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What about me? The impact of employee change agents' person-role fit on their job satisfaction during organizational change

Abstract

Organizational changes do not always achieve their intended outcomes and have been found to have negative consequences on employee wellbeing. It has been argued that this is because change processes need to support employees adopting the change. In the present study, we study an organizational change aimed to improve employee capacity to provide eHealth services. To support the change, employees were appointed change agents and trained in running seminars to facilitate the change. Using Person-Job fit as our theoretical framework, we proposed that change agents who perceived they possess the necessary competencies to deal with the change agent role (Person-Role fit) would feel more efficacious in this role and be more satisfied with their jobs post-change. We suggested that role-specific self-efficacy mediated the relationship between person-role fit and job satisfaction and that the most dissatisfied pre-change would perceive the greatest improvements in job satisfaction. Using a paired t-test, repeated measures analyses and mixed methods mediation testing, we found that change agents (N=110) reported increased job satisfaction post-change. Change agents who were dissatisfied with their jobs pre-change, but perceived a good fit to the change agent role, reported the greatest improvements in job satisfaction. No significant results were found for self-efficacy.

Keywords: Organizational change; dialogue seminars; job satisfaction; change agent; person-job fit

What about me? The impact of organizational changes on change agents

Organizational changes often do not achieve their intended outcomes (Washington & Hacker, 2005) and have been found to have negative consequences on employee wellbeing (de Jong, Wiezer, de Weerd, Nielsen, Mattila-Holappa, & Mockałło, 2016). The review by de Jong et al. (2016), however, shows that organizational changes can be implemented in a way that minimizes the negative effects on employee wellbeing. As a result, there have been calls to involve employees in the change process to prevent the negative impact on employee wellbeing (de Jong et al., 2016; Nielsen & Randall, 2012).

We present a study on an organizational change aimed at improving a healthcare organization's capacity to provide eHealth services in two hospitals and a primary care. eHealth services is the use of digital tools and digital information exchange to achieve and improve health (WHO, 2019). Employee representatives were appointed change agents and allocated responsibility for driving the change, which was implemented through a series of cross-disciplinary, participatory dialogue seminars. The change agents were trained in how to lead dialogue seminars.

Traditionally, research on the impact of change processes has focused on the impact on employees' (change recipients') wellbeing (de Jong et al., 2016). Limited attention has been paid to the impact on those who are responsible for driving changes despite the importance of their role for successfully implementing change. In the present project, employee change agents played a particular role in the organizational change, which may have impacted their job satisfaction; a job-related dimension of wellbeing (Danna & Griffin, 1999), and we study the impact of being in this role on change agents' job satisfaction. Based on the person-job fit theory (Kristof-Brown, Zimmerman, & Johnson, 2005), we propose that change agent swho

likely to report a positive outcome. We explore the impact on these change agents who have been allocated the responsibility of running dialogue seminars to support the organizational change using a process evaluation approach. The primary role of the change agents was to lead dialogue seminars in their units. In their meta-analysis, Kristof-Brown et al. (2005) found that Person-Job (P-J) fit was most strongly associated with job satisfaction and we thus chose this as our main outcome.

The paper contributes to our understanding of 1) how running dialogue seminars during times of organizational change impacts on change agents themselves when these are ordinary workers who have taken on this particular role and 2) in which circumstances change agents experience a positive impact. This knowledge may provide valuable insights into how we can ensure employee input during organizational change to minimize the potential negative impact of such change on employee wellbeing (de Jong et al., 2016). To the best of our knowledge, this is the first study to examine if and under what conditions the wellbeing of employees who act as change agents improves. Previous studies have primarily focused on line managers or occupational health consultants as the main change agents (Nielsen, Randall Holten, & Rial-González, 2010; Havermans, Schelvis, Boot, Brouwers, Anema, & van der Beek, 2016; Nielsen & Noblet, 2018).

In participatory organizational interventions, organizational change has mainly been seen as "noise" (Nielsen, Fredslund, Christensen, & Albertsen, 2006). To the best of our knowledge, only one study has focused on how participatory interventions may support organizational change. Abildgaard, Nielsen, and Sverke (2018) found that a participatory intervention (using an occupational health consultant as the change agent), resulted in stabilized qualitative job insecurity compared to a control group. Qualitative job insecurity refers to fears of changes to the job; new tasks, new work practices and procedures and new social relations (Hellgren et al., 1999). Translating these results into the present study, we examine the impact on employees' wellbeing when they play a particular role in facilitating the implementation of the change, i.e. running dialogue workshops.

