Implementing workplace health promotion – role of middle managers

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Abstract

Purpose – The purpose of this paper is to address a missing link between top management and employees when it comes to understanding how to successfully implement and embed workplace health promotion (WHP) as a strategy within organizations: the role of the middle managers.

Design/methodology/approach – A conceptual framework based on review of theory is applied within an empirical multi-case study that is part of a health intervention research project on increased physical activity among office workers. The study involves six Danish organizations.

Findings – Middle managers play a key role in successful implementation of WHP, but feel uncertain about their role, especially when it comes to engaging with their employees. Uncertainty about their role appears to make middle managers reluctant to take action on WHP and leave further action to top management instead.

Research limitations/implications – Limitations included the middle managers' low attendance at the half-day seminar on strategic health (50 percent attendance), the fact that they were all office workers and they were all from Denmark.

Practical implications – Middle managers ask for more knowledge and skills if they are to work with WHP in daily business.

Social implications – Implementing and embedding WHP as a health strategy raises ethical issues of interfering with employees' health, is seen as the employee's personal responsibility.

Originality/value – This study adds to knowledge of the difficulties of implementing and embedding WHP activities in the workplace and suggests an explicit and detailed research design.

Keywords Leadership, Physical activity, Implementation, Middle manager, Work health promotion, Workplace health management

Paper type Research paper

Introduction

Workplace health promotion (WHP) is the combined efforts of employers, employees and society to improve the health and well-being of people at work as defined by the European Network for Workplace Health Promotion (2012). In this context health is understood as a positive concept emphasizing social and personal resources as well as physical capabilities, and considered as being instrumental for successful living. Health is largely defined by the way we live our lives. The environment, our economy, social and organizational circumstances directly or indirectly influences people's health in everyday life. To succeed with health promotion, health promotion activities must take place in people's everyday life and therefore the workplace is an ideal setting for influencing people's health behavior (Kuoppala *et al.*, 2008; Dooris *et al.*, 2014). Reasons are that most people spend many hours in the workplace, where they can motivate and encourage each other toward a healthier lifestyle. Finally, companies usually have effective communication channels where target groups can be reached with more success than through traditional public health campaigns, such as national obesity and smoking prevention campaigns (Danish Prevention Committee, 2009).

Interventions to increase physical activity (PA) may be suitable for WHP due to health effects that are valued by organizations (Proper *et al.*, 2003; Makrides *et al.*, 2007). Danish, Dutch, Canadian and American studies have documented an increase in activity (Proper, 2006; Makrides *et al.*, 2007), efficiency and quality of work and a decrease in sick leave (Pronk, 2004; Galinsky *et al.*, 2007; Makrides *et al.*, 2007; Zwetsloot *et al.*, 2010) as well as a decrease in musculoskeletal complaints (Blangsted *et al.*, 2008; Bredahl *et al.*, 2015) when implementing PA in the workplace. Furthermore, Danish and Canadian studies have shown that active employees have a higher energy surplus and are less stressed (Makrides *et al.*, 2007; Hansen *et al.*, 2010). In addition, it is generally accepted in literature and practice that WHP activities are worthwhile and profitable, and that employees and employers alike are highly motivated to work with WHP (Kuoppala *et al.*, 2008; Zwetsloot *et al.*, 2010; Bardus *et al.*, 2014; Dickson-Swift *et al.*, 2014; Merrill and Grant Merrill, 2014).

Despite all the advantages of WHP and the positive support in implementing and embedding WHP, maintaining the activity remains a major challenge (Berry *et al.*, 2010; Bardus *et al.*, 2014). A review shows that workplace policies/resources for PA only result in a weak positive relationship with the level of actually performed PA (Lin *et al.*, 2014). At the same time, research shows that strategies, structure and policies are not the prime mover in organizations; culture is (Kossek *et al.*, 2012). Thus, implementing WHP can be perceived as a cultural change effort, as both the target group members as well as a number of other stakeholders have to change behavior and sustain new patterns of behavior and prioritization. However, evidence-based research shows that 70 percent of all change projects in the workplace fail (Burnes and Jackson, 2011; Charles and Dawson, 2011).

