Time to change: a review of organisational culture change in health care organisations

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Abstract

Purpose – The culture of an organization shapes the attitudes and behaviors of employees and plays a key role in driving organizational outcomes. Yet, it is enormously challenging to manage or change. The purpose of this paper is to review the recent literature on culture change interventions in health care organizations to identify the common themes underpinning these interventions.

Design/methodology/approach – The paper is developed from an extensive review of the literature on culture change interventions in health care from 2005 to 2015, building on previous reviews and highlighting examples of good practice.

Findings – All culture change interventions included in the review used processes and techniques that can be classified into Lewin's (1951) three stage model of change. These include providing evidence for the need for change through data, a range of successful change strategies, and strategies for embedding the culture change into business as usual.

Practical implications – There is no "one size fits all" recipe for culture change. Rather, attention to context with key features including diagnosis and evaluation of culture, a combination of support from leaders and others in the organization, and strategies to embed the culture change are important for the change process to happen.

Originality/value – The authors provide an important insight into the key principles and features of culture change interventions to provide practitioners with guidance on the process within health care and other organizations.

Keywords Change, Interventions, Health care, Culture (organization)

Paper type Literature review

Introduction

Organizational culture – the "personality" of an organization – has an important impact on an organization's performance and sustainability as well as the health and well-being of its employees (Ogbonna and Harris, 1998). It is often a key source of competitive advantage because it impacts the way an organization responds to challenges and acts as an important mechanism in achieving organizational goals (Boyce *et al.*, 2015). Organizational culture also shapes the decision-making processes, attitudes, and behaviors of organizational members, with empirical evidence showing links between organizational culture and staff morale, turnover, service quality, and

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service outcomes (Homburg and Pflesser, 2000; O'Reilly *et al.*, 1991; Sheridan, 1992; Tsui *et al.*, 2006). In addition, Hartnell *et al.* (2011) showed that culture affects key employee outcomes such as job satisfaction, morale, engagement, and higher levels of discretionary work effort and cooperation. In short, organizational culture plays a critical role in shaping an organization's success or failure and has therefore, not surprisingly, received ample attention from both academics and practitioners.

Organizational culture plays an especially critical role in health care organizations, where the collective extent to which health care professionals communicate and work with each other often directly impacts the quality of care delivered to patients (Davies *et al.*, 2000). Resources are usually scarce and fiercely contended for in health care organizations, amplifying the critical link between organizational culture and bottom line outcomes for patients and employees. Thus, the role of organizational culture in health care organizations cannot be overemphasized, as a functional organizational culture leads to better patient outcomes, with patients being treated with care, dignity, and respect, whereas a dysfunctional organizational culture often leads to lower quality patient outcomes, and in some cases even physical harm or death. In addition, the costs of a dysfunctional organizational culture include bullying in the workplace, poor employee mental and physical health, disengagement, and underperformance (Balthazard *et al.*, 2006; Cooke and Szumal, 2000). An example of the devastating impact of a dysfunctional organizational culture within the health care context comes from the 2010 inquiry into the Mid Staffordshire National Health Service (NHS) Foundation trust, in which up to 1,200 patient deaths were attributed to "an insidious negative culture involving a tolerance for poor standards" (Francis, 2013, p. 9).

Given that the culture of an organization has an important impact on its performance and sustainability, as well as the health and well-being of those who work in it (Ogbonna and Harris, 1998), it is not surprising that the issue of managing organizational culture has received ample attention within management theory and practice. A significant theme in culture research has been the study of management attempts to direct and change culture. The underpinning assumption in this literature is that culture is malleable and can be managed and changed through targeted management activities (Ogbonna and Harris, 1998; Harris and Ogbonna, 1998). However, it is also widely recognized that achieving successful organizational culture change is notoriously difficult. Indeed, most organizational culture change initiatives fail either immediately or are not sustained over time (Smith, 2003).

One of the cornerstone theories for understanding organizational change, such as that underpinning organizational culture change initiatives, is Lewin's (1951) model of change management, which proposes three stages to the change process: unfreezing (i.e. overcoming inertia and dismantling existing mindsets, change (i.e. a period of transition and change), and freezing (i.e. new mindsets are crystalized and comfort levels return to previous levels). We argue that applying this model to existing culture change initiatives may help pinpoint why and how specific culture change initiatives may or may not be as successful as anticipated. Rather than examining how culture change should unfold based on current theories and models of culture change, we aim to provide a comprehensive literature review of all available recent empirical culture change initiatives in health care organizations to examine how culture change actually does unfold. Thus, the purpose of this paper is to provide a comprehensive review of published articles of organizational change initiatives and to identify their processes and outcomes in light of Lewin's proposed model, thus shedding light on how actual culture change initiatives unfold and how they may or may not end up meeting their

initial goals. Doing so will allow us to better describe of process of implementing cultural change initiatives in health care organizations and identify common factors and themes that lead to successful culture change in a health care context and provide health care professionals and managers with practical insights as to how to manage future culture change initiatives.

In the following, we briefly review theories of organizational culture and change. We then report our findings from a comprehensive literature review of all available peer-reviewed journal articles published between 2005 and 2015 on workplace culture interventions within the health care industry. For each intervention study, we identified, among others, the design, target, as well as the effectiveness of the culture change intervention in light of Lewin's (1952) three stage process model of organizational change. We report the results of our findings and conclude with a discussion of theoretical and practical implications of our findings.

Theoretical background: changing organizational culture

Although organizational culture is difficult to define, it is commonly described as "the way we do things around here." In his seminal paper, Edgar Schein (1992) offered a definition of what he called an empirically based abstraction: "Organizational culture is a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (p. 17).

According to Schein (1985), the way things are done in an organization rests on the collective artefacts, values, and assumptions of the organization. At the most basic level, the underlying assumptions represent members' unconscious "taken for granted" and unarticulated beliefs that have developed over time as a legitimate way to think and solve problems. These assumptions give rise to conscious values and beliefs that members are capable of espousing, articulating, and verbalizing. At the more observable level, organizational culture is reflected in visible behaviors and artefacts that represent these underlying values and assumptions. Importantly, these shared assumptions and values held by organizational members influence their perception and interpretation of events, and also the way the organization functions and responds to challenges. Most definitions of organizational culture in the literature reflect Schein's core focus on employees' shared values, beliefs, assumptions, and norms. These shared beliefs and assumptions prompt organizational members to make sense of situations in similar and distinctive ways, which consequently guides behaviors (e.g. Hofstede *et al.*, 1990; Schein, 1985).

Changing the way that things are done in an organization may appear relatively easy on a functional level. After all, change is a common thread that runs through all businesses regardless of industry, size, or age. However, recent health system reforms in many countries tended to focus primarily on structural change rather than cultural change. For example, the introduction of managed care in the USA, the establishment of bodies such as the National Institute for Clinical Excellence, and the restructuring of primary care in the UK, as well as the development and improvements of medical error reporting systems in Australia and Canada (Hutchison *et al.*, 2001; Miller and Luft, 1997; Wilson *et al.*, 1995) focussed to a much greater extent on organizational processes and procedures rather than employees' psychological experience of organizational culture.

