle management
Rowland et al., 2018	Canada Change in different units in a healthcare system	Studies changes in healthcare with a view to increasing patient participation in their care	Case study, 26 interviews with staff and patients from various units
Stensåker et al., 2008	Norway Three units in a major company	Studies how implementing planned changes affects sensemaking among employees	Studies how implementing planned changes affects sensemaking among employees
Stensåker & Meyer, 2012	Scandinavia 10 companies in Scandinavia	The importance of previous experience with changes and how employees react to organizational change	Two case studies of organizational change in 10 companies. 50 interviews with various staff categories
Valleala et al., 2015	Finland Hospital, A&E	Studies learning opportunities in a planned change	Longitudinal case study of A&E nurses, observations at meetings and interviews (16)

in the change process. The studied change occurred at three different units in a major Norwegian company in the oil industry, and the study was a longitudinal case study lasting four years, based on numerous interviews and observations. The change had to do with streamlining structures, work processes, leadership styles, control systems and the implementation of a new IT system. The change was described by those responsible as the biggest and riskiest change project in the company's history. The study is based on the term sensemaking (Weick, 1995), and may be described as the construction (and reconstruction) of various involved parties to create meaning with a view to understanding the change in question. The related term sensegiving is described as a process that is intended to influence sensemaking among others in the organization so as to redefine the organizational reality. The results from the three different units exhibit important differences.

In the unit designated "business unit 1"

(BU1) the changes were implemented in stages, one change at a time and with limited employee participation. As a result, the employees were given no opportunity to gain a holistic understanding of the change. This approach also led to the changes dragging out over time. A different strategy was chosen for BU2, one characterized by greater participation and careful and highly detailed planning of the change, which also caused the employees to have problems understanding it in its entirety, i.e. when and how changes would be made. Strong elements of sensegiving from the managers were evident in both BU1 and BU2. In BU3 they used an approach based on greater participation, dialogue and discussion between parties, particularly between company and trade unions, and especially during the planning process. Here the sensemaking process resulted in a more collective understanding of the change, which was then implemented in stages. The authors believe that the study supported the contention that

participation in planned change processes fosters motivation and can be viewed as support for more collective sensemaking with respect to planned organizational changes. The study also points out that there is a danger in viewing participation in an organizational change (e.g. during the planning phase) as a decisive factor for successful change. There are several reasons for this. Participation in planning per se is often not enough; it is when changes start to be implemented that problems can arise. Participation is often subject to pressures, so that a lack of time or internal/external needs may limit its quality. Plans seldom make good starting points for exercising participation, not least because they are often altered or discarded.

In the study by Stensåker and Meyer (2012) the focus is on employees' previous experiences with major organizational changes, and how they could be significant in terms of employee reactions during ongoing organizational changes. The study is based on two case studies in which interviews were conducted with representatives of various staff categories at ten Scandinavian companies. The results show that those who had previous experience with major organization changes exhibited greater solidarity during ongoing changes. This group consisted both of those who accepted or supported the change (acceptance) and those who, despite a more negative take on the change, assumed a stance of "I don't like change, but it's no doubt best to be included". In other words, they developed a cynical attitude (p. 114). The group with experience was more uncertain and frustrated prior to the relevant change and underwent a significantly longer process in terms of developing solidarity with the change. Other important factors in understanding the extent to which the employees developed solidarity with the change related to the types of experiences that occur in the actual change process (positive or negative), the individual's own change capability and the degree to which the individual can cope with uncertainty and a low level of control. Positive experiences from the

change process appear to contribute to greater solidarity, while negative process-related experiences lead to a lower level of solidarity (even cynicism). The authors describe three key contributions to the research field. First, change resistance cannot be understood solely on the basis of individual personal characteristics and attitudes, but should also be understood in relation to previous experiences with organizational changes. Second, the types of experiences derived from change that are relevant also play a role. Some experiences appear to contribute to cynicism, others to acceptance. Third, the study shows that change capability is present and can be developed at the individual level. Managers and supervisors have an important role to play in developing change capability among employees.

The results also indicate that participation in change processes is key in terms of their outcomes. The meaning of participation in the study is defined as more multifaceted than in similar studies, as both problem-solving and decision-making stood out as important aspects of participation for the nurses in the change process. Because the nurses had a degree of freedom to present their self-perceived problems and propose changes in their working methods, this had a certain (albeit limited) effect on how the changes were implemented. According to the authors, expanding opportunities for individual learning in change processes requires 1) greater participation in planning and decision-making, 2) identity work, i.e. support for changing views on job duties and work roles and 3) training as support for the introduction of new work routines.

The process fell short on all of these points.

Rowland et al. (2018) also study changes in healthcare with a view to increasing patient participation in their own care in Ontario, Canada. The healthcare system underwent planned changes with a view to increasing patient cooperation in their own care. The studied group consists of so-called patient advisers, i.e. people who had experience as

patients and were now retired or sick-listed. The study does not proceed on the basis of any explicit theory, but is said to be inspired by Latour and Foucault. A total of 20 people were included in the study, 14 of whom were patient advisers, the rest healthcare staff. Analysis of the results shows that the importance of patient advisers can be described from three different subjective positions, each of which also contributes to their legitimacy in the organization. The first position relates to how the patient advisers' experiences contribute a greater understanding of how the care process works. The second position is related to the first, in that the patient advisers become trustworthy on the strength of their convincing narratives about their experiences. Based on a third subjective position, the patient adviser may be understood as a critical friend who contributes with constructive criticism while at the same time keeping their distance from the organization. All in all, the results show that it is possible to learn from patient advisers and allow their experiences to have an impact on ongoing changes in the organization.

There is, in many organizations, a tension between the need for continuity in everyday life and the need for change, a tension which is especially evident at the individual level. Employees seek predictability and reliability, while also desiring new stimulus and personal growth. This is turned on its head when organizations undergo radical change. Huy (2002) is interested in the role that middle managers play during radical change, and in particular in how they are able to balance employees' emotional needs during a change. One point of departure is that individuals appear to be more inclined to participate in collective initiatives, such as implementing major changes, when there is confidence in, support from or identification with the organization. Some of the challenges posed by radical change have to do with supporting emotional balance. The study was conducted at a major American IT company as a longitudinal study over three years, based on 265 interviews with a number of staff categories, mostly senior manage-

ment and middle managers. The company in question was compelled by market deregulation and increased global competition to undergo several radical changes, i.e. replacement of its leadership team and CEO, a divisionalization of the company and staff cutbacks. The results of the study show that the middle managers play a role in two important respects. Because of their awareness of the staff's emotional needs during the change, the operations could continue without disruption. The more experienced middle managers also had the capacity, by trial and error, to learn more about what was required of them when the company underwent major changes. Their learning repertoire was expanded by balancing the staff's emotional needs in the tension between continuity and change.

Organizational change competence – meso-level

The following section presents the qualitative meso-level studies included in the literature review. They comprise a total of three studies that meet the relevance and quality criteria, i.e. Balogun (2003), Balogun and Johnson (2005) and Westerberg and Tafvelin (2015). The studies differ from one to the next, and address sensemaking among change agents, middle managers and change intermediaries, while one focuses on how leaders can foster commitment to change. An overview of the included studies is presented in Table 8.

