Workplace Culture Improvements: A Review of the Literature

A report for the Workforce Planning and Development Branch of the NSW Ministry of Health

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INTRODUCTION

Managing workplace culture is an increasingly important issue in today's organisations. Research has established that the 'right kind of culture' is a source of competitive advantage because it impacts on the way an organisation conducts its business and its capacity and receptiveness to change. Workplace culture also shapes the decision-making process and influences the attitudes and behaviours of organisational members. When culture is dysfunctional, such as when the values of members are not aligned with organisational values, the risk of organisational underperformance increases. Culture dysfunction commonly manifests as agitating behaviour, factionalism, or the emergence of silos and countercultures, which actively work against the best interests of the organisation as a whole. A dysfunctional workplace culture also erodes employee engagement and can lead to an increase in unplanned absences and stress-related occupational health and safety claims. Inevitably, productivity and quality of service will decrease. Ultimately, an organisation with a dysfunctional culture is at a higher risk of failing in its role by neglecting the expectations of its stakeholders and those that rely on the service it provides.

Fortunately, there is increasing evidence that organisations can implement effective interventions for changing workplace culture. The aim of this report is to provide a review of the literature from 2005 and beyond of successful interventions that have been implemented to improve workplace culture. The focus of this review is on workplace culture interventions designed to reduce unacceptable behaviours and to improve staff engagement and well-being, as well as adherence to core values. This report provides information about workplace culture interventions and is intended to assist readers to make informed decisions about the process of culture change. We don't advocate one particular culture change model or suggest that there is one approach to change that will work best. Rather we summarise the culture change interventions that have been published in the peer reviewed academic literature since 2005 and based on this evidence provide insights and suggestions for managers who will be leading culture change within their organisation. In addition, we provide a comprehensive table with details from over 50 culture change interventions. These

can be used as a resource which we hope will stimulate ideas and inform decisions about specific challenges and opportunities that present themselves in the process of changing culture.

The report is divided into three sections. The first section provides a definition of workplace culture and an overview of the key concepts. The second section provides details on the literature review process and summarises the key articles identified. Specifically, we found 52 articles which reported on the effectiveness of workplace culture interventions. We categorised these interventions into six main types: (1) organisational-wide culture interventions; (2) workplace civility and staff engagement interventions; (3) leadership interventions; (4) teamwork interventions; (5) anti-bullying interventions and (6) mindfulness and stress/burnout interventions. The report concludes with a general overview and general guidelines and practical recommendations for implementing effective workplace culture interventions.

SECTION A: WORKPLACE CULTURE

What is workplace culture?

The culture of an organisation is important for the performance and sustainability of an organisation and for the well-being of those who work in it. Leaders within organisations know intuitively that the culture is important but it can be difficult to pin down what the culture is, how it emerged and how to shape it so that it supports rather than undermines organisational effectiveness. In general, workplace culture can be defined as the shared values, beliefs, assumptions and, norms that affect the way people and groups in an organisation interact with each other. It is considered the unwritten rules that exist in a workplace – or 'how things are done around here'.1 There are four basic elements of workplace culture:

Artefacts: Symbols and objects used to express cultural messages. For example what is celebrated within the organisation? Who are the heroes? Why did they become heroes?

Behavioural norms: Observable recurrent practices of employees. Leaders play an important role in modelling behaviours that reflect or align with the culture they want to create.

Values: Preferences for certain outcomes over others. What is considered important within an organisation will be a major influence on behaviour, and the values that employees see enacted in the workplace are more powerful than those written on plaques on the wall. Ideally there needs to be an alignment between what employees' value and what the organisation values and this is likely to be fluid, particularly as organisations become more diverse. Leaders shouldn't assume that their values are shared universally by all employees and they play a major role in communicating and helping employees connect to organisational values.

Assumptions: Unconscious beliefs that shape organisation members' perceptions and interpretations of their work environment. Underlying artefacts, behaviours and values are the assumptions that all employees make about the organisation. These are the most difficult to change because they are

'unconscious' and rarely made explicit. Leaders also play a role in helping employees make the connection between their behaviours and values and the assumptions that underlie them.

Workplace or organisational culture can be *strong* (widely shared by members), *weak* (not widely shared), or *transitional* (characterised by the gradual replacement of one culture by another). Culture can also exist at many levels, including a dominant organisational culture; subcultures which are associated with specific units, and countercultures which present a direct challenge to the maintenance of a dominant organisational culture and can be found in work units that are poorly integrated with the larger organisation. It should be noted that members of subcultures broadly share the same values as the rest of the organisation but differ in ways unique to their members. Thus subcultures do not necessarily threaten the broader culture. They can enhance it by providing a level of reassurance and can sometimes even be motivating. For example, a subculture of long serving employees may demonstrate a strong commitment to the organisation and its values thus providing a good example to others, particularly new recruits whose commitment to the organisation may not be as strong.

Why is workplace culture important?

Underpinning a productive workplace is a healthy workplace culture, as it affects the way an organisation functions and responds to challenges. The relationship between workplace culture and organisational effectiveness has been widely studied. Organisational culture is a source of sustainable competitive advantage² and affects key organisational outcomes such as staff morale, turnover, service quality, and service outcomes^{3,4}. Workplace culture also affects key employee outcomes. For example, studies have found positive links between culture (e.g., effective leadership, communication openness, participative management, and effective conflict management) and employee well-being, such as satisfaction, morale, engagement, and higher levels of discretionary work effort and cooperation. The costs of a substandard organisational culture include bullying in the workplace, poor employee mental and physical health, disengagement and underperformance¹. When organisational culture is not functional, significant resources are directed to containing and dealing with employee behaviours and workplace conflict. An example of the devastating impact

of a dysfunctional culture comes from the 2010 inquiry into the Mid Staffordshire NHS Foundation trust, in which up to 1200 patient deaths were attributed to 'a culture of tolerance for poor standards'⁵.

When organisational culture is functional on the other hand, employees share beneficial values, norms and ways of interacting, which guide how they respond when there is uncertainty or challenges. This can help reduce stress when dealing with ambiguity and complexity¹. In addition culture shapes the reputation of organisations, as how employees feel within an organisation influences how they talk about it to colleagues, the public, even their patients. Finally when there is a functional organisational culture employees thrive and are motivated to deliver better services².

How do we change workplace culture?

One of the basic challenges faced by many organisations is how to improve workplace culture and bring about positive behavioural change. Research shows that organisational culture can be improved with planned organisational interventions. In this report we describe the results of an extensive review of workplace culture change interventions conducted at all levels of the organisation (individual, group, and organisation-wide) and applied across a range of different industries.

SECTION B: REVIEW OF WORKPLACE CULTURE INTERVENTIONS

What process was used to identify relevant studies?

Using library resources from the University of New South Wales and University of Sydney, we searched relevant databases (e.g., Proquest, Central, Science Direct, PsyInfo, ABI Global, PubMed, and Web of Science) for peerreviewed journal articles published after 2005 on workplace culture interventions. These databases combine coverage of all major scientific and management journals. In the first phase of the search, a combination of broad terms such as "organisational culture", "culture change", "workplace culture", "culture intervention", "culture schemes", "culture interventions" and "culture initiatives" were used. A total of 195,000 articles were found, although only 1,953 articles were relevant. Of these articles, 70 met the main inclusion criteria (that is, studies on workplace culture interventions), but further analysis revealed only 52 key articles there were sufficiently insightful and high quality to be included in the final review.

The 52 studies were evaluated and rated according two major criteria: i) The reputation of the journals where the study is published (based on the Australian Research Council (ARC) journal ranking and the journal's impact factor), and ii) the quality of the design and analysis employed in the study. These criteria provide guidance as to the dependability and reliability of the findings reported in each study. Based on these criteria, each study is assigned a quality rating, with ' $\sqrt{\sqrt{}}$ ' indicating a very high quality study ' $\sqrt{}$ ' a high quality study and ' $\sqrt{}$ ' a good quality study.

What articles were identified?

The details of the 52 key articles can be found in **Appendix 1.** As can be seen in the Appendix, each article has been summarised and detail is provided on the nature of the interventions, the change framework used, the outcomes, key success factors and logistics.

We also categorised the 52 articles into six types of interventions:

- 1. *Organisational-wide culture interventions:* These are larger-scale workplace culture interventions aimed at transforming culture across the whole organisation. These interventions tend to be more complex, longer term, and involve change strategies at multiple levels of the organisation.
- 2. Workplace civility and staff engagement interventions: These interventions are aimed at raising awareness of the importance of workplace civility and facilitating a culture that upholds the values of respect, collaboration and engagement.
- 3. Teamwork interventions: These are interventions aimed at improving workplace culture through teambuilding, improving communication within teams, conflict management and fostering a culture of teamwork and collaboration.
- **4.** Leadership interventions: These are interventions targeted at managers and leaders, designed to equip them with the skills to manage culture change and employ different training methodologies to develop leadership capabilities.
- **5. Anti-bullying interventions:** These interventions are aimed at reducing unacceptable, bullying-type behaviours in the workforce and involve both preventative and reactive measures.
- 6. Mindfulness and stress/burnout interventions: These tend to be more individual-based interventions focused on modifying individuals' responses to stress and encouraging mindfulness as a means of enhancing employees' overall well-being.

Table 1 provides a summary of the 52 articles we found on workplace culture interventions.

Table 1. Overview of the 52 key articles reviewed

	Type of workplace culture interventions		
1.	Organisational- wide culture	Action research, workshops, team taskforce, communication.	7
2.	Workplace civility and staff engagement	Clinical development teams, combined class discussion, speaker presentations, active learning strategies, and leadership training.	10
3.	Teamwork	Crew resource management (CRM), teamwork, coaching and training.	13
4.	Leadership	Action-learning leadership development workshops, 360-degree feedback, executive coaching, leadership learning modules, interactive leadership, leadership website and conflict resolution.	5
5.	Anti-bullying	Zero bullying tolerance program, conflict prevention and mediation.	4
6.	Mindfulness and stress/burnout	Coaching and training.	13
		Total	52

Below we provide a more detailed analysis of these intervention studies.

1. Organisational-wide culture intervention studies

We found seven articles aimed at transforming culture across the whole organisation. Two were published in top quality journals^{6,7}, three in mid-tiered journals^{3,8,9} and two in lower-tiered journals^{10,11}. Five of the studies were carried out in healthcare settings^{3,7,9–11}, one was in an education setting⁶ and one was carried out in a manufacturing firm⁸. All the interventions in these studies involved a timeframe of between two to five years, and all but one⁸ reported positive outcomes.

The interventions in this category were implemented mainly in response to urgent needs identified within the organisations. For example, Costello and colleagues' culture transformation program was developed in response to the high level of dissatisfaction expressed in an employee opinion survey and a high turnover rate. The survey results revealed that the core problems were due to a high level of disrespectful behaviours with more than 60% 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 Betts⁹ was motivated

by the high rates of absenteeism amongst nursing staff which compromised the mandated nurse to patient ratio. Likewise, Cottingham and colleagues' study was motivated by the constant display of suboptimal behavioural patterns within the Indiana University School of Medicine which led to students feeling alienated, disrespected, and unsupported by the school staff.

Most of the interventions in this category appear to follow Lewin's Action Research¹² framework, which includes five major steps: diagnosis, analysis, feedback, action, and evaluation. In most of the studies, the organisations had administered a baseline employee survey to better understand the culture and the results of the surveys were analysed and reviewed by senior management teams. In addition, several of the organisations also used focus groups, interviews, and open-ended surveys to identify the area of concerns and to specifically map the existing culture or sub-cultures within each unit or organisation. For instance, Mulcahy and Betts⁹ used focus groups to identify and map the culture in the neonatal unit. Likewise, Cottingham and colleagues⁶ conducted in-depth interviews to better understand the students' needs. Costello and colleagues¹¹ employed open-ended survey questions to understand how the staff experienced disrespectful behaviours. The results of these assessments were communicated to both senior leaders and all employees with the aim of highlighting the need for change. Subsequently specific strategies were developed to address the key issues. Following the strategies, action plans and evaluative procedures were outlined to capture and assess the change.

What did the interventions entail? All the interventions involved leadership teams that were responsible for setting the direction and the vision of the project. For instance, the intervention reported by Kaplan and colleagues¹⁰ was continually sponsored by the senior leadership team. In addition, task force or special committees were also elected to elicit ideas from employees aimed at developing action plans to support the transformational strategies. These task forces or committees consisted of representatives from specific units or organisations who were instrumental in supporting the change strategies. For instance, Costello and colleagues¹¹ study was aimed at transforming culture in the operating rooms of three different hospitals, thus two major task forces were formed: a 'Human Resources Management Group' and a 'Quality of Worklife Task Force'. The Human Resources Management Group was

responsible for reviewing and evaluating roles and responsibilities, staff allocation, and leadership structures. The 'Quality of Worklife Task Force' was responsible for using survey results to develop action plans. This is a well designed intervention¹¹ but it is published in a lower ranked journal. Similarly, Mulcahy and Betts' study created a 'Team Review' taskforce, which consisted of early career nurses, doctors, senior nurses and managers working together to be change agents, responsible for developing and implementing the action plans. This interdisciplinary representation was also evident in Costello and colleagues' study where a Steering Team made up of senior leaders from different disciplines took charge of the implementation.

The implementation of the interventions in this category involved multiple stages, rolled out in different phases. For example, Kaplan and colleagues¹⁰ piloted and evaluated the intervention for one year prior to launching it on a larger scale. Glison and colleagues³ also engaged in multiple stages of intervention. Specifically, there were three-phases focused on developing collaborative working relationships with internal and external stakeholders, facilitating broad participation in change efforts and encouraging the adoption of innovation and change that addresses barriers or deficits in services. The three-stage process was then followed by a four-phase intervention of i) problem identification, ii) strategies identified for addressing the barriers from phase i, iii) implementation of new strategies, and iv) stabilisation of those strategies as an ongoing part of organisational development. While both studies^{3,10} outline the benefits of a multiple stage-intervention, the study by Glisson and colleagues³ uses a stronger intervention design and more reliable measurements, therefore more confidence can be placed on these findings.

What specific strategies were used? Most of the intervention studies in this category (except Scheeres and Rhodes⁸) employed multiple strategies at various stages of the intervention. Most studies employed strategies such as workshops, training and coaching in their interventions. These strategies were used to create awareness and addressed the need to change. Other tools and resources, such as communication methods (e.g. newsletter, bulletin board etc.), codes of conduct, collaborative resolution process tools, team charters, self-assessment tools, role play and simulation training were also instrumental in supporting the change initiatives.

There were variations, however, in the use of these strategies. For example, the intervention reported by Scheeres and Rhodes⁸ was highly restrictive and formalised, thus the initiative appeared to be 'less genuine'. Post-intervention results revealed that employees felt that their concerns and input were not considered. On the other hand, the training and workshops used in the other studies were customised to the specific employees, such as the leadership team or employees from specific units. The leadership workshop and coaching sessions mainly focused on business planning, team development, and people management^{6, 9}, leaders' accountabilities in managing conflict and resolving interest-based conflicts¹¹. The employees' training and workshop mainly focused on collaborative resolution processes¹¹, developing healthy relationships⁶ and sharing knowledge⁹. Another interesting element found in two of the studies^{6,11} was that the intervention included the opportunity to promote and celebrate successful initiatives through staff events¹¹ and newsletters⁶, which had a 'ripple' effect to other parts of the organisation or unit. It is also interesting to note that both Mulcahy and Bretts⁹ and Costello and colleagues¹¹ report strategies to reduce the scepticism associated with the initiatives, which they identify as one of the major barriers in engaging employees in the change initiatives.

Results of the interventions. Most studies^{3,6,9,11} reported positive outcomes. For example, Mulcahy and Betts ⁹ reported that 12 out of the 16 cultural attributes showed improvement. Staff in this study reported that it was 'a truly great place to work' because people were more approachable. They further noted that the environment was friendly (i.e., focus on respect and trust) and team-oriented. Furthermore, the unit had high expectations and delivered successful outcomes. In addition, the absence rate was significantly reduced. Similarly, Costello and colleagues¹¹ reported reduction in staff turnover rates in one of the sites and an overall improvement of over 40% in teamwork, respect, and work practices. While these two studies^{9,11} showed positive outcomes, which are important for hospitals, the findings should be read with caution as there is limited information on the reliability or validity of the measurements used (i.e. Best Practice Australia surveys)¹¹. On the other hand, Glisson and colleagues³ reported significant improvement in the organisation's culture, reduced turnover, stress and higher levels of engagement using reliable measurements and rigorous data analytical methods. Likewise, Cottingham and colleagues⁶ reported an increase in students' overall satisfaction and employees reported positive changes in their work

and learning environment. These outcomes were also benchmarked against national data over several years. These studies^{3,11} provide excellent guidance on strategies for measuring change and capturing 'real' or intended culture change.

