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Linking perceived management support with employees' readiness for change: the mediating role of psychological capital

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ABSTRACT

Although the relationship between management support and readiness for change is a well-studied topic, mediating variables in this relationship are rarely examined. This paper presents the findings of an investigation into the mediating role of psychological capital (PsyCap) in the relationship between perceived management support and readiness for change. A questionnaire was administered to employees ($N = 120$) of a public sector organization undergoing a change initiative. Results of structural equation modelling demonstrated that PsyCap partially mediated the relationship between management support and employees' readiness for change. This indicates that employees' responses to change are shaped by both their personal psychological resources and their perceptions of the organizational environment. The findings offer a platform for positive future developments in research and practice.

KEYWORDS

Readiness for change;
perceived management
support; psychological capital

Introduction

Change is a pervasive feature of organizational life. To facilitate effective responses to change, evidence suggests that companies should foster readiness for change amongst employees on an ongoing basis (Armenakis, Bernerth, Pitts, & Walker, 2007; Piderit, 2000). The concept of readiness for change is well-established within the prevailing literature and has been examined from a number of perspectives, enlightening the situational, individual and organizational factors that support readiness for change (Holt & Vardaman, 2013; Vakola, 2013). However, in their review of 60 years of research on change recipients' reactions to organizational change, Oreg, Vakola, and Armenakis (2011) highlight a number of outstanding gaps in the readiness for change literature. For instance, while many studies have illuminated the antecedents of readiness for change, much less research has explored the mechanisms by which the identified antecedent variables modulate levels of readiness for change (Oreg et al., 2011). Additionally, the extant psychological research has tended to privilege trait-level over state-level variables in exploring the facilitators of readiness for change (Choi, 2011). These shortcomings restrict the

research literature's ability to inform either theoretical development or practical interventions regarding employees' readiness for change.

The current paper seeks to address these gaps in the existing literature by exploring the pathway through which perceived management support for change influences employees' levels of readiness for change. It specifically focuses on the mediating role of psychological capital (PsyCap), a state-level individual difference variable whose emotional, cognitive and behavioural significance is substantiated by accumulating empirical evidence. Using the technique of structural equation modelling (SEM), the current research proposes that employees' responses to change will be determined by both their personal psychological resources and their perceptions of the organizational environment.

Conceptual background and hypotheses

Readiness for change and its antecedents

Readiness for change refers to the extent to which members of an organization regard a change positively and anticipate that it will be a good thing for themselves and their organization (Bouckennooghe, 2010; Goh, Cousins, & Elliott, 2006). The readiness for change literature is characterized by a good deal of conceptual confusion, with different theorists defining and measuring the concept in different ways (Stevens, 2013). Possibly the most comprehensive definition is given by Bouckennooghe, Devos, and Van Den Broeck (2009), who define readiness for change as an individual's 'beliefs, feelings, and intentions' (p. 561) about their own and the organization's capacity for implementing a successful change and the extent to which that change will be beneficial for those concerned (Armenakis, Harris, & Mossholder, 1993; Eby, Adams, Russell, & Gaby, 2000; Holt, Self, Thal, & Lo, 2003). Bouckennooghe et al. (2009) describe three elements which together comprise readiness for change. These are an emotional element, which captures how people feel about the change being introduced; a cognitive element, involving the beliefs and thoughts people hold about the outcomes of change; and an intentional element, which refers to the effort and energy organizational members are willing to invest in the change process. The holistic, multidimensional nature of this model is an advantage in researching specific organizational environments, since it approximates the complexity of real-world psychosocial contexts.

Readiness for change is regarded as a critical factor in the success of change initiatives (Rafferty, Jimmieson, & Armenakis, 2013). Achieving a smooth transition depends on sufficient levels of readiness for change both before and during the change process (Choi & Ruona, 2011); conversely, efforts to implement change when readiness is low are likely to meet resistance (Prochaska, Redding, & Evers, 2002; Vakola, 2014). The documented importance of readiness for change has stimulated considerable interest in developing strategies by which robust levels of readiness for change can be embedded throughout an organization (Choi & Ruona, 2011). This has naturally focused empirical attention on the factors that support (or compromise) readiness for change. Bouckennooghe et al. (2009) identify two categories of antecedents to readiness for change: climate-based factors, which relate to the internal circumstances of how change occurs, and process-based factors, which relate to the ways in which the change is managed. Empirical research has confirmed Bouckennooghe et al.'s (2009) contention that important climate-based factors include an organization's levels of trust in leadership, politicking and