Middle managers have traditionally been viewed as links between upper management and the operational core of the organization, and as communicators of information upward and decisions downward in a company. But they are also often seen as a group or level in organizations that has a negative and braking influence on organizational change, and middle managers are often eliminated in those cases where reorganization occurs in the direction of a flatter organization. The study by Balogun (2003) examines, in three case studies, the importance of middle managers in a comprehensive change process that involved changes in structures, systems, working

Table 8: Overview of qualitative studies at meso level

Author(s) and year	Country and organization	Focus	Methods and samples
Balogun 2003	Great Britain Newly privatized hospital	Middle managers' role in major organizational changes	Case studies of three units, journals, telephone interviews and interviews with 26 middle managers
Balogun & Johnson 2005	Great Britain Newly privatized hospital	Middle managers' sense-making during organizational changes	Case studies of three units, journals, telephone interviews and interviews with 26 middle managers
Westerberg & Tafvelin 2015	Sweden Home care service	Leaders' importance for commitment to change	Longitudinal study, two rounds of interviews with supervisors (10) and middle managers (8)

methods and the organizational culture. Three aspects stand out: the managers' perceptions of the ongoing change, their various roles in the implementation process, and factors that respectively supported and impeded the middle managers in assuming new roles. Empirical data were derived from case studies of three units in a newly privatized hospital. The change was driven in top-down fashion by senior managers, with support from consultants. The middle managers experienced a shift in their roles and relationships during the change. From previously having had distinct roles and job descriptions, they now had to develop new roles and working methods to be able to support the ongoing changes. The results show that the middle managers in a change process have to cope with four challenges. The most important one (and one that affects the others) has to do with sensemaking (Weick, 1995) in relation to their own new role. The other challenges have to do with supporting others during the change, keeping the daily operations going, and implementing the adopted changes. Sensemaking in the new role is largely a social process based on discussions with colleagues and higher-ranking managers, and an arena in which important collective learning occurs. The results further indicate that, in those cases where it is possible to identify change resistance among middle managers, such resistance may be related to insufficient organizational resources – first and foremost a lack of time and a lack of support for the middle managers. Because the

duties of the middle managers largely consist of interpreting, understanding and translating different meanings of change between various parties, the author believes that the term change intermediary better encapsulates the role of the middle manager. Another study by Balogun and Johnson (2005) calls into question the customary depiction of planned change as rational and goal-based, and describes it instead as a non-linear process, context-dependent, hard to predict, and one that often leads to unanticipated results. The focus here is also on the organization described above, i.e. a newly privatized hospital studied in three case studies via journals and interviews with middle managers and senior managers, and where a large share of the theoretical frame of reference is based on Weick (1995). The results are analysed in two steps. The ways in which the middle managers form a subjective understanding of the change is described in the first step. In the second, the middle managers' sensemaking is tied to the results that gradually emerge ("emergent change outcomes"). The authors distinguish between two types of sensemaking processes, i.e. vertical (between middle managers and higher-ranking managers) and horizontal (within the group of middle managers). The results show that the lion's share of the sensemaking occurs among the managers (horizontally) without the presence of higher-ranking managers, rather than with the higher-ranking managers (vertically). In addition, vertical sensemaking often bears

upon formal planning and the goals associated with the change, while the horizontal sensemaking is more informal in nature and bears upon changes in one's job as a middle manager. While the vertical sensemaking is often tied to formal documents and plans, the informal sensemaking also includes rumours, stories and gossip. The results further indicate that there are major challenges in driving extensive planned changes towards set goals in a controlled manner. Against the background of these results, leading change is not about steering, managing and controlling, but rather about supporting and creating favourable conditions for a more collective sensemaking process with respect to the purpose, objectives and anticipated results of the change.

Home care services constitute an important part of elderly care in Sweden and have undergone major organizational changes in recent years. A number of studies indicate that working in home care services has become more stressful for the care personnel, and managers have been shown to be very important with regard to their working environment. A study by Westerberg and Tafvelin (2015) examines the importance of managers in creating commitment to change in home care services. The study was conducted in a Swedish municipality and is based on interviews with supervisors and middle managers that were conducted on two occasions (a year apart). The questions posed in the study have to do with leaders' views on change and how they have altered over time, which factors have affected their attitudes towards change, and the presence of stress at work. In the first interview the leaders expressed heterogeneous views (both negative and positive opinions) vis-à-vis the planned changes, views that became more similar over time. A number of contributing causes of this increased homogeneity are discussed. The most emotionally positively committed leaders came to be confronted with several obstacles to the change, while others who were more negatively disposed from the start gradually came to accept and consent to the change.

Other reasons for the eventual convergence in perceptions are also tied to managerial training that was conducted between the two interviews, as well as to meetings that the management held every other week during the studied period. One general conclusion is that attitudes towards change are not givens, but rather alter over time, and that regular meetings between different levels in the organization can contribute to greater consensus.

Organizational change competence – macro-level

The following section presents the macro-level qualitative studies included in the literature review. They comprise a total of four studies that meet the relevance and quality criteria, i.e. Alänge and Steiber (2009); Clark et al. (2010); Valleala et al. (2015) and Wylie and Sturdy (2018). These studies differ from one to the next and address the importance of the board of directors in sustainable change, the meanings of organizational identity in change processes, change and learning opportunities at the organizational level, while one study identifies and discusses collective forms of change agency. An overview of the included studies is presented in Table 9.

Previous studies of major planned changes in organizational systems show that a large share fail to achieve their goals. For example, the introduction of a quality management system (TQM, Total Quality Management) achieves its goals in only 10–30 per cent of cases. One important factor cited in this context is that major organizational changes take a long time, often longer than the CEO and upper management stay with the organization. Against this background, Alänge and Steiber (2009) studied the role that the board of directors plays in terms of sustainability in the implementation of major organizational changes. The study is based on three case studies that address the introduction of a new quality system (TQM) at a hospital and new production systems (Lean Production) at two companies.

The results show that the CEO's commit-

Table 9: Overview of qualitative studies at macro level

Author(s) and year	Country and organization	Focus	Methods and samples
Alänge & Steiber 2009	Sweden Two large industrial companies and a hospital	The importance of the board for sustainability in organizational changes	Three case studies. Interviews (18) with CEOs, board chairpersons, board members and other key personnel
Clark et al., 2010	USA Two healthcare organizations	Importance of the organizational identity in successful organizational change	Longitudinal case studies, interviews, participatory observation and document studies. Feedback of results to respondents
Valleala et al., 2015	Finland Hospital, A&E department	Studies learning opportunities in a planned change process	Longitudinal case study of A&E nurses, observations of meetings and interviews (16)
Wylie & Study 2018	Great Britain 24 organizations from private and public sector	Identifies, describes and assesses various types of collective change agents	Case studies. Interviews with 96 change agents in various organizations

ment to the planned change plays a major role, but that the board of directors is also important in a number of important respects if the change is to endure. The board should understand its own role as being significant in contributing to the sustainability of a change. The work done by the board in supporting organizational changes, both at and between meetings, should be characterized by an open, inquisitive and cooperation-based culture, rather than one with a unilateral focus on control. Furthermore, the board should possess sufficient experience and competence (or see the need to strengthen its competence) if it is to be able to support an organizational change and apply its collective competence in supportive board work. The authors conclude by identifying a number of indicators that can be used to assess the ability of a board to serve as a support for sustainability in organizational changes, i.e. the board's collective experience with governance, mapping of its members' networks, i.e. which other competencies exist within these networks, previous collaboration with researchers, the number of board meetings per year (usually low), the number of contacts between board and CEO,

and the presence of a plan to replace a CEO who suddenly departs.