When dealing with the psychological perception of experiencing organizational culture, understanding why things are done the way they are done and counteracting resistance to change of employees is often a challenging problem

(Schneider *et al.*, 1996). Over the last two decades, the literature on organizational culture has exploded with a variety of perspectives presenting a very diverse picture of the nature of organizational culture and, in particular, the causes of change and the role of leaders in the change process. For example, whereas some of the theories downplay the significance of human agency as a source of culture change (e.g. Ogbonna, 1993), other theories view leaders' purposeful action as a key driving force (e.g. Bate, 1994; Davies *et al.*, 2000). Further, the environmental, as well as the cognitive and resource constraints present during change initiatives can also limit their effectiveness (Hannan and Freeman, 1984; Haveman, 1992; Piderit, 2000).

In short, there is a plethora of research on efforts to change organizational culture, but this vast body of work abounds with complexities, including multiple and conflicting theories and research findings about what works and what does not work, with many arriving at inconclusiveness or concluding rather bleakly that it is not possible to change culture (e.g. Martin, 1985). This complexity presents a challenge to managers and researchers alike and illustrates researchers' conflicting views about the cause and nature of culture change in organizations, especially in relation to critical enabling factors of successful culture change. Although a few studies exist that attempt to identify critical success factors, our understanding of what enables organizational culture change success has been predominately theoretical (e.g. Armenakis and Bedeian, 1999; Weick and Quinn, 1999). For example, Cummings and Worley (2014) identified several aspects of successful cultural change, such as formulating a clear strategic vision, displaying and modeling top-down commitment to the proposed change, and modifying organizational systems, policies, and procedures to support the proposed change. Despite these findings, we argue that there has not yet been sufficient analysis of common success factors underlying actual culture change interventions. Although a few studies exist that have attempted identifying key factors in changing organizational culture, they are limited in their analysis of one or only a limited number of interventions or derived primarily from theory rather than a comprehensive synthesis of actual culture change interventions. For example, based on a single longitudinal study of mergers, Kavanagh and Ashkanasy (2006) came up with four identifiable aspects of organizational life that enables successful organizational change. The problem with single intervention studies of culture change is the lack of generalizability because it does not draw on points of consensus in the literature. Where studies have attempted to analyze commonalities (e.g. Fernandez and Rainey, 2006), the approach has been primarily based on relevant theories of culture change rather than a comprehensive analysis of the published interventions.

Lewin's process model of organizational change

As mentioned earlier, most models of organizational culture change can be mapped onto Lewin's (1951) change process model. Lewin's model continues to be a widely applied generic template for organizational change initiatives (Weick and Quinn, 1999). According to Lewin, the first stage in a change process, unfreezing, requires the destabilization of old behaviors and mindsets. This stage requires a realization that the status quo is no longer acceptable and, if continued, will result in harm to the organization and its people. In other words, unfreezing entails the realization that change is necessary and creates the necessary conditions for people to abandon existing behaviors and patterns of thinking. Unfreezing creates uncertainty and a motivation to begin testing new approaches. The second stage, changing, captures the efforts of the organization to assist in the development of new behaviors and patterns of thinking.

Thus, this stage focusses on the transformation of actual behaviors, attitudes, and norms. Change requires that people are enabled and motivated to adopt new ways of doing things. The final stage, freezing, seeks to ensure that the new behaviors and mindsets are sustained through everyday organizational practice. This stage anchors the change into culture and develops ways to sustain it, for example through leadership support, reward and feedback systems, and by providing support and training to employees.

While there has been some criticism levelled at Lewin's model of change (Burnes, 2004), this seems to be targeted at its broad or unspecific approach, which limits the extent to which the model is prescriptive in describing the processes affecting change. This broad approach, however, also enables the framework to be applied to a range of culture change initiatives across different settings, and allows to analyze and document the strategies used by different organizations in those three stages. In this paper, we draw on Lewin's model of change processes in reviewing and understanding actual organizational change interventions in health care organizations. Specifically, we aim to identify the strategies used in published change management initiatives to unfreeze, change, and freeze in light of Lewin's model and aid our understanding of the outcomes of those change initiatives. In doing so, we are able to describe the process of implementing change within health organizations and point to factors contributing to success, thus providing valuable theoretical and practical insights into the change process of organizational culture initiatives.

Method

We searched seven electronic databases (Proquest, Central, Science Direct, PsyInfo, ABI Global, PubMed, and Web of Science) for peer-reviewed journal articles published after 2005 on workplace culture interventions. We searched for a combination of broad terms such as "organizational culture," "culture change," "workplace culture," "culture intervention," "culture schemes," "culture interventions" and "culture initiatives."

Studies were considered for inclusion in the review if they met the following criteria:

(1) reported an evaluation of a culture intervention in health care services;

(2) compared intervention effectiveness to baseline or control;

(3) used quantitative methods to report outcomes of the intervention;

(4) available in English;

(5) full text-available;

(6) published between 2005 and 2015; and

(7) provided information regarding the design of the intervention.

This search identified 1,953 database entries that were considered, resulting in an initial pool of 70 studies that were then screened. Of these studies, many did not meet one or more criteria of those listed above, resulting in a final sample size of 25 studies that were included in our review. These 25 studies described 18 unique interventions. Table I provides a comprehensive list of these 25 studies and captures their key characteristics, including study design, country, sample, sample size, and length of intervention. The majority of studies were conducted in the USA ($n = 8$), followed by Australia ($n = 4$), and Canada ($n = 3$). The remaining three studies were from the UK, Switzerland, and Denmark. The majority of research used cross-sectional designs ($n = 8$), followed by quasi-experimental pre-post interventions ($n = 5$), and pre-post interventions ($n = 4$).

Table I.
Characteristics of the research design and intervention

Author	Country	Design	Sample	Sample size	Length of intervention
Glisson (2007)	USA	Randomized pre-post	Mental health/social services	26 case management teams 235 caseworkers	1 year 2 h weekly meeting for 5-6 weeks
Munroe *et al.* (2011)	USA	Quasi-experimental pre-post	Multi-facility health care corporation	4 facilities pre = 199; post = 198	20 months 10 training sessions
Mulcahy and Betts (2005)	Australia	Cross-sectional	Neonatal hospital unit	Post-intervention $n = 90$	1 year
Kaplan *et al.* (2010)	USA	Cross-sectional	Perioperative services	All staff in medical center	2 years
Costello *et al.* (2011)	Canada	Cross-sectional	15 surgical divisions across 3 sites	3 hospitals with 562 perioperative staff	2 years
Henderson *et al.* (2014)	Australia	Pre-post	Midwives across three sites	Pre $n = 216$, post $n = 90$	4 months
Laschinger *et al.* (2012), Leiter *et al.* (2011, 2012) and Gilin Oore *et al.* (2010)	Canada	Quasi-experimental pre-post	Nurses across 41 units from 5 hospitals	8 units selected for intervention, 33 comparison units	6 months
Osatuke *et al.* (2009)	USA	Quasi-experimental pre-post	Staff from all VHA facilities	Pre $n = 1{,}956$, post $n = 2{,}062$	3 years
Bleakley *et al.* (2004, 2006, 2012) and Allard *et al.* (2007, 2011)	UK	Quasi-experimental pre-post	Operating theater	All operating theater staff (n = approximately 220)	6 months

(*continued*)

Table I.