cohesion (Bommer, Rich, & Rubin, 2005; Bouckennooghe, 2011; Herold, Caldwell, & Liu, 2008). The process-based factors specified by Bouckennooghe et al. (2009) comprise quality of communication, participation, management's attitudes towards the change, and supervisors' support for the change. While the roles played by communication and participation have been elaborated by numerous studies (Armenakis et al., 1993; Bordia, Hobman, Jones, Gallois, & Callan, 2004; Gagné, Koestner, & Zuckerman, 2000; Rafferty & Restubog, 2010), much less research has illuminated the dynamics through which management's and supervisors' responses to change affect employees' readiness for change. The current study supplements this under-researched area.

Management support for change

Early formulations of the readiness for change concept positioned 'principal support', that is, the degree to which organizational leaders support the change, as a key contributor to employees' readiness for change (Armenakis & Bedeian, 1999). On a day-to-day basis, support from management helps employees cope with the demands of their role (Bakker, Demerouti, & Verbeke, 2004), with clearly positive effects for organizational outcomes such as employee engagement, motivation and well-being (Breevaart et al., 2014; Morgeson & Humphrey, 2006; Nielsen, Randall, Yarker, & Brenner, 2008; Piccolo & Colquitt, 2006; Podsakoff, MacKenzie, & Bommer, 1996; Rhoades & Eisenberger, 2002; Skakon, Nielsen, Borg, & Guzman, 2010; Van Dierendonck & Jacobs, 2012; Whittington, Goodwin, & Murray, 2004). These effects persist in the context of organizational change, such that supportive relationships lead to more positive employee attitudes toward change (Jimmieson, White, & Zajdlawicz, 2009), which in turn help employees to proceed effectively with the tasks of change (Bouckennooghe et al., 2009; Dirk & Ferrin, 2002). This forms the basis for the first hypothesis of this study, which seeks to corroborate the theoretical tenet that readiness for change is correlated with perceived management support for change (*Hypothesis 1*).

Hypothesis 1. Perceived management support for change will be positively related to employees' readiness for change.

In an extensive review of the literature on responses to organizational change, Oreg et al. (2011) criticize the relative neglect of the *mechanisms* by which the identified process- and climate-based antecedents of readiness for change exert their effects. Oreg et al. (2011) suggest that rather than compiling a list of isolated variables that predict readiness for change, researchers should investigate the factors that might mediate and/or moderate these relationships, in order to illuminate the precise manner in which the antecedents lead to readiness for change. A more holistic approach to readiness for change, which accounts for the networks of multiple, mutually-interacting variables that characterize real-world situations, would serve both theoretical progress and practical applications.

Psychological capital

Employees' sense of support from supervisors is a subjective perception rather than an objectively verifiable fact (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). This means that the ways perceived management support affects readiness for change are likely to be psychological rather than purely material. Previous research has established

that readiness for change is related to a host of psychological variables including personal attitudes (Jimmieson & White, 2011; Meyer, Srinivas, Lal, & Topolnytsky, 2007), openness to change (Nikolaou, Tomprou, & Vakolar, 2007), tolerance for change (Kotter & Schlesinger, 1979), fear of the unknown (Karim & Kathawala, 2005; Visagie & Botha, 1998), striving for security (Visagie & Botha, 1998), and concerns about personal failure (Mink, 1992). The employee characteristics that affect organizational change can be both trait-based, that is, relatively permanent individual characteristics such as personality (Vakola, Tsaousis, & Nikolaou, 2004), and state-based, that is, more transient and situation-specific characteristics such as stress (Vakola & Nikolaou, 2005). However, Choi (2011) argues that the extant readiness for change literature shows disproportionate focus on trait- over state-based variables. This is an important oversight, particularly because since state characteristics are more malleable, they are a more promising target of intervention. Incorporating state-like variables into investigation of readiness for change will yield more helpful insights into how individual differences can be leveraged to smooth the path of change.