The scope and magnitude of planned organizational changes are described by Bartunek and Moch (1987) on three different levels, i.e. "first-order, second-order and third-order change". First-order change is minor in scope, e.g. the implementation of new routines. The second order includes more sweeping changes, such as the introduction of new strategic goals. The third order involves comprehensive and radical organizational changes, such as corporate mergers. This latter type of change is studied by Clark et al. (2010), more specifically a merger of two healthcare organizations that were studied longitudinally based on observations, interviews and documents.

The point of departure is the issue of what happens to the perception of the organizational identity when two organizations are merged, or as the study puts it, "Who are we as an organization?" The study is based on theories about sensemaking and sensegiving, (Weick, 1995), where particularly sensegiving is used by upper management to influence sensemaking among the staff. Presumably the most important challenge facing the leadership

teams in the two organizations is to create meaning for their primary stakeholder and counterpart, their future partner. From this perspective, a merger depends largely on the ability of the most senior leadership groups in each organization to reorient their current thinking and act to promote sensemaking among the members of both organizations. People in each organization that is to be merged must consequently either revise or refrain from their existing perceptions (including their organizational identity) and instead find new and shared perceptions of a new and transformed organizational identity. The two organizations had major problems in moving forward in this process; they were unable to answer the question “Who are we as an organization?” The process continued without major progress until one manager suggested, almost by chance, “Let’s call the future organization Newco, but that’s just temporary and non-binding”. Talking about the future organization as a temporary construction and as non-binding enabled the process to move forward. The temporary construction of the future organization was sufficiently vague to admit different points of view, but not so vague that it was perceived as completely alien and threatening. The picture of the future organization served as a transitional identity, and as a transitional object (boundary concept) that could be used to bridge differences in perceptions between managers and employees in the two organizations.

The study by Valleala et al. (2015) is focused on elucidating employee learning opportunities in organizational change processes. The empirical data are based on interviews with A&E nurses in supervisory positions (“chief duty nurses”), and on observations made at meetings and in the daily work at a hospital. This longitudinal study lasted for 2.5 years. It was presented earlier in the section “micro-level”, but it appears again here because it also describes opportunities for organizational learning.

At the clinic, experienced nurses work as supervisors during their shifts. The change

means that the A&E nurses are being given new job duties, and that their responsibilities and authorizations are being changed. A fast track system is also being introduced to treat minor complaints. The planned changes were discussed at a number of staff meetings, but not all had the opportunity to attend, due to shift changes. The majority of all the important decisions were taken in planning groups consisting of managers. The changes that were made were met by the nurses with some uncertainty as to their results, but there was no change resistance. Participating in parts of the change process increased the nurses’ opportunities for organizational learning, particularly in the preparations for and discussion phases of the change, in that they expressed problems and discussed solutions. The most prominent among the problems discussed was the shortage of nurses in the A&E department, and proposals for new methods were put forth, such as changes in the chief duty nurse model. The learning opportunities at the organizational level were expanded, and proposed solutions were noted and taken into consideration by the managers in their efforts to develop the clinical work. The proposed new working method led to changes in organizational roles, competence and practice.

Studies of organizational changes often cite an interest in so-called change agents. The term derives from Lewin and was a key term in the growing OU movement. Change agents are often individuals present either within or outside the organization, e.g. in the form of consultants, and an interest in change agents is often expressed in studies of planned change. Such agency is tied to single individuals, often in the form of managers who assume the role of change agent. Criticism has been levelled at this research focus on change agents as being overly individual-based and interested in change agents as kinds of “heroes” (Caldwell, 2003). In the study by Wylie and Sturdy (2018) interest is instead focused on collective forms of change agents, who are defined as individuals in permanent positions who understand that a substantial part of

their role involves managing change.

They work on defined projects or programmes for change, and as part of a formal team or entity that has a defined responsibility for delivering change (p. 317). The study by Wylie and Sturdy is based on a large number of interviews with change agents in 24 different organizations (private and public). Four different kinds of collective change agents are described in the results, i.e. transformers, specialists, enforcers and independents.

The groups or entities differ in two key respects: a) their degree of embeddedness in the organization (from fully embedded to low embedment) and b) the scope of the change (of all or parts of the organization). Transformers (the least common form) must deliver major changes across the entire organization; they are often independent of other organizational entities (low embedment) and are of a temporary nature, i.e. they are dissolved once the task is completed. Transformers are often met with distrust by other entities, as the responsibility for the results and effects of the change are often unclear. Example: a group that is tasked with carrying out a drastic staff reduction. Specialists have responsibility for more limited changes, and a higher degree of embedment. Example: IT and HR departments. They are experts in their respective fields and are assigned specific tasks, but may meet with resistance depending on traditional perceptions, such as notions about “what HR should concern themselves with”. Like transformers, enforcers have a focus on the overall organization in their tasks and a high degree of embedment in the organizational structure, and often comprise a group of people close to the most senior managers that is used for various investigational purposes. Because of their proximity to management, enforcers often meet with suspicion from other parts of the management (“sitting on management’s knee”). The last group, independents, consists of groups that are used as drivers for limited tasks within limited parts of the organization. They may also accept assignments outside of their own organization to contribute to

their own financing. By identifying groups of collective change agents, the authors claim that it is possible to see a shift with respect to the meaning of change agency in the direction of more collective forms, a shift that has been studied to only a limited extent heretofore.

Summary of the qualitative studies

This organizational change competence literature review includes a total of 12 qualitative studies. Six of these are at the micro level, three at the meso level and three at the macro level. They differ in terms of both what is being studied and how. The studies were published between 2002 and 2018 and were conducted in Scandinavia (6), with two in Sweden, three in Western Europe, two in the USA and one in Canada. Earlier in the report we described organizational competence as the ability of an organization to apply both existing competence within the organization and the ability to apply and develop competence in order to meet a need for change. One important issue is then what the reviewed qualitative studies contribute in relation to organizational change competence. As noted above, the research within the field appears to exhibit major variations. There are three general areas in the summary that may be described as key in relation to organizational competence: 1) management, managers and change agents, 2) participation in change processes and 3) learning opportunities in change processes.

The importance of the board of directors in applying an organization’s change competence is illustrated by Alänge and Steiber (2009). By studying leadership groups in three enterprises, the authors determined that the commitment of the leadership group and the CEO to the planned change had major significance, but that the board was also important to the sustainability of changes. The board had an understanding of its own role in terms of contributing to the sustainability of the changes made.

The study further showed that the board should contain sufficient experience and competence (or see the need to strengthen

its competence) to be able to support an organizational change, and have the ability to apply its collective competence and channel it into its supportive board work. A number of studies point to middle managers and first-line managers as important in reducing change resistance, increasing commitment and getting personnel involved in the planned change (Huy, 2002; Stensåker et al., 2008; Balogun 2003; Balogun & Johnson 2005; Westerberg & Tafvelin, 2015). The study by Huy (2002) shows that managers can support change processes by being attentive to the needs of the personnel and, through learning, increasing their own competence in that regard. The studies by Balogun (2003) and Balogun & Johnson (2005) focus on middle managers and the importance of sensemaking in change processes. The tasks of middle managers and supervisors in planned change consist largely in interpreting, understanding and translating different means of change, both for themselves and in relation to other managers and employees. The manager may be viewed in this capacity as a “change intermediary”, i.e. someone who acts as a go-between and intermediates the meanings of the change (Balogun, 2003). The study also states that the role of the middle manager in a planned change is not primarily to steer, manage and control, but rather to support and create conditions favourable to a more collective sensemaking process in which important perspectives, experience and anticipated results are incorporated as key elements. A number of studies also touch on the phenomenon of change agents, particularly Wylie and Sturdy (2018). The authors attempt to get away from the depiction of the change agent as an individual (often manager) and instead identify and analyse various forms of collective change agents, where the capacity to be a change agent is not tied to any individual but rather is viewed as being spread across the organization.