Author	Country	Design	Sample	Sample size	Length of intervention
DiMeglio *et al.* (2005)	USA	Pre-post	Nurses from all inpatient units	Pre $n = 165$, post $n = 118$	12 months
Ginsburg *et al.* (2005)	Canada	Quasi-experimental pre-post	Nurses in clinical leadership roles from 2 teaching hospitals	Pre $n = 408$, Post $n = 417$	6 months
Haller *et al.* (2008a, b)	Switzerland.	Cross-sectional	Women's hospital	$n = 239$	1 year
Johnson and Kimsey (2012)	USA	Cross-sectional	Perioperative services	$n = 809$	6 months
Kalisch *et al.* (2013)	USA	Pre-post	Medical-surgical wards across 3 hospitals	$n = 85$	6 weeks
Kalisch *et al.* (2007)	USA	Cross-sectional	Medical oncology Community hospital	$n = 55$	n/a
Crethar *et al.* (2009)	Australia	Cross-sectional	Queensland health	$n = 5{,}254$	1.5 year
Mikkelsen *et al.* (2011)	Denmark	Pre-post	Hospital anaesthesiology department	$n = 264$	n/a
Meloni and Austin (2011)	Australia	Cross-sectional	Co-located public hospital and private hospital	$n = 1{,}200$	2 years

Only one single study used a randomized pre-post-intervention design. All the interventions in these studies involved a timeframe of between six weeks and three years.

In Table II, we summarized the target focus of the culture change intervention and the effectiveness of the interventions. Since culture change interventions often focus on multifaceted outcomes, study findings were categorized in terms of the effect of the intervention on staff climate perceptions, objective organizational outcomes, and individual level staff outcomes. Table II also details how the intervention maps onto Lewin's model. Specifically, we documented all the techniques used during the intervention, and subsequently coded these techniques according to Lewin's (1951) three-step process. While many of the studies involved different change processes (e.g. Costello *et al.*, 2011 used Kotters eight step process and Osatuke *et al.*, 2009 used a combination of models dependent on the context), all could be coded according to these three critical stages. Techniques aimed at highlighting the unsustainability of current behaviors and mindsets, need/motivation for change, and gaps between current and desired states were coded as the unfreeze stage. Techniques that supported the learning of new behaviors and mindsets, rewarded practice of new behaviors, and removed the barriers to change were coded as the change stage. Finally, techniques focussing on institutionalized efforts to maintain new behaviors and mindsets were coded as the freeze stage.

Results

We identified 18 unique interventions in our literature review that focussed on three types of change. Five studies focussed on changing the underlying culture of the organization, such as enhancing organizational climate, fostering a learning culture, or fostering a safety culture. Seven interventions focussed on a specific element of culture, such as enhancing employee civility. Finally, six interventions targeted culture at the team or unit level. In the following sections we first consider the processes involved in the interventions, and discuss these in line with Lewin's (1951) model. Second we analyze the effectiveness of those interventions based on the specific target focus.

Unfreeze

Of the 18 interventions, 13 reviewed what had prompted the need for culture change. The majority of these studies discussed how adverse staff survey results, as well as findings from interviews and focus groups, compelled change efforts. For instance, Mikkelsen *et al.* (2011) reported that staff surveys indicated a high frequency of bullying and conflict, with subsequent interviews suggesting that such incidents were unsuccessfully managed. Other studies discussed how management concerns over workforce issues prompted culture change initiatives. For example, Costello *et al.*'s (2011) culture transformation program in operating rooms across three hospitals was partly developed in response to a high turnover rate and, specifically, the retirement of the entire operating room leadership team in one hospital. These turnover issues in combination with survey results revealed that the core problems were due to a high level of disrespectful behaviors with more than 60 percent of the respondents indicating that they had been treated with disrespect and had witnessed disrespect among other team members. Similarly, the intervention described in Mulcahy and Betts (2005) was motivated by the high rates of absenteeism among nursing staff which compromised the mandated nurse-to-patient ratio.

Table II.
Culture change intervention effectiveness and strategies for change

Author	Intervention focus targer	Unfreeze	Change	Freeze	Climate outcomes	Organizational outcomes	Staff outcomes
Glisson (2007)	Enhance climate	Working party coalition Vision for change with broad consultation (practice principles)	Goal setting, and participatory decision making Education about the barriers to change	Continuous improvement efforts Job redesign	Enhanced perceptions of organizational climate	Decreased turnover	Enhanced engagement Decreased stress
Munroe *et al.* (2011)	Enhance culture/climate	Management concern	Classroom teaching Small-group activities		Enhanced perceptions of resident choice and organizational design (2/7 dimension)	n/a	n/a
Mulcahy and Betts (2005)	Enhance culture/climate	Focus group Interdisciplinary working party coalition Gap analysis	Leadership and professional development programs Communication workshops	Funding for project continuation New ward procedure and code of conduct	Enhanced perceptions of organizational culture	Zero nursing vacancies Halved casual and agency costs Decreased nursing absenteeism	n/a
Kaplan *et al.* (2010)	Incivility	Management concern Leadership coalition with nurse advocates Vision for change (code of conduct)	Training and development Case studies Scenario Role play	Monthly abbreviated culture training program New process for addressing unprofessionalism Program roll-out to new wards Compliance with code assessed in performance evaluations	Enhanced perceptions of respectful treatment, leader handling of disrespectful behaviors, and safety to speak about violations	n/a	n/a

(*continued*)

Table II.

Author	Intervention focus targer	Unfreeze	Change	Freeze	Climate outcomes	Organizational outcomes	Staff outcomes
Costello *et al.* (2011)	Incivility	Employee survey Critical incident Multidisciplinary working party coalition Senior management support Vision for change (commitment areas)	Leadership development program Conflict coaching Responsibilities clarification Education Self-management techniques Celebration of working party efforts Case studies of success stories	Creation of staff recognition awards Posting charter in all clinical areas Respect booklet distributed to all staff at orientation Respect course for all new staff members	Enhanced perceptions of workplace climate in low pre-scoring facility, sustained in high pre-scoring facility	Turnover unchanged at one facility, reduced by 50% at another	n/a
Henderson *et al.* (2014)	Organizational learning	Interdisciplinary working party	Optimism training Overcoming obstacles Presentation of alternative ways of behaving Acknowledgment and reward for sustaining new behaviors	n/a	Enhanced learning climate perceptions in 3/5 dimensions in site 1, and 1/5 dimensions in sites 2 and 3	n/a	n/a
Laschinger *et al.* (2012), Leiter *et al.* (2011, 2012) and Gilin Oore *et al.* (2010)	Incivility	Survey findings discussion Leadership working party Management support Vision for change + broad communication	Weekly facilitation training workshops for 6 months Civility exercises Establish unit goals and agendas for civility training Midterm review event (discussion of progress, shared concerns, action plans for the latter half of the project) Celebration event at end of intervention Celebration of progress by comparing pre and post scores	n/a	Enhanced perceptions of general and supervisor civility, improvements were maintained over time	Decreased absenteeism after intervention, but increased on one year follow-up	Enhanced staff satisfaction, and commitment, and trust in management, sustained over one year Decreased burnout and turnover intention, sustained over one year

(*continued*)

Author	Intervention focus targer	Unfreeze	Change	Freeze	Climate outcomes	Organizational outcomes	Staff outcomes
Osatuke *et al.* (2009)	Incivility	Survey Leader support	Weekly facilitation training workshops Civility training exercises Establish unit goals and agendas for civility training Monthly facilitator conference to share best-practice	n/a	Enhanced perceptions of civility	n/a	n/a
Bleakley *et al.* (2004, 2006, 2012) and Allard *et al.* (2007, 2011)	Teamwork	Change champion support 1-day Information seminar to highlight non-clinical aspects of patient care and safety in theater	Development of new OT procedure with three month trial Facilitated workshop discussion Expert information training session Introduction of OT process with week-long intensive implementation Post data feedback via newsletters and governance meetings Review and reflection of post survey for action	n/a	Enhanced perceptions of teamwork climate and work safety climate	n/a	n/a
DiMeglio *et al.* (2005)	Teamwork	Management concern Information letters	3 × 1 hour team-building sessions Identifying barriers to effective teamwork Change, conflict, communication training	n/a	Enhanced perceptions of group cohesion	Decreased turnover	Enhanced staff satisfaction

(*continued*)

Table II.