One increasingly prominent state-like variable that might mediate the effects of perceived management support for change is psychological capital, or simply PsyCap (Luthans, 2002). PsyCap is an unlimited psychological resource that can be fostered and developed by individuals to aid their personal and occupational success (Luthans, Avey, Avolio, & Peterson, 2010). Theoretically, it is defined as

an individual's positive psychological state of development that is characterized by: (1) having the confidence to take on and invest the necessary effort to succeed at challenging tasks (self-efficacy); (2) making a positive attribution about succeeding now and in the future (optimism); (3) persevering toward goals and, when necessary, redirecting paths to goals in order to succeed (hope); and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond to attain success (resilience). (Luthans, Youssef, & Avolio, 2007, p. 3)

Each of these four constructs – hope, self-efficacy, resilience and optimism – show independent relationships with work-related outcomes (Avey, Wernsing, & Luthans, 2008; Caldwell, 2011; Gondo, Patterson, & Palacios, 2013; Luthans et al., 2010). However, the higher-order construct of PsyCap has been found to account for more variance in behaviour than the four subcomponents (Luthans, Avolio, Avey, & Norman, 2007). As such, PsyCap is a powerful and parsimonious conceptual tool for understanding individual's attitudes and behaviours. Additionally, Luthans (2002) stipulates that PsyCap is a state variable, which can strengthen or decline across time and contexts. This means that it offers the advantage of malleability to experience and training, which makes it a useful target for intervention initiatives (Bolier et al., 2013; Luthans, Avey, Clapp-Smith, & Lia, 2008; Luthans, Avey, & Patera, 2008; Zhang, Li, Ma, Hu, & Jiang, 2014).

The operation of PsyCap can be conceptualized in light of Fredrickson's (2001) 'broaden-and-build' theory. According to this theory, the experience of positive emotions broadens people's cognitive perspective, leading to more creative and exploratory thought and action (Fredrickson & Branigan, 2005). This diversification of experience fosters the development of new skills and resources, and also encourages a sense of self as agentic and competent. This richer personal appreciation serves as a foundation not just for sustained constructive responses to demands, but also for the development of new relationships and expertise as people's actions move them beyond their

conventional habitus. Thus, the principles of Fredrickson's (2001) 'broaden-and-build' theory offer a plausible model for the operations of PsyCap: a person's prevailing psychological resources encourage positive and proactive engagement with the world around them, which further expands the psychological resources on which that person can draw. PsyCap broadens individuals' scope of attention, renders them likely to view themselves and their environment in a 'glass half-full' manner, and facilitates proactive and effective responses to stress (Luthans et al., 2010; Peterson, Luthans, Avolio, Walumbwa, & Zhang, 2011).

The cognitive effects that PsyCap facilitates lead to a number of desirable effects in employee attitudes and behaviours (Avey et al., 2008; Avey, Reichard, Luthans, & Mhatre, 2011). Workplace domains identified as significantly influenced by PsyCap include performance (Luthans, Avolio, et al., 2007), innovation (Luthans, Avolio, et al., 2007) and creativity (Abbas & Raja, 2011; Sweetman, Luthans, Avey, & Luthans, 2011). People high in PsyCap exhibit more citizenship behaviours and less deviance and cynicism (Avey et al., 2008; Avey, Luthans, Smith, & Palmer, 2010; Norman, Avey, Nimnicht, & Pigeon, 2010). PsyCap is positively related to psychological well-being (Avey et al., 2010), in particular eudaimonic well-being (Culbertson, Fullagar, & Mills, 2010) and is significantly related to engagement (Avey et al., 2008; Hodges, 2010; Sweetman & Luthans, 2010). PsyCap has been shown to act as an effective buffer against stress (Avey, Luthans, & Jensen, 2009; Roberts, Scherer, & Bowyer, 2011) and is negatively related to absenteeism (Avey, Patera, & West, 2006).

Several factors make PsyCap a plausible candidate variable in mediating the relationship between management support and readiness for change. First, the psychological resources exemplified in the construct of PsyCap are valuable at all times, but are particularly critical during times of turbulence and change (Avey et al., 2008). When organizations are running smoothly and employees are well-resourced and accustomed to their roles, job performance may be universally positive and the effects of differing levels of personal psychological resources are muted. It is during unusually testing conditions, as involved in organizational change, that the differential adaptability of individuals with high and low PsyCap becomes most apparent. This would imply that PsyCap is positively related to readiness for change (*Hypothesis 2*).