The change agents as key players in organizational change

Previous research has found that change agents have a positive impact on employees' (as recipients of change) psychological wellbeing and job satisfaction. Nielsen and Randall (2009) found that having line managers who had been allocated the role of change agents in the implementation of a teamwork organizational change was related to improved employee role clarity, social support and a meaningful work which in turn was related to improved job satisfaction, and to a lesser extent psychological wellbeing among employees. From the field of organizational interventions, Tafvelin, von Thiele Schwarz, Nielsen, and Hasson (2018) found that active line management support in the early phases of the intervention was related to increased employee participation in the later phases of the intervention which in turn was related to job satisfaction post-intervention. Furthermore, in a cluster-randomized, controlled trial, von Thiele Schwarz, Nielsen, Stenfors-Hayes, and Hasson (2017) found that improved mental health and job satisfaction could be observed in both the comparison group and the intervention group in which an occupational health consultant functioned as the driver of change. It has to be mentioned that the comparison group had received this support in the start-up phases of the project and had been trained in how to manage the intervention themselves and thus their improvement may be explained by the sustainability of the initial support provided by the consultant. Together these findings suggest that having someone driving the change may be related to employees' job satisfaction, however, it has yet to be examined whether driving the change through dialogue seminars increased job satisfaction among employee change agents. Semmer (2006) argued that participatory interventions are time-consuming and may put pressure on employees. Translating this knowledge to this study, we propose that change agents who take on the role of running dialogue seminars in

addition to their day job may experience an increased workload and this could potentially have a negative impact. On the other hand, having peers function as change agents may be an advantage over consultants or managers as participants may find it easier to trust colleagues (Ipsen, Gish, & Poulsen, 2015) to have a good understanding of the organization and the issues faced by employees (Nielsen & Noblet, 2018).

In the present study, we explored the job satisfaction of change agents themselves. We propose that change agents may report an increase in job satisfaction for three reasons. First, during times of organizational change, qualitative job insecurity is prevalent (Hellgren, Sverke, & Isaksson, 1999). Change agents are likely to benefit from additional information about what the change involves and thus better understand how they may use the change and their specific role to improve their job. Washington and Hacker (2005) found that managers who understood the reasons behind organizational change welcomed change. Second, taking on a particular role in supporting the implementation of eHealth services and engaging in training with other change agents may make change agents feel as an in-group who fulfil an important role in the organization (Haslam, O'brien, Jetten, Vormedal, & Penna, 2005). Third, being trained in managing the change and running dialogue seminars may develop change agents' process skills and these skills may be transferred to other areas of their job, which can help increase job satisfaction. We therefore suggest our first hypothesis:

Hypothesis 1: Change agents will report increased job satisfaction post-change

(Time 2, T2).

The importance of person-job fit

Organizational changes and interventions aimed at improving employee wellbeing often fail to achieve their intended outcomes (de Jong et al., 2006; Richardson & Rothstein, 2008; Washington & Hacker, 2005). We suggest that the extent to which change agents feel that they are a good fit to their new role may impact change agents themselves. PersonEnvironment fit (P-E fit) has been defined as the "compatibility between an individual and a work environment that occurs when their characteristics are well-matched" (Kristof-Brown et al., 2005, p. 281). A particular type of fit is Person-Job fit (P-J fit; Kristof, 1996) and one type of P-J fit is the fit between individuals' knowledge, competencies and abilities and the demands of the job (Kristof, 1996). In the present study, we focus on a specific type of P-J fit, that is the perceived fit of the change-specific role of change agent to the person, in particular whether change agents feel they have the necessary competencies to lead dialogue seminars; a key demand of the role as change agent. We call this Person-Role (P-R) fit.

It has been found that individuals' perceptions of their ability to cope with the demands of the job is crucial for their wellbeing (Lazarus & Folkman, 1984) and we therefore assume that it is important to understand whether change agents *perceive* their role is a good fit with their characteristics, i.e. that they have the necessary competencies to deal with the demands of the change agent role, in this case leading dialogue seminars.

P-R fit and role-specific self-efficacy

Not every individual reacts the same to change (de Jong et al., 2016). We propose that those change agents who feel this role to be a good fit with their competencies are more likely to report high levels of self-efficacy post-change. Change agents who feel secure in their role are more likely to address the challenges in their role as change agent (Palm, 2008), in this case taking on the challenge of leading dialogue seminars with their colleagues. It has been argued that self-efficacy should focus on the specific context (Bandura, 1997) and we therefore measured whether change agents felt efficacious about their change agent role, i.e. we focus on role-specific self-efficacy. It may be that change agents' perceptions of their fit to the role is crucial to how they develop as a result of this role, i.e. whether they develop greater self-efficacy. Being a change agent places demands on the individual to apply their competencies leading dialogue seminars and it is possible that those change agents who perceive a good fit with the role will over time develop a belief that they can effectively master the challenges of being a change agent. Bandura (1982) emphasized that experience or 'enactive attainment' is crucial to the development of self-efficacy and we propose that selfefficacy is a more likely result if change agents feel they are in their element when running dialogue seminars, in other words they may feel it likely they can attain a successful outcome of the seminars if they feel they are a good fit to the role. As part of the programme, change agents received coaching from more experienced change agents and they participated in workshops to discuss the role. Such support may provide opportunities for vicarious learning experiences; hearing about others' experiences may build these change agents' beliefs that they too can be successful change agents (Bandura, 1982). Bandura suggested that modeling is particularly effective when people see themselves as similar to the model and change agents who feel they are a good fit to the role may identify better with the more experienced change agents who are supporting their development. Furthermore, change agents may feel encouraged through social persuasion to engage fully with the role as they receive support from colleagues with more experience in the role (Bandura, 1982). Change agents who do not feel comfortable in their role may find it difficult to run dialogue seminars. As they stand in front of colleagues, they may experience distress which will prevent them from developing feelings of mastering the seminars. Change agents high in P-R fit may feel the role is more appropriate for them and thus more likely to believe they can rely on their competencies to succeed in the role (Nielsen & Randall, 2009).

