Achieving change readiness for health service innovations

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Abstract

Continual innovation to address emerging population needs necessitates health service ongoing redesign and transformation worldwide. Recent examples include service transformations in response to covid-19. Ensuring effective change management processes occur is central to delivering these transformative changes yet notoriously challenging. Recent evidence indicates that affective commitment to change amongst healthcare staff may be an important contributor to gaining support for change implementation but understudied in healthcare. Our analysis sought to examine the association between affective commitment to change and change readiness in projects across the New South Wales health system in Australia. Our findings indicate that affective commitment to change; healthcare worker's emotional and personal perception of the value of the proposed change, is independently associated with individual and collective change readiness. Given that achieving change readiness is a central goal of change management strategies, this pilot work provides valuable insight to inform change management practices in healthcare contexts.

Introduction

Continual innovation to address emerging population needs necessitates health service ongoing redesign and transformation worldwide. Recent examples include service transformations in response to covid-19. The pandemic has catalysed several changes to how healthcare is delivered, particularly in the rapid acceleration of virtual and hybrid models of care.(1) As work processes, systems and models of care shift in response to health system needs, so too must individual and collective behaviours of the workforce and its consumers.(2, 3) Ensuring effective change management processes occur is therefore central to transformative changes that deliver their intended outcomes and are sustained. Yet change management is notoriously challenging in healthcare contexts, with limited evidence available for healthcare managers to optimise their implementation of current change management models.

Achieving 'change readiness' amongst healthcare staff is identified as an important precursor to whether staff accept and adopt a change initiative. Change readiness is influenced by the extent to which staff perceive that a given change is needed (their commitment to the change) and that they have the required capability and support to work in a new way (change self-efficacy).(1)(4, 5) Commitment to change arises for three reasons: a) because there is a requirement to support the change due to recognition of cost associated with failure to do so (continuance commitment), b) because there is a sense of obligation to support the change (normative commitment), and c) because an individual wants or desires to support the change due to the benefits associated with it (affective commitment).(6, 7)

Recent evidence indicates that affective commitment to change is an important contributor to achieving change readiness but understudied in relation to healthcare projects.(8-10) A systematic review of 38 studies of healthcare change projects highlights that management approaches rarely focus on the influence of affective commitment to change.(11) Our analysis sought to address the evidence gap regarding the association between affective commitment to change and change readiness in healthcare by exploring change readiness amongst clinical and non-clinical staff directly involved in one of four transformational change projects in New South Wales, Australia.

Method

Ethical approval: This study was approved by Western New South Wales Local Health District Human Research Ethics Committee (Approval number 2020/ETH01247)

Design : Cross sectional survey

Survey instrument: A survey tool was developed by the research team consisting of five elements (Supplementary File A). The responses were measured on a 7-point Likert scale (from 1- strongly disagree to 7 - strongly agree). The four validated elements were: i) Individual change readiness scale (4 items) , ii) collective change readiness scale (4 items), iii) change self-efficacy scale (4 items), and iv) affective commitment to change scale (3 items).(6, 13) A fifth element contained purposively developed items to assess participants understanding and awareness of the change being proposed.

Setting : The study was conducted in partnership between academic researchers, health agencies and two local health districts (LHDs) in New South Wales, Australia. Two local health districts (LHDs) in New South Wales participated in this study, one servicing a metropolitan region and one servicing a rural/remote region. Within each district the project partners identified two transformational change projects that were at a suitable stage to address our aims. This meant that projects were of a similar scale, at a similar point in their planning, but implementation had not yet commenced. The four participating projects were: virtual pharmacy project, in-home monitoring project, emergency department expansion and an outpatient administration change project.

Recruitment and procedure : Employees in any clinical or non-clinical role who were directly affected by or involved in the change/s proposed in each project were eligible to participate: a total participant pool of 60 participants was available who met the eligibility criteria in the participating projects. A minimum sample size of 15 participants per site was sought to enable us to detect significant changes in individual change readiness between sites.(14) Participants were recruited via a study invitation email with an embedded survey link. The email was distributed by the research team to eligible potential participants at each site through the local study partners. Written consent was obtained from individuals prior to their participation.

Analysis : Descriptive and inferential statistics for sample characteristics and the levels of change readiness, change commitment, and change self-efficacy were explored using SPSS (IBM Statistics, Version 25). Pearson correlation coefficients were calculated to examine the relationships between readiness for change (individual and collective), change self-efficacy, and affective commitment to change. Multiple regression analysis using ordinary least square estimation was conducted to examine the independent effects of the two antecedents (affective commitment to change and change self-efficacy) on individual change readiness. Specifically, we conducted a simultaneous regression in which change readiness was entered as the outcome variable and change self-efficacy and affective commitment to change were entered as predictors.

Results

Thirty participants of the 47 invited (64% response rate) completed the survey. Table 1 provides a breakdown of participant characteristics by site and overall.

<INSERT TABLE 1>

Participants from both sites scored highly on individual and group readiness for change (Table 2). Readiness for change (individual and collective), change self-efficacy, and affective commitment to change were moderately to strongly correlated in a positive direction. Higher affective commitment to change was associated with higher levels of self-efficacy (r =.46, p<. 01) and individual readiness for change (r=.75, p<.001). The correlation between self-efficacy and individual change readiness was moderate in size (r =.32) but not statistically significant (p=.08). Finally, collective readiness for change was positively and significantly associated with higher levels of change self-efficacy, affective commitment to change and individual change readiness (change self-efficacy: r=.43, p =.02; affective commitment: r=.69, p<.001; individual change readiness: r =.39, p =.04).