Hypothesis 2. PsyCap will be positively related to readiness for change.

Second, evidence shows that PsyCap can be modulated by features of the organizational environment (Bolier et al., 2013; Luthans, Avey, Clapp-Smith, et al., 2008; Luthans, Avey, & Patera, 2008; Zhang et al., 2014). In particular, research has shown that effective leadership styles promote PsyCap among employees, and this in turn improves job performance (Rego, Sousa, Marques, & Cunha, 2012). Given this evidence, the current study hypothesizes that perceived management support will be positively related to PsyCap (*Hypothesis 3*). It should be noted that the causal directionality in this proposed relationship is debatable; it is plausible that employees who enjoy high levels of well-being are more likely to perceive their leaders as supportive (Nielsen et al., 2008; Winkler, Busch, Clasen, & Vowinkel, 2015). While there is likely some level of mutual reinforcement between PsyCap and perceived managerial support, previous research has established that perceptions of supervisors have a causative effect on employees'

psychological capital and job performance (Rego et al., 2012). Thus, the literature indicates that this may be the primary direction of causality.

Hypothesis 3. Perceived management support for change will be positively related to PsyCap.

Finally, PsyCap is a pervasive psychological state, which exerts indirect as well as direct effects. For instance, PsyCap has been found to mediate the relationship between supportive organizational climate and performance (Luthans, Norman, Avolio, & Avey, 2008) and the relationship between perception of transformational leadership and citizenship behaviours (Gooty, Gavin, Johnson, Frazier, & Snow, 2009). It has also been attributed a mediating role in the relationships between organizational socialization, knowledge integration and knowledge sharing (Jian & Hanling, 2009). These patterns make it plausible that PsyCap is also implicated in the relationship between perceived management support for change and employees' readiness to engage with organizational change (*Hypothesis 4*).

Hypothesis 4. PsyCap mediates the link between perceived management support and readiness for change.

Figure 1 presents the theoretical model proposed in this study. The current research sets out to enlighten the specific nature of these relationships using SEM.

Method

Organizational context

This research was carried out in a scientifically-focused public sector organization in Ireland. At the time of research, it was undergoing an organization-wide change initiative that involved significant resource rationalization, restructuring and refocusing of services. Major changes included the disposal of assets, the closure of a number of offices, restructuring of education delivery, a reduction in management and administrative posts, the introduction of a programme-based structure and a reduction in staff numbers. Most members of staff would be impacted to some degree by these changes.

Sample

Invitations to participate in the research were emailed to 1,172 employees by the organization's HR department. Unions and management were asked to encourage employees to

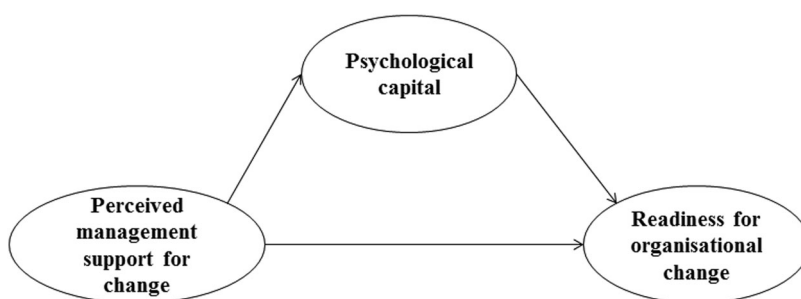


Figure 1. Conceptual model.

participate and reminders were issued by email and in a staff publication. Usable data were collected from 120 employees (10% response rate). The sample's demographic characteristics are contained in Table 1. Over half of the sample (59%; $n = 71$) was female. Most respondents were aged between 30 and 54 years, and just over half (56%) held a postgraduate qualification. Almost all (96%) of respondents were permanent and full-time members of staff. 23% had mid-level supervisory responsibilities and 23% held senior management roles while the remainder held non-supervisory positions.

Measures

Ethical approval for the study was granted by the authors' university. The survey was completed online. Respondents were asked to complete the questionnaire with the following question in mind: 'Based on your knowledge of the Change Programme underway in this organization, please use the following scale to indicate your level of agreement or disagreement with each statement below.' All responses were assessed using a Likert scale ranging from 1 ('strongly disagree') to 6 ('strongly agree').