Table II.

Author	Intervention focus targer	Unfreeze	Change	Freeze	Climate outcomes	Organizational outcomes	Staff outcomes
Ginsburg *et al.* (2005)	Safety culture	Communicated opportunities to attend workshop	Safety and error workshop Error prevention and near-miss reporting training Teamwork and leadership workshops	n/a	Enhanced perceptions of safety value (1/3 dimensions)	n/a	n/a
Haller *et al.* (2008a)	Teamwork	Critical incident Multidisciplinary working party coalition	Discussion of miscommunication issues and errors Education on patient safety, team coordination and communication Role playing exercises	n/a	Enhance perceptions of team and safety climate	n/a	Enhanced staff satisfaction
Johnson and Kimsey (2012)	Teamwork	Survey Multidisciplinary working party coalition	3 hour training session	Quarterly education sessions for new staff members Online course developed on internal learning system – accessible for all staff	Decreased safety incidents	n/a	n/a
Kalisch *et al.* (2013)	Teamwork	Nurse volunteers from each ward to train ward nurses	Introduction podcast 3 hour education session Didactic presentations, scenarios, role playing simulation Debriefing, and discussion	n/a	Enhanced perceptions of teamwork, over time	Decreased missed nursing care	Enhanced teamwork satisfaction over time

(*continued*)

Table II.

Author	Intervention focus targer	Unfreeze	Change	Freeze	Climate outcomes	Organizational outcomes	Staff outcomes
Kalisch *et al.* (2007)	Teamwork	Focus groups and interviews Multidisciplinary working party coalitions Vision of change Communication to staff	Day-long team training program Testing of approaches in select wards with implementation across hospital if successful Development of short-term wins Working team coalition responsible for communication of progress/ feedback Progress accounted during team meeting, bulletin boards in staff lounge, e-mails, and monthly unit staff meeting	Reinforcement of training session by management and working team coalition	Enhanced perceptions of teamwork	Decreased patient fall incidents Decreased staff turnover rates after the intervention Decreased vacancy rates	n/a
Crethar *et al.* (2009)	Incivility	Critical incident Government initiated change	Leadership development workshops based on action learning principles 360-degree feedback Executive coaching Leadership learning modules	Development of leadership website	Decreased grievances Decreased bullying and harassment reports	Decreased consumer complaints Decreased absenteeism Increased staff retention	n/a
Mikkelsen *et al.* (2011)	Incivility	Surveys and interviews Working party committee Discussion on	Information session Training on preventing bullying Dissemination of newsletters, pamphlets, and posters on bullying	Implementation of anti-bullying policy Lack of support, resources, and time led to intervention not being followed-up	Increased awareness of incivility	n/a	n/a

(*continued*)

Table II.

Author	Intervention focus targer	Unfreeze	Change	Freeze	Climate outcomes	Organizational outcomes	Staff outcomes
		wards Vision for change					
Meloni and Austin (2011)	Incivility	Survey management support Multidisciplinary working party coalition CEO letter of concern and support for action		Bullying and harassment included in formal compulsory orientation program and manual Redesign of complaint procedure Increase in network of workplace equity officers Posters of do's and don'ts with further contact details	n/a	n/a	Enhanced staff engagement

Several of the studies highlighted how a critical incident that led to errors and adverse incidents revealed underlying issues that prompted culture change. For example, Costello *et al.* (2011), in addition to the turnover problems described above, reported a behavioral incident that affected communication and patient safety in one site as an important precursor to the culture transformation program. As with Costello and colleague's study, many of the studies cited a combination of the above factors as the motivation for the culture change efforts.

While most studies identified a factor serving as the impetus for change, many studies did not indicate whether these factors were communicated to staff. So it is unclear whether staff recognized that current behaviors were unsustainable and that there was a need for change. The majority of studies, however, described the formulation of a vision for change (i.e. articulating the desired state). For instance, Glisson (2007) described the formulation and communication of five guiding principles for change. Kaplan *et al.* (2010) described the development and communication of a Code of Conduct and Standards of Professional Treatment throughout the hospital. The vision for change was communicated via posters, information letters, newsletters, pamphlets, and information seminars. For example, the series of studies by Bleakley *et al.* (2004, 2006, 2012) and Allard *et al.* (2007, 2011) included information seminars on patient safety issues as a precursor to the team culture change programs they report on. In addition, Meloni and Austin (2011) also report a letter being sent to the staff from the CEO outlining concerns about the level of incivility along with a call to action. It is likely (although not always clearly specified) that the formulation of this communication about the vision for the future was accompanied by a discussion of the current state, or at the very least it signaled that the current state of practice was unsustainable.

In most interventions, the vision for change was largely established through the input of senior management and a working party or coalition of professional staff. For example, Johnson and Kimsey (2012) used a multidisciplinary team to develop the culture change program within a perioperative division of a health network in Pennsylvania. Working parties generally consisted of voluntary stakeholders who saw the value of change and were interested in leading change efforts (e.g. Kalisch *et al.*, 2007) or had unique skill sets in progressing the change initiative. Kaplan *et al.* (2010), for example, used a combination of a leadership team, chief learning officer, and a team of nurses who advocated for the change. Coalitions generally consisted of staff from different professional backgrounds, and from different levels of the organization.

Change

All studies described techniques that helped enable changes in behavior. The majority of the studies focus on the training and development of knowledge, skills, and abilities that will enable actions conducive to change. To enhance knowledge, culture change initiatives included teaching and information seminars that highlighted the importance of new behaviors for sustained culture change. Information seminars were delivered in conjunction with professional coaching and workshops focussing on enhancing the skills and abilities of staff to practice behaviors targeted in the change initiative. For instance, Mulcahy and Betts (2005) used communication workshops, whereas Costello *et al.* (2011) used self-management approaches to enhance workplace civility. Likewise, DiMeglio *et al.* (2005) developed conflict management and communication workshops to enhance teamwork processes. These workshops often deployed role play and scenario case study techniques to enhance skilled practice.