Summary. In sum, although there are only a small number of studies on changing workplace culture at the organisational level, these studies clearly show that carefully planned interventions that have strong support from the senior management team and good participation from employees result in positive changes. These studies also highlight new approaches and processes to be incorporated as part of organisational practices. Overall, all of the interventions except Scheeres and Rhodes⁸ involved top-management support and a genuine participative approach to engage employees across all levels. The exception, Scheeres and Rhodes⁸, reported an intervention that was predominantly mandated from the top down. Scheeres and Rhodes⁸ did not find significant culture change as a result of the intervention and highlight the need to understand how employees experience the organisation's corporate culture before focusing on changing the culture. Finally a recently published paper in a new journal (open access) by Manley and Colleagues⁷² (which is not included in the review as it does not include an intervention) provides a comprehensive overview of the drivers and enablers of workplace culture.

2. Workplace civility and staff engagement intervention studies

We found ten articles on civility, respect and engagement interventions ^{13–22} and all of these interventions were implemented in healthcare settings. Two were published in top quality journals ^{17,18}, three in mid-tiered journals ^{14,16,19} and five in lower-tiered journals ^{13,15,20–22}. Six of these studies used the Civility, Respect, and Engagement at the Workplace (CREW) program while three employed an educational intervention ^{13,15,22} and one used a four-step development of behaviours program ¹⁴. All the interventions in these studies involved a timeframe of between 6 and 24 months. All the interventions reported positive outcomes although one, Osatuke and Belton's ²¹ article, was a review of CREW methodology rather than an intervention.

What did the interventions entail? Most of the civility and staff engagement interventions use a specific program known as Civility, Respect, and Engagement at the Workplace (CREW). The CREW intervention was developed in 2005 by the U.S. Department of Veterans Affairs (DVA), which is the second largest federal organisation in the USA. The DVA employs over 310,000 employees and provides healthcare and other services to approximately 5 million veterans nationwide²¹. The program was first launched in 2005 in response to employee feedback that low levels of civility affected their job satisfaction. The goal of the CREW intervention is to improve workplace culture through more civil and respectful interactions. The intervention is designed to raise awareness of the importance of workplace civility and respect and to facilitate discussions by defining and establishing a shared understanding of how civility helps to accomplish work tasks and performance goals for specific workgroups.

What specific strategies were used? The main strategies used in the CREW intervention are facilitated discussions, role plays and action plans which focus on participative and experiential learning. Trained facilitators meet regularly with identified work groups for approximately six months to give the group the necessary time to focus on creating a respectful and civil work environment. Facilitators facilitate discussions aimed at defining civil behaviours that are culturally specific to each workplace. The focus of the discussion is on changing behaviours, attitudes and emotions. Facilitators encourage problem solving, and conduct exercises and activities that can help improve how the group participants interact with one another. The regular meetings provide a forum for discussions of how to improve the work environment as well as provide a place to practice new behaviours and ways of interacting so these can become the norm. The CREW intervention is customised for each group following a structured approach and there is continual evaluation and monitoring of levels of civility and respect as part of the intervention. CREW interventions are also focused on obtaining senior leadership sponsorship, commitment, and engagement at all levels given that leaders' commitment to civility and respect in the workplace has been shown to enhance organisational culture and everyday interactions at work²¹.

There were also two studies that focused on workplace civility but did not use the CREW intervention. These two studies were designed in response to incivility among nurses and nursing students and used multiple tools such class discussion, speaker presentations, and other active learning strategies^{15,22} to raise awareness and create positive behavioural change in senior students enrolled in a nursing leadership course. Unlike the CREW intervention, these civility interventions had a top-down approach and involved classroom delivery.

Results of the interventions. Compared to the other types of interventions, the CREW intervention has been successful in both medium and large-scale culture change programs. For instance, Osatuke et al²⁰ reported on a nation-wide intervention which involved 23 sites of USA's VHA hospitals, including small, rural, and large metropolitan hospitals. Likewise, Leiter and colleagues ^{17,18} reported on interventions carried out in Canada with large numbers of participants (between 1,000 to 2,000). Laschinger and colleagues¹⁶ and Gilin-Oore and colleagues¹⁹ studies were carried out in a medium-sized healthcare organisation with 500-800 participants in 19 units in Nova Scotia and Ontario) and 300-500 participants in 17 units in five Canadian hospitals, respectively. While Osatuke and colleagues' studies provide good insights into the challenges and processes when implementing multiple sites intervention, the findings of these studies should be interpreted with caution as there are some limitations in the intervention design and data analysis. Leiter and colleagues^{17,18} studies, on the other hand, use reliable outcome measures, rigorous evaluative processes and data analysis, and are published in top ranked journals. Similarly, Laschinger and colleagues¹⁶ and Gilin-Oore and colleagues¹⁹ findings are based on well designed interventions.. However, none of these interventions use a randomised control design so there may be some bias in the samples selected to participate in the intervention ^{16,19}. Nevertheless, this limitation should be balanced by the generalizability of their findings to other hospitals.

Results of these evaluations studies showed that the CREW interventions delivered significant improvements in co-worker civility^{17,20}; empowerment and trust in management^{16,17}; supervisor incivility, respect, cynicism, job satisfaction and absences¹⁷; and reduced perceptions of work overload, which in turn improved mental health. However, the post-intervention sustainability of these changes varied. In

particular, one study¹⁸ showed that the moment the intervention ceased to guide and motivate behaviours, the behavioural change ceased. In particular, absence levels reverted to pre-intervention levels¹⁸. On the other hand, the improvements in job attitudes attained by the end of the intervention were maintained¹⁸. All the CREW interventions resulted in employees becoming more aware of the importance of civility at the workplace and a better understanding of how to effectively interact with respect and civility²⁰. This is an important finding, as CREW appears to be effective in changing the culture by focusing on core values of respect and civility.

The two non-CREW civility interventions also reported improvements such as changed attitudes and behaviours regarding civility, the small sample size (n=10), narrow participant group (nursing students) and research methods however, limit the generalizability of the findings.

Summary. Overall, the civility and engagement interventions have significant effects on workplace culture and deliver positive attitude and behavioural change that facilitates a positive culture.

3. Teamwork intervention studies

We found thirteen articles aimed at improving teamwork or team functioning^{24–36} and all the intervention were implemented in healthcare settings. Three were published in top quality journals^{29,30,34}, eight in mid-tiered journals^{24,26–28,31,33,35,36} and two in lower-tiered journals^{25,32}. All the interventions in these studies were successful in increasing teamwork and enhancing collaboration and team processes both in nursing and interdisciplinary teams. These interventions' were implemented in a timeframe of between 2 and 24 months.

What did the interventions entail? All the teamwork interventions were based on Crew Resource Management (CRM), which was initially developed to improve civil aviation safety as critical errors were identified as being largely due to failures in interpersonal communication, decision making, and leadership^{31,37}. In healthcare, CRM interventions have most often been used in operating theatres with a focus on

the use of briefings to improve efficiency, shared understanding, and to increase morale within interdisciplinary teams. The key element of CRM is the use of a participative approach to adapt and customise the strategies to the specific team context^{30,31}. In addition, CRM interventions use multiple processes to continually disseminate evidence of the value of the intervention. This helps to reduce scepticism among healthcare professionals and creates ripple effects of change²⁵.

What specific strategies were used? All interventions used numerous tools such as debriefing with facilitators²⁷, podcasts³³, communication tools such as bulletins and emails³⁵ and self-review, debriefing and communication^{26,36} as a means to support and engage staff throughout the intervention. In addition, three of the studies had strong support and sponsorship from nursing leaders and managers^{27,28,35}. Frankel, Leonard, and Denham²⁸ assert that leaders' engagement and commitment are crucial in facilitating good teamwork and communication in teams, which in turn helps facilitate a culture characterised by fairness and justice. The intervention Frankel and colleagues investigated, known as 'WalkRounds', is an informal conversation between leaders and staff, which help leaders elicit information within a formal structure. This information is then analysed and combined with root cause analyses and other reporting systems and regularly discussed in senior directors' meetings. The WalkRounds are intended to demonstrate leaders' transparency and openness to understanding problems and also show their commitment to open communication.

Several studies^{27,32,33,35} used discrete interventions during each phase of the change process in order to clearly align the intervention with the strategic outcome at each stage. For example Kalisch and colleagues^{35,} in a study using a well designed intervention with reliable findings, first used focus groups to understand how each of the teams functioned and what the teams needed in terms of education and development. Findings from the focus groups were communicated to all staff members in several facilitated feedback sessions. This was followed by the development of values, vision and goals, which involved all staff. Subsequently, each staff member attended a one day team training event on topics such as understanding team dynamics, and developing team based skills such as providing constructive feedback, managing conflict, active listening, and team information processing styles. At the same time, two interdisciplinary teams were formed to redesign the work in the

unit to better facilitate teamwork and quality of care. Some of the work redesign and new practices included the development of communication practices in each unit and ongoing development through coaching.

The team building intervention used by DiMeglio and colleagues²⁷ also used a similar quality intervention with clear and specific mapping of the existing teamwork practices before facilitated sessions to train nurses in team work skills. The facilitated sessions were also used to provide feedback on the progress of the intervention.

Results of the interventions. Regardless of the type of intervention, all studies reported positive results. The CRM interventions not only created stronger safety climates but were also successful in transforming the interdisciplinary team culture from one characterised by poor or limited communication to one focused on collaborative working relationships^{25,30,31,34}. The studies that employed a CRM intervention reported high satisfaction with the CRM training³¹ and positive changes in team and safety climate^{30,36} and team culture^{24,25}. The research by Haller and colleagues³⁰ is a particularly strong example of high quality research which illustrates a successful intervention in a multidisciplinary healthcare context. Similarly Kalisch and colleagues work^{33,34,35} provides important evidence on how training nurses to become CRM internal mentors and change champions will facilitate sustainable teamwork, with 84% of nurses and 80% of Certified Nurse Assistants (CNAs) from day shifts and 35% of nurses and 60% of CNAs on night shifts reporting improvements in teamwork. In addition, this research demonstrated that improved teamwork flowed through to other positive outcomes such as increased patient satisfaction, improved quality of nursing care (an increase of 6%) and improved communication with patients and families (increase of 11%). The intervention also helped reduce staff turnover and vacancy rates, from 13% to 8% and from 6% to 5%, respectively. Similarly DiMeglio and colleagues²⁷ reported significant improvement in group cohesion, nurse interactions, and job enjoyment and a decrease in turnover by 27%.

Finally a series of good quality papers by Bleakley and colleagues, ^{24,25,26} 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.

Summary. The CRM and other interventions aimed at improving teamwork and team collaboration are useful for facilitating positive behaviours and attitudes and creating culture change, particularly at the team level. CRM in particular is useful for improving communication and efficiency in interdisciplinary teams. However, like the other interventions discussed earlier, it is important to strategically align the type of interventions to the objective at each stage of the implementation plan

4. Leadership Training Interventions

Five articles were found that investigated workplace culture change through leadership-based interventions. Two of these articles focused on equipping leaders to manage change and culture^{38,39}; two described leadership interventions with a focus on leadership skills, such as conflict resolution, communication, and managing teams during reforms and change^{40,41}, and one focused on leaders skill transfer from training to managing problems and future challenges⁴².

What did the interventions entail? The leadership interventions varied quite widely. For example, Crethar and colleagues' study used a large-scale leadership intervention which employed numerous training methodologies to develop leadership capability. The project was implemented state-wide (Queensland, Australia) over a 3-year span. Stage 1 was implemented over 16 months and the leadership program was extended into Stage 2 to provide more customised leadership development to address the specific needs of individuals and teams. This study provides a good overview of different types of leadership training; however the study design limits the extent to which the outcomes can be attributed to the training. Battilana and colleagues' intervention study was well designed and aimed to equip leaders to take on the challenge of change management, employing Lewin's change framework to evaluate leaders' change activities. A change management program was combined with an executive education program and 360-degree feedback to better understand how task-oriented or person-oriented leadership competencies influence the change process. The leadership intervention carried out by McCauley-Smith and colleagues³⁹ was

conducted in schools and focused on teaching reflective and visionary practice to help leaders obtain foresight and reflection. While there are limitations in the evaluation of the results, it is useful and relevant to the healthcare context as it provides a framework for developing leaders to anticipate and manage change. In contrast, Roberts and colleagues' intervention used simulations and role playing and focused on implementing changes in the way the trauma teams communicate and deliver quality care. This is one of the few studies where the senior interdisciplinary team sponsored and designed the leadership training which was later incorporated into mandatory training for new general and emergency department residents. Specifically, the trauma leadership, hospital leadership, and emergency leadership endorsed and supported this project. This study uses a good intervention design and the training is highly applicable to clinical settings. Finally a study by Gilpin-Jackson and Bushe⁴² provides insight into the key elements of leaders' transferability of skills post-training and how these influence the culture change process; however the intervention design limits the generalisability of the findings.

What specific strategies were used? A variety of different strategies were employed including executive education and coaching^{38,41}, reflective and visionary practice³⁹, action-learning leadership development workshops, leadership learning modules/interactive leadership⁴¹, simulations and role playing⁴⁰.

Results of the interventions. All the studies reported positive results and provided important insights into implementing effective leadership interventions. For example, Battilana and colleagues' revealed that leaders who have more effective task-oriented behaviours are more likely to focus on mobilising and evaluating activities associated with planned organisational change, while leaders who have more effective person-oriented behaviours are more likely to focus on communication during planned organisational change. McCauley-Smith and colleagues revealed that self-assurance was important to help leaders prepare and manage change, seek opportunities for career development, communicate with peers and managers, and gain respect and credibility within the wider organisation. In particular, participants revealed that the training had helped them to understand leadership in new ways by exploring innovative approaches to learning and the need to recognise the importance of collaborative reflection and foresight. After two years of this intervention,

participants saw themselves as leaders and members of an integrated, connected, and collaborative network. Overall, this study highlights the importance of leaders' vision and reflexivity when managing change. Crethar and colleagues, 41 also found distinct improvements after the intervention. For instance, formal grievances dropped by over half in the two-year period following the program compared to the two year period prior to the program. In addition, there were large reductions in bullying and harassment grievances and consumer complaints to the ombudsman also decreased. Absenteeism also reduced whereas retention and recruitment of staff improved. The intervention reported by Roberts and colleagues, 40 was brief (three weeks) but it also showed positive changes to targeted team and individual behaviours such as improved team leadership, communication, and coordination behaviours. Finally, the findings by Gilpin-Jackson and Bushe⁴² revealed that while social support such as encouragement and praise helps to elicit positive judgment, they did not help staff utilise the skills learned. Rather, observing leaders and other colleagues 'walk the talk' encouraged other staff to use the skills learned. These are important insights in ensuring leader training transfers beyond the training environment.

Summary. Overall, these leadership interventions showed improvements on several workplace culture measures including trust in leadership, workplace health and safety, and workplace morale.

5. Bullying Interventions

We found two articles with interventions aimed at reducing and preventing bullying and improving workplace culture and engagement. Both interventions were implemented in healthcare settings and both were published in lower-tiered journals^{64,65}. Both interventions in these studies were successful in reducing reports of bullying and harassment across one unit⁶⁴ and across the whole hospital⁶⁵. These interventions' were implemented in a timeframe of between 2 and 36 months.

Bullying in the workplace threatens the well-being of employees and, if left unchecked, can severely affect organisational culture⁶⁴. While bullying is recognised as a prevalent problem in healthcare, most evidence comes from interventions with

school children in educational settings^{62,63}. However, the two articles that report on interventions to reduce or prevent bullying in the workplace had significant effects on outcomes relevant to organisational culture^{64,65}.

What did the interventions entail? Both the bullying interventions were implemented across all organisational levels, and used change frameworks to guide the intervention. For instance, Mikkelsen, and colleagues⁶⁴ employed Kotter's Eightstage Transformation Process while Meloni and Austin⁶⁵ used Bullock and Batten's (1989) Four-Phase Model. Meloni and Austin's⁶⁵ study is particularly useful as it describes how to implement an organisation-wide program against bullying behaviours.