Hypothesis 2: Change agents who perceive high levels of P-R fit at Time 1 (T1) will report greater role-specific self-efficacy post-change (T2).

Fit to the role and job satisfaction

The extent to which change agents feel that the role they have taken on is a good fit to their competencies is likely to influence whether their job satisfaction increases post-change.

Previous research has established the link between job-skills fit, i.e. having the skills to do the job and job satisfaction (Allen & Van der Velden, 2001) and thus engaging with a role that is perceived to be a good fit with the change agents' competencies are more likely to lead to increased job satisfaction post-change. Change agents who perceive they are a good fit to the role may be more proactive in shaping the role and the activities that fall within this role, in particular playing an active role in leading dialogue seminars, and as a result they will perceive a greater increase in job satisfaction post-change.

Hypothesis 3: Change agents who perceive a good P-R fit at T1 will experience the greatest increases in job satisfaction post-change.

Self-efficacy as a mediating mechanism of the P-R fit and job satisfaction

Nielsen (2013) argued that one mechanism by which interventions may improve employee wellbeing is through participants' perceptions of effectively implementing changes, i.e. change self-efficacy. Applying this line of thinking to the present study, we propose that the explanation why job satisfaction increases is because change agents feel confident they can deal with the changes, i.e. feel efficacious that they can deal with the demands of their role as change agents. Job satisfaction may increase as change agents feel they can cope with the challenges they encounter in the process of leading dialogue seminars (Bandura, 1997).

Change agents who feel they are a good fit to the role as change agents will report feeling more efficacious that they can cope with the demands of the role. As a result, they will report being more satisfied with their jobs. Change agents who feel equipped to deal with the demands of the change agent role are more likely to experience job satisfaction post-change because they develop a perception that they can manage the challenges they meet as part of this role and because they feel confident they can achieve the goals that have been set for the change agent. In a meta-analysis, Judge and Bono (2001) found a moderately strong relationship between generalized self-efficacy and job satisfaction. Hypothesis 4: The association between P-R fit (T1) and increases in job satisfaction (T2) is mediated by self-efficacy (T2).

Need for change, P-R fit and job satisfaction

Change agents who feel the greatest need for change, i.e. those who are dissatisfied with their jobs pre-change may be more motivated to engage with their change agent role. This motivation is likely to lead to concrete improvements if change agents feel they have the necessary resources to act on the role they have been allocated. We therefore suggest that baseline job satisfaction will interact with perceived fit to the role to lead to higher levels of job satisfaction post-change. From the organizational intervention literature, we know that interventions may not achieve their intended outcomes due to a "ceiling effect" whereby those who are already doing well may be less motivated for implementing changes (Nielsen, Fredslund, Christensen, & Albertsen, 2006). Translating these results to the present study, we propose that change agents who are dissatisfied with their current conditions but believe they possess the necessary competencies to deal with the demands of the change agent role are more likely to act on the opportunities offered by the role and will take action to change the status quo. Therefore we propose that dissatisfied change agents who believe they have the necessary competencies to fulfil the change agent role will be more satisfied with their jobs post-change.

Hypothesis 5: Change agents with lower baseline job satisfaction (T1) will have stronger relationships between P-R fit (T1) and job satisfaction at post-change (T2).

Need for change, P-R role fit, self-efficacy and job satisfaction

Combining hypotheses 4 and 5, we propose that the level of job satisfaction interacts with P-R fit to influence changes to job satisfaction, however, we propose that this relationship will be mediated by role-specific self-efficacy. The explanation why job satisfaction and perceived fit to the role of change agent may influence job satisfaction postchange through the change agents' perceptions that they can deal with the demands they meet as change agents. Job satisfaction may not increase if change agents do not feel they can effectively and successfully deal with the difficulties and challenges they meet as part of their role as change agents, even if they are unhappy with their situation and feel they have the time and the competencies to deal with the role.