Perception of management support: Nine items from Bouckennooghe et al. (2009) were used to measure employees' perception of management support for change based on two dimensions: perceived senior manager support and perceived supervisor support. Three items assessed perceptions of senior management's attitudes towards change (e.g. 'The Senior Management Group (SMG) supports the change process unconditionally'). The other six items measured perceived supervisor support for change (e.g. 'Our business unit/department's managers coach us very well about implementing change'). The fit indices for two first-order factors (the two dimensions) plus one second-order factor fell within an acceptable range ($\chi^2(21) = 41.91$, CFI = .97, RMSEA = .08, SRMR = .06), supporting the notion that the dimensions are distinct, but also collectively reflective of the overall construct of perceived management support for change. All factor loadings were higher

Table 1. Demographic characteristics of sample.

| Demographic | % | Demographic | % |
|-----------------------------------|----|--------------------------|----|
| Gender | | Employment type | |
| Female | 59 | Permanent | 96 |
| Male | 41 | Temporary | 4 |
| Age group | | Location | |
| 18–24 | 1 | Small site | 22 |
| 25–29 | 2 | Large site/campus | 78 |
| 30–34 | 13 | Work tenure | |
| 35–39 | 11 | Less than 1 year | 1 |
| 40–44 | 15 | 1–2 years | 2 |
| 45–49 | 13 | 3–5 years | 6 |
| 50–54 | 24 | 6–10 years | 23 |
| 55–59 | 16 | 11–19 years | 25 |
| 60+ | 5 | 20–30 years or more | 16 |
| Education | | 31 years or more | 28 |
| Leaving Certificate or equivalent | 8 | Job category | |
| Certificate/Diploma or equivalent | 13 | Staff Member | 48 |
| Bachelor's Degree or equivalent | 23 | Line Manager/Supervisor | 23 |
| Postgraduate/Masters | 39 | Middle or Senior Manager | 23 |
| Doctorate | 17 | | |

than .39 ($p < .001$). The reliabilities were $\alpha = .82$ for the perceived senior manager support and $\alpha = .88$ for the perceived supervisor support.

PsyCap: The four components of PsyCap were assessed using 24 items from Luthans, Youssef, et al. (2007). Each component was measured with six items. Sample items were 'I feel confident presenting information to a group of colleagues' (efficacy); 'I can think of many ways to reach my current work goals' (hope); 'I usually take stressful things at work in stride' (resilience); and 'I always look on the bright side of things regarding my job' (optimism). The fit indices for the four first-order factors (the four dimensions) plus one second-order factor fell within an acceptable range ($\chi^2(242) = 380.55$, CFI = .91, RMSEA = .07, SRMR = .07), supporting the notion that the dimensions are distinct, but also collectively reflective of the overall construct of PsyCap. The factor loadings ranged from .38 ($p < .001$) to .97 ($p < .001$). Reliabilities were $\alpha = .90$ for efficacy, $\alpha = .87$ for hope, $\alpha = .80$ for resilience and $\alpha = .79$ for optimism.

Readiness for organizational change: Thirteen items from Bouckennooghe et al. (2009) were used to measure three dimensions of readiness for change. Five items assessed emotional readiness for change (e.g. 'I have a good feeling about the programme for change'). Five items measured cognitive readiness for change (e.g. 'Change will improve how we work'). Three items measured intentional readiness for change (e.g. 'I want to devote myself to the process of change'). The fit indices for three first-order factors (the three dimensions) plus one second-order factor fell within an acceptable range ($\chi^2(242) = 380.55$, CFI = .91, RMSEA = .07, SRMR = .07), indicating that the dimensions are distinct but collectively reflective of the higher-order construct of readiness for organizational change. The factor loadings ranged from .53 ($p < .001$) to .94 ($p < .001$). Reliabilities were $\alpha = .81$ for emotional readiness for change, $\alpha = .88$ for cognitive readiness for change, and $\alpha = .88$ for intentional readiness for change.