As Karanika-Murray and Weyman (2013, p. 105) say, WHP is "a change agenda, that raises questions for researches and practitioners over how best to achieve change." For successful change to happen middle managers must play a key role (Neubert and Cady, 2001; Huy, 2001; Burnes, 2009; Barton and Abrosini, 2013; Mellor and Webster, 2013), but in the WHP literature there is a knowledge gap as to the contents and concerns regarding the middle managers' role in implementation and embedding of WHP as a health strategy.

The purpose of this paper is to address a missing link between top management and employees when it comes to understanding how to successfully implement and embed WHP as a strategy within organizations.

Theoretical framework

Top and middle management can be seen as two complementary systems that need to work together in search of success (Kotter, 2001). Top managers define strategies and have responsibility for the overall direction of the organization (mission/vision),

whereas middle managers must commit to strategies laid down by top management and execute strategies throughout the organization by relating the strategies to their own departments (Huy, 2001; Neubert and Cady, 2001; Mellor and Webster, 2013). In terms of WHP, a health strategy within an organization can be seen as "an effort related to the employees' health behavior that can help the company attain its overall company vision". The health strategy is pursued by explicit health measures as well as health initiatives e.g. WHP projects.

For successful change to happen, middle management has to play a key role, as it is the only group of managers who (due to their closeness to daily business and their employees) can execute change (Burnes, 2009; Barton and Abrosini, 2013; Mellor and Webster, 2013). Middle managers have access to top management, and their job is to bring order and consistency to the organization (Kotter, 2001; Balogun, 2006; Bryant and Stensaker, 2011). Middle managers know the informal network, modes and emotional needs of their employees better than the top managers and are therefore more suitable as change movers (Huy, 2001; Gunnarsdottir, 2016). This appears to be especially important in WHP initiatives as research suggests that a global approach to WHP does not always work (Leininger *et al.*, 2015; Karanika-Murray and Weyman, 2013) and middle managers may be better placed to identify specific needs.

When working with change Kurt Lewin introduced the term change agent in the 1950's (Burnes, 2009). Change agents can be middle managers, senior managers, internal- and external consultants, events, structures and peers, etc. Beckhard defined change agents as: those people, either inside or outside organization, who are providing technical, specialist or consulting assistance in the management of a change effort. Beckhard's definition of change agent was one of the earliest in the literature. When middle managers' commitment to WHP as a health strategy is lacking, they often fail to engage in the behavior that supports change (Barton and Abrosini, 2013). Inappropriate culture in the form of lack of alignment between the value system of the change intervention and employees undergoing the change (Burnes and Jackson, 2011) and weak managers (Kotter, 1996; Makrides, 2013; Bardus *et al.*, 2014; Bredahl *et al.*, 2015) are other sources of non-successful WHP. Furthermore, Smith *et al.* (2012), found that organizational health, which includes perceptions of work satisfaction, and training and development, among other factors, can have significant effect on employee health. These findings reinforce the important role that proper management has on all levels in the success of WHP. In addition, individual changes will not be effective over time if group values, norms and artifacts are not changed (Schein, 1996).

In more recent opinions research shows that it is possible to change culture, but it is a long haul which involves the whole organization (Kanter *et al.*, 1992; Schein, 2010). Change is a group activity, and the management of change is a cultural and cognitive process rather than a rational and analytical exercise (De Witte and van Muijen, 1999). Company artifacts and formal norms can be changed but when it comes to the deepest levels of company culture, i.e. values and basic assumptions, which typically are invisible and even unconscious (Schein, 1992), it is more difficult (Brubak and Wilkenson, 1996).

A bottom-up and involving approach to change is the most suitable method when dealing with cultural change, as attempts to change culture through top-down management alone will not work (Stacey, 2010). A core element of the emergent approach is that change managers work together with the organization instead of directing change from the top (Stacey, 1995), and for change to happen managers must work on themselves, change their own behavior and challenge their own assumptions and values in order to understand what they ask of their co-workers (Kotter, 1999; Balogun, 2003).