Hypothesis 6: Change agents who report lower baseline job satisfaction (T1) will have a greater indirect effect between P-R fit (T1) and job satisfaction (T2) via self-efficacy (T2).

Materials and method

Design

A two-wave panel design was used. The study was set in a large healthcare organization in the Stockholm region, Sweden. The organization initiated an organizational change effort ("The eHealth capacity building project") aiming to improve the capacity of their employees to provide eHealth services. The 18,000 employees working in two hospitals and a primary care organization were targeted, with the aim to improve staff attitudes, competencies, and use of information technology thus improving the provision of eHealth services to patients. The change was implemented through a series of cross-disciplinary dialogue seminars at each work unit, led by local change agents. These change agents are the focus of this study. The local change agents were recruited after an open invitation to all employees, from any professional group, to volunteer for the role. The use of employees as change agents had been done before in the healthcare organization and thus some had previous experience as change agents.

Baseline questionnaires were distributed step-wise between months 0 and 6, as the healthcare implemented the change in a staggered manner (in each unit the baseline survey

was distributed before any changes were implemented and dialogue seminars run). The follow-up questionnaire was distributed about 6 months after the baseline, when three dialogue seminars in a specific unit had been completed.

Dialogue seminars

The dialogue seminars held focused on three recently developed eHealth services (online medical records, a web-based information service and solutions for data management). Each seminar lasted between 2.5 and 3 hours and all employees were expected to participate, as part of their competence development and engagement with organizational change efforts. Approximately 10 employees participated in each seminar and they were repeated until all employees had had the opportunity to participate. The seminars were multi-disciplinary, including doctors, nurses, healthcare assistants, and other staff such as social workers, physiotherapists or psychologists. The seminars had a participatory approach where change agents were expected to ensure employees' active participation in discussions, reflections, and practical exercises, and allow participants to shape the seminars to address their needs. As a result, the questions discussed and the amount of time dedicated to different tasks differed across seminars. The eHealth capacity building project can be viewed as part of a national, long-term digitalization effort (The National Board of Health and Welfare, 2019). IT-literacy in Sweden is high, and a previous study of a similar initiative in a large health care organization found that employees perceived eHealth to be useful in their job and that work groups, in general, were positive towards using eHealth (Augustsson, Richter, Hasson, & von Thiele Schwartz, 2017).

The process instructors all had prior experience of running dialogue seminars. All individuals in the organization who had experience of working as change agent in a dialogue seminar were invited to be a process instructor. They received support from the project

management team that consisted of individuals responsible for the "eHealth capacity building project" including project coordinators and managers from the organization.

The coaching that "process instructors" gave for the change agents was conducted in a workshop format and followed the same participatory approach as the dialogue seminars. Change agents were invited to bring up topics of importance to them. The change agents also received workshop material, including factual information concerning the change. The materials were developed by the project management team and the process instructors.

As part of the preparations, the project management team and the process instructors participated in a workshop to clarify the activities of the different actors (i.e. Process instructors and change agents) and the logic linking them to the expected outcomes of the change among employees. The collaborative, structured COP-process (Co-created Program Logic) was used (von Thiele Schwarz, Richter, & Hasson, 2018). This process increased awareness that the role of change agents included more than eHealth competencies. This awareness guided the evaluation by informing the choice of study variables, as well as prepared the process instructors that change management and leadership issues may be needed to be addressed in the support to the change agents (von Thiele Schwarz et al., 2018). *Data collection*

Data collection was conducted using a web-based questionnaire. Prior to receiving the baseline questionnaire, change agents participated in a kick-off meeting and received information material about their role and the materials to ensure they had an understanding of the competencies required for the change agent role. The link to the questionnaire was sent to each change agent along with information about the study including the fact that participation in the questionnaire survey was voluntary and that participants retained the right to withdraw at any time, and a consent form for the use of data for research purposes. The time frame for

answering the questionnaire was about six weeks; during this period, a number of reminders were sent out.

Sample

All change agents (289 at baseline and 362 at follow-up; new change agents were included after the baseline) were invited to participate in the surveys. In total, 219 change agents (76%) responded to the questionnaire at baseline and 193 (53%) at follow-up, and 110 responded to both baseline and follow-up surveys; they form the panel sample used in the analysis (Table 1). Of the panel sample, 71% were female and 14% were male and 16% preferred not to say. The majority of change agents had a university education at Masters or bachelor level (69%), while 15% had attended secondary school and 16% had a PhD or equivalent. The mean age was 47 (SD = 10.07) and the average tenure was 11.84 (SD = 10.20). Twenty-eight percent of the sample had previous experience as change agents, with an average of 1.5 years of experience. Of the 110 respondents at both time points, 64 (58%) were from the largest hospital, and 25 and 21 (23% and 19%), respectively, from the other hospital and the primary care organization. The majority of change agents were nurses (35%), 8% were medical secretaries, 6% were consultants, 5% held managerial positions, 5% were psychologists, 5% were administrators and the remainder were a mix of other medical professions.