What specific strategies were used? Both the interventions^{64,65} had clearly defined aims and objectives that were communicated to all employees by senior management teams. Senior management was not only the main sponsor (sending letters to every employee's home about the new program⁶⁵ but they were also committed to every stage of the implementation. Employees' ideas and recommendations were sought to develop the specific intervention strategy that became known as the "Zero Tolerance of Bullying and Harassment Program". Special steering committees and 'change agent' networks were formed to sustain and create ripple effects of change. Training was provided and refresher courses offered every 18 months. In addition, the "Zero Tolerance of Bullying and Harassment Program" was integrated into organisational human resource policies and practices and consistently evaluated, refined, and improved.

Results of the interventions. Overall, these two studies reported increased awareness of the importance of preventing workplace conflict and bullying ^{64,65} and increased engagement from 28% to 37% with disengagement decreasing from 27% to 20% over two years and improvements in the bullying and harassment section of employee survey after three years ⁶⁵.

Summary. To be effective workplace bullying interventions need to occur across all levels and incorporate different intervention strategies. Specifically, Saam⁶⁸ suggests that coaching rather than mediation is a more appropriate strategy to tackle

workplace bullying, at an individual or group level. Organisational development is more suitable across the organisation. There is evidence that interventions such as training in how to handle bullying are best incorporated into medical or nursing training^{69,70}. Finally, qualitative research showed that organisations need to institute a specific workplace bullying policy that emphasises zero tolerance for bullying⁷¹ because the absence of a clear code of conduct against bullying leaves employees unsure about how to deal with bullying behaviours.

6. Mindfulness and Stress/Burnout Interventions

We found thirteen articles on mindfulness interventions^{23,44–53} and strategies for reducing workload and stress^{54,55}. One was published in a top quality journal⁵⁵, four in mid-tiered journals^{23,44,45,53} and eight in lower-tiered journals^{46–52,54}. Only eight of the thirteen studies reported successful interventions^{23,47-53}. The mindfulness interventions were quite brief, taking between 6 to 8 weeks. We also included two review studies^{54,55} in the table in appendix 1 because they provide an overview of other workload and stress interventions.

What did the interventions entail? Mindfulness and stress/burnout interventions are aimed at enabling individuals to develop strategies which assist them in regulating thinking processes and emotions at work. The changes in employee's ability to regulate their cognitive and emotional experiences provide opportunities for positive and constructive interactions and contribute to establishing and transforming organisational culture. These collective changes in employee experiences are reflected in the culture ^{25,56,57}. For this reason, we included mindfulness intervention studies that were aimed at improving work engagement and energy ^{23,44,45} and reducing stress and burnout ^{47-49,51-53}. These interventions help employees to set goals and to become more motivated and engaged at work ⁴⁴.

We also include two reviews^{54,55} of the major types of interventions specifically aimed at reducing stress: 1) preventive and proactive interventions, such as job redesign, changes to work pacing and enhancement of social support, 2) ameliorative interventions, (of which mindfulness is an example) which focus on modifying individual responses to stressors and include interventions that equip employees with

skills to control and modify their perceptions of stress, and 3) reactive interventions, better known as 'stress management' interventions, aimed at minimising the effects of stress-related problems. The details of these interventions can be found in Lamontagne and colleagues⁵⁴ and Richardson and Rothstein⁵⁵.

What specific strategies were used? "Mindfulness-based Stress Reduction" (MBSR) programs are generally relatively brief interventions (i.e., eight weeks), and involve a mix of strategies such as training and mindfulness practice. The interventions also incorporated additional supporting materials and exercises such as a diary, weekly homework with reminders, email contact and teleconferencing and coaching.

Results of the interventions. "Mindfulness-based Stress Reduction" (MBSR) programs have reported some positive results not only in reducing stress among healthcare professionals but also in increasing empathy and self-compassion^{52,53}. Stress has been found to lead to burnout⁵⁸ which reduces employees' ability to provide quality patient care⁵⁹. For instance, the MBSR intervention Shapiro and colleagues⁵² reported helped to decrease stress, negative emotions, anxiety and rumination and, increased positive emotions and self-compassion. Cohen-Katz and colleagues⁴⁹ also found a decrease in job burnout after a mindfulness intervention, and there is some evidence that patient satisfaction increased and safety incidents decreased⁴⁶.

While mindfulness interventions have generally involved small groups, the review by Irving, Dobkin and Park⁵⁰ concluded that mindfulness training is a viable tool for the promotion of self-care and well-being. Specifically, positive affect, self-compassion and well-being of healthcare professionals not only help to deliver quality care⁵³ but to also facilitate positive culture in the midst of change⁶⁰. Shapiro and colleagues' study⁵³ is a good example of a well designed intervention that illustrates how approaches such as meditation can reduce stress and facilitate greater self-compassion among health care professionals. In addition, mindfulness interventions help improve communication and relationships⁴⁸ through developing a greater awareness of the needs and state of mind of the person with whom they are working^{51,61}. As a result, mindfulness increases compassion and desire to create a

culture and work environment that benefits employees, those they serve, and the organisation as a whole⁴⁷. MBSR is a relatively brief intervention (i.e., eight weeks), yet it is relatively effective in reducing levels of strain and increasing self-compassion, which remain stable after the intervention concludes⁵¹. However, other mindfulness interventions we identified for this review did not yield significant outcomes. The authors conclude that this is most likely due to poor support within the workplace.

Summary. Mindfulness and stress/burnout interventions have some benefits for organisational culture but tend to take time to feed into culture change as they are predominantly aimed at the individual. In addition they tend to be short term and rely heavily on individual compliance. These interventions may have stronger effects on culture if they are part of a larger culture change program that has some structural support.

SECTION C: ANALYSIS OF EFFECTIVE ELEMENTS OF WORKPLACE CULTURE INITIATIVES/ PROGRAMS

In this section we evaluate the six types of culture change interventions and draw out the key insights that are common to all the culture change interventions included in this review. In particular we detail the elements that appear to be critical for successful culture change within healthcare.

All of the successful interventions included in the review use a systematic approach to change. Some of the culture change interventions follow a specific identifiable change process (such as Kotter's (1996) Eight Stage Process for Successful Organisational Transformation), however most appear to have adapted the process from several change models to suit the context rather than applying one specific framework. This suggests that it is not important which of the change process models is used, but rather that there is a process that is developed, communicated, and implemented. There are a number of elements in this systematic approach which appear to be important.

Diagnosis (identify the problems): Understand the specific context in which the change will take place through cultural mapping, baseline surveys, or an initial baseline measurement of an organisational indicator of culture.

It is important for leaders within an organisation to establish that the need for change is based on a problem that is identified within the organisation. In many interventions action follows employee surveys, which highlighted issues with the culture. However, problems could be identified through other means such as patient complaints, employee harassment complaints, or levels of absence/stress leave. These initial baseline measures are important, firstly to provide a business case for the change, as everyone within the organisation will need to invest in the change and they will need to be convinced that the consequences or costs of the culture remaining the same are far worse than the cost of changing. Secondly, baseline measures also provide a means to evaluate the change, and to determine the effects of the interventions. Baseline measures can also be specific to a particular unit. Often a combination of some organisation-wide indicators along with specific indicators that are more sensitive to change within each unit, provide an opportunity for units to

work on issues that are most relevant and to have indicators that are sensitive to changes within smaller units rather than just at the organisational level.

In addition to objective indicators and employee surveys, identifying disparities between the organisations stated values and the artefacts and behaviours can also provide a rich resource for convincing leaders of the value of changing culture. For example

What do you hear employees say when they discuss work or their patients?

What do employees talk enthusiastically about?

How do employees respond to requests that are not usually part of their job?

These and other questions about what is celebrated, how poor performance is dealt with etc. all provide a rich picture of culture and an important way to determine what needs to change.

Vision and support from leadership (leading from the front), working with change champions

All of the successful culture change interventions included a combination of both leadership and employee support. Interventions that were primarily driven by a leadership group were less successful as the change is mandated and viewed with scepticism by employees, who may perceive the change as reflecting management's need to comply with directives from above rather than a genuine desire for change. On the other hand, when change is only driven by employees, it quickly loses momentum as it is not perceived to be valued or rewarded by the leadership team. There are a variety of approaches from the interventions to achieve both leadership support and employee involvement. It is important to have direct, open, and honest communication with staff and to seek their views on the causes of the dysfunctional culture. To achieve this, some interventions use an elected interdisciplinary steering group or key representatives from different stakeholders working with the leadership team. The important factor is that the intervention occurs at all levels and reaches out to all stakeholders. In addition, what leaders do (rather than what they say) will have the greatest impact. Where a leader devotes time and attention is perceived by employees as an indication of what he or she values. Awareness of the impact of

behaviour on others is important, as, whether interactions are formal or informal, they are signals of what is "really" valued.

Use a combination of interventions to develop, embed and sustain change

From this literature review it is apparent that there are many different approaches that are effective, and that multiple channels and strategies are likely to be most effective in creating and then sustaining change. These can include formal learning through workshops or informal learning through facilitated discussion and action planning in team meetings. It is important not to just have a statement of good intentions with some brief cheerleading, for example a formal presentation of the new values or laminated posters as this will not have a substantial impact on organisational culture (and may even create more damage). Multiple strategies enable new behaviours to be rehearsed and the effects to be felt through employees having an opportunity to interact with each other and for the new behaviours to emerge and create a positive spiral of interactions. The focus of many of the interventions is to change behaviour, which in turn changes hearts and minds.

Finally, it is important to ensure that the new behaviours are rewarded through personal recognition and public acknowledgement, and that these values are integrated into human resource systems such as performance management, career development, succession planning, etc. Public acknowledgement of individuals and groups can go a long way to signalling what is valued, but can be undermined if these values are not part of broader human resource systems. However it is also important that culture change is not seen as something HR does but rather something that all good leaders within the organisation do and that is part of all activities within the organisation.

Use an Evidence-based and Evaluative Process

Most of the studies in this literature review employed an evidence-based approach when implementing interventions. This means that the intervention strategies and implementation should be informed by the latest research and developed based on organisational evidence of where the change is most needed. In addition, it is important that evaluative processes are incorporated at different stages of the intervention as they help to provide guideposts as to the extent outcomes have

been achieved and to determine the effectiveness of the intervention. This, in turn, will help facilitate ongoing improvements in the intervention implementation which will enhance the cost-effectiveness of the interventions.

Commit to the long term

Changing culture requires a significant investment of time, resources, and energy for all leaders. Short-term change initiatives —while often appreciated at the time— are unlikely to stick, unless they are part of a sustained effort. However, because culture change initiatives are likely to take years, rather than weeks or months, it is important to celebrate small wins along the way to build a sense of progress and mastery and to maintain momentum. This is also where it is helpful to have identified indicators of culture and guideposts, as this can be a way of measuring the outcomes of the change and creating an ongoing commitment. Culture change requires consistency, mindfulness, and perseverance on the part of all leaders.

Culture change happens because people want it to

Several of the interventions in this literature review had mixed success, and this was partly attributed to the extent to which units or employees participated because they wanted to, or because it was mandated. Leaders may want to identify units that are "ready" to change and begin the intervention within these units whilst simultaneously creating strategies to spread the desire for change. There may be silos within organisations that are very resistant to change. In such cases, creating opportunities to share experiences through cross divisional or hybrid teams or secondments can help spread the uptake of the interventions as well as reducing counterproductive subcultures within the organisation. Although it should be noted that subcultures can also be helpful, for example occupational subcultures, as they provide a community of learning to members.

CONCLUSION

Changing workplace culture is enormously challenging, but the consequences of not changing a dysfunctional culture can be devastating for the organisation's effectiveness and individual employee wellbeing. When 'good enough' becomes the 'way we do things around here', and employees no longer strive to provide the best possible care, then the organisation is no longer meeting the expectations of any of its stakeholders. From the review of culture change interventions it is clear that changing culture is complex and takes time, determination and resources from all parts of the organisation. 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 organisation. We hope that this report and the table in appendix 1 will provide a rich resource for considering how to embed culture change within an organisation.

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APPENDIX 1: TABLE OF KEY ARTICLES

Appendix 1 provides details of each of the 52 studies included in the review. Each study was evaluated and rated according two major criteria: i) The reputation of the journals where the study is published (based on the Australian Research Council (ARC) journal ranking and the journal's impact factor), and ii) the quality of the design and analysis employed in the study. These criteria provide guidance as to the dependability and reliability of the findings reported in each study. Based on these criteria, each study is assigned a quality rating, with ' $\sqrt{\sqrt{}}$ ' indicating a very high quality study ' $\sqrt{}$ ' a high quality study and ' $\sqrt{}$ ' a good quality study.

Organisational-wide Culture Intervention Studies (Total Articles: 7)

Source/ Authors/ Journal	Initiatives/ Program Details	Outcomes/ Findings	Key Elements for Successful
Quality			Interventions
REFERENCE#3: Glisson (2007), Research on Social Work Practice, (Aim: Availability, Responsiveness and Continuity (ARC) intervention to change organisational climate Intervention Details: Availability, Responsiveness and Continuity (ARC) intervention focuses on 5 principles: 1) Mission driven verses rule driven 2) Results oriented vs process oriented 3) Improvement directed versus status quo directed 4) Relationship centred vs individual centred 5) Participation versus authority based. The intervention firstly involved three-stages in which change agents focus on: 1) Developing collaborative working relationships with stakeholders both within and outside the organisation 2) Facilitating broad participation in change effort both within and outside the organisation 3) Encouraging the adoption of	1) After the 1-year intervention, organisational climate was significantly improved 2) Staff turnover was significantly reduced 3) Case managers in the ARC condition reported less stress and more engagement and experience 40 % less turnover.	1) Leaders' support 2) Across all organisational levels

	innovation and change that address barriers or deficits in service. The three-stage process was then followed by Four-phase intervention 1) Problem identification 2) Plan strategies for addressing the barriers identified in first phase 3) Implementation of new strategies 4) Stabilisation of those strategies as ongoing part of organisations efforts Information on Logistics: 10 urban, and 16 rural case management teams in multiple countries		
REFERENCE#6: Cottingham et	Aim: To initiate a culture change aimed at	Observed changes:	1) Emergent approach
al.(2008), Journal of General Internal Medicine	aligning the informal and formal curricula at Indiana University School of Medicine (IUSM)	New meeting formats and practices (e.g. 'humanising meetings' to recognise success, relationship centred learning	 2) Focus on modest change and prompt reflection 3) Trace and evaluate change 4) Leaders' sponsorship and mindfulness
Key Contact: Ann H. Cottingham, MAR Medical Education and Curricular Affairs Indiana University School of Medicine.	 Intervention Details: Phase 1: In 1999, IUSM restructured its formal curriculum focusing on 9 competencies. Phase 2: Despite the focus on 9 competencies, IUSM students felt alienation, disrespect, and lack of attention to their concerns by the administration. Phase 3: 2002, received three year grant to foster Relationship-Centered 	community), 2) Communication about culture that focused on relationships and professionalism, 3) Growth in participation in Relationship Centred Care Initiative (RCCI) grew over time from 6 to 900 members, 1) Increased students' satisfaction with the medical education.	 5) Willingness to explore non-traditional principles of organisational change 6) Appreciative inquiry which allows for adaptation of what was not working 1) Focus on everyday small changes which can amplify and spread spontaneously

Email: ancottin@iupui.edu	Care. ISUM directors convened a	
Eman. ancounterupur.edu		
	steering committee of themselves and	
	consultants (2).	
4	The Three-year Program was	
	launched in January 2003 with the	
	principles: a) Plan only initial step to	
	discern subsequent opportunities, b)	
	Choosing to recognise and	
	disseminate success with the use of	
	Appreciative Inquiry (AI) approach	
	that focuses on root cause.	
	S) Steps taken: a) Recruited "Discovery	
	Team" to conduct appreciative	
	interviews (1 student, 1 resident, 10	
	faculty), b) Communication of results	
	from the 80 interviews in a public	
	open forum, c) Steering committee	
	engaged in reflection process to plan	
	the next steps. d) Events and changes	
	were tracked and evaluated by the	
	faculty members and Project Manager	
	with a monthly visit to the school	
	from March 2004 for two years. e) 4	
	months into the project, Discovery	
	teams were asked to share their	
	observations.	
1	The intervention drew on Lewin's action	
r	esearch principles.	
	-	
	information on Logistics:	
	Location: Indiana University School of	

	Medicine		
	 Steering Committee: Associate Dean for Medical Education and Curricular Affairs, Project Manager, two external consultants. Discovery Team: 1 student, 1 resident, 10 faculty members Research Leader: 2 faculty members Evaluation Team: 2 faculty members, project manager and independent observer 		
REFERENCE#7: Munroe, Kaza	<u>Aim:</u> Formal and Informal Culture-Change	While there was improvement in most of the measures, only the	1) Formal training helps improve
& Howard (2011), Geriatric Nursing, (VVV)	Training in 4 facilities	decision making and resident	culture change perceptions. 1) Leadership support
Troubling, (C C C)	Intervention Details:	choice changes were significant.	r
Key Contact:	6 Months (May 2006 to Oct 2007) Formal Culture Change Training by External Consultant and intermittent		
Professor Donna J Munroe, PhD, RN	consulting continued until April 2008 2) Informal Culture Change by leadership and staff member (2 years).		
Northern Illinois University	A week-long meeting to facilitate specific culture change effort		
School of Nursing and Health			
Studies, DeKalb, IL.	Information on Logistics:		
Email: dmunroe@niu.edu	Duration: 3 years, 4 facilities, n=104 pre-		
	test, n=114 post-test.		
REFERENCE#8: Scheeres &	<u>Aim:</u> Mandatory Training program	The authors did not consider this a	This was a two-year ethnographic study

Rhodes (2006), Journal of Organisational Change Management,



Key Contact:

Associate Professor Hermine Scheeres

Centre for Research in Learning and Change

University of Technology Sydney

Email:

Hermine.Scheeres@uts.edu.au

designed to educate employees in the company's newly designed "core values". These training sessions were designed as a change management intervention that would enable the organisation to operationalise its managerially defined culture.