All studies were designed in a way that could measure progress or the impact of culture change initiatives and demonstrate its utility on desired outcomes (i.e. through pre-post or cross-sectional comparisons). Despite this, the majority of studies did not discuss to what extent the outcomes of change were actively communicated to staff to sustain the momentum for change. Only four interventions discussed the celebration of change efforts and outcomes. For instance, Costello *et al.* (2011) and Laschinger *et al.* (2012) discussed efforts to celebrate successes. Kalisch *et al.* (2007) and the four studies conducted by Bleakley *et al.* (2004, 2006, 2012) and Allard *et al.* (2007, 2011) actively discussed how the changes in survey findings were fed back to staff through team meetings to keep track of progress.

A small number of interventions discussed using participatory decision making, as opposed to pre-developed programs, to establish the goals and trajectory of training sessions and adapt and customize the strategies to the specific team context (e.g. Haller *et al.*, 2008a, b). These training groups defined their own change goals and agendas to enhance the relevance and applicability of training to workplace practice. In particular, civility programs designed around the Crew Resource Management (CRM) principles involved regular meetings that provided participants an opportunity to practice learned behaviors and to provide feedback that is usefulness in practice. In addition, Bleakley *et al.* (2004, 2006, 2012) and Allard *et al.* (2007, 2011) found that while formal training in CRM places heavy demands on resources, the collaborative approach helps to establish a self-sustaining and self-researching culture. They found that as a result of the intervention, teams began to own the CRM principles as part of their operational practices.

Freeze

Nine studies discussed how the culture changes were instituted or consolidated within the organization. In general, these studies discussed how the change vision was incorporated into the explicitly stated organizational framework. For instance, Costello *et al.* (2011) described efforts to enhance civility by creating recognition awards and posting code of conduct charters in all clinical areas. The authors also described the development of a respect course for all new staff members and how respect booklets were distributed to all new staff members at orientation. In four of the interventions, the training programs that were developed were subsequently used to orient new staff members. For instance, Johnson and Kimsey (2012) described how the training program was included in an orientation program, and made available as part of the internal learning management system. Meloni and Austin (2011) described how bullying and harassment training was subsequently included in the formal compulsory orientation program and manual. Four studies described more formal changes to the processes and procedures of the organization during the culture change. In particular, in three studies new procedures for ward conduct and/or for the handling of incivility were developed (Kaplan *et al.*, 2010; Meloni and Austin, 2011; Mulcahy and Betts, 2005), whereas Glisson (2007) documented changes in job design.

Effectiveness of interventions

All the intervention studies were focussed on organizational culture, however each study identified a particular aspect of culture as the intervention target. The way in which the effectiveness of the culture change interventions was measured also reflected the differences in the targets of the interventions. The effectiveness of the interventions was generally measured through organizational climate, incivility outcomes, and teamwork outcomes.

Organizational climate. The five studies on organizational culture/climate interventions were generally successful in lifting perceptions of the organization's climate but only some of the dimensions of organizational climate were substantially changed (i.e. statistically significant). Two of these studies also considered whether the culture change intervention affected objective organizational effectiveness indicators. For instance, Glisson (2007) reported decreased turnover, whereas Mulcahy and Betts (2005) reported decreased nursing vacancies, absenteeism, and agency costs. In addition, Glisson (2007) reported changes to staff well-being outcomes, such as increased engagement and decreased stress.

Incivility. Six of seven interventions focussing on addressing incivility and documented positive climate outcomes such as enhanced perceptions of civility at work. Three interventions focussed on objective organizational outcomes associated with the intervention, such as decreased turnover (Costello *et al.*, 2011), absenteeism (Crethar *et al.*, 2009; Laschinger *et al.*, 2012), and reduced grievances (Crethar *et al.*, 2009). Further, in a series of studies, Laschinger and colleagues reported the effects of their incivility intervention on staff outcomes, such as enhancing satisfaction and commitment and decreasing stress, in addition to improved climate outcomes and a temporary improvement in absenteeism (Gilin Oore *et al.*, 2010; Laschinger *et al.*, 2012; Leiter *et al.*, 2011, 2012). Meloni and Austin (2011) found that their incivility intervention enhanced staff engagement.

Teamwork. Five of six interventions focussed on improving teamwork processes and reported positive outcomes on climate perceptions of teamwork. Three of these studies considered the impact of these interventions on objective organizational indicators, such as decreased turnover (Dimeglio *et al.*, 2005; Kalisch *et al.*, 2007, 2013), decreased absenteeism (Crethar *et al.*, 2009), and enhanced patient outcomes (Kalisch *et al.*, 2007, 2013; Johnson and Kimsey, 2012). Three studies reported positive impact of the intervention on staff and teamwork satisfaction (DiMeglio *et al.*, 2005; Haller *et al.*, 2008a, b; Kalisch *et al.*, 2013).

Discussion

Through a combination of different strategies, most culture change interventions included in this review successfully changed perceptions of the climate and organizational outcomes such as work behaviors and work attitudes and well-being. Although the interventions identified in our review were quite varied, they all followed a process that can be explained by Lewin's (1951) three-step approach to change. Across all the studies there were three processes that seemed critical to creating successful organizational culture change in health care organizations. In the following section, we detail these processes and the techniques that enable these processes to bring about successful change.

Diagnosis and evaluation

Our literature review demonstrates that it seems to be important to establish a need for change that is based on an existing problem in the organization. Employee surveys (Costello *et al.*, 2011; Laschinger *et al.*, 2012; Meloni and Austin, 2011; Mikkelsen *et al.*, 2011; Osatuke *et al.*, 2009), focus groups (Kalisch *et al.*, 2007; Mulcahy and Betts, 2005), interviews (Kalisch *et al.*, 2007; Mikkelsen *et al.*, 2011) and critical incident analysis (Costello *et al.*, 2011; Crethar *et al.*, 2009; Haller *et al.*, 2008a, b) appears to have been

used as evidence of the need to change and to highlight what needs to change. Further, the data gathered in the early phase of the culture change program assisted in understanding the underlying assumptions that support the continuation of unwanted behaviors such that they can be changed during the intervention (Costello *et al.*, 2011). While critical incidents and management concerns appear to have initiated some change, surveys and interviews also provided a platform to investigate whether the issues identified resonated with employees. This seems to have been important in ensuring the initiative gained the support needed to enable change to progress. Further, in a number of the interventions the initial baseline measures were not only important to provide a business case for the change, but also provided a means to evaluate the change, and to determine the effects of the interventions. A combination of survey findings along with organization indicators (e.g. absenteeism rates) seem to be useful ways to provide a compelling case for the effectiveness of change.

Vision and support from leadership and change champions

Many of the studies in the review did not specifically indicate whether the underlying issues that motivated the culture change intervention were communicated to staff to create dissatisfaction with current practice. Instead, most studies described how the organization developed a vision for culture change. One potential explanation for this is that the identification and communication of problems with current practice may reiterate known problems, and may prompt cynicism over a lack of resolve to address underlying issues. In addition, it may be that the change initiative itself did not have a specific mechanism to communicate the underlying issues. In those studies that did include the underlying issues that motivated the culture change intervention, the communication of survey findings appears to help establish and identify the observed problems, which in combination with the presentation of a vision or an "ideal state" created a gap that generated the motivation to act on the problem (e.g. Kaplan *et al.*, 2010). This suggests that for culture change to be successful there needs to be a combination of acknowledging or highlighting problems with current practice with a vision for the future. The identification of the disparities between observed and ideal practices appears to have provided a rich resource for convincing leaders of the value of the culture change intervention.