Another area involves participation in change processes. Multiple studies have a focus on the importance of participation in planned organizational change (Stensåker et

al., 2008; Stensåker & Meyer, 2012; Valleala et al., 2015). The results from the study by Stensåker et al. (2008) show how participation in planned change processes contributes to increased employee motivation, while also providing important support for more collective sensemaking in planned changes.

The study also points out that there is a danger in viewing participation in organizational change as a decisive factor for successful change.

Participation in planning per se is often not enough, as it is when changes begin to be implemented that problems can arise. Participation is often subject to pressures, and a lack of time or internal/external demands can often limit participation.

Furthermore, plans seldom make good starting points for participation, particularly given that they are often altered or quite simply abandoned. In summary, participation in change can be viewed as a necessity, but not as enough of a factor in ensuring the success of planned organizational change. In the study by Stensåker et al. (2012), participation is also considered in relation to the individual's previous experiences with organizational change. Such previous experiences were shown to have a bearing on the degree to which solidarity with the change developed, but it was also dependent on the types of experience gained in the actual change process and the individual's own capacity for change.

The third area has to do with change processes and learning opportunities. That such an area can be identified may be related to the fact that many studies of planned changes in organizations view change as educational (Soparnot, 2011). This recurs in a number of studies (Hetzner et al., 2009; Huy, 2002; Valleala et al., 2015). Many of the studies in which the term sensemaking is key also have strong ties to a learning perspective on organizational change, as is evident in the study of change in bank employees' job duties (Hetzner et al., 2009). Even though the change was made in top-down fashion and led to the introduction of a standardized working method, it also led to greater cooperation and learning opportu-

nities among the employees. In the study of the role of middle managers in comprehensive change at an IT company, Huy (2002) shows that the more experienced middle managers had the ability to learn more about what was required of them when the company underwent major changes. Huy reports an increase in the middle managers' learning repertoire in that, through trial and error and discussions among themselves, they gradually came to understand what new knowledge and skills were required in their changing roles as middle managers. Finally, the study by Valleala et al. (2015) pointed to

learning opportunities in change processes. Participating in parts of the change process expanded the nurses' opportunities for organizational learning, particularly in the preparations for and discussion phases of the change, in the form of explicit problems and discussed solutions. The learning opportunities at the organization level increased when problem-identification and proposed solutions were noted and taken into account by the managers in the task of developing the clinical work. Proposals for new working methods led to changes in organizational roles, competence and practice.

4. Discussion

Summary of the results

A summary overview of the 13 quantitative studies included in this literature review shows that the majority of the studies (11) were conducted in public organizations. Only two stem from the private sector. The most common methodological approach was the case study, with seven cross-sectional and six longitudinal studies. The longitudinal studies involve two or three measurement occasions. The number of respondents varies from 88 to 3,355. The response rate is between 33 per cent and 84 per cent. Data were analysed via variance analysis, hierarchical, linear and logistic regressions and SEM, with the latter method being the most prevalent, having been used in eight of the studies. All the studies stated which staff categories or occupational groups had been included, and the number of people in each category. Some of the studies adjusted for demographic variables. Common to the studies that used multiple methods is that they followed strategic changes. Both studies show that major strategic changes, such as changing the organizational culture or working method, take time. Information and communication can promote participation and greater understanding. The importance of being able to switch between different leadership strategies during a change is also noted here.

The following picture emerges as we summarize how the 12 qualitative studies were conducted in terms of the types of organizations studied, types of data, etc. The majority of the studies were conducted in large private organizations (7), the rest in public enterprises. Some studies include data from both private and public enterprises.

Case studies represent the most common methodological approach by far. No less than ten of the studies are case studies, and five of

those are longitudinal. They were conducted over a time span of 1–4 years. The two studies that are not case studies are described as qualitative (Hetzner et al., 2009; Westerberg & Tafvelin, 2015). Three of the ten case studies are studies of a single case, while other studies examined two or three cases (“multiple case”). The case sizes in terms of numbers of people interviewed vary from 10 to 256 people.

There is some variation among the studies in terms of the types of data-collection methods that were used. Common to all 12 is that they used interviews, while four out of 12 also used observation. A large number also employed document studies, although no exact figure can be stated, as the tasks are not described clearly in several of the studies. All the studies stated which staff categories were included, and how many people were in each category. Reporting based on gender occurred in four of the studies. This group included the Swedish studies.

In an early overview of the research on organizational change and growth, it was characterized by Kahn (1974, p. 487) as follows: “[...] makes few theoretical contributions [...] repetitions without new evidence [...] a few pieces of practical advice” [translation ours]. Just over 25 years later Pettigrew, Woodman and Cameron (2001) stated that such research had advanced dramatically, and that the area was characterized by a greater understanding of processes, organizational risk context, cultures and the organization’s change history. A knowledge review from 2014 (Barends et al.) points out that over 75 per cent of the studies that focused on the effects of organizational changes were case studies and cross-sectional studies, and that there was a corresponding lack of quantitative studies with more sophisticated designs. The literature review regarding organizational change competence exhibits, to

some extent, patterns similar to those described by Barends et al. (2014), i.e. a large share of the studies are cross-sectional studies and case studies (19). Two research designs called for by Barends et al. (2014), i.e. case studies with case control and replication studies of earlier research, are not present among the studies reviewed. On the other hand, there are examples of studies that correspond to the factors identified by Pettigrew et al. (2001) as being important to include in studies of organizational change, i.e. the organization's change history, the time factor and tracking the change process over time. For example, the literature review includes a large number of longitudinal case studies.

Our literature review shows that the research has been published across a broad range of journals, with a certain emphasis on leadership and organizational change, and that it is not possible to identify individual journals that play a central role in this area of research. The Journal of Behavioral Science might be an exception. There are major variations in terms of the research objects, the methods used and the level(s) studied. Studies at the micro level are the most prevalent in this literature review. This result is consistent with research concerning organizational change, wherein the secondary area "change recipients' reactions" also contains a large number of micro-level studies (Oreg et al., 2011). Of the total of 27 studies included in the literature review, 19 are in the public sector, mostly in the areas of healthcare and nursing. Only six of the studies were conducted in the private sector, which evinces a skewed distribution between both sectors and industries. Only two studies include empirical data from organizations in both the public and private sectors.

Assessment of documentation

In this section we will assess the documentation and discuss the results of the literature review. We will begin by returning to the research question from which we started, and the extent to which it has been answered.

The starting point for this literature review has been to examine which factors in

empirical research are described as important in terms of applying, maintaining and increasing organizational change competence. By drawing a distinction between studies that examine the phenomenon at different levels (micro, meso and macro), we have attempted to identify significant factors and conditions at each level. In the case of the qualitative studies, we have identified three areas in relation to organizational change competence, i.e. management, managers and change agents, participation in change processes and learning opportunities in change processes. Four areas have been identified in relation to change competence in the quantitative studies, i.e. the importance of leadership during change, employee attitudes towards change, conditions surrounding change, and competence and organizational learning in relation to change. Common to the studies involving multiple methods is that they follow strategic changes. Both studies show that major strategic changes, such as changing an organizational culture or working method, take time.

Information and communication can promote participation and greater understanding. The importance of being able to switch between different leadership strategies during a change is also noted here.