Intervention Details:

Core values were created by the senior management team:

- 1) Integrity
- 2) Excellence a results orientation
- 3) Co-operation, reliability and responsiveness
- 4) Change initiate and embrace;
- 5) Respect the individual and the community.
- 6) The intervention consisted of one day mandatory training in these core values.
- 7) The day starts with an address by the Managing Director of production, who gave a short speech, emphasising that the company was "about people" and that the core values were the "cornerstone".
- 8) The trainer used a 50-page workshop manual (short bulleted points; a range of activities often with score sheets; definitions or short statements).

successful culture change.

- They argue that "the prescriptive and linear structure of the training program demanded adherence to set activities.
- 2) The culture was more scripted than organic".
- 3) The change initiative was too simplistic, and was designed to satisfy management that they were "doing something about culture".
- 4) This reinforced the behaviour required to survive the realities of the organisational culture, such as remaining silent on contentious issues and to be compliant.
- 5) The authors argue that the attempt to change culture (even though there was a desire by employees to see culture change) was undermined by the training which was prescriptive and only engaged in simplistic interactions that were supportive of the training.
- 2) The employees did not see the values enacted in the organisation, so the authors conclude that the training was an expensive exercise without tangible benefits other than to reinforce the old culture of control and silence.

of an organisation's attempt to change "core values" using a training program designed to educate employees in the new culture. The research is based on a critical management approach, which assumes the desire to change corporate culture stems from the desire of management to exercise control over employees values

2) Methodology to evaluate the training intervention included observations of workplace practice, interviews with managers/ employees, documentation and informal meetings, conversations and telephone calls, regular factory floor tours, attendance at team meetings and training sessions.

	Information on Logistics:		
REFERENCE#9: Mulcahy & Betts (2005), Journal of Nursing Management, ()	Information on Logistics: 900 employees (from all levels in a light industrial equipment factory) received the mandatory training. Aim: To transform culture in neonatal unit to improve retention of nurses	 3) Zero nursing vacancies with a waiting list of applicants 4) Halved the casual and agency costs 5) Climate of trust and respect improved by 10% from the staff 	 3) Top down approach to provide vision and create structure 7) Bottom-up to encourage participation and generate support. The use of two different change
Key Contact: Caroline Mulcahy Director of Neonatal Services The Royal Women's Hospital 132 Grattan Street Carlton Melbourne 3053 Australia E-mail: carolinem@mivf.com.au	Intervention Details: Intervention included 6 phases: 1) Understand the current situation: mapping of culture and sharing information, 2) Determine the desired state and develop a change plan: Development of Code of Conduct on bullying, education rights, respect, value and collegiality 3) Leadership and management development for nurse managers and in-charge nurses (workshops and planning) 4) Establish a new team relationship between in-charge nurses and nurses, 5) Development of Skilled Communication workshop with a Train the Facilitator program 6) Convene a facilitated Family Focus Working Group to identify relationship between staff and	satisfaction and organisational culture survey 6) Nurses absence rate decreased from 12.8% to 4% Nursing attrition significantly reduced and 100% of nursing graduates accepted ongoing positions for the first time in many years.	frameworks; one specific to culture while the other to change, also appears to have played a part in the success.

	families.				
	The intervention used a combination of approaches: i. Johnson and Durley (2000) "Active role by participants" to produce knowledge and empower people ii. Moran and Brightman (2001) change management framework: Understand the current situation, determine the desired state and develop a change plan, enlist others and develop critical mass, and track and stabilise results.				
	Information on Logistics: Duration: 3 years. Neonatal Unit (only 52% response rate)				
REFERENCE#10: Kaplan, Mestel & Feldman (2010), American Perioperative Nurses Association Journal, (Key Contact: Kathryn Kaplan, PhD,	 Aim: Development and implementation of Code of Conduct on Mutual Respect Intervention Details: 1) A multidisciplinary group from MMC attended a conference on trust in health care20 in 2003 and were inspired to write a code of mutual respect for the medical center. 2) MMC hired a chief learning officer (CLO), (with high level skills) who 	 2) 2) 	Mutual respect code of conduct helped to positively enhance the workplace and led to better patient care (80% of participants) Leaders actively manage disrespectful behaviours (increased from 38% to 58%). Cultural change into how different professional staff treat each other, with improvement in respectful behaviours. This improvement challenged the traditional	1) 2) 3) 4) 5) 2)	(Chief Learning Officer) Training and tools to train local change agents Developing a formal accountability process
Chief learning officer at	reviewed research on best practices,		hierarchical structure in medicine.		

Maimonides Medical Center,	interviewed key stakeholders and
Brooklyn, NY	proposed the design for
Brooklyn, 1V1	implementation of the code.
Email: Unknown.	3) The CLO advocated a multifaceted
Eman. Chkhown.	approach to culture change based on
Kathryn is currently Managing	professional experience and research
Partner at Kaplan Knowlton and	on respect in the workplace.
-	4) Leaders were trained in Crucial
Associates	Conversations®, the two-day
	VitalSmarts program for resolving
	conflicts during high-stakes situations.
	5) The leadership team implemented the
	first pilot initiative in perioperative
	services which included 5 components
	(leadership, mediated conversations,
	tracking of operational system issues,
	skills training and measurements).
	6) Leadership team elected 23 nursing
	staff to serve as code advocates aimed
	at obtaining buy-in for the pilot
	initiative.
	7) The 23 staff received training on how to explain the code and encourage
	their colleagues to confidentially disclose interpersonal behaviours that
	affect quality of care. The training was
	a 2 eight-hour days of role playing
	activities and individual application.
	Information on Logistics:
	Organisational wide: Maimonides Medical
	Centre, Brooklyn, NY. Pilot: 2 years
	before it was launched in 2005.

REFERENCE#11: Costello, Clarke, Gravely, D'Agostino-Rose, Puopolo (2011), American Perioperative Nurses Association (AORN) Journal ()

Key Contact:

Dr Judy Costello, the Deputy Director of the Maryland Biotechnology Center.

Email:

jcostello@marylandbiocenter.org.

<u>Aim</u>: To transform Operating Room (OR) Culture

Intervention Details:

- 1) Surveys about respect were sent to hospital staff
- 2) Due to lower than hospital average scores, the respective Operating Room (OR) managers presented results to staff members and actions such as revision of OR bookings policy, staffing schedule and revision and updates to staff member orientation were carried out.
- OR managers, directors and HR organisational development staff members teamed up to develop a short 8-item tool to better understand the low respect scores.
- 4) Results were communicated to staff.
- 5) Leadership personnel launched a major quality improvement transformational project.
- 6) Second Phase of the Intervention: a) 2006-2008: Start of the OR
 Transformation Project, Evaluation of processes and people, b) 2007-2008:
 LEAN initiatives, including value, stream mapping and rapid, improvement events (i.e., multiple projects to enhance patient flow and improve efficiency), Educational strategy development and implementation, c) 2008-2011

- 3) An update of the OR policy
- 4) Creation of procedure booking and finish time
- 5) Reports categorised by service and surgeon
- 6) Implementation of an average procedure duration report by service and surgeon
- 7) Development of a cancellation policy
- 8) Development of a cancellation queue to track when patients whose procedures were cancelled finally underwent surgery.

- 3) Leaders' support
- 4) Participative approach with ideas and recommendations from steering committees, which were endorsed by senior leaders
- Collaborative resolution process and creation of code of conduct and team charters
- Formal celebration to highlight results and to recognise successful teams
- 7) Continual communication to other and new staff
- B) Formal education days to include ongoing focus on wellness initiatives.

Celebration and launch of the team charter, Evaluation of the sustainability of the project, Evolution of the project, Launch of the recognition strategy. The intervention drew on Kotter's Eightstage Process for Successful Transformation. Information on Logistics Target Participations: Operating Room Staff. Three major sites: Toronto General, Princess Margaret and Toronto Western. Toronto Rehab: All staff included in Phase 1 but only 248 responded (41% nurses, 35% surgeons, 18% support staff and 6% allied health). Phase 2 included quality improvement and transformational initiatives in surgical services.

Note: Very high quality study is denoted as 'VVV', High quality study as 'VV' and Good quality study as 'V'

Civility, Respect and Engagement (CREW)/ Civility and Engagement Interventions (Total Articles: 10)

Source/ Authors/ Journal Quality	Initiatives/ Programs Details	Outcomes/ Findings	Key Elements for Successful Interventions
REFERENCE#13: Glembocki & Dunn (2010), The Journal of Continuing Education in Nursing, (Key Contact: Karen S. Dunn, PhD, RN, Associate Professor, Oakland University, 402 O'Dowd Hall, Rochester, MI 48309. E-mail: kdunn@oakland.edu.	Aim: Educational intervention called Reigniting the Spirit of Caring (RSC) from Creative Healthcare Management designed to increase caring behaviours and lead to increased nursing and patient satisfaction Training to enhance nurses perceptions of caring. Facilitators complete a 5-day training course that is taught by Creative Healthcare Management. Five foundational core concepts are used: 1) Personal mastery 2) Mental models 3) Shared vision 4) Team learning 5) Systems thinking	An increase in perceptions of caring for patients, improving knowledge and skills, advocating for patients, involving families in decisions and working together as a team- post seminar	
	36 registered nurses employed in one Midwestern (US) hospital.		
REFERENCE#14: Henderson, Schoonbeek, Ossenberg, Caddick, Wing, Capell & Gould (2013), Journal of Clinical Nursing,	<u>Aim:</u> Used Four-Step Process to foster development of behaviours consistent with learning in everyday practice	Reduced dissatisfaction after intervention, greater sense of belonging. Aspects of learning culture pertaining to staff affiliation and recognition were	 Project facilitators with guidance and support from a clinical development team. Local leadership support makes a significant difference to midwifery teams, as they feel supported in

(V V)	Intervention Details:	improved.	their role and able to facilitate
	intervention betans.	3) Improved collegial support,	others' learning.
	1) Clinical Development Team (Nursing director,	teamwork and	3) Positive behaviours that are
	a nurse/midwife educator, a project leader, a	acknowledgement.	supported and reinforced regularly
Key Contact:	nurse/midwife researcher and four project		in everyday practice can contribute
	educators from 4 midwifery sites) led the		to staff's perception of support of
Amanda Henderson, RN, RM,	project.		their teaching role, and influence
PhD, Nursing Director,	2) Facilitators were appointed to work closely		learning cultures.
Princess Alexandra Hospital,	with these leaders to advance learning		4) In addition leadership engagement
Woolloongabba, Brisbane.	behaviours.		and investment in resources to
woonoongabba, Brisbane.	3) Project educators were responsible to facilitate		assist facilitators to complete the
Email:	the four-step process of (OORO). O-Optimism		four stages – namely working with
amanda henderson@health.ql	was the emotion to gain acceptance;		local teams around the
d.gov.au	'overcoming obstacles' was a broader term		impediments to simple interactive
<u>u.gov.au</u>	used to recognise the contextual difficulties		behaviours.
	that needed to be addressed; 'oversight' referred to the guidance needed around		
	initiatives that introduced staff to alternative		
	ways of interacting and shifting their		
	behaviours; and 'reinforcing outcomes'		
	described acknowledgement and reward		
	processes recognised as instrumental in		
	sustaining practice change		
	Information on Logistics:		
	Three hospital sites. OOORO was conducted in		
	ante/postnatal areas and clinics where midwives		
	were employed. 216 pre intervention, 90 post		
	intervention participants		
	mor. ondon participanto		

REFERENCE#15: Jenkins, Woith, Stenger & Kerber (2013), Journal of Nursing Education and Practice, ()	Aim: Journal Club Strategy to teach civility to nursing students Intervention Details: Educational intervention:	1) No outcomes reported	
Key Contact: Dr Sheryl D. Jenkins, PhD, ACNP, Illinois State University Email: sjenkin@ilstu.edu.	 Combined class discussions, speaker presentations and active learning strategies, to raise student awareness 6 Fifty-minute session incorporated in course content led by faculty. Discussion based on assigned journal articles and variety of active learning strategies. 		
	Information on Logistics: 79 Nursing students participated.		
REFERENCE#16: Laschinger, Leiter, Day, Gilin-Oore & Mackinnon (2012), Nursing Research (🗸 🎸	Aim: Civility, Respect, and Engagement in the Workplace (CREW) Intervention to increase nurses' empowerment, improve experiences of supervisor and co-workers incivility and trust in nursing management. Intervention Details:	CREW intervention units reported greater improvement in structural empowerment Greater decreases of supervisor and co-worker incivility Greater increase in trust in management.	Management's willingness to provide support for improving staff working relationship through CREW process.
Key Contact: Dr Heather K. Spence Laschinger, Arthur Labatt	Civility, Respect, and Engagement in the Workplace (CREW) Interventions: See details from Leiter, Laschinger, Day & Oore (2011) above Information on Logistics:		

Family School of Nursing, The University of Western Ontario, London, Canada. Email: hkl@uwo.ca	The project was carried out in two hospitals. 41 Units but only 8 units were selected to participate in the 6 month CREW Intervention. T1 n=755, T2 n=573 in 41 units across 5 hospitals in 2 provinces.			
REFERENCE#17: Leiter, Laschinger, Day & Oore (2011), Journal of Applied Psychology, (** ***) **Key Contact:* Michael P. Leiter, Psychology Department, Acadia University, Wolfville, Nova Scotia, Canada. Email: Michael.leiter@acadiau.ca.	 Aim: Civility, Respect, and Engagement in the Workplace (CREW) Intervention to promote civility among unit employees Intervention Details: This intervention used Action research as the underlying change management framework. 1) Employees participated in a 6-month process of working with a facilitator to address issues related to civil interactions among employees on their work units. 2) Developed plan of action on the specific areas or working relationships that were identified as important within each group. 3) The intervention followed CREW Principles: a) building civility through required direct conversations on the issue, b) driving the process through exercise that help participants explore new ways of interacting, c) moving participants out of established patterns of social behaviour through leadership from facilitators, d) receiving explicit support for the process from management e) encouraging employee ownership of the process. 4) Each unit held weekly meetings and used 	1) 2) 3) 4) 3)	Greater civility among workers, supervisor civility and respect. Greater improvement in burnout and turnover intentions and reduced cynicism among intervention units. Greater improvement in job attitudes (job satisfaction and commitment) among intervention units. Greater improvement in trust in management among intervention units. Reduced absences among intervention units.	The adaptation of CREW methods helped to address the specific incivility challenges in each unit. Explicit support from management (through core value statements, published articles and commitment to model civility). This program was developed by the National Centre for Organisation Development, within the US department of Veteran Affairs. More details can be found at http://www.va.gov/ncod/crew.asp. The quasi experiment compared results across 41 units with 1172 participants at T1 and 904 at T2.