Measures

Person-Role (P-R) fit. A single item was developed for the purpose of this study following the COP-process (von Thiele Schwarz et al., 2018) to capture the expected outcome was used: "I have the necessary competencies to lead dialogue seminars". Change agents rated this at T2 on a five-point Likert scale from 1 = strongly disagree to 5 = strongly agree.

Job satisfaction (Hellgren, Sjöberg, & Sverke, 1997) was measured at T1 and T2 with a single item: 'I enjoy my work' rated on a five-point Likert scale from 1= not at all true to 5 =

completely true. Single-item job satisfaction measures have been found to be valid and reliable (Wanous, Reichers, & Hudy, 1997; Nagy, 2002).

Role-specific self-efficacy was measured at T2. We adapted the self-efficacy measure of Rigotti, Schyns, and Mohr (2008) for the purpose of the present study. The six items were changed so they included the word "change agent". An example of an item is "In my work as a change agent, I can keep calm when I encounter difficulties because I can rely on my skills". Response categories ranged from 1= not at all true to 5 = completely true. Cronbach's alpha was .92.

Control variables. We included a number of control variables. We created dummy variables for the three organizations, for gender where 1 equals female and 0 equals male, and for previous change agent experience coded 1 = yes, 0 = no. Age and job tenure was also included as controls.

Analysis

Each hypothesis was tested using a model appropriate for the relationships specified. Hypotheses 1 and 2 were relatively simple in nature, and did not involve longitudinal analysis, and were therefore analyzed using paired samples t-test (H1) and linear regression (H2). Hypotheses 3 and 4 involved modeling change in job satisfaction, and therefore this change was modeled using latent growth curve analysis (i.e. a repeated measures, mixed effects model). Hypotheses 5 and 6 did not require longitudinal modeling, but used moderated regression and moderated mediation respectively. Linear models were used and checked for any clear violations of the underlying assumptions. All analyses controlled for which hospital/primary care the change agent was based in, and their gender, age, job tenure and whether or not they had any previous change agent experience. Although missing data reached no more than 3% for any of the core variables, there was up to 15% missing data for the control variables, and therefore most analyses (for hypotheses 2-6) were conducted using Mplus version 8 (Muthen & Muthen, 1998-2017), using Full Information Maximum Likelihood (FIML) rather than listwise or pairwise deletion, to ensure bias was minimized (Newman, 2003).

Results

Means, standard deviations and intercorrelations for the measures used are shown in Table 1. It can be seen from the descriptive statistics that mean job satisfaction was higher at T2 (4.51) than at T1 (4.33). Hypothesis 1 was tested using a paired samples t-test, which showed that the mean change in job satisfaction was 0.18 (95% confidence interval 0.02-0.32, p = .025), providing support for hypothesis 1.

INSERT TABLE 1 ABOUT HERE

To test hypothesis 2, we regressed role-specific self-efficacy onto person-role fit, controlling for organization, gender, age, length of service and previous development experience. Full results are shown in Table 2. However, the relationship between the two variables was not significant (B = 0.13, 95% CI -0.04-0.29, p = 0.14), indicating that hypothesis 2 was not supported.

INSERT TABLE 2 ABOUT HERE

Hypothesis 3 examined whether P-R fit were linked with increases in job satisfaction. This was tested using a mixed effects repeated measures model in which job satisfaction was regressed on time (within individuals) and this change was associated with P-R fit (controlling for the same variables as before). This showed that the change in job satisfaction was greater when P-R fit was perceived to be good (B = 0.10, 95% CI 0.04-0.17, p = .002), thus providing support for hypothesis 3. Full results are in Table 3. For a one standard deviation increase in P-R fit, the expected change in job satisfaction would be 0.09 higher: this is a sizeable increase in the context of the overall change in job satisfaction which was 0.18 on average).

INSERT TABLE 3 ABOUT HERE

Hypothesis 4 examined whether the link between P-R fit (T1) and job satisfaction (T2) was mediated by role-specific self-efficacy (T2). This was tested by examining and calculating a bootstrap confidence interval for the indirect effect. The model showed that the indirect effect does not quite reach statistical significance at the 5% level (b = 0.02; 95% CI - 0.01-0.08), and therefore we cannot say that hypothesis 4 is supported.

Hypothesis 5 examined the effect between P-R fit (T1) and job satisfaction (T2), testing whether the effect was stronger when baseline job satisfaction was lower. Results of the moderated regression analysis are shown in Table 4. Importantly, the interaction effect was significant (B = -0.28, 95% CI -0.44 - -0.13, p < .001), and so we further interpreted this by plotting the effect – see Figure 1. It can be seen that when change agents are already highly satisfied at T1, there is little effect of perceived P-R fit on subsequent job satisfaction. However, when change agents' job satisfaction is lower to start with, there is a clear positive relationship between P-R fit and subsequent job satisfaction, thus supporting hypothesis 5.