A summary answer to our research question is that the following factors and conditions are described as important in applying, maintaining and developing organizational change competence:

- Management, managers and change agents
- Employee attitudes towards (incl. previous experiences of) change
- Information, communication and participation before, during and after change processes
- Competence and learning opportunities in change processes

But the task of trying to assess what importance these factors have, whether separately or in mutual interaction, in a given type of organization is not just a complicated one, but rather one that can be described as complex.

This complexity was characterized by Pettigrew as far back as 1987 as consisting of dynamic processes occurring between what is being changed (content), how it is being changed (process) and why the change is being made (context). The ability to identify the importance of specific factors has to do with better handling of what are customarily described as the greatest challenges facing social scientists, i.e. to increase control over underlying, mediating and moderating factors, namely that which, in simple terms, "lies between" the dependent and independent variable.

This question can be viewed at least in part as an issue of which methods are used. Qualitative studies are not intended to generalize based on statistical correlations, but rather are based on other possibilities such as theoretical (or analytical) generalization, in which theories can be expanded/limited, and generalization based on contextual similarity, falsification or replication of cases (Flyvberg, 2006). The qualitative research reviewed here exhibits limitations in several respects. In many cases this has to do with empirical limitations, both in terms of the number of individuals and the number of organizations studied. The case studies are in many cases fairly thin, with three clear exceptions (Clark et al., 2010; Huy, 2002; Stensåker et al., 2008), and the analysis of the importance of the context can be pushed further in the studies conducted in both public organizations and private companies. The quantitative studies exhibit major variations, and thus deficiencies, in terms of their descriptions of how the studies were conducted. This applies, for example, to descriptions of samples and representativity, non-response analysis and analyses of the importance of the context. Roughly half of the quantitative studies are cross-sectional studies.

To summarize, at present the research on organizational change competence does not constitute a coherent research field, but rather such research appears to be spread across a number of fields and disciplines. Describing it as a separate area of research would be inaccurate, and research concerning organizational change competence should rather be viewed

as a secondary area of something else. What then is this "something else"?

Based on this literature review, research on organizational change competence can almost be seen as a part of leadership research, and as a part of research concerning organizational change. Support for this particular interpretation is evident in the types of journals in which such research has been published (see Table 1). Over half of the 20 journals may be categorized as leadership journals or journals about organizational change.

Methodological challenges

The term organizational change competence is a complex one that lacks any accepted definition, has no research tradition and is consequently difficult to operationalize. The authors chose to conduct a term analysis of the terms "change" and "competence" separately, in order to then delimit what can be encompassed within the term "organizational change competence". Here are examples of questions that were incorporated in the analysis of the terms change and competence:

- What is meant by organizational change?
- Planned/unplanned (emergent) change?
- What drives change ?
- Internal or external factors?
- Agents versus structures?
- What is meant by competence?
- Who has competence: individuals, team/groups, the organization in its entirety?
- How is competence changed and developed?
- Which actors or organizational conditions are described as important in terms of developing change competence?

This process resulted in the definition of organizational change competence as "the ability of an organization to apply both existing competence within the organization and the ability to use and develop competence in order to meet (externally or internally generated) needs for change". In English this corresponds most closely to the term organizational change capacity (Soparnot, 2011). Of

the studies we have reviewed in this literature review, the term organizational change capacity (or variants thereof) appears in only four of them.

This has led to an important part of our analysis of the studies involving an interpretation of whether a given study is relevant in view of our definition of the term.

One important part of conducting a knowledge review is to find so-called gold standards, i.e. examples of earlier studies that are centrally positioned within the research field and are consequently taken note of and cited. The presence of gold standard articles offers a means of determining the extent to which the current literature search hits the mark. If no gold standard articles can be found in test searches, it may be an indication that the search terms being used are failing to capture the phenomenon being researched. In the case of this particular literature review, this has been a challenging task, as it has been difficult to identify gold standard articles. We have addressed this problem by also selecting a number of key articles in the area of planned organizational change, which yielded a total of 20 gold standard articles. Seventeen of these 20 were found in the final search, which we view as support for the search delivering precision. Only one of these 17 studies was included among those reviewed (Neves, 2011); the others were not empirical or did not focus on planned change.

Another consequence of the fact that organizational change competence lacks a clear definition is that it has been extremely difficult to find previously conducted knowledge reviews regarding organizational change competence.

The challenges we have faced may be summarized in three points:

- a. The term organizational change competence is weakly defined and, as an area of research, lacks any tradition to connect to.
- b. This means that searches in this area risk yielding major variations in what the change pertains to, its content and organizational level, and the theoretical perspective from which it is studied.

- c. The reviewed studies were conducted within public and private enterprises.

There is major variation within these respective sectors in terms of different organizational contexts that have to be addressed from a methodological standpoint. This has been a challenge, particular because the organizational context is not always described in detail.

We shall conclude with some additional comments about possible deficiencies in the literature review. Early in the process, a delimitation was made to the effect that organizational change competence was to be viewed in relation to planned change. Given the facts in hand, this delimitation would appear to be necessary, not least in order to define a comprehensive area. But it is not always easy to draw a distinction between a planned organizational change and an unplanned (emergent) one. These difficulties were described as far back as 1999 in the classic article by Weick and Quinn. The situation does not get any easier when it also becomes clear that current research on planned organizational change shows that change within organizations is, in reality, not so planned. Plans are deviated from or left entirely unused; the planned process takes on more of the form of continuous change (see Stouten et al., 2018). It is of course impossible to assess how this literature review would have turned out had we also included continuous changes, but this is worthy of attention with respect to continued summaries in the field, and in cases where different delimitations may be relevant.

Finally, a word about the databases that were used. The searches were run in Scopus and Web of Science. Both databases are very broad and contain a huge number of high-quality peer-reviewed articles. There are of course a number of other databases that could have been used, such as ERIC and Business Source Premier. However, we do not believe that they would have yielded different results.

Knowledge gaps and research methods

This literature review regarding organizational change competence has sought to answer

the question of which factors and conditions are described as being important in applying, maintaining and developing organizational change competence.

Four different areas have been identified:

- Management, managers and change agents
- Employee attitudes towards (incl. previous experiences with) change
- Information, communication and participation before, during and after change processes
- Competence and learning opportunities in change processes

The biggest number of studies in the literature review relate to the first area, i.e. management, managers and change agents. In other words, organizational change competence in organizations appears to be tied largely to the competence and actions of managers and change agents, rather than being viewed as the organization's collective ability to drive planned change. Consistent with this position, it appears that there is a corresponding lack of studies in which employees' ability to contribute is analysed. In those cases, the focus was on employee change resistance and how it can be understood, rather than on employee motivation for change and how it can be developed. Studies of information, communication and participation before, during and after organizational change processes and as a part of organizational change competence are presented in a number of studies. Providing information is important at every level of the organization, and the way this issue is handled remains an important area for research, particularly based on what was previously described as "organizational sensemaking". One important part of our definition of what is encompassed by organizational change competence is an organization's ability to apply existing competence and develop organizational competence through learning (individual, group and organizational learning). Here the literature review shows that there is a limited number of relevant studies.

Some of the identified knowledge gaps

can be tied to the research methods used.

In the case of quantitative studies, we see a lack of longitudinal ones in which change is followed over time. Over half the studies have a cross-sectional design, which can describe relations but not causal links (causality).