	structured exercises.		
	Information on Logistics: 8 hospital units were selected to participate in the 6 month intervention based on their interest in the project. The project was carried out in two hospitals, and results (pre and post intervention survey and some organisational data such as absence) were compared to 33 units from 5 hospitals.		
REFERENCE#18: Leiter, Day, Gilin-Oore, Laschinger (2012), Journal of Occupational Health Psychology, (V V V	Aim: Intervention to enhance workplace civility. This paper examines the effects long term effects of the study reported above (Leiter, Laschinger, Day & Oore (2011) by examining the effects of the intervention at 12 months (compared to pre intervention levels) and after 24 months to determine if the intervention's effects were sustained. T Intervention Details:	There were significant improvements in civility in units that participated in the intervention, and these improvements were maintained for 2 years. 1) CREW encourages a more positive social environment 2) There was a decrease in supervisor incivility over time but there was no significant	Understanding the specific effects of change over time is important to understand the sustainability of changes. Sustained change requires change dynamics such as reciprocity, positive spirals and social contagion.
Department, Acadia University, Wolfville, NS Canada. Email: michael.leiter@acadiau.ca.	 Pre-test survey was administered 8 units participated in 6-month CREW intervention in the first year 6 units participated in CREW in Year 2 however these units were not included in the analysis. A third survey was administered at 24 months. Details of the intervention can be found in 	difference in co-worker incivility over time. 3) There were improvements in job attitudes for CREW groups and the improvement showed an increasing trend at the beginning but stabilised post-intervention. 4) Absences though showed a	

	Leiter, Laschinger, Day & Oore (2011) above. Civility and respect, incivility, distress, attitudes, physical symptoms of stress, job attitudes, and absences measures were included in the surveys at (1), (2) and (3).	significant improvement for the CREW groups for pre-to post-intervention (Leiter et al, 2011) were not sustained at follow-up (both for CREW and non-CREW groups).	
	Information on Logistics:		
	Location: 3 district health authorities in Nova Scotia and 2 hospitals in Ontario.		
	Year 1: 8 units; Year 2: 6 units.		
	Pre-test survey of 957 participants.		
	Intervention involved 262 participants. Year 2: survey of 680 participants with 181 involved in the intervention. Year 3: survey of 647 participants with 447 involved in the intervention.		
REFERENCE#19: Gillin	<u>Aim:</u> CREW intervention to improve stressor-strain	After CREW intervention, health	Willingness of healthcare managers to
Oore et al (2010), Journal of Nursing Management, (relationship among hospital workers	care workers showed a weaker	endure logistical challenges of engaging in group-level incivility
Nursing Management, (VV)	Intervention Details:	relationship between workload and mental health.	interventions (i.e. CREW).
	Civility, Respect, and Engagement in the		
<u>Key Contact:</u>	Workplace (CREW) Interventions developed by US		Due is set from dead has Deadton analysis a in
Debra Gilin Oore, Department	Veterans Hospital Administration (VHA):		Project funded by Partnerships in Health Services Improvement of the
of Psychology, Saint Mary's	1) Review of the unit's self-reported baseline		Canadian Institutes for Health
University Halifax NS,	levels of civility, respect and work life indicators from a survey		Research, the Nova Scotia Health
Canada B3L 1J9.	2) Training of facilitators,		Research Foundation, the Ontario

E-mail: debra.gilin@smu.ca	 An initial unit kick-off event at which civility and incivility were defined and discussed in the context of the groups particular interactions, Regular meetings with the facilitators and employees for the 6-month intervention period to raise and solve issues and develop action plans, A meeting of facilitators at the 3-month point and A wrap-up meeting to solidify lessons learned and encourage continuity. This intervention used Action research as the underlying change management framework. Information on Logistics: Health professionals from 17 care-giving units (n=478) in three district health authorities in Nova Scotia and two hospitals in Ontario. 		Ministry of Health and the Social Sciences and Humanities Research Council of Canada.
REFERENCE#20: Osatuke, More, Ward, Dyrenforth & Belton (2009), Journal of Applied Behavioral Science, (Aim: Nationwide Organisation Development Civility, Respect, and Engagement in the Workplace (CREW) Intervention to increase civility in Veteran Health Administration Intervention Details: This intervention occurred across multiple sites, and the specifics of in-group process and follow- up varied significantly, and as a result, the interventions become driven by responsiveness to local needs and local culture-based civility definitions:	Significant improvement (i.e. group differences) in civility levels in intervention sites compared to control sites where no improvements over time were observed.	 Organisational support, i.e. endorsed by the VHA National Leadership Board Use of a prototype-based approach emphasizes connections between individual behaviours and their context (workplace environment) and this helps to determine the mechanisms used in the intervention. In addition outcomes such as patient related experiences and alliances between facilitators and participants are also important.

Administration National	1) First CREW meetings involved determining		
Center for Organization	the proto-type model that involved collecting		
Development.	and sharing data on workplace perceptions,		
Development.	employee and customer behaviours to clarify		
Email: va gov VHANCOD@va.gov.	strengths and opportunities for improvement. 2) Methods, ideas and mechanisms in the prototype model were both specific and actively defined, changed and adjusted to ensure they worked. 3) VHA National Center for Organizational Development (NCOD) provided the information on the usual strategies on intervention and educational kits to local facilitators (the use and adaption of these materials were determined by local facilitators).		
	Information on Logistics: 28 Veterans Affairs health care facilities across the USA participated with a broad range of workgroups. Groups retained in the analysis were those with at least 8 participants in pre and post surveys, and that could be matched to a control work group.		
REFERENCE#21: Osatuke,	Aim: Civility, Respect, and Engagement in the	This is a review of CREW	2) CREW works best when it is
Leiter, Belton, Dyrenforth &	Workplace (CREW) Intervention to increase	methodology rather than an	purely voluntary for both the
Ramsey (2013), Journal of	civility	empirical paper:	individuals and workgroups who
Management Policies and			participate in it.
Practices, ()	Intervention Details:	1) Behavioural approach,	3) In addition, visible support of
114040005, (♥)		2) Participative approach	senior leadership of the
	1) Any organisation within the Veteran Affairs or	3) Customised to local culture	organisation (e.g. a public
			statement of support by a CEO) is

	outside can contact National Center for	4)	Structured using toolkits		crucial.
	Organisation Development (NCOD) for		provided	4)	It is equally important that
<u>Key Contact:</u>	CREW. But VA will appoint local CREW				supervisors of participating groups
	Coordinator and NCOD assigns staff member/				are supportive of CREW coming
Dr Katerine Osatuke, staff	companion for the site.			~`	to their workgroups.
psychologist at the Veterans	2) CREW Coordinator and NCOD senior staff			5)	Organisations need to commit to
Health Administration	member must attend readiness call meeting to seek clarification on how to establish working				giving time, attention, and support to regular conversations between
National Center for	relationship between site and NCOD.				co-workers about civility at their
Organization Development	3) CREW coordinator or two/ three trained				specific workplaces.
	facilitators attend workshops to plan how to			6)	One factor to note is that CREW
Email: va gov	promote the initiative at their site, how to				does not work in highly
VHANCOD@va.gov.	choose appropriate workgroups, how to share				dysfunctional workgroups with
	civility concepts.				multiple grievances and significant
	4) NCOD held monthly national conference call				turmoil, with groups with poor
	for CREW coordinators and facilitators to offer				leadership (CREW is not an
	opportunity to network and share best				intervention for problematic
	practices.5) CREW facilitator and NCOD Companions				groups rather it is designed to enhance functioning groups)
	often have frequent phone and email			7)	CREW is a low-cost, low tech
	correspondence.			')	initiative which develops upwards
	6) NCOD provided training to CREW facilitators.				through employee participation.
	,				
	Information on Logistics:				
	, and the second				
	Nationwide-any organisation within the Veteran				
	Affairs or outside can contact National Center for				
	Organisation Develop (NCOD) for CREW.				
REFERENCE#22: Jenkins,	Aim: Intervention to promote civility among	5)	Participation in the intervention	3)	Not identified and based on
Kerber & Woith (2013),	nursing students		changed students' attitudes and		evaluation, this is a poorly
Nursing Education Research,	- -		behaviour regarding civility.		designed study.
(v)	Intervention Details:				

Key Contact: Dr Sheryl D. Jenkins, PhD, ACNP, Illinois State University, Email: sjenkin@ilstu.edu.	1) Baseline information on dimensions of incivility, camaraderie and ability to work in groups were collected. 2) Monthly journal club for student leaders were held. This club was designed to build social capital by raising students' awareness of civility, collaboration, and collegiality. 3) The one-hour meetings were held to discuss nursing articles (selected by nursing students). 4) In order to facilitate discussion, faculty researchers led the students to design activities that encourage civility and students were charged to apply these designs in their interaction with other students and faculty.
	5) Online journal were kept to note their development in understanding civility. Information on Logistics: Nursing Students in a state university in the American midwest. 10 student leaders were recruited, 25 junior and senior nursing students for the interview and journal entries.

Note: Very high quality study is denoted as 'VVV', high quality study as 'VV' and good quality study as 'V'

Teamwork and/or Team Functioning Interventions (CRM) (Total Articles: 13)

Source/ Authors/ Journal	Initiatives/ Programs Details	Outcomes/ Findings	Key Elements for Successful
Quality			Interventions
REFERENCE#24: Allard, Bleakley, Hobbs & Vinnell (2007), Journal of Interprofessional Care, (***) **Key Contact:* Jon Allard, Institute of Clinical Education, Peninsula College of Medicine & Dentistry. Email: jon.allard@rcht.cornwall.nh s.uk	Aim: Post evaluation of Theatre Team Resource Management Project on briefings Intervention Details: Surveys were sent out to evaluate: 1) The frequency of briefings 2) Briefing methods 3) Staff opinions about briefing 4) Reasons for not attending briefing See other studies by Bleakley, et al., (2012) and Bleakley, et al., (2006) for more details. Information on Logistics: OT personnel that were involved in the TTPRM project. 270 employees surveyed with 118 responding. For costing see Bleakley, et al., (2012).	Frequency of briefing remains low (48% had unstructured in theatre briefing, 44% had no formal or informal briefing) though 78% agree that briefing improves teamworking within theatre teams. The lack of take up is attributed to the perception that it takes time to establish new practices.	 General raising of awareness of evidence and the effort of dissemination The influence of a core group of champions and early adopters including consultant surgeons and anaesthetists First-hand experience of benefits for teamwork and morale from adopters Promotion of briefing by a part-time facilitator. If national model of briefings is implemented, surgeons may be open to it, but will likely resist a uniform model.
REFERENCE#25: Bleakley, Allard & Hobbs (2012), Medical Teacher,	Aim: Culture Change in Operating Theatre (Teamwork climate) Intervention Details:	Positive attitudes and teamwork: Individuals who report that they regularly engage in briefings also express a positive shift in	Holding regular briefing meetings assisted in translating a structured complex educational intervention to sustain positive attitudes to teamwork

Key Contact: A. Bleakley, Institute of Clinical Education Email: alan.bleakley@pms.ac.uk	 Introductory human factors 2-day seminar for identified 'champions' and 'sceptics', One day human factors symposium, with follow-up 1-day seminar, for all theatre staff and managers Introduction of close call (near miss) reporting with internal feedback Introduction of briefing before surgery Introduction of debriefing after surgery. The intervention was based on an Action Research approach (Lewin, 1958). Information on Logistics: All Operating Theatre Staff (221 employees 73% participation). Part of a 4 year Theatre Team Resource Management Project involving 332 OT Practitioners. Cost: £80,000 of which £50,000 was from Strategic Health Authority, and £30,000 was from the National Patient Safety Agency. In addition a research fellow to prepare an educational teamwork package for wider dissemination (£50,000) and researchers to develop a team self-review programme (£50,000).	
REFERENCE#26: Bleakley, Boyden, Hobbs, Walsh and Allard (2006), Journal of Interprofessional Care, ()	Aim: To Improve teamwork climate in operating theatres by shifting from multi-professionalism to inter-professionalism Intervention Details: 1) Theatre Complex A received education	1) Briefing and debriefing (team self-review) and close-call (near miss) reporting are two key aspects of the educational intervention. 2) Intervention facilitates 1) Educational interventions focusing or briefing and debriefing. 2) In addition the articulation and sharin of social capital or the resources of a group is a necessary condition for Inter-professionalism to function effectively.

Key contact: Dr Alan Bleakley, Peninsula Medical School, Institute of Clinical Education, Knowledge Spa Royal Cornwall Hospital, Truro, Cornwall TR1 3HD, UK. E-mail: alan.bleakley@pms.ac.uk	interventions 2) Theatre B received intervention one year later. 3) For intervention details see Bleakley, Allard & Hobbs (2012) Information on Logistics: All Operating Theatre Staff that were part of the TTPRM project. First Year 1: 221, Second year 2: 224. For further details see Bleakley, Allard & Hobbs (2012).	greater inter-professional cohesion, work satisfaction within OT teams. 3) Communication shifts away from monological to dialogical communication pattern by surgeons, and improved communication within and between OT teams, ward and recovery team.	
REFERENCE#27: DiMeglio et al (2005), Journal of Nursing Administration, (Aim: The intervention was designed to improve ward cohesiveness, improve teamwork, group cohesion, nurse satisfaction and reduce turnover. Intervention Details: 1) Team-building intervention was developed and implemented by a Lifespan RN and a trained group facilitator 2) Each participating nursing unit scheduled a minimum of three 1-hour team sessions. Usually a morning and evening meeting was scheduled to accommodate the various shifts. All sessions were interactive and included nursing staff, nurse manager and facilitator. 3) Session 1: discussed questions like what is a high performing team, what is this unit like etc. on a 	Improvement in group cohesion, RN interaction, job enjoyment, and turnover.	This study demonstrated the importance of getting nursing staff together to talk openly about their units' traits and culture. Through these discussions, RNs identified barriers to cohesive group functioning including ineffective and negative communication, generational differences, peer competence, and accountability

Email: cpadula@lifespan.org	flip chart. 4) Facilitator led discussion to identify major issues in the units. 5) Session 2 employed the MBTI (Myers Briggs Type Inventory) and discussed approaches for dealing with opposite styles. 6) Session 3 was an open discussion to identify major issues and action plan for resolution. Information on Logistics:		
	Registered nurses (RNs) employed on inpatient units in a 247-bed, private acute care Magnet teaching hospital.		
REFERENCE#28: Frankel, Leonard & Denham, (2006), Health Services Research, (**\nline*) Key Contact:	 Aim: To review and evaluate Three initiatives: The development of a Fair and Just Culture Leadership's intelligence in engaging WalkRounds safety by using frontline provider insights to directly influence operational decisions Systematic and reinforced training in teamwork and effective communication. 	1) Leadership by our trustees, CEOs, and physician leaders is the single most important success factor to turning the barriers of diminished awareness, accountability, ability, and action into accelerators of performance improvement and transformation.	To sustain effective teamwork and communication requires three components: visible and consistent senior leadership involvement, clinical physician leadership, and embedding the tools and behaviours in every day clinical work.
Allan S. Frankel, M.D., Director of Patient Safety, Partners Healthcare. See: http://www.ihi.org/education/InPersonTraining/PatientSafetyExecutive/2014Septem	 To develop fair and just culture: Develop a clear vision statement/document. Use the unsafe acts algorithm developed by Reason (1997); Open commitments to good citizenship, i.e. all employees support transparent and open communication (e.g., implementing a number of 	2) Awareness is the first critical dimension of innovation adoption. Leaders must be aware of performance gaps before they can commit to adoption of any innovation. 3) Leaders need to be directly and personally accountable	

berPatientSafetyExecutiveD evelopment/Pages/faculty.as px .	red rules that if broken X times, can result in censure and potentially dismissal). 4) Education about safety. 5) Walkrounds involve an informal conversation between leaders and providers which elicit useful information which is documented, analysed and combined with root cause analyses. Information on Logistics: N/A This is a review paper.	4)	to close the performance gaps. Organisations need to take explicit actions toward line of sight targets that close performance gaps that can be easily scored.		
REFERENCE#29: Ginsburg et al. (2005), Health Research and Educational Trust, (**V**) **Key Contact:* Dr Liane R Ginsburg, School of Health Policy and Management, York University Toronto, ON, Canada. Email: lgins@yorku.ca	 Aim: Educational intervention to enhance the value nurse leaders place on patient safety culture Intervention Details: Two workshops: 1) Training on Adverse Events (Evidence, Theories and Tools) 2) Training on the role of teamwork and leadership in improving safety Safety culture is assessed by: 1) Valuing safety 2) Fear of negative repercussions 3) Perceived state of safety. 	2)	An Increase in value placed on safety, but no significant change in fear of repercussion or perceived state of safety. Decline in perceived safety among control groups (i.e. participants who did not attend the workshop).	3)4)5)6)	Education and Training to enhance understanding and knowledge of patient safety. Senior leadership support to set the agenda and prioritise improving safety culture. The intervention may serve as a buffer against and help prevent deterioration in safety culture. In addition competing priorities and human resource constraints prevented the use of tools and the intervention may require longer than the study timeframe to have an effect.