Resistance to change is inevitable, and the more a given change effort challenges people's existing norms of behavior and assumptions, the more resistance there will be (Kotter, 1996). Middle management can be resistant to new strategies if they feel they are losing control or

influence (Kotter, 2007; Randall and Nielsen, 2009). Perhaps some middle managers are satisfied with the status quo or feel lack of empowerment, and that they cannot identify themselves with the burning platform, i.e. a sense of urgency for the change (Kotter, 1996; Harley *et al.*, 2006; Michel *et al.*, 2013). This is in line with research showing that more than 50 percent of all change projects fail because middle managers fail to establish a sense of urgency (Kotter, 2007).

From this argumentation it follows that middle managers must develop skills to deal with resistance from their employees, and top managers must develop skills to deal with resistance from their middle managers. In particular, resistance from middle managers themselves is not dealt with in the literature. Competence development (education and involvement) of the middle managers seems to be a core element when it comes to successful implementation of change and sustaining momentum (Michel *et al.*, 2013). Furthermore, it is important to define the contents of the roles of various forms of change agents (Gareis, 2010).

In sum, middle managers play a key role in implementing successful change. However, a gap in the literature exists when it comes to describing how the middle managers themselves understand and buy into their role, and how their role performance influences employees.

Method
Study design for the overall intervention study
The empirical study which was part of a health intervention research project (Sjøgaard *et al.*, 2014) consisted of a multiple-case study involving six Danish organizations. The study was a prospective two-year parallel group, examiner-blinded, randomized controlled trial with a physical exercise training intervention group (194) and a control group (195). The enrollment was sequential in six strata from May 2011 to March 2013, with baseline as well as one-year and two-year follow-up measures. Employees (office workers) were individually randomized within each stratum using computerized random numbers and balanced for gender in strata with less than 100 employees. As part of the research project one employee for every 10-15 employees was appointed as change agent. In the present study change agents are employees appointed by their middle managers but middle managers were never themselves acting as change agents. The change agents' task was to motivate their colleagues in the training group to become and remain physically active and to coordinate and implement health promotion activities in general.

The change agents were selected by middle management and trained to support the target group. The intervention for the target group (incl. the appointed change agents') consisted of individually tailored training programs termed intelligent physical exercise training (IPET). The organizations allowed each participant to allocate one hour of weekly working hours to IPET. The IPET concept was: to balance the physiological capacity of the employees relative to occupational exposure; to tailor the exercise to individual capacities and disorders to improve employees' health; to motivate participants by offering evidenced and enjoyable programs implemented with care; and to be cost-effective for the organization. As specified in our previous protocol paper (Sjøgaard *et al.*, 2014), each employee started a training session with a 20-minute cardio-respiratory fitness routine that included a 10-minute warm-up in order to balance their physically inactive occupational exposure, i.e. long sitting times. After this, instructors guided the employees through their own structured purposeful exercises at the recommended exercises and training intensities for the appropriate time. High-intensity exercise was defined as rowing, ballgames, running, etc. (targeting 77-95 percent HR max corresponding to RPE 14-17). Instructors were instructed and trained to measure 1RM when training started at the six workplaces and to progress training when needed. The individualized intelligent exercise programs were composed of a mixture of aerobic exercises, strength training for major muscle groups and functional training following the guidelines from the American College of Sports Medicine

(Garber *et al.*, 2011), as well as specific strength training exercises for the neck and shoulder region (Andersen *et al.*, 2008). The choice of aerobic exercises was up to the employee with guidance from instructors and with the focus of training at a high intensity. All researchers were blinded to the randomization. The main aim of the overall study was to measure if IPET had a positive effect on office workers' individual health (fitness level, BMI, blood profile and blood pressure), productivity, short-term absence, workability, general health and pain or discomfort which required contact with the healthcare system.

Recruitment of workplaces and participants
In total, 103 Danish private and public companies were contacted by mail in May 2010. The companies were selected due to presumed interest in health issues. In total, 17 of the 103 companies agreed to receive more information. One of the researchers visited all 17 companies and presented the research project to the contact person and a top manager. After the 17 meetings, six companies agreed to participate. In sum, 389 employees, 17 change agents and 41 middle managers agreed to participate in the study.