All the successful culture change intervention studies included in the review had both leadership and employee support. This suggests that interventions solely driven by a leadership group may be less successful as the change is mandated, and may be viewed with skepticism by employees (Erwin and Garman, 2010). For example, employees may perceive such change as reflecting management's need to comply with external pressures or directives rather than an intervention reflecting a genuine desire for change (Erwin and Garman, 2010). On the other hand, when change is only driven by employees, there may not be sufficient resources to sustain the change initiative (Scott *et al.*, 2003), which may then lose momentum as it is not perceived to be of value by others. Most culture change initiatives in the review used an interdisciplinary voluntary working party coalition as the drivers of the change process (e.g. Johnson and Kimsey, 2012; Kalisch *et al.*, 2007; Kaplan *et al.*, 2010). Representation from multiple professions and levels of seniority in the working group may have been important to not only ensure adequate representation in determining the vision and strategy for change, but also ensuring that the intervention has the potential to reach all stakeholders. Given the strong power dynamics and professional identities in health

care settings, adequate representation is likely to enhance communication efforts and ensure that professions and/or levels were not left out of the change initiative. However, our results suggest that it also appears to be important for coalitions to have senior leader input and presence (Meloni and Austin, 2011) to emphasize the importance of the change initiative and to give the initiatives credibility.

Combination of interventions to develop, embed, and sustain change

Another important finding from our literature review is that there are many different approaches to culture change that are effective, and that using multiple channels and strategies are likely to be most effective in both creating and sustaining change. The interventions we reviewed ranged from formal learning in workshops (e.g. Kalisch *et al.*, 2007; Mulcahy and Betts, 2005) to informal learning through facilitated discussion and action planning (e.g. Haller *et al.*, 2008a, b). From the interventions reviewed, we conclude that it is important to ensure that these workshops and processes of informal learning are sustained over time as none of the interventions identified in our review used a one-off session or short-term intervention to produce sustainable change. Ingrained behaviors and assumptions and mindsets are difficult to amend and are likely to revert back to previously enacted behaviors or held assumptions without continued support (Lewin, 1951). In addition, results show that it is crucial that some effort is made to ensure that training is transferred to the work environment. Several of the successful interventions in our sample indicated that staff had opportunities to practice behaviors at work. For instance the work reported by Laschinger and colleagues (Laschinger *et al.*, 2012; Leiter *et al.*, 2011, 2012; Gilin Oore *et al.*, 2010) (using CRM) deployed weekly facilitation meetings over six months. The meetings encouraged participants to practice skills throughout the work week and to report on their experience at subsequent meetings. A defining feature of this successful culture change intervention seemed to be a careful and considered approach over time to enable new behaviors to be practiced so that the effects were realized.

However, most of the intervention studies in the review did not detail how the performance of new behaviors were encouraged and sustained. While many interventions discussed the development of charters and codes of conduct (e.g. Mulcahy and Betts, 2005; Kaplan *et al.*, 2010), it was not apparent whether these policy documents guided organizational practice in a meaningful way. Exceptions include Costello *et al.* (2011) who detailed the importance of encouragement to sustain behavior, specifically the reward of new behaviors through personal recognition and public acknowledgment. In particular, the public acknowledgment of individuals and groups was important to signal the changes that were valued. Because culture successful change initiatives are likely to take years, rather than weeks or months, this suggests that it is important to celebrate small wins along the way to build a sense of progress and mastery and to maintain momentum (Kotter, 1995). In addition, it appears to be helpful to have identified indicators of culture early in the process in order to have a mechanism to measure the outcomes of the change and to create an ongoing commitment. Value statements, such as charters and codes of conduct, may only have utility if they are "lived," such that people are rewarded for practice and discouraged from noncompliance. Further, the findings of our review also suggest that policy documents should be integrated into human resource systems such as performance management, career development, succession planning, etc. For example, Kaplan *et al.* (2010) outline how the codes were included as part of performance evaluations of their culture change initiative.

Limitations

We limited our search for culture change interventions to those in a health care context that were published after 2005. We did so in order to elicit effective culture change management strategies that capture current best-practice and thinking and to build on previous reviews of culture change (e.g. Mannion *et al.*, 2005; Scott *et al.*, 2003). While there has been a more recent review (Parmelli *et al.*, 2011), the authors conclude "current available evidence does not identify any effective, generalizable strategies to change organisational culture" (p. 33). We acknowledge that through this strategy we have excluded successful culture change interventions prior to 2005; however these were captured in the earlier reviews. Likewise, our focus on culture change in the health care sector, limits the scope of the review. We decided to focus on health care because we concluded from our initial broader review of the literature that the vast majority of published culture change interventions have taken place in a health care context (for exceptions, see Cottingham *et al.*, 2008, who report on a long-term culture change program at Indiana University School of Medicine). However, given that our review focusses on effective culture change management strategies, it is likely that these strategies are able to be replicated and implemented across industries.

Empirical reports of culture change interventions tend to be scarce on details. In particular, details on how the change is negotiated and implemented and the specific content of culture change programs are often not included or not included with sufficient detail to be replicable. It is therefore likely that our review does not capture the back-stage work involved in culture change interventions. However, what is apparent from the review is that there is not a "one-size-fits-all" approach to culture change, and that successful change is highly contingent on context and stakeholder engagement (Kotter, 1995). What we can conclude from the review is that the best approach to changing culture involves consultation with key stakeholders in the organization and through stakeholders within the organization who are able to bring about effective change.

Finally, the published papers on culture change interventions invariably present a "file drawer" problem in that only successful interventions were published, whereas unsuccessful programs are not available through peer-reviewed literature. In addition, the culture change interventions included in the review did not involve what is considered the "gold standard" of research, randomized control designs (Sacks *et al.*, 1982), making it difficult to conclude with any certainty whether specific strategies worked, whether some elements were more important than others, or whether something else led to the outcome. Further, while the change management field discusses the difficulty with "freezing" the changes, most studies did not have medium to long-term follow-up to document whether the changes lasted over time. However, this is a reflection of some of the challenges of applied organizational research in general.

Conclusions

Changing workplace culture is enormously challenging, but the consequences of not changing a dysfunctional culture can be devastating for the organization's effectiveness and individual employee well-being. When "good enough" becomes the "way we do things around here," and employees no longer strive to provide the best possible outcomes, then the organization is no longer meeting the expectations of any of its stakeholders. From our review of culture change interventions in health care organizations, it is clear that changing culture is complex and takes time,

determination, and resources from all parts of the organization. Gains are slow to emerge and set backs are common. In addition, culture change is not a discrete activity performed by human resource departments, but rather a consistent approach by all leaders to all decisions about the organization.

References

Allard, J., Bleakley, A., Hobbs, A. and Coombes, L. (2011), "Pre-surgery briefings and safety climate in the operating theatre", *BMJ Quality & Safety*, Vol. 20 No. 8, pp. 711-717.

Allard, J., Bleakley, A., Hobbs, A. and Vinnell, T. (2007), "Who's on the team today? The status of briefing amongst operating theatre practitioners in one UK hospital", *Journal of Interprofessional Care*, Vol. 21 No. 2, pp. 189-206.