	The intervention was based on Lippett et al (1973) Seven-phase Model of Planned Change: 1) Diagnosis of problem 2) Assessment of motivation and capacity to change 3) Assessment of the change agent's motivation and resources 4) Selection of progressive change objectives 5) Choosing an appropriate role for the change agent 6) Maintaining the change once it started.				
	Information on Logistics: Duration: 1 year; Number of Participants: 356 nurse managers and educators/ CNSs \$5,000 to cover survey cost (Liane Ginsburg's personal communication)				
REFERENCE#30: Haller, Garnerin, Morales, Pfister, Berner, Irion, Clergue & Kern (2008), International Journal for Quality in Health Care, (**V**) Key Contact:	Aim: Crew Resource Management (CRM) intervention to improve teamwork and communication skills in a multidisciplinary obstetrics setting Intervention Details: For details see Haller, et al. (2008) below. Information on Logistics:	1)2)3)4)	Better knowledge about teamwork and shared decision making after the training program Positive change in the team and safety climate, working cognition and job satisfaction, Stress recognition 90% satisfaction with the program.	1) 2)	Management support. The significant changes were wiped out in the second trimester when participants perceived that they were not supported by management.
Guy Haller Quality Care Unit and	239 midwives, nurses, physicians and technicians from the department of anaesthesia, obstetrics and				

Department of Anesthesia	paediatrics.		
and Intensive Care			
Geneva Hospital.			
Email: guy.jaller@hcuge.ch			
REFERENCE#31: Haller,	Aim: Crew Resource Management (CRM)	This study should be read with	Development and customisation of CRM
Morales, Pfirster, Garnerin,	intervention to improve teamwork and	Haller et al. (2008) in IJQHC.	by healthcare professionals.
Chipp, Guillemot, Clergue	communication skills in a multidisciplinary obstetrics		
& Kern (2008) Journal	setting	Participants rated their	
interprofessional care		satisfaction as very high:	
(VV)	Intervention Details:	1) 90% for course	
Key Contact: Guy Haller Quality Care Unit and Department of Anesthesia and Intensive Care	Ensemble Program using Crew Resource Management Techniques. 1) CRM was used to trains employees to communicate and coordinate as a team and make better use of human resources. 2) The Ensemble program was designed by a team of multidisciplinary healthcare professionals along with cognitive psychologists and aviation safety experts. 3) The team were chosen based on expertise and	organisation, 2) 3.5–71% for course content, 3) 79–81% for teaching method 4) 69–79% for group dynamic related items	
Geneva Hospital.	leadership position. 4) The intervention was held over 2 days.		
Email: guy.jaller@hcuge.ch	 5) Day 1: Film to initiate discussion on common miscommunication issues and errors experienced during clinical practice. 6) This was followed by lectures aimed to improve understanding of patient safety and team coordination and communication in healthcare settings. 		

	 7) Day 2: Role plays aimed at highlighting interprofessional expectations and misunderstandings. 8) A comparison of the issues raised by the professionals from the three departments enabled participants to define the problems likely to have an impact on the safety of the patients and babies. 9) The programme ended with identifying team improvement strategies that could be implemented in daily practice. 10) This intervention used Kirkpatrick's four-level method for evaluating training programs: a) Reaction (do participants like the program), b) Learning (Do participants learn), c) Behaviour (do participants apply what they have learnt), d) Organisational impact (was there increased safety and fewer errors after the program). 		
	Information on Logistics:		
	The programme was set up as a two day inter-		
	professional seminar for groups of 12 people and was		
	chaired by two of their peers. Obstetrics teams in Geneva Hospital; 239 midwives, nurses, physicians		
	and technicians from the department of anaesthesia,		
	obstetrics and paediatrics obstetrics, and paediatrics.		
	1		
REFERENCE#32: Johnson	<u>Aim:</u> Safety training presentation (3 hours) based on	1) An increase in voice and	1) Training was mandatory and
& Kimsey (2012),	Crew Resource Management, communication	reduced root cause analysis incidents.	interdisciplinary. 2) All participants who attended and
Association of perioperative	techniques and TeamSTEPPS. The presentation	2) The perioperative team	completed surveys receive continuing

registered nurses (AORN),	included introduction, back ground about the reasons		training safety course	education credits.
	for the program and a description of CRM, positive		offered participants key	3) The use of videos of staff members,
(✔)	team dynamics and communication tools.		tools to enhance communication in the	research and internal institutional
	Management level staff presented the program to		perioperative environment.	anecdotes to present supporting evidence.
	ensure buy in.	3)	By using a variety of	4) The videos incorporated the use of
Key Contact:			teaching techniques, team	techniques.
<u> </u>			members taught audience	-
Hope L. Johnson, MSN,	Intervention Details:		participants the importance	
RN, CNOR, is the	Intervention Details.		of communication, as well	These videos can be found online at
	1) A culture survey was conducted which revealed		as situations in which to apply improved	10.1016/j.aom.2012.03.002
director of operative	a lack of teamwork and positive communication		communication techniques.	
services at Lehigh Valley	in the perioperative division of the Lehigh Valley	4)	Collaboration between	
Health Naturals Codes Crest	Health Network in Pennsylvania.		several departments in the	
Health Network Cedar Crest	2) The main aim was to improve patient safety as measured via incidents and root cause analysis.		hospital was fostered.	
in Allentown, PA	3) Assembled a multidisciplinary team.	5)	The course also promoted	
	4) The team conducted a literature review to	6)	transparency of real issues. By involving all the	
	determine evidence based best practices to	6)	departments, staff members	
	improve patient safety. This showed that		could better understand the	
	teaching team building and communication skills		challenges and work to	
	can improve safety and reduce errors. Educating		implement permanent	
	staff members raises awareness, improves communication and empowerment.		solutions.	
	5) The training used video vignettes and audience			
	response system (small handheld voting devices			
	that polled the audience) to engage learners.			
	Topics included conflict resolution and			
	assertiveness techniques.			
	Information on Logistics:			
	809 staff in preoperative wards in the course over a			

	six month period			
REFERENCE#33: Kalisch, Aebersold, McLaughlin, Tschanne & Lane (2014), Western Journal of Nursing , (****) Key Contact:	 Aim: Virtual simulation to improve teamwork among nursing staff Intervention Details: 1) 3 Dimensional multi-user virtual environments (MUVE) as Second Life in a virtual simulation training program 2) 1 hour training with three role plays 3) After the simulation, the trainees analysed the 8 teamwork behaviours using Sales model. 4) Pre and post-intervention surveys were used to measure impact. 	Imp	proved teamwork behaviours	 The intervention was easy to use and flexible. Provided a new approach to training
Beatrice J. Kalisch, University of Michigan, School of Nursing, MI 48109, USA. Email: bkalisch@umich.edu	Information on Logistics: 80 nursing staff (88% RN, 12% NAs). Cost of training: \$25,000. 1 hour in length for 4-6 weeks. Survey cost: \$425. Total length of time: 3 months (4-6 weeks training, post-intervention survey: 2 months after).			
REFERENCE#34: Kalisch, Xie & Ronis (2013), Nursing Research, (VVV)	Aim: Train-the-trainer intervention to increase nursing teamwork and decrease missed nursing care in acute care patient units Intervention Details: 1) Three nurses from each unit underwent a training program (CRM) role-playing scenarios,	1) 2) 3) 4)	Teamwork increased Missed care decreased Job satisfaction among nursing staff increased An increase in teamwork knowledge	Cost effective as internal staff members serve as trainers after having acquired the skills in the training

Key Contact: Beatrice Kalisch, University of Michigan, Ann Arbor. Email: bkalisch@med.umich.edu	debriefing (leadership, team orientation, backup, performance monitoring) 2) The skills and knowledge acquired were taught to the rest of the staff on their unit in a 3-hour session. 3) Pre and post intervention surveys were used to measure the impact.		
	Information on Logistics: Three patient care units in three acute care hospitals. 80 Participants. Cost of training: \$25,000. 1 hour in length for 4-6 weeks. Survey cost: \$425. Total length of time: 3 months (4-6 weeks training, post-intervention survey: 2 months after).		
REFERENCE#35: Kalisch,	<u>Aim:</u> Intervention to enhance nursing staff teamwork	Lower patient fall rate, lower	The development of 'Values, vision and goals'
Curley and Stefanov (2007), Journal of Nursing Administration,	Intervention Details:	turnover and vacancy rates and improved teamwork	 2) Communication of feedback 3) Sponsors/ Champions or 'guiding team' to lead the change 4) Training needs assessments and
Mey Contact: Dr Beatrice J. Kalisch, PhD, RN, FAAN, Nursing Business and Health	 Focus groups and interviews to determine level and nature of teamwork Feedback to focus groups aimed at creating need for change 'Values, visions and goals' development session and gap analysis Teamwork Training. Formation of guiding team Creative problem solving sessions Implementation of ideas/ changes Continual communication 		 4) Training needs assessments and coaching and training. 5) Continuous collaboration with staff in the areas of listening, feedback, and conflict management and the importance of measuring cost savings (e.g. decreased staff turnover, less errors, decreased length of stay)
Systems, School of Nursing,	8) Follow-up coaching and reinforcement.		

University of Michigan.	The steps were based on Kotter's Eight-stage Process			
Email: bkalisch@umich.edu	for Successful Transformation.			
	Information on Logistics:			
	Duration: 1 year 8 months;			
	Nursing Teams: 55 staff members (RN, CAN and secretaries)			
REFERENCE#36: Allard,	<u>Aim:</u> Pre-surgery briefings to improve safety climate	A significant association	6)	Success in establishing a safety
Bleakley, Hobbs & Coobes	perception	between briefing practices and		culture may depend on first
(2011), BMJ Quality and		attitudes towards safety.		establishing unidirectional, positive
Safety,	Intervention Details:			change in attitudes to create a safety
(V V) Key Contact: Jon Allard, Institute of Clinical Education, Peninsula College of Medicine & Dentistry. Email: jon.allard@rcht.cornwall.nh s.uk	Briefing was introduced in conjunction with debriefing (the subject of a separate paper). OT teams have found briefing easier to adopt than debriefing (often perceived as superfluous). Briefing methods include: 1) formal checklist; 2) informal 'corridor' and 'coffee room' discussions; 3) 'horizon' (the night before); 4) 'cumulative', such as 'whiteboard' briefs (issues noted as the list unfolds). The study was implemented using principles associated with crew resource management (CRM) as described in Bleakley et al., (2012). <i>Information on Logistics:</i>			climate. The influence of surgeons (Lead in OT) determines whether the teams sustain or abandon briefing methods.
	Operating Theatre Staff, see Bleakley et al., 2012.			

Note: Very high quality study is denoted as 'VVV', high quality study as 'VV' and good quality study as 'V'

LEADERSHIP INTERVENTION STUDIES (Total number of Articles Reviewed: 5)

Source/ Authors/ Journal	Initiatives/ Program Details		Outcomes/ Findings	Key Elements for Successful
Quality				Interventions
	Initiatives/ Program Details Aim: Leaders' training and 360-feedback to understanding how leaders' competencies influence the types of change activities/ focus Intervention Details: 95 managers working in 81 different organizations within the NHS attended a two-week strategic leadership executive education program in 2003. These managers were part of the change projects implemented between January 2003 and December 2004. Each program participant was required to design and implement a change project in his/her organisation. Participants were self-selected into the program and free to choose the change project they implemented. Before attending the program, participants were required to write a comprehensive description of the change project they intended to initiate. They started implementing their change	2)	Leaders who are more effective at task-oriented behaviours are more likely to focus on both the mobilising and evaluating activities associated with planned organisational change implementation (than other leaders)	
	project after the program and were asked to refine their change project description after three months of			
	implementation to reflect any modification of their change project. Participants were also asked to			
	participate in a 360-degree leadership survey that was filled out three months before they attended the executive education program. Leadership data were			
	thus collected three months before they attended the			

	program and three and a half months before they implemented their change project. The intervention used Lewin's Three-step Change Process. Information on Logistics: 95 managers working in 81 different health organisations in NHS attended a two-week strategic leadership executive education program.		
REFERENCE#39: McCauley- Smith, Williams, Braganza & Gillon, (2014), Strategic Change, ()	<u>Aim</u> : To consider whether the 'bespoke' intervention helped the participants to understand and prepare for their future leadership roles and the environment in which they were to operate. <u>Intervention Details:</u>	Findings were drawn from organisational documents such as strategy plans and minutes of meetings, observation and semi-structured reflexive interviews with 9 participants on the completion of learning intervention:	 Importance of foresight and reflection in the development of leaders from both single and multiple perspectives. The need to include collaborative evaluation of experiences and trends helps to identify actions
Key contact: Catherine McCauley-Smith Teesside University Business School Teesside University, United Kingdom.	Bespoke learning intervention was designed to help participants to anticipate and prepare for their future role. It was centred on reflective and visionary practice, both techniques associated with strategic foresight. Foresight is defined as a provision for or insight into future problems—the act(s) of looking forward. Information on Logistics:	 The authors observed the development from a group of teachers and an IT specialist to leaders and members of an integrated, connected, and collaborative network of leader-practitioners. Applicants have progressed in their collaborative working as the WLT to detect changes and predict and solve 	for the future. The importance of individual and collective reflection and the need for those in leadership roles to embrace and embed visionary and reflexive thinking.
Email: c.mccauley- smith@tees.ac.uk	Individuals who form a second tier of leadership known as the wider leadership team (WLT) hierarchically situated immediately below a senior leadership team known as the executive leadership team (ELT). The participants formed a cohort that was	problems. 3) The majority of interviewees commented on self-assurance not only in relation to leadership issues but also preparing for and managing change, seeking opportunities for career development, communicating	

	purposefully identified by the ELT. All nine members of the WLT agreed to participate in a two-year learning intervention.	with peers and managers, and gaining respect and credibility within the wider organisation. 4) Through the intervention the participants were able to challenge taken-for-granted concepts of leadership and were introduced to new ways of interpreting leadership and change so that they could explore alternative scenarios and approaches that use critical management studies in a practice-oriented and more reflexive dialogic way. 5) The participants recognised the value of reflexive skills.	
REFERENCE#40: Roberts Et Al (2014), The American Journal of Surgery, (**V*) **Key contact:* Associate Professor Nicole Roberts Department of Medical Education, School of Medicine, Southern Illinois University, Springfield, IL 62794-9681, USA. Email: nroberts@siumed.edu	 Aim: Leadership training in team communication in an ad hoc team trauma care setting Intervention Details: 1) Pre-intervention stimulated trauma resuscitation event. 2) Team communication and role appropriate behaviour training (Leadership and team member behaviour). 3) Debriefing on team performance. 4) 3-week post-intervention simulated trauma resuscitation event. Information on Logistics: 3 weeks, 57 medical hospital staff (leaders / members) 	Brief training episodes can lead to changes in targeted team and individual behaviours. This includes changes in targeted team leadership, communication, and coordinated behaviours.	The design of the training was carried out by an interdisciplinary team leadership, The trauma leadership, hospital leadership, and emergency leadership are committed in the training and made it mandatory for new general and emergency department residents

REFERENCE#41: Crethar, Phillips, Stafford and Duckett (2009), Australian Health Review, ()

Key contact:

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Brisbane, QLD 4029.

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meagan crethar@health.qld.g ov.au <u>Aim:</u> To improve workplace culture in response to reports of bullying and intimidatory behaviour.

Intervention Details:

Intervention based on the premise that leaders are fundamental to culture and if change is to take place, leadership needs to change.

The training followed a staff survey of culture. The components of the program include action learning leadership development workshops, 360-degree feedback, executive coaching, leadership learning modules and an interactive leadership website.

A second phase included a number of additional initiatives — an Emerging Clinical Leaders Program, a Top 500 leaders Program, Conflict Resolution Program for Clinicians and a Clinical Network Chairs Leadership Program. The intervention followed the domains of the NHS Leadership Qualities Framework. Participants also completed personal action plans for their own development. The Framework therefore provides Oueensland Health leaders with a common language and a consistent approach for the behavioural qualities of leadership to which they should aspire. A 2-day residential workshop was conducted for clinical and non-clinical executives to develop a shared understanding of the Queensland Health vision and values; and to gain the commitment of participants to act as leaders by driving the change agenda and to provide a toolkit of skills and knowledge relevant to the challenges of the reform agenda. A standard workshop was developed and delivered to staff across the state. One unique feature of the workshop was a

The workshops were well received and while causation cannot be inferred, there were promising signs.