Another defect we can see is low response rates, primarily in the longitudinal studies. A study with few participants in terms of both the sample and the number of respondents does not provide a representative sample, and entails problems in credibly identifying change over time and the possibilities for addressing causality. The identified quantitative studies less often have a theoretical starting point, but rather often use measurement scales and models in which the underlying theoretical assumptions have not been developed. There are also a few studies that examine organizational change capacity on multiple levels. The analysis of the importance of context can be pushed further in the case of those studies that were conducted in both public organizations and private companies. The qualitative research reviewed here exhibits methodological limitations in a number of respects. In many cases this has to do with limited empirical data in terms of both the number of individuals and the number of organizations studied, and the case descriptions in many cases are rather thin. Case studies with control groups ("case control") and duplications of earlier studies are not represented among the 27 studies we reviewed. Studies involving multiple methods are also very uncommon.

Trade unions are important actors, particularly in the Swedish labour market. There is a long-established tradition of collectively developing work and working life in Sweden (and to a large degree the rest of Scandinavia). Trade unions are viewed not just as counterparts, but also as key actors in developing working life. Viewed from such a perspective, trade unions in a workplace can be seen as a part of the organization's collective ability to drive change, and cooperation with unions can contribute to enhancing organizational change competence. Research with this particular orientation was significantly more

robust in the past, and no study of this type is to be found in the literature review. There is consequently a need to note the need for such research.

Another need for research may be noted. The presence of external and internal pressures to change are often seen as key drivers of organizational change, and the ways in which such pressure to change is taken note of and managed can be related to organizational change competence. Key groups in the world outside the organization, such as customers, users and patients, can have a major influence on which changes are initiated. Such groups are often seen as “recipients” of change, but they may also be viewed as co-creators of organizational change. An important part of organizational change competence thus has to do with using, in a sophisticated way, these groups as a means of increasing organizational change competence.

General advice

The general advice presented below is tied largely to the definition of organizational change competence as an organization’s ability to apply both existing competence within the organization and the ability to use and develop competence in order to meet needs associated with change. This ability is viewed largely as being dependent on the ability to apply existing competence and, through learning, develop organizational change competence. The advice presented here is based on the results of the literature review, but also on a more general portrayal of the field. Advice based solely on the literature review would, by necessity, be rather limited, or as Barends et al. (2014) put it: “[...] given these [...] findings, practitioners should be sceptical about relying uncritically on research findings relevant to Organizational Change Management as a basis for important decisions” (p. 21). The advice offered below is not to be considered universally applicable, but should be reviewed critically. One article is particularly noteworthy in this context (and recommended for reading), namely that by Stouten et al. (2018), who make an attempt to compare and

assess research on organizational change with what is being done in practice (often with support from consultants) out in companies and organizations, and to what extent it is possible to find relevant scientific evidence.

Learning from history and assessing results and effects of planned changes

All organizations have a more or less extensive history of planned changes, both more successful and less so. A number of studies in this literature review point out that the ability to apply previous experience from organizational change is important. That organizations appear to be “historyless” in this regard may contribute to problems rather than to their solutions. At the same time, many organizations ignore or lack the capacity to apply earlier experience, or their organizational memory is, in the worst case, just as “short” as the individual memory. One factor contributing to this limited ability may presumably be tied to the fact that planned changes are seldom followed up and evaluated. In the rare cases when this is done, the results that emerge are not applied as important lessons or as input in new changes. Learning from history and learning from the results of evaluations can be viewed as important factors in enhancing organizational change competence.

Leaders and change agents are important, but not solely determinative

One of the main results of the literature review shows that a majority of the studies tie organizational change competence to management, managers and change agents.

There is undoubtedly strong research support for the importance of leaders and change agents in organizational change, but there is a clear risk here of both exaggerating the role of and idolizing leaders and change agents. Leaders and change agents are naturally important, but not solely or primarily to manage and lead change, but also to visibilize and support the use of the competence that resides in other parts of the organization, and particularly among its employees.

Working with or working against?

A number of studies exhibit an interest in the ways in which planned changes are received by the members of the organization (“change recipient’s reactions”), and this area of research is extensive. Some of this research focuses on resistance to change and how such resistance can be grappled with, rather than on how motivation for change can be supported. Change resistance and the danger that it will arise among employees is of interest in a number of respects, as the focus (as well as any “blame”) is placed on employees who do not want the change, or do not understand its importance. But change resistance can also be viewed as a legitimate reaction to or necessary friction in a poorly executed or misconceived change process. It can also be seen as an opportunity to foster openness, to have influence, to utilize the knowledge and experience that is spread throughout the organization, and to thereby build change competence.

Participation as an essential but insufficient precondition

The importance of participation in both the planning and execution of organizational change processes is noted in a number of the studies included in the literature review. This view appears to be fairly common among many actors in working life. The importance of employee participation in changes in the workplace, together with a striving for consensus and problem-solving through negotiations, has also been described as an important element of “Scandinavian leadership”. There is also research that shows that participation can take different forms and be present to differing degrees, and that participation can be used for both legitimate and illegitimate purposes. Studies in the literature review show that participation in planning and execution can increase motivation and contribute to greater collective sensemaking, just as participation can be subject to pressures from a lack of time or other factors that entail

limitations. Examples of important questions surrounding participation in a planned change include:

- When in a change process is participation especially important (in all or parts of the process)?
- How/by what methods can participation be developed?
- Advantages/disadvantages of various methods?
- What role/importance do leaders have in terms of staff participation?
- What obstacles or potential threats to increased participation exist?

Strategies and policies are not everything

There are ample studies showing that organizations, and particularly the managements of organizations, have great faith in and put great emphasis (including time) on developing plans, policies and various types of strategy documents. The research also shows that plans and strategies are often unsuccessful; they run a major risk of not surviving the encounter with the organizational reality. There appears to be a mismatch between, on the one hand, the heavy focus (including resources) that managements often place on preparing and formulating policies and strategies and, on the other hand, the often limited attention focused on support and resources for implementing those policies and strategies. It would appear rather that the situation needs to be reversed, with more energy being devoted to developing methods for and supporting execution.

Viewed from this perspective, one important element of organizational change competence may be seen as the ability to assess and critically evaluate organizational changes, including the ability to adapt and modify plans and strategies and the methods and approaches used when implementing changes.

5. Conclusions

- Research concerning organizational change competence does not constitute a coherent area of research at present, but rather is spread across a number of areas and disciplines, particularly research on leadership and research on organizational change. The term organizational change competence lacks a more definite and generally accepted meaning in the research.
- Research concerning organizational change competence could benefit if disciplinary cross-section studies and case studies (single case) based on limited material were less dominant. Greater methodological variation would be welcome, as would input from more multidisciplinary studies, e.g. studies conducted between business economists, educators and organizational sociologists.
- Elements of more critical and questioning perspectives are limited in the reviewed research. Further studies of planned changes would presumably benefit from problematizing why changes are made, who or what is favoured, the presence of overt/hidden purposes, who/what is presumed to contribute key competence, etc.
- The reviewed research has a heavy focus on leaders and change agents as being key to organizational change competence. Other categories of employees and actors within the organization appear to a significantly lesser extent, such as staff in subordinate positions, and trade unions.
- A number of the studies included in the literature review tie change processes to learning. There is a need here for further research that studies learning at different levels in the organization and how such learning can contribute to the development of organizational change competence.

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Appendix 1 – Method

This appendix provides an in-depth description of the method used to produce this literature review. The work has followed the SAWEE model. The intention is to present a relatively chronological description in order to give the reader an understanding of the process in its entirety. We begin with a description of how the focus areas of the literature review were determined and thus how the studies were selected, and how the inclusion criteria were determined.

This is followed by a description of the search strategies and how the first study screening was carried out. After that, we describe the assessments of relevance of the full texts and the quality review process for the studies deemed relevant.