Armenakis, A.A. and Bedeian, A.G. (1999), "Organizational change: a review of theory and research in the 1990s", *Journal of Management*, Vol. 25 No. 3, pp. 293-315.

Balthazard, P.A., Cooke, R.A. and Potter, R.E. (2006), "Dysfunctional culture, dysfunctional organization: capturing the behavioral norms that form organizational culture and drive performance", *Journal of Managerial Psychology*, Vol. 21 No. 8, pp. 709-732.

Bate, P. (1994), *Strategies for Cultural Change*, Butterworth-Heinemann, Oxford.

Bleakley, A., Allard, J. and Hobbs, A. (2012), "Towards culture change in the operating theatre: embedding a complex educational intervention to improve teamwork climate", *Medical Teacher*, Vol. 34 No. 9, pp. 635-640.

Bleakley, A., Hobbs, A., Boyden, J. and Walsh, L. (2004), "Safety in operating theatres: improving teamwork through team resource management", *Journal of Workplace Learning*, Vol. 16 Nos 1/2, pp. 83-91.

Bleakley, A., Boyden, J., Hobbs, A., Walsh, L. and Allard, J. (2006), "Improving teamwork climate in operating theatres: the shift from multiprofessionalism to interprofessionalism", *Journal of Interprofessional Care*, Vol. 20 No. 5, pp. 461-470.

Boyce, A.S., Nieminen, L.R., Gillespie, M.A., Ryan, A.M. and Denison, D.R. (2015), "Which comes first, organizational culture or performance? A longitudinal study of causal priority with automobile dealerships", *Journal of Organizational Behavior*, Vol. 36 No. 3, pp. 339-359.

Burnes, B. (2004), "Kurt Lewin and the planned approach to change: a re-appraisal", *Journal of Management Studies*, Vol. 41 No. 6, pp. 977-1002.

Cooke, R.A. and Szumal, J.L. (2000), "Using the organizational culture inventory to understand the operating cultures of organizations", Ashkanasy, N.M., Wilderom, C.P.M. and Peterson, M.F. (Eds), *Handbook of Organizational Culture and Climate*, Vol. 4, Sage Publications, Thousand Oaks, CA, pp. 1032-1045.

Costello, J., Clarke, C., Gravely, G., D'Agostino-Rose, D. and Puopolo, R. (2011), "Working together to build a respectful workplace: transforming OR culture", *AORN Journal*, Vol. 93 No. 1, pp. 115-126.

Cottingham, A.H., Suchman, A.L., Litzelman, D.K., Frankel, R., M., Mossbarger, D.L., Williamson, P.R., Baldwin, D.C. and Inui, T.S. (2008), "Enhancing the informal curriculum of a medical school: a case study in organizational culture change", *Journal of General Internal Medicine*, Vol. 23 No. 6, pp. 715-722.

Crethar, M.P., Phillips, J.N., Stafford, P.J. and Duckett, S.J. (2009), "Leadership transformation in Queensland health", *Australian Health Review*, Vol. 33 No. 3, pp. 357-364.

Cummings, T.G. and Worley, C.G. (2014), *Organization Development and Change*, Cengage Learning, Stamford.

Davies, H.T., Nutley, S.M. and Mannion, R. (2000), "Organisational culture and quality of health care", *Quality in Health Care*, Vol. 9 No. 2, pp. 111-119.

DiMeglio, K., Padula, C., Piatek, C., Korber, S., Barrett, A., Ducharme, M., Lucas, S., Piermont, N., Joyal, E., DeNicola, V. and Corry, K. (2005), "Group cohesion and nurse satisfaction: examination of a team-building approach", *Journal of Nursing Administration*, Vol. 35 No. 3, pp. 110-120.

Erwin, D.G. and Garman, A.N. (2010), "Resistance to organizational change: linking research and practice", *Leadership & Organization Development Journal*, Vol. 31 No. 1, pp. 39-56.

Fernandez, S. and Rainey, H.G. (2006), "Managing successful organizational change in the public sector", *Public Administration Review*, Vol. 66 No. 2, pp. 168-176.

Francis, R. (2013), "Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry. Volume 1: analysis of evidence and lessons learned (part 1)", available at: http://webarchive.nationalarchives.gov.uk/20150407084003/http://www.midstaffspublicinquiry.com/report (accessed June 10, 2016).

Ginsburg, L., Norton, P.G., Casebeer, A. and Lewis, S. (2005), "An educational intervention to enhance nurse leaders' perceptions of patient safety culture", *Health Services Research*, Vol. 40 No. 4, pp. 997-1020.

Gilin Oore, G.D., Leblanc, D., Day, A., Leiter, M.P., Spence Laschinger, H.K., Price, S. and Latimer, M. (2010), "When respect deteriorates: incivility as a moderator of the stressor–strain relationship among hospital workers", *Journal of Nursing Management*, Vol. 18 No. 8, pp. 878-888.

Glisson, C. (2007), "Assessing and changing organizational culture and climate for effective services", *Research on Social Work Practice*, Vol. 17 No. 6, pp. 736-747.

Haller, G., Garnerin, P., Morales, M.A., Pfister, R., Berner, M., Irion, O., Clergue, F. and Kern, C. (2008a), "Effect of crew resource management training in a multidisciplinary obstetrical setting", *International Journal for Quality in Health Care*, Vol. 20 No. 4, pp. 254-263.

Haller, G., Morales, M., Pfister, R., Garnerin, P., Chipp, P., Guillemot, V., Millart, V., Berner, M., Irion, O., Clergue, F. and Kern, C. (2008b), "Improving interprofessional teamwork in obstetrics: a crew resource management based training programme", *Journal of Interprofessional Care*, Vol. 22 No. 5, pp. 545-548.

Hannan, M.T. and Freeman, J. (1984), "Structural inertia and organizational change", *American Sociological Review*, Vol. 49 No. 5, pp. 149-164.

Harris, L.C. and Ogbonna, E. (1998), "Employee responses to culture change efforts", *Human Resource Management Journal*, Vol. 8 No. 2, pp. 78-92.

Hartnell, C.A., Ou, A.Y. and Kinicki, A. (2011), "Organizational culture and organizational effectiveness: a meta-analytic investigation of the competing values framework's theoretical suppositions", *Journal of Applied Psychology*, Vol. 96 No. 4, pp. 677-694.

Haveman, H.A. (1992), "Between a rock and a hard place: organizational change and performance under conditions of fundamental environmental transformation", *Administrative Science Quarterly*, Vol. 37 No. 1, pp. 48-75.

Henderson, A., Schoonbeek, S., Ossenberg, C., Caddick, A., Wing, D., Capell, L. and Gould, K. (2014), "Achieving success in intervention studies: an analysis of variable staff engagement across three midwifery settings", *Journal of Clinical Nursing*, Vol. 23 No. 11, pp. 1653-1661.

Hofstede, G., Neuijen, B., Ohayv, D.D. and Sanders, G. (1990), "Measuring organizational cultures: a qualitative and quantitative study across twenty cases", *Administrative Science Quarterly*, Vol. 35 No. 2, pp. 286-316.

Homburg, C. and Pflesser, C. (2000), "A multiple-layer model of market-oriented organizational culture: measurement issues and performance outcomes", *Journal of Marketing Research*, Vol. 37 No. 4, pp. 449-462.