Control variables. The analysis controlled for three sociodemographic variables. Gender was included as a dummy variable, coded as 1 for male and 0 for female. Work tenure was measured using seven categories (1 = <1 year, 2 = 1–2 years, 3 = 3–5 years, 4 = 6–10 years, 5 = 11–19 years, 6 = 20–30 years and 7 = >31 years). Education was measured using five categories (1 = secondary school, 2 = certificate, diploma or equivalent, 3 = bachelor's degree or equivalent, 4 = postgraduate qualification and 5 = doctorate degree).

Measurement models

The measurement model results indicated a good fit to the data. This provided evidence that the structural model could be further examined. Since all measures were collected from the same source, common method bias may exist. Therefore a series of confirmatory factor analyses was carried out to assess the potential influence of common method bias and the discriminant validity of the scales. A full measurement model was tested initially. The second-order confirmatory factor analysis results for each main construct were presented above. In the measurement model tests, all constructs (i.e. perceived management support, PsyCap and readiness for organizational change) were checked against their dimensions. For example, the four dimensions of psychological capital were treated as observed indicators where the mean of the relevant statement was used. All dimensions were loaded on to their respective factors. All factors were allowed to correlate. Overall goodness of fit was determined using five fit indices: χ^2/df , the comparative fit index (CFI), the Root Mean Square Error of Approximation (RMSEA) and the Standardized Root

Mean Square Residual (SRMR) (Hair, Black, Babin, & Anderson, 2009). In the case of χ^2/df , values of less than 2.5 indicate a good model fit and values around 5.0 an acceptable fit (Arbuckle, 2006). For the CFI, values greater than .95 represent a good model fit and values greater than .90 an acceptable fit (Bentler, 1990). For the RMSEA and the SRMR, values less than .08 indicate a good model fit (Browne & Cudeck, 1993; Hu & Bentler, 1998). Results are presented in Table 2.

The three-factor model showed a good model ($\chi^2(24) = 40.36$, CFI = .96, RMSEA = .08, SRMR = .05). Results comparing the measurement models reveal that the model fit of the alternative models was significantly worse compared to the full measurement model (all at $p < .001$). This suggests that the variables in this study are distinct.

Results

Table 3 provides the descriptive statistics, scale reliabilities and correlations for the variables in the study.

SEM with AMOS 18.0 was used to test the hypothesized mediation model. SEM is preferred as it offers a simultaneous test of an entire model of variables in a hypothesized model and enables assessment of the extent to which the model is consistent with the data (Byrne, 1994). Assessment of the structural models compared the model fit indices for the full mediation model (without the path from management support to readiness for change), partial mediation model (with the path from management support to readiness for change) and the direct model (without the path from management support to psychological capital). Table 4 presents the comparison results.

The comparison results in Table 4 show that the partial mediation model has the best model fit since it has the highest CFI, lowest RMSEA and SRMR compared to the full mediation and direct models. Figure 2 presents the results of the partial mediation model ($\chi^2(46) = 98.37$, CFI = .90, RMSEA = .09, SRMR = .07).

The results displayed in Figure 2 confirm Hypothesis 1, demonstrating that the relationship between perceived management support for change and readiness for change is positive and significant ($\beta = .81$, $p < .001$). Similarly, Figure 2 confirms Hypothesis 2, showing that the relationship between PsyCap and readiness for change is positive and significant ($\beta = .23$, $p < .05$). Hypothesis 3 proposed that PsyCap would be positively linked to perceived management support for change. Results in Figure 2 show the

Table 2. Fit statistics from measurement model comparison.

| Models | χ^2 (df) | CFI | RMSEA | SRMR | χ^2_{diff} | df_{diff} |
|--|-------------------|------------|------------|------------|-----------------|-------------|
| Full measurement model | 40.36 (24) | .96 | .08 | .05 | | |
| Model A ^a | 92.76 (26) | .85 | .15 | .10 | 52.40 | 2** |
| Model B ^b | 124.50 (26) | .79 | .19 | .10 | 84.14 | 2** |
| Model C ^c (Harman's Single Factor Test) | 137.31 (27) | .76 | .19 | .10 | 97.35 | 3** |

Notes: $N = 120$; χ^2 = chi-square discrepancy; df = degrees of freedom; CFI = Comparative Fit Index; NFI = Normed Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual; χ^2_{diff} = difference in chi-square, df_{diff} = difference in degrees of freedom. All models are compared to the full measurement model.