Selection of studies

When beginning this literature review, the content, focus and limitations of the review were clarified based on the PEO model (People, Exposure, Outcome). The PEO model was used to clarify the focus of the content of the studies forming the foundation of this literature review (see Table 13) and to clarify the kinds of content and studies that would not form the focus (see Table 14).

The inclusion criteria for the literature review were determined jointly by the authors and representatives from the Swedish Agency for Work Environment Expertise (librarian and process manager). The studies should:

- a. focus on the contexts of working life and workplaces
- b. be carried out in a Nordic context
- c. investigate leadership in terms of styles, behaviours, roles or similar terms or synonyms in relation to
- d. employee health and well-being (health factors).

To ensure that the basis of the literature review was scientific and empirically founded and to obtain a reasonable quantity of studies to manage within the stipulated time period, additional limitations were chosen. The studies should be:

- e. scientific articles in international, peer-reviewed (academic) journals
- f. published or “in press” between 2009 and 2019
- g. written in English; and contain empirical material.

The purpose of limiting the material to the Nordic context was partly to limit the scope of the literature in relation to the available timeframe, and partly because, as the literature review should culminate in guidance, the cultural and geographic proximity of the

Nordic countries was likely to produce more transferable results compared to studies from non-Nordic countries. The specific timespan was chosen in part with the quantity of literature in mind, and in part because this timespan complements the earlier systematic literature reviews in the field with which the authors were familiar from the start of the project (Kuoppala et al., 2008; Skakon et al., 2010). Because these reviews had already assessed studies from 1970 to July 2009, a longer timespan would only overlap them. Other research reviews were not familiar to the authors when beginning the project, but were incorporated into the report. However, all of the later reviews set limitations differently – only studies with a certain design, certain scales, certain journals and so forth, and none of them included qualitative studies. Of the 33 studies in this literature review, only six overlap with previous literature reviews.

The exclusion criteria were determined in parallel with the inclusion criteria stated above. Studies would be excluded if they: a)

Table 10: Inclusion criteria in the PEO model

People	Exposure	Outcome
Studies focused on the contexts of working life and workplaces.	Leadership in terms of styles, behaviours, roles and similar terms/synonyms.	Employee health and well-being (health factors).
Studies carried out in a Nordic context.		

Table 11: Exclusion criteria in the PEO model

People	Exposure	Outcome
Studies solely focused on contexts other than working life, such as school and education.	Indirect leadership	Studies focused only on illness.
Studies carried out in a non-Nordic context.	Destructive leadership	

focused solely on contexts other than working life, such as school and education (for example, studies of relationships between teachers and students); b) were only carried out in a non-Nordic context; c) focused only on indirect leadership; d) focused only on destructive leadership; and e) focused only on illness. Studies were also excluded if they f) were not based on empirical material (such as literature reviews, meta-analyses, conceptual articles, “viewpoints” or the equivalent); g) were not published in scientific, academic journals (such as reports, books, book chapters, doctoral or licentiate dissertations); and h) were written in a language other than English.

Search strategy

After establishing the inclusion and exclusion criteria, the authors of this literature review identified ten studies that met the inclusion criteria and which they had used themselves in other projects. The librarian used these ten studies to generate suitable search terms, and to validate the subsequent searches and make sure all ten studies were included in the search results. The initial search terms were determi-

ned based on the ten identified articles, and based on the authors’ previous experiences in the research field. The final search terms were selected through discussions between the authors, the librarian and the process manager from the Swedish Agency for Work Environment Expertise. The searches were primarily carried out in the Scopus database. Web of Science was used as a supplementary database (see Table 15). Scopus generated 2,463 hits and Web of Science generated 1,499 hits. After eliminating duplicates, 2,859 unique studies remained. The project librarian conducted all searches in June 2019 and delivered titles and abstracts for all hits via the software Rayyan.

Screening of titles and abstracts

The authors read through all titles and/or summaries (abstracts) of all hits using the software Rayyan. All hits were marked with either “include”, “exclude” or “maybe” (see Table 16). The studies marked “maybe” and the studies in which different assessments were made were read by all authors and discussed until consensus was reached. In the assessment process, the authors attempted to determine whether the study in question empirically explored the relationship between leadership on the one hand, and health and

Table 12: Different steps, search strings and number of hits for the search

Database	Step	Area	Search string	Number of hits
Scopus	1	Leadership	TITLE-ABS-KEY (leadership) OR TITLE-ABS-KEY ("Leader* behavior*") OR TITLE-ABS-KEY ("Leader* style*") OR TITLE-ABS-KEY ("Leader* skills") OR TITLE-ABS-KEY ("Supervisor* behavior*") OR TITLE-ABS-KEY ("Leader-member exchange") OR TITLE-ABS-KEY ("Manager* behavior*")	177,015
	2	Health	TITLE-ABS-KEY ("Well being" OR Wellbeing) OR TITLE-ABS-KEY (Health W/O (work* OR employ* OR occupational OR subordinate)) OR TITLE-ABS-KEY (healthy PRE/O (employee* OR work*))	295,830
	3		1 AND 2 (10 standard articles)	4,632
	4		3 AND Filters activated: Language: English Publication type: Article Year: 2009 and forward	2,463
Web of Science	1	Leadership	TS= (leadership) OR TS= ("Leader* behavior*") OR TS= ("Leader* style*") OR TS= ("Leader* skills") OR TS= ("Supervisor* behavior*") OR TS= ("Leader- member exchange") OR TS= ("Manager* behavior*")	99,347
	2	Health	TS= ("Well being" OR Wellbeing) OR TS= (Health NEAR/O (work* OR employ* OR occupational OR subordinate)) OR TS= ("Healthy employee*") OR TS= ("Healthy work*")	141,067
	3		1 AND 2 (8 standard articles)	2,058
	4		3 AND Filters activated: Language: English Publication type: Article Year: 2009 and forward	1,499
Total	5		Scopus step 4 AND Web of Science step 4	2,859

well-being on the other. At this phase, no consideration was given to whether the study investigated constructive leadership and positive health and well-being. In cases in which this was difficult to determine, the study was marked with “maybe”. The “maybe” group also included studies that were literature reviews, conceptual papers, and studies where no abstract could be seen. In total, there were 491 studies (studies marked “Include”, “Maybe – Difficult”, “Maybe – Incomplete information”) for which a reading of the full text was assessed as necessary in order to determine whether the study met the inclusion criteria.

Relevance assessment of full texts

After downloading the full texts, the review of relevance began. All full texts were assessed to determine whether the inclusion criteria had been met. Each study was assessed to determine whether it 1) was written in English; 2) addressed empirical material; 3) measured or addressed well-being or health and not (only) illness, pain, ailments or similar negative/pathogenic indicators; 4) measured or addressed constructive leadership and not (only) destructive leadership, i.e. the studies do not measure leadership involving abusive, exploitative, manipulative, or similar leadership behaviours; 5) contained empiri-

cal material collected at least in part from a Nordic context; 6) at least partially addressed the relationship between constructive leadership and health and well-being. Studies that included both positive and negative (salutogenic and pathogenic) indicators of health and well-being are included, but the focus of this literature review is only on the positive outcomes. For example, a study might investigate leadership in relation to job satisfaction and perceived stress but the focus is only on the relationship between leadership and job satisfaction. The relationship between leadership and health was not the main focus of some of the qualitative studies, but studies with findings that at least partly address this relationship were considered relevant.

Table 17 presents an overview of how many studies were excluded based on the various exclusion criteria.