INSERT TABLE 4 ABOUT HERE

INSERT FIGURE 1 ABOUT HERE

Hypothesis 6 was tested using moderated mediation, equivalent to model 7 in PROCESS (Hayes, 2013). Of key interest was whether the interaction effect found to support hypothesis 5 would be mediated by self-efficacy. The model provided an index of moderated mediation of -0.01 (95% confidence interval: -0.06-0.01), meaning that there was no evidence of this moderated mediation. Therefore, hypothesis 6 was not supported.

Discussion

In the present study, we aimed to explore the impact of running dialogue seminars to support an organizational change on ordinary employees who had taken on the role of change agents. Based on the principles of Person-Job fit (Kristof-Brown et al., 2005), we explored the impact of these change agents perceiving they had the necessary skills to fulfil this role on their job satisfaction.

Testing a series of six hypotheses, we found change agents reported a significant increase job satisfaction (hypothesis 1). This finding is interesting as many studies have found a negative effect of organizational change on employee wellbeing including job satisfaction (de Jong et al. 2016). This result suggests that being responsible for running dialogue seminars can alleviate the negative impact of organizational change. Previous research has found that participatory interventions can stabilize employees' qualitative job insecurity compared to a control group during organizational change (Abildgaard et al., 2018), but to the best of our knowledge, this is the first study to explore job satisfaction as a wellbeing outcome when employees are appointed change agents and become responsible for running dialogue workshops. We also found that change agents who perceived they possessed the necessary skills to perform the main task related to the change agent role, i.e. leading dialogue seminars, reported the greatest increases in job satisfaction (hypothesis 3) and that these increases were the greatest for those with greatest need for change, i.e. were less satisfied with their jobs prechange (hypothesis 5).

We developed a change-specific fit concept Person-Role fit and measured the extent to which employees as change agents perceive that they have the necessary competencies to deal with the demands of the role-specific role, in this case leading dialogue seminars. We found that a good P-R fit was significantly related to job satisfaction post-change. These findings extend the existing research finding an association between person-job fit and job satisfaction (Kristof-Brown et al., 2005). Together, these results provide support for Person-Job fit theory (Kristof-Brown et al., 2005) in that a perceived good fit of a change agent's competencies to run dialogue seminars was related to increased levels of job satisfaction.

Despite the assumption that self-efficacy may an important explanatory mechanism for why job satisfaction may increase for change agents themselves as they develop the confidence to manage change (Nielsen, 2013), none of our hypotheses including role-specific self-efficacy were supported (hypotheses 2, 4, and 6). To the best of our knowledge, no previous studies have explored self-efficacy as a mediating mechanism during changes. Based on Palm (2008), we proposed that change agents who feel more secure in their role, as they perceive they have the necessary competencies to fulfil the role, are more likely to report they feel they can effectively deal with the challenges they meet in the role post-change. We did not find any support for role-specific self-efficacy playing any role. One possible explanation may be how we measured the construct of fit and role-specific self-efficacy. We measured fit with a single item focusing explicitly to the core task of the change agent, namely whether they felt they had the competencies to run dialogue seminars. Our role-specific self-efficacy measure was much broader, asking about the role in general. Although we followed the recommendation of Bandura (1997) and tailored a self-efficacy measure to the context of change, we captured change in general. Perhaps perceptions of having the competencies to lead dialogue seminars only translates into self-efficacy related to dialogue seminars.

It is also possible that other mechanisms may bring about job satisfaction, for example, the opportunity to lead seminars may develop change agents' project management skills, which they can then transfer to other areas of their job. It is also possible that reduced qualitative job insecurity is an explanatory mechanism. As change agents are actively involved and receive additional support from process instructors, this may reduce their job insecurity. It may also be that job crafting, i.e. the extent to which change agents use the role to change their conditions to fit with their needs may explain the link between feeling capable of fulfilling the role and running dialogue seminars and job satisfaction. Finally, it is also possible that taking on this role getting coaching and engaging with other change agents result in a feeling of belonging to an in-group. Such a feeling may be further enhanced by peers who participate in dialogue seminars (if they are well run) may show their appreciation. Future studies should explore other change mechanisms, which may explain the relationship between P-R fit and job satisfaction.

Strengths and limitations

To the best of our knowledge, this is the first study to explore whether and in which circumstances taking on a change agent role has a positive impact on employees job satisfaction. The prospective design and the factors influencing (e.g. person-role fit and previous job satisfaction levels) change agents' job satisfaction are obvious strengths, however, the study suffer from a number of limitations that must be acknowledged. First, we tested mediation using two waves rather than three waves, which raises the risk of common method variance between change agent self-efficacy and job satisfaction, and increases the possibility of findings being due to reverse causality. It is impossible within observational designs to determine completely the order of causal effects. It also increases the chances of biasing indirect effects compared with a three-wave study, although less so than a cross-sectional study would do (Taris & Kompier, 2006). Future studies should replicate our findings in a fully longitudinal study with three waves. Organizational constraints prevented us from collecting three waves of data.