Interactions with change agents
During the first year of intervention, all appointed change agents, i.e. 17 persons, held four one-hour meetings with one of the researchers. Meetings were held at the six companies. The purpose of the meetings was to gain insight into the change agents' experiences of undertaking their role as change agents. After one year of intervention, the change agents answered a questionnaire by mail (SurveyExact). In addition, focus group interviews were held at three companies where ten change agents participated.

Interactions with middle managers
Middle managers who had employees and change agents participating in three of the companies, i.e. 17 persons, were invited to a half-day seminar on "implementing PA as a health strategy in the workplace" and an introduction to the two-year health interventions project. All invited middle managers attended the seminar and participated in a survey. Replying to the survey was the first activity on the agenda at the seminar, i.e. the questionnaires were to be completed before the middle managers were introduced to the research project and their role in the research project. One month after completion of the survey, nine middle managers (three middle managers from each of the three companies) were interviewed – six who participated in the half-day seminar and three who did not participate. This selection was undertaken in order to identify the impacts of participating in the seminar.

Data collection
Overall (Table I), the data presented in this paper stems from a questionnaire survey with close-ended questions for all employees after one year ($n = 305$), field notes based on four meetings with change agents at each workplace, nine interviews with middle managers based on semi-structured interview guides at three workplaces, questionnaires surveys with both open- and close-ended questions for middle managers as well as for change agents, and focus group interviews with ten change agents at three workplaces. Questionnaire with close-ended questions to the change agents were scaled from 1 to 6: 1 – I totally disagree, 2 – I disagree, 3 – I neither agree nor disagree, 4 – I agree, 5 – I totally agree, and 6 – I do not know. The data were collected from January 2012 to May 2013.

After one year of training both the exercise group and the control group answered three questions regarding their middle manager's role on working with WHP. The respondents received the questionnaire by mail (SurveyExact).

	Case A: private	Case B: municipality	Case C: municipality	Case D: national board	Case E: national board	Case F: private	Case A-F – Participants all together
Employees							
No. Baseline	40	105	103	52	42	47	389
No. After one year	26	86	88	37	37	31	305
Survey response rate*	96%	94%	99%	92%	92%	87%	93%
Change agents´							
No. Appointed	2	5	3	1	2	4	17
Meeting attendance rate**	100%	100%	100%	100%	100%	100%	100%
Survey response rate	100%	100%	100%	100%	100%	100%	100%
Interviewed in focus groups	–	–	100%	100%	100%	100%	100%
Middle managers							
No. Formally involved	–	–	27	7	7	–	41
No. In half-day seminar	–	–	13	4	4	–	21
Survey response rate***	–	–	100%	100%	100%	–	100%
No. Interviewed	–	–	3	3	3	–	9

Notes: *Employee survey participants: employees after one year; **change agents meetings: four meetings, one meeting every three months; ***middle manager survey participants: participants in the half-day seminar

Table I.
Participants in the
research project

In order to dutifully undertake the middle manager role related to WHP, the middle manager were to:

(1) prioritize WHP at the same level as other tasks and projects in daily business;

(2) create room and skills for the employees to make the healthy choice in daily business; and

(3) create room for WHP activities in daily business.

To "prioritize WHP at the same level as other tasks and projects in daily business," means that WHP should be a part of the middle manager's managing job as well as all the other areas the middle managers manage.

To "create room and skills for the employees to make the healthy choice in daily business," means that middle managers must make sure their employees have the necessary skills to make the healthy choice in daily business. By "skills" we mean the necessary knowledge about health and how to change their own health behavior.

To "create room for WHP activities in daily business," means that middle managers must allocate time for WHP activities in their employees' weekly work program.

The three issues (1-3) mentioned above form our construct of "role performance."

We define "not satisfied with the middle managers health work" when the target group gave a score of five or less in all three questions.

Results and discussion
Questionnaire surveys
In questionnaires prior to intervention all middle managers in the case study – except two, who neither agreed nor disagreed, argued that employees should be engaging employees when implementing WHP. Furthermore the middle managers agreed that it was the top managers' job to engage employees before implementation. When asked about their own role in engaging employees, more than 50 percent of the middle managers thought that it was not their role.