As positive health and positive well-being are complex terms that may be defined differently, a decision was made to include studies as long as they were not obviously pathogenic, and as long as the authors of the studies themselves considered well-being or health an outcome. After reviewing all of the downloaded full texts for relevance, 37 studies met all of the relevance assessment criteria above.

Quality assessment

Both authors carried out the quality assessments of all studies judged as relevant for the literature review.

One assessment protocol was used for studies with a quantitative approach and another assessment protocol was used for studies with a qualitative approach.

Studies with a quantitative approach were assessed for quality with a protocol developed by Tompa (Tompa et al., 2007, 2016) which has been used in several previous literature reviews, both Swedish (Ståhl, 2016) and international (Andersen et al., 2019). The protocol consists of ten questions, in which each one is assessed and given 1 to 5 points. An example of a question is: “Are the results adjusted for important influencing factors?” In accordance

with the assessment protocol, studies with 35 points or more were considered high quality; studies with 25 to 34 points were considered medium-high quality; and studies with 24 points or less were considered low quality. In accordance with the assessment protocol and previous literature reviews, only studies of high or medium high-quality were included in this literature review. Of a total of 31 quantitative studies reviewed for quality, 28 were assessed as high or medium-high quality.

The studies based on qualitative data were assessed using a review template developed by the Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU, 2017). SBU’s review template consists of five headings: purpose, selection, data collection, analysis and results. Each of these headings has questions to be answered in the quality assessment. For example, the following question comes under the heading of purpose: “Is the study based on a well-defined problem/question?” The questions are answered with yes, no, unclear or not applicable. The results are summed up to determine whether the article is of high, medium-high or low quality. Studies of high and medium-high quality were included. Of a total of six qualitative studies reviewed for quality, five were assessed as high or medium-high quality. Thus, a total of 33 studies were included in the review. Figure 2 presents an overview of the different steps of the process.

In conjunction with the quality assessment, any conflicts of interest that may have arisen due to how the included studies were funded were also assessed. When funders were listed, they were exclusively national research councils or internal funders from the universities at which the researchers were active. No conflicts of interest emerged.

Processing and analysis

The quantitative studies assessed as high or medium-high quality went on to analysis.

In the analysis process, all studies were read and tables were compiled with key information relevant for this literature review. This

Table 13: Number of studies for screening

Assessment	Number of studies	
Include	367	
Exclude	2,290	
Maybe	204	with the following labels::
	Difficult to assess	112
	Literature reviews/conceptual studies	78
	Incomplete information	14
Total	2,859	204

Table 14: Number of excluded studies and reason for exclusion

Excluded	Number of studies	Number of studies	
Excluded based on title or abstract:	2,290		
Excluded – literature review:	78		
Excluded – relevance:	454	Excluded – focus on illness or destructive leadership	128
		Excluded – non-Nordic context	186
		Excluded – lack of empirical material (conceptual)	19
		Not written in English	1
		Excluded – book chapter	14
		Wrong focus (for example, not leadership, leaders' health) or context	77
		Duplicates	2
		Does not study the leadership-health relationship	27
Excluded due to quality:	4		
Total number excluded:	2,826		

key information includes the country in which the study was conducted, on which population, how leadership was measured, how health-related outcomes were measured, what the association looked like between leadership and health-related outcomes, bivariate data, and adjustments in the final model for other factors, as well as any mediators investigated. This was described in the results section of the literature review and conclusions were drawn based on this description. This proce-

cedure is called narrative synthesis (SBU, 2017).

The qualitative articles were analysed in four steps. In step 1, the articles were read and assessed for relevance and quality.

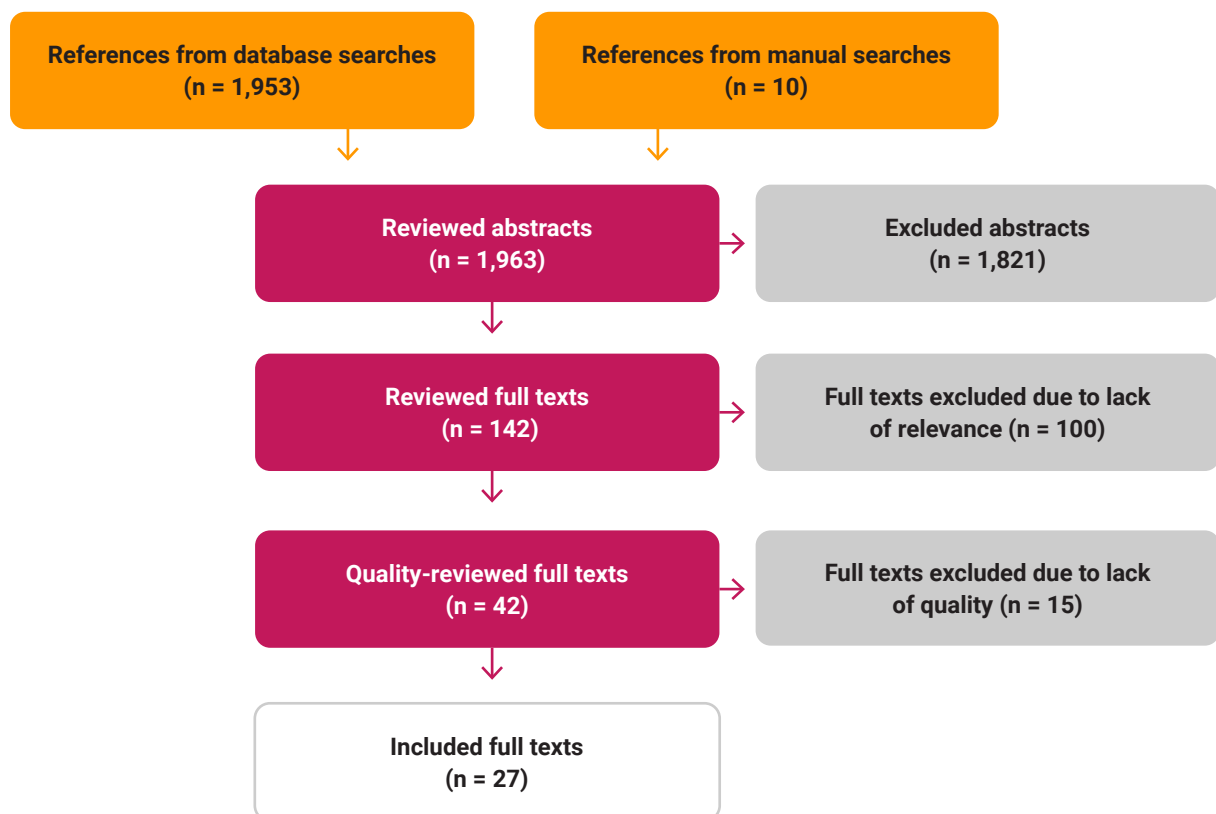
Based on this reading, the first content overview was created. In step 2, a reading was conducted based on descriptive categories which aimed to collect basic information about the articles, such as journal, country, purpose, questions, theoretical starting points, methodology and more. In step 3, an induc-

tive conventional content analysis (Hsieh & Shannon, 2005) of the findings of the articles was carried out. The results, discussion and conclusions were read through and, based on this reading, preliminary categories were created from each article. In this step, each article was summarized with a focus on the content and validity of the findings. In step 4, the

authors discussed the relationships between the preliminary categories, leading to the identification of four overarching categories that are addressed to some degree in most of the included articles:

- 1) direct leadership, 2) indirect leadership, 3) mutual influence and 4) leadership adapted to the situation.

Figure 1: Flow diagram of the review process



A list of all excluded studies can be found at mynak.se in association with this report.



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