Second, we focused on perceived rather than objective fit to the role. We did this to capture the cognitive appraisals of the change agents and how these perceptions were related to their self-efficacy and job satisfaction. Cognitive appraisal theory (Lazarus & Folkman, 1984) suggests that cognitive appraisals influence our perceived ability to cope with the demands of the job and we considered this to be important in this study as we study the perceptions of whether change agents felt they had the time and the competencies to do their change agent job well.

Third, we only measured self-efficacy post-change. It could be argued that we needed to measure changes to self-efficacy measuring baseline self-efficacy, however, due to the nature of the measure, role-specific self-efficacy, this was not possible. We followed the recommendation of Bandura (1997) and developed a tailored measure capturing change agents' self-efficacy with respect to dealing with the demands of their role. Change agents would not have been able to rate their ability to manage the change before change was implemented and they had engaged with the role.

Fourth, the use of single-item measures is clearly a limitation compared with higher quality measures, and can lead to lower reliability and hence lower statistical power, as well as a lack of certainty about the validity of the measures. The use of single-item measures is not uncommon, and particularly for job satisfaction. Research has shown that such measures are not necessarily poorer than scale measurements, with good convergent validity and perhaps even higher face validity (Nagy, 2002; Fisher, Matthews, & Gibbons, 2016; Wanous et al., 1997). Despite this, it remains the case that the lower reliability of the measures may bias results, and therefore further research using more reliable measures would help add to our knowledge about this.

Fifth, the focus of our study was on change agents and how being a change agent impacted their own job satisfaction. It would have been desirable to measure the job satisfaction of all employees to understand whether there was a crossover effect from change agents to all employees. It is possible that those change agents who feel comfortable in the role and were more satisfied with their jobs did a better job of getting their colleagues on board. Due to financial constraints, we were unfortunately unable to collect data from all employees in the organization.

Sixth, we did not study the actual behaviours of change agents. It is possible that change agents that perceived a good fit to the role, took a more proactive role when leading the seminars. Observations of the dialogue could have shed light on how change agents ran the seminars. Unfortunately, financial constraints also prevented us to collect such data as a large number of seminars (N=1021) were run.

Finally, we had no control group. There are two reasons for this. First, the study was a natural experiment where we evaluated how being a change agent in an organizational change affected the change agents. The organizational change and the dialogue seminars were implemented in the entire organization making it impossible to introduce control groups. The strength is that the study has high ecological validity, but it could be argued that we cannot know whether job satisfaction would have increased without change agents taking on this role. Due to the vast literature showing a negative impact of organizational change on

employee outcomes (de Jong et al., 2016), it is unlikely that job satisfaction would have increased without change agents engaging in this role. The option to increase variation by varying the degree of support the change agents received was deemed unethical, as it would put not only change agents but also the employees participating in dialogue seminars at risk for poor wellbeing, given the existing knowledge we have on the negative impact of organizational change (de Jong et al., 2016). Second, the nature of our questions assume experiences of the role as change agents, making it impossible to answer them for ordinary workers who did not have a change agent role. It would make no sense to ask a control group about key aspects of our study such as the necessary competencies to run dialogue seminars if these did not exist and likewise it would not make sense to ask about role-specific selfefficacy among employees who did not have such a role.

Practical implications

Our results provide valuable insights into what organizations can do to alleviate the negative impact on employee wellbeing when introducing organizational change (de Jong et al., 2016). First, Human Resource professionals and managers should develop strategies for involving employees in the change process. Our results suggest that one way of doing this may be to run dialogue seminars led by ordinary employees who act as change agents. Such a strategy may make these ordinary employees feel they have a purpose. Although not tested here, it is possible that this strategy creates ownership and it may be easier to get colleagues on board the change if they see colleagues as role models in driving the change and explaining what the change means rather than having to rely on external consultants who may not fully understand the context in which change is being implemented. Human Resource professionals and managers should ensure that support is available to these change agents. Despite all change agents being trained in running dialogue seminars, variations in the extent to which they felt they possessed the necessary competencies to do so existed. These

variations influenced the impact of the change. Supporting these change agents to make sure they have the necessary competencies to meet the demands of the change agent role is crucial. A potential added benefit of involving ordinary workers and making them drivers of change, may be cost-effectiveness, as organizations can potentially reduce costs of external consultants by training their own employees to be change agents. In the present study, a trainthe-trainer approach was used, as change agents were expected to train their colleagues in how to use eHealth services after being trained in the process themselves.