Hutchison, B., Abelson, J. and Lavis, J. (2001), "Primary care in Canada: so much innovation, so little change", *Health Affairs*, Vol. 20 No. 3, pp. 116-131.

Johnson, H.L. and Kimsey, D. (2012), "Patient safety: break the silence", *AORN Journal*, Vol. 95 No. 5, pp. 591-601.

Kalisch, B.J., Curley, M. and Stefanov, S. (2007), "An intervention to enhance nursing staff teamwork and engagement", *Journal of Nursing Administration*, Vol. 37 No. 2, pp. 77-84.

Kalisch, B.J., Xie, B. and Ronis, D.L. (2013), "Train-the-trainer intervention to increase nursing teamwork and decrease missed nursing care in acute care patient units", *Nursing Research*, Vol. 62 No. 6, pp. 405-413.

Kaplan, K., Mestel, P. and Feldman, D.L. (2010), "Creating a culture of mutual respect", *AORN Journal*, Vol. 91 No. 4, pp. 495-510.

Kavanagh, M.H. and Ashkanasy, N.M. (2006), "The impact of leadership and change management strategy on organizational culture and individual acceptance of change during a merger", *British Journal of Management*, Vol. 17 No. 1, pp. 81-103.

Kotter, J.P. (1995), "Leading change: why transformation efforts fail", *Harvard Business Review*, Vol. 73 No. 2, pp. 59-67.

Laschinger, H.K.S., Leiter, M.P., Day, A., Gilin-Oore, D. and Mackinnon, S.P. (2012), "Building empowering work environments that foster civility and organizational trust: testing an intervention", *Nursing Research*, Vol. 61 No. 5, pp. 316-325.

Leiter, M.P., Laschinger, H.K.S., Day, A. and Oore, G.D. (2011), "The impact of civility interventions on employee social behavior, distress, and attitudes", *Journal of Applied Psychology*, Vol. 96 No. 6, p. 1258.

Leiter, M.P., Day, A., Gilin Oore, D. and Spence Laschinger, H.K. (2012), "Getting better and staying better: assessing civility, incivility, distress, and job attitudes one year after a civility intervention", *Journal of Occupational Health Psychology*, Vol. 17 No. 4, pp. 425-434.

Lewin, K. (1951), *Field Theory in Social Science*, Harper & Row, New York, NY.

Lewin, K. (1952), "Group decision and social change", *Readings in Social Psychology*, Henry Holt, New York, NY.

Mannion, R., Davies, H.T.O. and Marshall, M.N. (2005), "Cultural characteristics of 'high' and 'low' performing hospitals", *Journal of Health Organization and Management*, Vol. 19 No. 6, pp. 431-439.

Martin, J. (1985), "Can organizational culture be managed?", in Frost, P.J., Moore, L.F., Louis, M.R., Lundburg., C.C. and Martin, J. (Eds), *Organizational Culture*, Sage, London, pp. 186-199.

Meloni, M. and Austin, M. (2011), "Implementation and outcomes of a zero tolerance of bullying and harassment program", *Australian Health Review*, Vol. 35 No. 1, pp. 92-94.

Miller, R.H. and Luft, H.S. (1997), "Does managed care lead to better or worse quality of care?", *Health Affairs*, Vol. 16 No. 5, pp. 7-25.

Mikkelsen, G.E., Hogh, A. and Berg Puggaard, L. (2011), "Prevention of bullying and conflicts at work: process factors influencing the implementation and effects of interventions", *International Journal of Workplace Health Management*, Vol. 4 No. 1, pp. 84-100.

Mulcahy, C. and Betts, L. (2005), "Transforming culture: an exploration of unit culture and nursing retention within a neonatal unit", *Journal of Nursing Management*, Vol. 13 No. 6, pp. 519-523.

Munroe, D.J., Kaza, P.L. and Howard, D. (2011), "Culture-change training: nursing facility staff perceptions of culture change", *Geriatric Nursing*, Vol. 32 No. 6, pp. 400-407.

O'Reilly, C.A., Chatman, J. and Caldwell, D.F. (1991), "People and organizational culture: a profile comparison approach to assessing person-organization fit", *Academy of Management Journal*, Vol. 34 No. 3, pp. 487-516.

Ogbonna, E. (1993), "Managing organizational culture: fantasy or reality?", *Human Resource Management Journal*, Vol. 3 No. 2, pp. 42-54.

Ogbonna, E. and Harris, L.C. (1998), "Managing organizational culture: compliance or genuine change?", *British Journal of Management*, Vol. 9 No. 4, pp. 273-288.

Osatuke, K., Moore, S.C., Ward, C., Dyrenforth, S.R. and Belton, L. (2009), "Civility, respect, engagement in the workforce (CREW): nationwide organization development intervention at veterans health administration", *Journal of Applied Behavioral Science*, Vol. 45 No. 3, pp. 384-410.

Parmelli, E., Flodgren, G., Beyer, F., Baillie, N., Schaafsma, M.E. and Eccles, M.P. (2011), "The effectiveness of strategies to change organisational culture to improve healthcare performance: a systematic review", *Implementation Science*, Vol. 6 No. 1, pp. 1-33.

Piderit, S.K. (2000), "Rethinking resistance and recognizing ambivalence: a multidimensional view of attitudes toward an organizational change", *Academy of Management Review*, Vol. 25 No. 4, pp. 783-794.

Sacks, H., Chalmers, T.C. and Smith, H. (1982), "Randomized versus historical controls for clinical trials", *The American Journal of Medicine*, Vol. 72 No. 2, pp. 233-240.

Schein, E.H. (1985), *Organizational Culture and Leadership: A Dynamic Review*, Jossey-Bass, San Francisco, CA.

Schein, E.H. (1992), *Organizational Culture and Leadership*, 2nd ed., Jossey-Bass, San Francisco, CA.

Schneider, B., Brief, A.P. and Guzzo, R.A. (1996), "Creating a climate and culture for sustainable organizational change", *Organizational Dynamics*, Vol. 24 No. 4, pp. 7-19.

Scott, T.I.M., Mannion, R., Davies, H.T. and Marshall, M.N. (2003), "Implementing culture change in health care: theory and practice", *International Journal for Quality in Health Care*, Vol. 15 No. 2, pp. 111-118.

Sheridan, J.E. (1992), "Organizational culture and employee retention", *Academy of Management Journal*, Vol. 35 No. 5, pp. 1036-1056.

Smith, M.E. (2003), "Changing an organisation's culture: correlates of success and failure", *Leadership & Organization Development Journal*, Vol. 24 No. 5, pp. 249-261.

Tsui, A.S., Wang, H. and Xin, K.R. (2006), "Organizational culture in China: an analysis of culture dimensions and culture types", *Management and Organization Review*, Vol. 2 No. 3, pp. 345-376.

Weick, K.E. and Quinn, R.E. (1999), "Organizational change and development", *Annual Review of Psychology*, Vol. 50 No. 1, pp. 361-386.

Wilson, R.M., Runciman, W.B., Gibberd, R.W., Harrison, B.T., Newby, L. and Hamilton, J.D. (1995), "The quality in Australian health care study", *Medical Journal of Australia*, Vol. 163 No. 9, pp. 458-471.

Further reading

Dawson, P. (1994), *Organizational Change: A Processual Approach*, Chapman, London.

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