<INSERT TABLE 2>

Regression analyses demonstrated that the effect of affective commitment to change on change readiness continued to remain strong after controlling for change self-efficacy (β = .76, p <.001), whereas the effect of change self-efficacy became negligible after controlling for affective commitment to change (β = -.03, p = .82).

Individual items in the fifth survey component (Table 3) indicated that participants were aware of the change and its success measures. The scores also indicated that most participants understood the criteria for success, felt they had leaders that could drive the change and could get the support they needed. Although most felt that they had sufficient resources for change, this item had a slightly lower mean score overall (4.8/7) and wider variation between respondents.

<INSERT TABLE 3>

Discussion

Our findings indicate that affective commitment to change; healthcare worker's emotional and personal perception of the value of the proposed change, is independently associated with individual and collective change readiness. Given that achieving change readiness is a central goal of change management strategies, this pilot work provides valuable insight to inform change management practices in healthcare contexts. Larger scale replication of this analysis is warranted to explore these findings across health systems and a wider range of change projects.

Many factors contribute to an employee's affective commitment to change, which may warrant further exploration to underpin interventional approaches that promote change readiness in healthcare. Factors that contribute to an employee's affective commitment to change include employees interpersonal workplace relationships with managers and with colleagues, change frequency (more frequent change reduces commitment to change), organisational communication about change, and employee's participation or engagement in decisions about the change.(15)

Wider research literature indicates that employee engagement in decisions about the change process have been linked with individuals feeling more positive emotions towards change proposals and greater understanding of the purpose of change proposals and the possible gains to be made. These reactions, in turn, are associated with a greater likelihood of employees making the behavioural changes required for changes to be adopted and sustained.(16) When employees engage in decision-making about changes and how change occurs, it also promotes interpersonal trust, attachment to their organisation and their sense of competence to achieve the changes needed.(17) Employee engagement in decision-making about changes may also therefore be a factor to consider in attempts to promote affective commitment to change.

Our findings must be considered in light of the limitations of the research. As a pilot project, the results need to be treated cautiously due to the small sample size and cross-sectional nature of this research. Change

readiness is not static and it is important to consider in future analysis how the environmental factors (e.g. the extent to which a health service environment has a culture that is conducive to change, the level of resourcing and support for changes to be made successfully and leadership) influence whether change readiness is achieved and sustained. The sample was also made up largely of females and of clinicians who consented to participate, which may have also influenced the resulting data.

Conclusion

Our analysis provides novel insights into how health systems might seek to address the challenge of bringing about change in health services through a focus on value-based approaches to achieve staff investment in change proposals. These findings offer opportunities for developing service-level interventional approaches and avenues for research.

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References

1. Hambleton SJ, Aloizos Am J. Australia's digital health journey. Med J Aust. 2019;210 Suppl 6:S5-s6.

2. Bouckenooghe D, Schwarz GM, Hastings B, Lukacs de Pereny SG. Facilitating Change through Groups: Formation of Collective Attitudes toward Change. Research in Organizational Change and Development. 27: Emerald Publishing Limited; 2019. p. 143-65.

3. Schwarz G, Bouckenooghe D. Improving our understanding of collective attitudes towards change formation. Organizational Change: Routledge; 2018. p. 163-76.

4. Rafferty AE, Jimmieson NL, Armenakis AA. Change Readiness: A Multilevel Review. Journal of Management. 2012;39(1):110-35.

5. Armenakis AA, Harris SG, Mossholder KW. Creating readiness for organizational change. Human Relations. 1993;46(6):681-703.

6. Herscovitch L, Meyer JP. Commitment to organizational change: extension of a three-component model. The Journal of Applied Psychology. 2002;87 3:474-87.

7. Bouckenooghe D, Schwarz G, M., Minbashian A. Herscovitch and Meyer's Three-Component model of commitment to change: Meta-analytic findings. European Journal of Work and Organizational Psychology. 2015;24(4):578-95.

8. Stevens GW. Toward a process-based approach of conceptualizing change readiness. Journal of Applied Behavioral Science. 2013;49(3):333-60.

9. Neves P. Readiness for Change: Contributions for Employee's Level of Individual Change and Turnover Intentions. Journal of Change Management. 2009;9:215-31.

10. Madsen SR, Miller D, John CR. Readiness for organizational change: Do organizational commitment and social relationships in the workplace make a difference? Human Resource Development Quarterly. 2005;16(2):213-34.

11. Harrison R, Fischer S, Walpola RL, Chauhan A, Babalola T, Mears S, et al. Where Do Models for Change Management, Improvement and Implementation Meet? A Systematic Review of the Applications of Change Management Models in Healthcare. Journal of healthcare leadership. 2021;13:85.

12. Le-Dao H, Chauhan A, Walpola R, Fischer S, Schwarz G, Minbashian A, et al. Managing Complex Healthcare Change: A Qualitative Exploration of Current Practice in New South Wales, Australia. J Healthc Leadersh. 2020;12:143-51.

13. Rafferty AE, Minbashian A. Cognitive beliefs and positive emotions about change: Relationships with employee change readiness and change-supportive behaviors. Human Relations. 2018;72(10):1623-50.

14. Faul F, Erdfelder E, Lang A-G, Buchner A. G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behavior Research Methods. 2007;39(2):175-91.

15. Foks M. Antecedents of commitment to change : a study about the contribution of change related variables, individual variables, communication variables and work-relationships to employees? commitment to organizational change. 2015.

16. Bartunek JM, Rousseau DM, Rudolph JW, DePalma JA. On the Receiving End: Sensemaking, Emotion, and Assessments of an Organizational Change Initiated by Others. The Journal of Applied Behavioral Science. 2006;42(2):182-206.

17. Cummings TG, Worley CG. Organization development and change: Cengage Learning; 2014.

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