Conclusion

The main contributions of the present study are: 1) the focus on the job satisfaction of change agents' themselves and the fact that the change agents in this case were ordinary employees. Our findings suggest that allocating ordinary employee a change agent role during organizational change may increase job satisfaction, and 2) the exploration of change agents' perceived fit to the particular role they had taken on. We thus extended person-job fit (Kristof-Brown et al, 2005) into the arena of organizational change and found support that a good fit is associated with increased job satisfaction also in this arena. The study offers novel insights on how a natural experiment, an organizational change, impacts on employees who have taken on a change-specific role. By its natural design, it provides actionable insights outside academia on what organizations can do to alleviate the negative impact of organizational change on employees.

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Table 1 Descriptive statistics and intercorrelations of study variables

	Mean	in SD	Correlations						
			1	2	3	4	5	6	7
1. Job satisfaction, T1	4.33	0.87							
2. Job satisfaction, T2	4.51	0.79	0.49**						
3. P-R fit, T1	3.97	1.03	0.22*	0.33**					
4. Role-specific self-efficacy, T2	4.16	0.75	0.08	0.16	0.28**				
5. Gender ¹	0.84	0.37	-0.03	-0.02	0.05	-0.07			
6. Age	47.32	10.07	0.02	0.10	0.07	0.23*	0.02		
7. Length of service (years)	11.85	10.20	0.21*	0.10	-0.11	0.00	0.04	0.45**	
8. Previous change agent experience ²	0.28	0.45	0.12	0.21*	0.36**	0.28**	0.14	-0.06	-0.01

* p < .05; ** p < .01, P-R fit = Person-Role fit
¹ Gender coded 1 = female, 0 = male
² Previous change agent experience coded 1 = yes, 0 = no

Regression analysis of Person-Role fit predicting self-efficacy				
	B (SE)	р		
Organization 1 (dummy variable)	0.18 (0.22)	.42		
Organization 2 (dummy variable)	-0.03 (0.25)	.90		
Gender ¹	-0.26 (0.24)	.27		
Age	0.03 (0.01)*	.01		
Length of service	-0.01 (0.01)	.29		
Previous change agent experience ²	0.35 (0.21)	.11		
P-R fit, T1	0.13 (0.09)	.14		

Table 2

* p < .05; ** p < .01, P-R fit = Person-Role fit ¹ Gender coded 1 = female, 0 = male ² Previous change agent experience coded 1 = yes, 0 = no

Table 3 Mixed effects repeated measures analysis of Person-Role fit predicting change in job satisfaction

	B (SE)	р
Predicting job satisfaction level:		
Organization 1 (dummy variable)	0.08 (0.17)	.64
Organization 2 (dummy variable)	-0.02 (0.19)	.92
Gender ¹	-0.19 (0.17)	.27
Age	-0.00 (0.01)	.64
Length of service	0.01 (0.01)	.10
Previous change agent experience ²	0.17 (0.13)	.42
Predicting job satisfaction change:		
P-R fit, T1	0.10 (0.03)**	.00

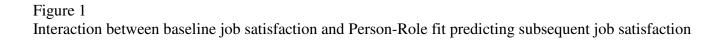
¹ Gender coded 1 = female, 0 = male ² Previous change agent experience coded 1 = yes, 0 = no

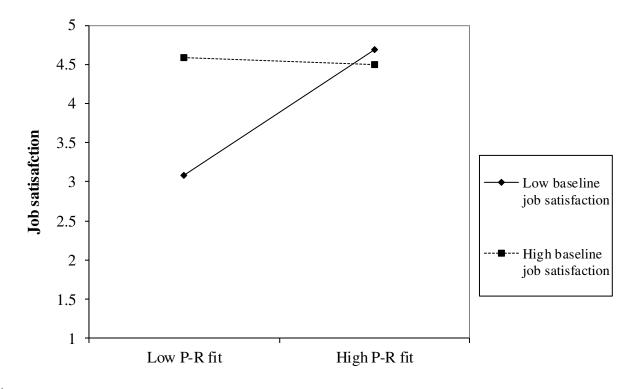
	B (SE)	р
Organization 1 (dummy variable)	-0.07 (0.16)	.69
Organization 2 (dummy variable)	-0.08 (0.19)	.66
Gender ¹	0.01 (0.01)	.52
Age	0.04 (0.18)	.82
Length of service	-0.00 (0.01)	.17
Previous change agent experience ²	0.22 (0.16)	.79
Job satisfaction, T1	1.37 (0.32)**	.00
P-R fit, T1	1.35 (0.35)**	.00
Interaction	-0.28 (0.08)**	.00

Moderated regression analysis of Person-role fit predicting job satisfaction, moderated by baseline job satisfaction

Table 4

* p < .05; ** p < .01, P-R fit = Person-Role fit ¹ Gender coded 1 = female, 0 = male ² Previous change agent experience coded 1 = yes, 0 = no





P-R fit = Person-Role fit