In total, 94 percent of all employees answered the three questions (Table II), the outcome demonstrating that middle managers did not succeed with the implementation of WHP in this research project. Employees found that middle managers only to some degree (total mean ± SD: 4.2 ± 3.1) prioritized WHP at the same level as other projects in daily business, and their ability to create room and skills for the healthy choice in daily business was rated as: 4.8 ± 3.0. Furthermore, the rating of middle manager's prioritization of WHP in daily business was at a similar level: 4.3 ± 3.0, with no significant differences between the training- and control group for any of the three questions.

Results from the survey with the 17 (change agents) at the six workplaces clearly show that support from middle management is necessary in order to implement WHP activities (4.6 ± 0.5). Furthermore, all change agents found that it was necessary to involve their middle managers when implementing WHP activities (4.8 ± 0.4), and involvement of middle managers is necessary if change agents are to succeed in their work (mean of 3.9 ± 1.1).

Interviews

Based on findings from the interviews, we present and discuss themes that relate to middle management's role when implementing and embedding WHP as a strategy.

Middle managers' role. Middle managers agreed prior to the training intervention (i.e. on the questionnaire before the research project presentation at the half-day seminar) that they should play an active role during the intervention. However, our findings show that they found it difficult in practice. As the following quotations from interviews of middle managers show, implementing WHP as a health strategy was a new discipline for all the middle managers in the study.

Two middle managers replied to the question about their former experiences with WHP in the workplace:

> We have had some activities like a running club, yoga and training in a local fitness center [offered] for all employees to use in our free time.

> WHP has not been part of our role. Instead the tacit message from the company has been that it is our own personal responsibility to work on health in our free time.

Five out of six middle managers agreed that their role in the WHP project was clearly described, but it was still a new discipline for them and they needed more knowledge and tools to fulfill their role in implementing WHP:

> It is unclear for me how to practice my new role – it is a new discipline for me.

Questions	Training (n = 144) Mean	SD	Control (n = 144) Mean	SD	p-value
Do you feel that your middle manager prioritizes WHP at the same level as other tasks and projects in daily business?	4.5	3.1	3.9	3.1	0.13
To what extent do you feel that your middle manager creates room and skills for you to make the healthy choice in daily business?	5	2.9	4.5	3.1	0.20
To what extent do you feel that your middle manager creates room for WHP activities in daily business?	4.5	2.9	4.1	3.0	0.25
Notes: WHP, workplace health promotion. The responses to questions are scaled from 1 to 10, where 1 represents "not at all" and 10 "very much"					

Table II.
Employees' view on their middle managers' role performance

Health management is a new discipline we haven't worked with before and we need to know what is expected from us in practice.

It is a challenge to practice leadership in health, which is an unknown discipline compared with the professional fields I work with in daily business.

I need more knowledge and skills to work with WHP in practice as a middle manager.

The findings relate to the work of Gareis (2010) and Michel *et al.* (2013), who point out that education is a core element when it comes to successful implementation of change and sustaining momentum. Furthermore the findings regarding the missing engagement of employees in implementations of WHP relate to the work of Stacey (2010), who points out that engagement of employees is crucial when working with implementation.

Findings from the empirical study show that when middle managers were asked about their understanding of their role in implementing WHP, all middle managers but one agreed that a very important part of their job (i.e. role in the research project) was to show through their attitude that working with WHP was important. When middle managers were asked about the importance of their own behavior (signaling the importance of being healthy and taking part in intervention activities) the majority (75 percent) still agreed that it was important. The following statements from the interviews of both the change agents and the middle managers support this.

Middle managers:

It is our job to communicate the change and to exemplify the change ourselves.

Middle managers must take an active part in WHP activities and in that way signal that it [WHP] is not only allowed but is highly prioritized.

There must be full focus on and acceptance of health and well-being in all links in the chain – only then will we succeed.

Change agents:

Middle managers must encourage employees to engage in WHP activities during working hours.

If middle managers don't take an active part in the WHP activities then we (employees) are not sure whether it is ok for us to [take part].

An interesting finding is that all middle managers in the survey prior to intervention stated that they should be role models. A month after, all but two no longer saw themselves as role models. This conflicts with both the questionnaires and the literature. "Setting the scene" in terms of not only using the normal channels of communication in the company (like posters, departmental meetings and intranet), but personally communicating the WHP project is a key tool for communicating change and part of the middle managers' role (Rouleau and Balogun, 2011). Research (McKay *et al.*, 2013) indicates that uncertainty due to lack of communication in change projects can be stressful.