- 1) Formal grievances dropped by 56% in the 2-year period from 2004–05 to 2007–08.
- Bullying and harassment grievances dropped by 40.6% reduction from 2004–05 to 2007–08.
- 3) Consumer complaints to the ombudsman decreased by 28% from 2005–06 to 2006–07.
- 4) Absenteeism dropped from 4.67% in 2003–04 to 3.99% in 2006–07.
- 5) Retention of staff improved and separation rates decreased from 7.99% in 2004–05 to 6.65% in 2006–07.
- 6) Recruitment (the number of new permanent employees as a proportion of the total permanent workforce) improved, with an increase from the second quarter of 2004 (4.8%) to the second quarter of 2007 (8.2%).
- 7) Awarded the 2007 Queensland Government Premier's Award for Excellence in Public Sector Management in the Focusing on our People category.

Unclear which parts of the program had the best effect. However the following appear to be important:

- Extensive consultation and research that was undertaken during the program design phase.
- Learning and building upon the processes implemented by the NHS.
- Importance of consultation with reference group that included senior clinical leaders.
- 4) One-on-one debriefing of 360-degree feedback results with an experienced facilitator (missing in previous 360s).
- 5) Innovative development experiences such as the "prophetical" raised key issues in a safe environment.

REFERENCE#42: Gilpin-	drama-based interactive case study (the "prophetical — applied theatre") which was developed by Queensland University of Technology, utilizing actors who played out typical scenarios (a project that gets derailed) using different behaviours, to enable participants to observe the effects of the behaviour, which were referred to throughout the workshop. The methodology used in the workshop is experiential and encourages active participation in problem solving and decision making. In line with the executive workshops, the scenarios (applied theatre) allow participants to enter a "safe" space to observe and critique the leadership approach of others and use the skills they have acquired throughout the workshop to intervene and correct behaviours which can alter outcomes. Information on Logistics: Senior management from each of Queensland Health's 20 Districts, Corporate Office, and Division and Area offices (about 500 staff) participated in the residential workshops -which were mandatory for all senior executives. A 2-day non-residential workshop for managers and supervisors was developed to complement the residential workshops, targeted at middle to junior managers (about 4500 staff). Aim: To evaluate the Leadership development program	1)	Social support, encouragement and	1)	Social Support through
Jackson & Bushe (2007),	at Vancouver Island Health Authority (VIHA) to better	1)	verbal praise, were associated with	1)	encouragement and rewards from
Journal of Management	understand training transfer in facilitating change in		positive judgments of the training but not with utilisation.	2)	one's peers and boss Senior leaders to 'walk the talk'
Development,	leadership	2)	Observing others use the skills and	-/	by using similar training skills.
(/)	Intervention Details:		being able to coach one another was the kind of "support" that effected		

Key Contact:

Yabome Gilpin-Jackson

Email: yabome@supportingde velopment.com.

This intervention examines the factors that influence the transfer of leadership training and how these influence cultural change processes. The program was loosely based on Senge's (1990) five disciplines for creating learning organisations - systems thinking, personal mastery, shared vision, mental models and team learning. The goals of the program include: to help get results, shape culture, build leadership depth and improve leader effectiveness. The program was developed by external university and industry experts. The program was made up of six modules called, Laying the foundation, Clarifying aspiration, Developing clear leadership, Dealing with complexity, Creating shared vision and Back at work/celebration. It was intended to increase self-awareness and promote personal growth as well as provide skills for increasing organisational learning. Delivery was spread over nine months, including pre-work, 70 in-session hours, personalised coaching between course sessions and post-session assignments. After running a pilot group, the program was made available to senior and middle managers and later rolled out to the supervisor-level.

Information on Logistics:

The program was evaluated through interviews conducted with 21 participants of the extensive, soft skill oriented leadership development program, along with peer observers.

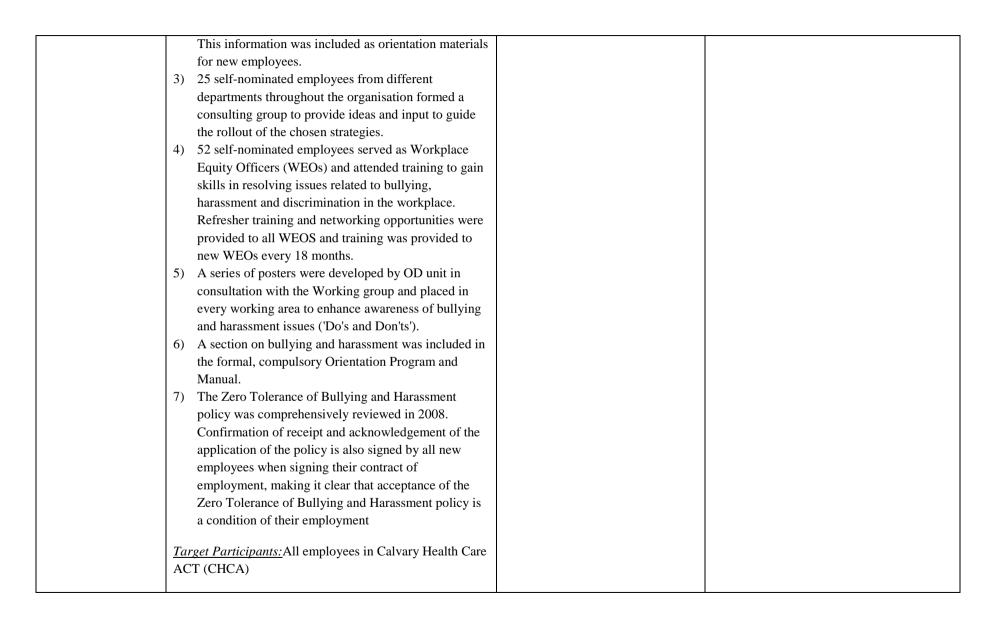
utilisation, which depended on colleagues and managers also receiving the training.

Note: Very high quality study is denoted as 'VVV', high quality study as 'VV' and good quality study as 'V'

Anti-bullying Interventions (Total Articles: 4)

Source/ Authors/	Initiatives/ Programs Details	Outcomes/ Findings	Key Elements for Successful Interventions
Journal Quality			
REFERENCE#64: Mikkelsen, Hogh and Puggard (2011), International Journal of Workplace Health, (Key contact: Eva Gemzoe Mikkelsen, CRECEA A/S, Aarhus, Denmark.	 Aim: Intervention to prevent bullying and conflict Intervention Details: The intervention consisted of three parts, all of which were facilitated by a consultant. Two 60 to 90 minute lectures on bullying (i.e. definition, negative acts, the bullying process, causes, consequences and prevention strategies) for all employees; A two-day course in conflict prevention (i.e. conflict theory, training in non-violent communication) and management for all managers and key employees. Participants discussed and analysed risks of conflict and how to prevent conflict arising. Three three-hour dialogue meetings, which involved table discussions on one of four topics with participants rotating and discussing solutions. Each table created and presented a poster summarising solutions and allowing for comments. Written material was created from the posters and distributed. The intervention used Kotter's Eight-stage Process for Successful Transformation. Target Participants: All employees 	Increased awareness helped prevent workplace conflict and bullying	 Key Success Factors Intervention objectives should be clearly defined and communicated to employees and should fit problems identified Sustained commitment and support from top management Organisational culture should support the intervention Good planning and well-organised invention is key Well-run steering group to take responsibility for implementation Participative approach to solicit solutions and recommendations from employees (rather than focusing on problems). Factors that appeared to prevent success: Poor planning and communication Lack of fit between training and problems identified Too many changes and not enough time. Other key success factors include

	Intervention was conducted in a business college (157 participants) and an anaesthesiology department in a hospital (264 participants). Both organisations contributed Euro 4,850 towards the study. Outcome of the 2 interventions were assessed through pre and post interviews and process evaluations using field observations		Communication: Opportunities for managers and employees to discuss psychosocial work environment problems and possible solutions Information: General knowledge lectures and informative pamphlets Participation: Participative approach and ongoing dialogue
REFERENCE#65: Meloni & Austin (2011), Australian Health Review, (*) **Key contact:** Marion Meloni, Organisational Development Unit, HR, Calvary Health Care ACT, Corner of Belconnen Way and Haydon Drive, Bruce, ACT 2617, Australia. Email: marion.meloni@calv ary-act.com.au	 Aim: Zero Tolerance of Bullying and Harassment Program Intervention Details: The project was carried out in Calvary Health Care ACT (CHCA) to promote CHCA's mission and values throughout the organisation and to combat bullying and harassment and used the Bullock and Batten (1989) Four-Phase Model. The intervention was implemented as follows 1) The Director of Mission was appointed as the Zero Tolerance of Bullying and Harassment project sponsor. 2) The executive team showed their commitment by a) CEO sending a letter to all employees at home stating her commitment to eliminate bullying and harassment in all forms and highlighting everyone's responsibilities. b) This letter was also signed by all Executive team members, framed and displayed in the front reception area of the hospital to send a strong message to all employees, patients and visitors. c) 	 Employees understand how to report and deal with bullying and harassment issues. Level of overall engagement increased since 2005. After 3 years there are improvements in the bullying and harassment section of the most recent employee satisfaction survey. 	 The intervention objectives were clearly defined and communicated to all employees. CEO and Executive team's commitment and support throughout the intervention and post-intervention. Special steering committees and designated consultant to drive the initiatives. Recruitment of 'change agents' to continue to promote and implement the intervention strategies. Successes and new practices were incorporated as part of the organisational practices and policy.



REFERENCE#68:	This is not an intervention study but it is a key source for	1)	Identifying and understanding	A multilevel intervention should be
Saam (2010),	'Bullying Interventions'		the causes of bullying will help	employed when dealing with bullying.
European Journal of			to adjust intervention strategies	
Work and			to the diagnosed causes.	
Organizational	Intervention Details:	2)	Identifying the stage of conflict	
Psychology. (🗸)	Intervention Details.		within the escalation process	
	This study was carried using semi-structured interviews		will help to prescribe the	
	with consultants who intervened in organisations seeking		appropriate intervention	
Von contact.	support to resolve cases of workplace bullying.		strategies.	
Key contact:		3)	It is important to understand	
Nicole J. Saam,			the difference between an	
Universität Erfurt,	n et e		'organisation-oriented' or	
,	Participants:		'person-oriented' mediation	
Staatswissenschaftlic	18 consultants from Germany		strategies. The former works	
he Fakultät,	To Consuming from Communy		on problem areas at all levels	
Nordhäuser Str. 63,			of the organisation while the	
D-99089 Erfurt,			latter focus on the person	
Germany.			involved.	
F '1		4)	Coaching supports the	
E-mail:			management executive or the	
nicole.saam@uni-			work council.	
<u>erfurt.de</u>		5)	-Policies and practices against	
			bullying (e.g. Formulating a	
			vision, bullying conventions,	
			company agreements,	
			designating someone	
			responsible for conflicts) should be incorporated in the	
			agenda of organisational	
			development activities.	
			development activities.	

REFERENCE#71:	This is not an intervention study but it is a key source for	Interventions vary across disciples	Bullying prevention should be simple,
Stagg & Sheridan	'Bullying Interventions'	of business, education and	consistently implemented and easy to
(2010), AAOHN		healthcare.	evaluate but the findings reveal otherwise.
Journal, (✔) Key contact: Ms. Stagg, Family Nurse Practitioner, University of Maryland Medical System, Cambridge. Email: sstagg@shorehealth. org.	Intervention Details: This is a review of bullying interventions. The review included both experimental and non-experimental research. 1426 articles were found but only 18 involved an intervention and were included in the final review.	 Business evidence showed that an employer's apology would help to resolve dispute and ii) program regarding issues relating to psychosocial problems (e.g. job stress and workplace violence) help to improve employees' knowledge over time. Educational evidence suggests that the effectiveness of bullying interventions in schools is inconclusive. Healthcare evidence suggest two major interventions aimed at: i) to improve culture of support for colleagues with effective communication, collaboration and conflict resolution, ii) to equip employees with skills on how to cognitively rehearse responses as defence against the effects of bullying. 	evaluate out the initiality is reveal office wise.

Note: Very high quality study is denoted as 'VVV', high quality study as 'VV' and good quality study as 'V'.

Mindfulness and Stress/Burnout Intervention (Total Articles: 11)

Source/ Authors/ Journal	Initiatives/ Program Details	Outcomes/ Findings	Key Elements for Successful
Quality			Interventions
REFERENCE#23: Van Berkel, Proper, Boot, Bongers & Beek (2011), BMC Public Health	Aim: Mindfulness intervention to improve work engagement and energy balance-related behaviours Intervention Details:	No significant change in work engagement except for the change of physical activity.	Social support from leadership and the organisation.
(**)	See Van Berkel, Boot, Proper & Beek (2013) for details.		
Key Contact:	Information on Logistics		
Ce´cile R. L. Boot, PhD,	Duration: 8 weeks of intervention training. The study was carried out over one year. 129 participants, 128		
VU University Medical	participants in each organisation. Two Dutch		
Center, Amsterdam, the	governmental research institutes were involved.		
Netherlands.			
Email: crl.boot@vumc.nl			

REFERENCE#44: Van	Aim: To evaluate the effectiveness of a worksite	There were no significant	1)	Follow-up after the intervention is
Berkel, Boot, Proper & Beek	mindfulness-related multicomponent health promotion	differences in work engagement,		important.
(2014), Public Library of	intervention to improve work engagement, mental health,	mental health, need for recovery	2)	Personal resources (job demands
Science ONE (PLoS ONE),	recovery and mindfulness.	and mindfulness between the		and job resources) are easiest to
,		intervention and control group after		influence in an intervention.
('')	<u>Intervention Details:</u>	the 6 and 12 month follow-up.		
		Additional analyses in mindfulness		
	See Van Berkel, Boot, Proper & Beek	related training compliance		
V C t t -	(2013) for details.	subgroups (high and low		
<u>Key Contact:</u>	(2013) for details.	compliance versus the control		
Ce'cile R. L. Boot, PhD,	Information on Logistics	group as a reference) and subgroups		
de one in 2. 2 see, i ii.		based on baseline work engagement		
VU University Medical	Duration: 8 weeks of intervention training. The study was	scores showed no significant		
Center, Amsterdam, the	carried out over one year. 129 participants, 128	differences.		
Netherlands.	participants in each organisation. Two Dutch			
	governmental research institutes were involved.			
Email: crl.boot@vumc.nl				
REFERENCE#45: Van	Aim: To evaluate process evaluation of Mindfulness	This study is the evaluative	1)	Social context and social support
Berkel, Boot, Proper & Beek	intervention programs in improving work engagement and	component of Van Berkel, Proper,		are important.
(2013), Journal of	energy balance-related behaviours.	Boot, Bongers & Beek (2011). The	2)	Management and employees
Occupational Environmental		authors measured the reach of the		should be involved in the
Medicine, (VV)	(also see Van Berkel, Proper, Boot, Bongers & Beek,	training and participation in the	3)	development of the intervention. There must be a practical
	2011)	various programs introduced.	3)	facilitation by managers/
	L. C. D. H	Participation in the mindfulness		supervisors (emails were not
	Intervention Details:	training was higher with greater		enough).
<u>Key Contact:</u>	Intervention Mapping (IM) approach:	compliance than the e-coaching	4)	Employees should participate
C'ecile R.L. Boot, PhD,	inter remain mapping (int) approach.	(only 6% compliance) or the		within paid working hours.
Department of Public and	1) Needs assessments through surveys, interviews and	homework component (8%		
Occupational Health–EMGO	focus groups.	compliance).		
Institute for Health and Care	2) Definition of Program Objectives			
institute for Health and Care	3) Method and Strategies: Identify theory-based			

Research	technique to influence resources and determinants in Step 1 and 2		
VU University Medical	4) Program Development: Mindfulness Training		
Center	focusing on cognitive, behavioural and e-coaching.		
	5) Development of a plan for implementation.		
Amsterdam, the Netherlands.	6) Evaluation.		
Email: crl.boot@vumc.nl			
	The intervention was based on Action Research:		
	Diagnosis, analysis, feedback, action and evaluation.		
	Information on Logistics:		
	Duration: Each mindfulness training took 90 minutes and		
	was carried out over the span of 8 weeks and they were		
	accompanied by homework and e-coaching sessions.		
	Location: Two Dutch governmental research institutes.		
	1570 Site 1, 250 Site 2 with the total of 1820 but only 257		
	participants participated in the intervention study. The		
	study was carried out over one year.		
REFERENCE#46: Brady,	Aim: to examine the impact of the mindfulness-based	1) The overall stress score of	
O'Connor, Burgermeister &	stress reduction (MBSR) program on managing work	participants on the MHPSS	
Hanson (2011), Perspective in	stress and improving patient outcomes	decreased after taking the MBSR class.	
Psychiatric Care, ()	Intermention Details	2) Burnout scores did not	
	Intervention Details:	demonstrate a statistically	
	MBSR program of 4 weeks (instead of the usual 8-10	significant decrease on the	
<u>Key Contact:</u>	weeks)	emotional exhaustion or depersonalisation subscales.	
Stephanie Brady. System Administrator for Behavioral	 Week 1: Formal Meditation and attention to breathing. Week 2: Mindful eating, walking and driving. Week 3: Total body relaxation. 	3) There was an improvement in the personal accomplishment subscale, but it was not	

Health

St. John Providence Health System

Madonna University, Livonia, Michigan, USA Email: stephanie.brady@stjohn.org 4) Week 4: Incorporating Week 1-3 techniques into the work setting. Participants were asked to document their mediation practices and barriers in a diary. Weekly homework was assigned which included how to demonstrate mindfulness techniques in their daily routines.