Based on these insights, we propose:

P1. In order to make employees change health-related behavior, middle managers must through their own behavior and attitudes communicate the importance of suitable health-related behavior.

P2. In order to make middle managers clear about their role in WHP implementation, training including theory inputs on WHP and health management is necessary.

Role-related challenges. Our empirical study shows that middle managers found ethical issues related to the WHP difficult to work with as well as the interference in

daily business. Middle managers joining the half-day seminar stated that WHP is a joint responsibility between the company and their employees. However, the two middle managers who did not take part in the workshop found it problematic to interfere with employees' health-related behavior:

> I find it problematic that companies and society in general interfere with how people want to live their lives.

> It can be problematic to interfere in employees' health, and I see a tendency for companies to interfere with how you live your private life, which worries me.

> I think that this goes beyond traditional management. This is not about management but about influencing employees to make the right decision concerning health, which is very different from my normal job dealing with daily business.

All middle managers agreed that finding time for WHP in daily business was the biggest challenge, together with ethical issues of management interfering in employees' health and well-being:

> Do we have time for this in daily business? Daily business is my top priority.

> I can't see myself as the manager with raised finger telling my colleagues how to live a healthy life – it is not my job to do that.

> Can we as middle managers interfere in employees' health?

Furthermore the middle managers were concerned about the time used for WHP activities. As their primary job is to take care of operational aspects and, with constant pressure from top management to reduce costs, undertake re-organization and implement other new structures and systems, WHP was hard to prioritize:

> My job as a manager is to find the right balance between work and health activities in working hours.

> Do we have time for this in hard times? What I mean is that I have to take time out from my professional work to use on WHP activities.

Competition from daily business within the given organization is a big challenge when working with WHP. Our findings relate to Grant (2008), who states that it is necessary to study the dissonance between the existing culture and the envisioned organizational change in order to succeed in the latter. Furthermore, the literature supports the notion that alignment between the value systems of the change intervention and the existing culture is necessary for change to happen (Burnes and Jackson, 2011). The findings show a specific need for middle managers to work together with top management on their understanding of their own role regarding ethical issues in WHP, e.g. how to deal with non-work-related health behavior bordering on the private sphere. Change agents were trained for this engagement process with employees in the study, but findings show that they believe that they will not succeed without the middle managers' support (Sjøgaard *et al.*, 2014). Our findings relate to Grant (2008), who states that for successful alignment to happen it is necessary to study the culture of middle managers within organizations, because over time people working together will think and act in similar fashion and become self-protective and resistant when "outsiders" attempt to change them.

Based on these insights, we propose:

P3. In order for middle managers to feel confident about ethical issues regarding interfering with employees "private life," an engagement process must take place before they can fulfill their role in implementing WHP in the workplace.

P4. In order for WHP to become daily business, top managers and middle managers must work together to align WHP in the governance structure of the company.

Top management's role. For successful implementation of WHP, middle managers have a key role as executers of change. Furthermore, middle managers will not succeed if they are not supported by top managers at all times. As middle managers state in interviews:

Together with middle managers, top managers must work out the change throughout the organization.

Top managers must back us up at all times.

Top managers must at all times prioritize the intervention.

It must become a natural part of our job – a new culture.

The challenge is that we feel the pressure for budget cuts every day and we have to run even faster every day – top managers must show us how much WHP must be prioritized.

Change agents' state:

Middle managers must set up goals for our work together with us and follow up on results if we are to succeed in our job.

In all change processes, including WHP, management must show us the importance of the change and back it up at all times.

Findings from nine interviews with middle managers and four focus group interviews with ten change agents support the conclusion that engagement of employees is necessary if implementation of WHP is to succeed, but, at the same time, the interviews and survey show that middle managers were not sure about the engagement process and took no action in the engagement process in the research project.

Change agents:

The whole organization must work on the implementation of WHP together, including middle managers, and both employees and management must agree that this is important for us.

Middle managers:

Co-work between middle managers and employees is necessary for success and there must be employee engagement at all times.