Information on Logistics:

Duration: 4 weeks, 16 Staff members (convenient sample) in an inpatient behavioural health unit in a large Midwestern hospital. The staff members were psychiatric nurses (n=7), social workers (n=3), mental health technologists (n=3), psychiatrists (n=1), recreational therapists (n=1) and health unit coordinators (n=1).

- statistically significant.
- 4) Mindfulness scores increased over the course of the class.
- 5) Findings from participants' diary outlined barriers to meditating daily and these included the following: (a) forgetting to put on the calendar to make this a habit, (b) getting too busy with other things, and (c) being pulled in too many directions by others and family when one gets home.
- 6) Themes on how work may be improved included the following: (a) "by taking time for myself every day, I feel better and more calm," (b) "makes me feel more present for others," (c) "helps me learn to relax and take care of myself so I can be stronger for others," (d) "this was very positive in dealing with my stressors, so I do not affect the care of my patients," and (e) "improves my self-awareness."
- 7) By finding time to take care of themselves, staff members will be better equipped to take care of the patients they serve and the overall patient satisfaction showed improvement (nursing care showed an increase of 4.6%, other staff increased by

REFERENCE#47: Bazarko,	<u>Aim:</u> To examine the effectiveness of a new intervention	6%). 1) Nurses showed significant	
Cate, Azocar & Kreitzer (2013), Journal of Workplace Behavioral Health, (✔)	of Mindfulness-Based Stress Reduction (MBSR) program using group telephonic session (tMBSR) in a large health care organisation Intervention Details:	improvement from Time 1 to Time 2 on perceived stress, with no significant change from Time 2 to Time 3. This suggests that change was maintained over 4 months.	
Key Contact: Dawn Bazarko, DNP, MPH, RN Center for Nursing Advancement, UnitedHealth Group 9800 Health Care Lane, MN006-W300 Minnetonka MN 55343, USA. Email: Dawn m bazarko@uhg.com	 An email was sent to 258 nurses inviting them to participate in one-hour tMBSR informational conference call, including a 10-minute meditation session led by MBSR instructor. 72 participants participated in the conference call but 58 participants indicated interest in the program and completed a brief online application. 41 participants (out of the 58 participants) were assessed against the eligibility criteria (i.e. hired before June 1, 2009; lack of previous MBSR training; active nurse licensure; performance standing; manager's support to ensure business continuity) and provided with the information to officially enrol in the study. tMBSR program was delivered by MBSR experience instructor and it involved a full-day retreat on Saturday at the beginning of the 8-week program. Six weekly 1.5-hour group teleconference calls at a regularly scheduled day and time, email contact with the instructor between sessions, and a full-day retreat on a Saturday at the end of the 8-week program. 	 Significant improvement in all areas of burnout (personal, work and client related) from Time 1 to Time 2 and this improvement was maintained for personal and client related burnout. On work burnout, while the nurses continued to improve from Time 2 to Time 3, there was a significant decrease over the 4 months after the program. Significant improvements on all mental health aspects including social function, role emotional, mental health but these improvements were maintained for 4 months only. Serenity and empathy improvements were sustained for 4 months. Mindfulness, self-judgment, 	

	 6) Participants followed a proposed schedule that included (a) guided instruction in mindfulness meditation practices, (b) facilitated group discussion, (c) gentle stretching and yoga, (d) daily work and home assignments, and (e) access to individually tailored instruction and support. 7) Throughout the 8-week intervention period the participants maintained a log of the type of home practice they engaged in and the amount of time they spent on each activity. 8) Study participants were asked to complete baseline, 2-month follow-up, and 4-month follow-up. Information on Logistics: Duration: 8 weeks, n=41 nurses in a large healthcare organisation. 	6)	isolation, and overidentification showed significant improvement and these were sustained for the whole duration of the intervention. Overall nurses who participated in this hybrid MBSR intervention showed decreased perceived stress and burnout, improved mental health and social functioning, and increased overall general health, as well as significant increases in serenity, empathy, and self-compassion—all important elements to patient care.	
REFERENCE#48: Cohen- Katz, Wiley, Capuano, Baker	<u>Aim</u> : To examine the Mindfulness-based Stress Reduction (MBSR) intervention effects on nurses (Quantitative	1)	Significant changes on mindfulness attention	The 8-week program is powerful intervention but it is should be
& Shapiro (2005), Holistic	Results)		awareness in the treatment	accompanied with on-going support to
Nursing Practice,	Intervention Details:	2)	group. Greater reductions in emotional exhaustion and lack of personal	sustain the lasting changes in nurses burnout and stress in hospital.
	The MBSR is taught as an 8-week program that meets approximately 2.5 hours a week and includes a 6-hour daylong retreat between the 6th and 7th weeks.	3)	accomplishment in the treatment groups. The number of people showing elevated psychological distress	-
Key Contact:	Participants are asked to practice the mindfulness		pre-intervention decreased	
Joanne Cohen-Katz, PhD	techniques 6 days a week as "homework" and given audiotapes to facilitate this. Group sessions include a		following the MBSR program in both the treatment and non-	
Lehigh Valley Hospital, Department of Family	combination of formal didactic instruction on topics such as communication skills, stress reactivity, and self-compassion and experiential exercises to help participants		treatment (wait-list control) groups.	

Medicine	integrate these concepts. Participants were asked to fill up	
	baseline survey (T1), post-intervention (t2) and follow-up	
17th & Chew Sts, Allentown,	at 3 months (T3). Burnout, mindfulness awareness,	
PA 18105	emotional exhaustion, psychological distress measures	
Email: <u>Joanne.Cohen-</u>	were included in the surveys.	
Katz@lvh.com.	Information on Logistics:	
	Duration: 8 weeks, with 27 participants. Nurses (n=27) at	
	Lehigh Valley Hospital & Health Network (LVHHN). 14	
	were assigned to treatment group while 13 were included	
	in the wait-list control group.	

Irving, Dobkin & Park	Aim: to evaluate empirical studies of mindfulness-based	10 intervention studies were	Mindfulness trainer can influence the
(2009), Complementary, (✔)	stress-reduction.	reviewed.	effectiveness of the MBSR
Key Contact: Julie Anne Irving. Department of Educational and Counselling Psychology, McGill University, Montreal, Canada. E-mail address: Julie.irving@mail.mcgill.ca	Review Details: Both qualitative and quantitative studies were reviewed and 10 articles were included in the review.	1) Quantitative results of MBSR program demonstrated positive effects on self-report measures of psychological symptoms such as anxiety and depression, as well as increased ratings of empathy, self-compassion and spirituality. 2) Qualitative results of MBSR helped to improve interpersonal function and coping with stress.	intervention.
REFERENCE#51: Newsome, Waldo & Gruszka (2012), Journal for Specialists in Group Work, (Key Contact: Sandy Newsome, Ph.D., is a staff psychologist at the Counseling Center at New Mexico State University. E-mail: newsome @nmsu.edu.	Aim: to examine the effects a 6-week mindfulness group had on 31 college students who were intending to enter helping professions (e.g., nursing, social work, counselling, psychology, and teaching). Intervention Details: MBSR of 8-weekly 90-min sessions. Techniques for MBSR that could be integrated into the group members' works as helping professionals were taught. MBSR focused on: 1) Learning mindfulness practices 2) Application of these practices to group members' lives 3) Self-reflection and speculation about integrating mindfulness practices into group members' lives in the	1) Significant decrease of perceived stress and increased of mindfulness attention awareness and self-compassion between pre-test and post-intervention but not between pre-pre test and pre-test results. These results indicate that perceived stress, self-compassion and mindfulness only changed after participation in the mindfulness group. As such, mindfulness practices helped to directly influence group members' levels of mindfulness. 2) In addition, mindfulness	
	future. 4) Baseline surveys that consist of perceived stress, mindfulness attention awareness scale and self-	training appears to have helped group members learn to be	

	compassion scales were administered prior to the intervention (pre-pre-test), 4 weeks later (beginning of first group meeting, pre-test) and 4 weeks later after the last group meetings(post-intervention). Information on Logistics: Duration: 8 Weeks. 31 students (15 in one group and 16 in the other group) who were training for careers in helping professions (e.g., counselling, psychology, education, family-child science, nursing, sociology, communications, government, and physical therapy) at a university in the Southwest participated in a MBSR group.		more conscious and present in their lives, and may have helped them become aware of their tendency to be mindless at times.		
REFERENCE#52: Shapiro, Brown & Biegel (2007), Training and Education in Professional Psychology, (Key Contact: Shauna L. Shapiro, Santa Clara University, 500 El Camino Real, Santa Clara, CA 95053. E-mail: slshapiro@scu.edu	Aim: To evaluate Mindfulness-based Stress Reduction (MBSR) intervention in enhancing the mental health of therapists in training. Intervention Details: The Stress Management course consisted of 10 weekly classes, meeting 3 hours per week. The 8-week MBSR intervention began in the third week; the intervention was modelled after the well-established manualised treatment program developed by Kabat-Zinn and colleagues at the University of Massachusetts. The MBSR intervention included weekly 2-hour sessions wherein students received training in five mindfulness practices adapted from Kabat-Zinn (1982). (also see Shapiro, Astin, Bishop & Cordova (2005) for details) Information on Logistics: Duration: 8 weeks, 32 Therapists in training.	2)	Participants in the MBSR intervention reported significant decreases in perceived stress, negative affect, state and trait anxiety, rumination, as well as significant increases in positive affect and self- compassion. Increases in mindfulness were related to improvements in mental health. Increases in mindful attention and awareness were associated with declines in perceived stress, anxiety, and rumination, and increases in self-compassion.	2)	Senior management should support this initiative by providing the employees to engage in tMBSR is cost-effective in the long term but there is a set-up cost involved.

REFERENCE#53: Shapiro, Astin, Bishop & Cordova (2005), International Journal of Stress Management,



Key Contact:

Shauna L. Shapiro, Department of Counseling Psychology, Santa Clara University, 500 El Camino Real, Santa Clara

CA 95053-0201.

E-mail: slshapiro@scu.edu

<u>Aim:</u> To evaluate Mindfulness-based Stress Reduction (MBSR) intervention effects on healthcare professionals

Intervention Details:

8-week randomised controlled trial. Training in mindfulness attempts to increase awareness of thoughts, emotions, and maladaptive ways of responding to stress, thereby helping participants learn to cope with stress in healthier, more effective ways. Mindfulness involves paying attention to one's present experiencing in a nonjudgmental and non-evaluative way.

The MBSR intervention consisted of eight 2-hr sessions, 1 session per week. Participants received training in the following meditative practices: (a) sitting meditation, involving awareness of body sensations, thoughts, and emotions while continually returning the focus of attention to the breath; (b) body scan, a progressive movement of attention through the body from toes to head, observing any sensations in the different regions of the body; (c) Hatha yoga, which consists of stretches and postures designed to enhance greater awareness of and to balance and strengthen the musculoskeletal system, and (d) three-minute breathing space, a "mini-meditation" that focuses on the breath, the body, and what is happening in the present moment.

Information on Logistics:

All health care professionals (e.g., physicians, nurses, social workers, physical therapists, and psychologists)

- 1) Changes in self-compassion significantly predicted positive changes in perceived stress but did not have predictive power for satisfaction with life.
- 2) Those who participated in the MBSR intervention reported decreased perceived stress and greater self-compassion when compared with controls.
- 3) Psychological distress, satisfaction with life, and job burnout were decreased; however, the differences between experimental and control groups along these dimensions were not significant (largely due to small sample of 10)

	from the Palo Alto and Menlo Park Divisions of the Veterans Affairs Health Care System were eligible for the study but only 8 completed the intervention. Duration: 8 weeks.			
REFERENCE#54: Lamontagne, Keegel, Louie,	<u>Aim:</u> To evaluate the effectiveness of job-stress intervention	1)	There is a growing application of intervention that a) used	It is important to understand effectiveness of the specific
Ostry & Landsbergis (2007),	intervention		primary prevention as	intervention to strategically align plans
International Journal of	Review Details:		predominant approach but also	and strategies with the targeted
Occupational Environmental	00		integrated either risk assessment or other needs'	perceived outcomes.
Health, (✔)	90 reports of job-stress interventions were systematically reviewed and evaluated.		assessments, b) used only used	
	reviewed and evaluated.		primary prevention activities	
		2)	(and nothing else) Individual-focused	
Key contact:		2)	interventions that used little or	
			no primary interventions (e.g.	
A. D. LaMontagne,			muscle relaxation, meditation and cognitive behavioural skill	
The McCaughey Centre,			training) are effective at the	
School of Population Health,			individual level as they	
			favourably affect a range of	
University of Melbourne, VIC		3)	outcomes. However, the studies in (2)	
3010, Australia.			tend not to have a favourable	
E-mail:			impact at the organisational	
alamonta@unimelb.edu.au		4)	level. Organisationally-focused with	
		+/	integrated approach highlighted	
			in (a) and primary prevention	
			approaches highlighted in (b)	
			have favourable impacts at both the individual and	
No. W. It I to a Little			organisational levels.	

Note: Very high quality study is denoted as 'VVV', high quality study as 'VV' and good quality study as 'V'

APPENDIX 2: BIOGRAPHY OF AUTHORS

Associate Professor Markus Groth, BA, Ph.D. School of Management, Australian School of Business

Dr Groth's research examines the impact of employee experiences at work and the service quality experiences of customers and patients. His research has explored the behavioural and emotional components of service interactions and the way in which the management of these interactions (for example abuse from patients and families) affects employee well-being and performance and the patient / customer experience. Dr Groth has been the Chief Investigator on three ARC Linkage grants (with 5 major hospitals and two financial institutions) in collaboration with Dr Helena Nguyen and Dr Anya Johnson. All these projects involved producing reports for hospital administrators and a business audience. In addition Dr Groth has extensive experience in developing material for the Australian Graduate School of Management (AGSM) Master of Business Administration (MBA) program, translating academic findings for a business audience, to ensure they are accessible and useful.

Dr Anya Johnson BPsych, MSc, Ph.D: Work and Organisational Studies, University of Sydney Business School

Dr Johnson's research investigates the relationship between the design of jobs and teams and outcomes such as staff engagement, well-being and performance. In collaboration with Dr Groth and Dr Nguyen, she has conducted research on organisational interventions to bring about behavioural change in health care and investigated the mechanisms through which these changes are achieved. Dr Johnson also has extensive experience working as a Management Consultant for international organisations undergoing significant change initiatives.

Dr Ju Li Ng, BBA (Hons), M.A. (Communication), Ph.D.: School of Management, Australian School of Business

Dr Ng has collaborated with Associate Professor Julie Cogin and Queensland Health to explore Human Resource Management Systems at different levels within hospitals and their effects on Hospital Outcomes. Her research includes the impact of human resource management in healthcare, teams and team processes, and the development of trust in the workplace. In addition she brings her extensive and diverse corporate experience in multinational corporations and large banks.

Dr Helena Nguyen, BPsych (Hons), MPsych, Ph.D.: Work and Organisational Studies, University of Sydney Business School

Dr Nguyen's research is multidisciplinary and includes the role of emotions and cognition at work, human performance and well-being. She also has expertise in the area of service, in particular, the delivery of safe and effective service in the healthcare and aviation industry, and will draw on this expertise to help evaluate workplace culture change interventions that impact safety and quality outcomes. Dr Nguyen has collaborated with local government agencies, aviation organisations and hospitals and translated complex findings from her research into industry reports.