Engagement is necessary so that we don't lose our colleagues in the process.

I think that you need to know 'your people' in order to know what to do to motivate them.

I think the employees have been engaged in information meetings but I'm not sure.

Both middle managers and change agents argue for the need of a project manager in order to succeed in implementing WHP as a health strategy.

Middle managers:

Like all other new change projects – somebody must take responsibility for WHP interventions.

Interventions should be adjusted and evaluated regularly at all times if we really want to succeed.

Change agents:

For WHP to be a success somebody must be responsible for evaluating the activities.

Somebody must run the project and help us with health-related challenges in daily business.

All 24 one-hour meetings with change agents in the six workplaces (see Table I) raised the challenge of getting middle managers to take action in WHP activities. This included getting support from their middle managers as well as making middle managers set goals for the change agents' work and to follow-up on the goals.

The findings demonstrate that it is important for middle managers to be supported by top managers and engage their employees at all times if they are to succeed in implementation of WHP. As the current literature states, middle managers have a key role as drivers of change (Huy, 2001; Neubert and Cady, 2001; Barton and Abrosini, 2013). Furthermore, to implement change projects with success it is important to define roles for various parties involved in the change, and it is essential for all organizations to identify the resources and competencies needed for successful change (Grant, 2008; Michel *et al.*, 2013). Middle managers must work together with their employees instead of directing change from the top, and to succeed they must work as facilitators and coaches (Kanter, 2008). Berry *et al.* (2010) state that middle managers must work together with a health program manager in order to succeed. Furthermore Berry *et al.* (2010) argue for the necessity of a WHP program manager in order for change to happen. The program manager must have knowledge of health aspects as well as organizational skills; and when working strategically with WHP all activities must be measured and adjusted to ensure they have an effect (Berry *et al.*, 2010).

Based on these insights, we propose:

P5. In order for middle managers to succeed, they must work together with top managers.

P6. In order for middle managers to succeed, they must set goals for their change agents and follow-up on their work.

P7. Engaging employees is crucial for successful implementation of WHP, and middle managers must be in charge of the engagement process.

P8. A health program manager is necessary in order to succeed in implementation of WHP, and the program manager must adjust and evaluate activities and assist middle managers in measuring effect.

Research shows that interventions in which employees are appointed as interventionists are more effective than interventions with other actors as interventionists (Conn *et al.*, 2009). Further, a core advantage of WHP at the workplace is that multi-level interventions can be applied, meaning that you can address organizational and environmental/policy issues in addition to factors at the individual level (Bull *et al.*, 2003).

The World Health Organization has emphasized the workplace as an important setting for public health campaigns (European Foundation, 2013). The role of middle managers and employees as change agents is crucial when companies want to succeed with the implementation of WHP. Future studies must focus on how to implement WHP through the work of middle managers with help from change agents (employees).

Strengths and limitations
As specified in our previous protocol paper (Sjøgaard *et al.*, 2014) major strengths of this study were the high numbers of workplaces and participants from both the private and public sector which were geographically representative in a two-year study and the rigid RCT design with the involvement of experts within occupational health as well as sports science.

A limitation of this study was middle managers' low attendance at the half-day seminar on strategic health where only 50 percent (21 out of 41) of all the middle managers participated. Another limitation is that all participants were office workers. It might be interesting to involve more employee groups in future studies. The same holds true for the national

origins of the study. As it was conducted in Denmark, it might be interesting to investigate the impact of national culture by doing future studies in more countries. With its very explicit and detailed research design, it would be easy to undertake similar studies in the future.

Conclusion

This study adds to the knowledge of researchers and practitioners with respect to the difficulties of implementing and embedding WHP activities in the workplace. Middle managers do not find it easy nor are they willing to fit WHP into their daily work. Middle managers ask for more knowledge and skills if they are to work with WHP in daily business. For middle managers to succeed with the implementation of WHP top managers must prioritize time for WHP and follow-up on their middle managers' health leadership. Furthermore middle managers must work closer together with their change agents to set goals for their work together with the change agents.

Implementing and embedding WHP as a health strategy through the work of top managers, middle managers and change agents raises ethical issues of interfering with employees' health, which by tradition has been the employee's personal responsibility.

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