^aPsychological capital and perceived management support combined into a single factor.

^bPsychological capital and readiness for change combined into a single factor.

^cAll factors combined into a single factor.

** $p < .001$.

Table 3. Descriptive statistics.

| Variables | | Mean | SD | α | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-----------|---|------|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. | Readiness for organizational change | 4.13 | .79 | .83 | | | | | | | | | | | |
| 2. | Emotional readiness for change | 4.34 | .85 | .81 | .87** | | | | | | | | | | |
| 3. | Cognitive readiness for change | 3.78 | .97 | .88 | .90** | .61** | | | | | | | | | |
| 4. | Intentional readiness for change | 4.38 | .90 | .88 | .82** | .62** | .64** | | | | | | | | |
| 5. | Psychological capital | 4.74 | .59 | .81 | .49** | .47** | .38** | .42** | | | | | | | |
| 6. | Efficacy | 5.03 | .83 | .90 | .24** | .29** | .16 | .17 | .72** | | | | | | |
| 7. | Hope | 4.75 | .76 | .87 | .43** | .41** | .31** | .45** | .86** | .44** | | | | | |
| 8. | Resilience | 4.72 | .63 | .80 | .36** | .36** | .27** | .32** | .83** | .43** | .68** | | | | |
| 9. | Optimism | 4.46 | .74 | .79 | .53** | .45** | .50** | .42** | .81** | .35** | .64** | .63** | | | |
| 10. | Perceived management support for change | 3.95 | .97 | .72 | .61** | .45** | .60** | .54** | .43** | .26** | .33** | .31** | .49** | | |
| 11. | Perceived senior manager support for change | 4.10 | 1.05 | .82 | .56** | .41** | .56** | .46** | .35** | .20* | .25** | .26** | .40** | .88** | |
| 12. | Perceived supervisor support for change | 3.81 | 1.13 | .88 | .53** | .38** | .51** | .49** | .42** | .26** | .34** | .29** | .46** | .89** | .57** |

Note: $N = 120$.** $p < .01$.* $p < .05$ (two-tailed tests).

Table 4. Fit statistics from structural model comparison**.

| Models | χ^2 (df) | CFI | RMSEA | SRMR |
|--------------------------------------|---------------|-----|-------|------|
| Full mediation model ^a | 124.55 (47) | .86 | .12 | .09 |
| Partial mediation model ^b | 98.37 (46) | .90 | .09 | .07 |
| Direct model ^c | 102.93 (49) | .89 | .10 | .08 |

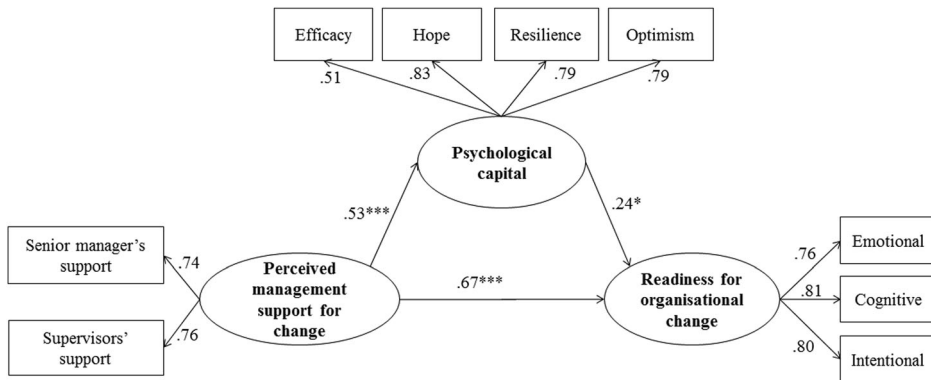
Notes: $N = 120$; χ^2 = chi-square discrepancy, df = degrees of freedom; CFI = Comparative Fit Index; NFI = Normed Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

^aWithout the path from perceived management support to readiness for change.

^bWith the path from perceived management support to readiness for change.

^cWithout the path from perceived management support to psychological capital.

** $p < .001$.



Note: $N = 120$. Standardized coefficients are reported. All factor loadings are significant at $p < .001$

* $p < .05$

** $p < .01$

*** $p < .001$

Figure 2. SEM results.

relationship between perceived management support for change and PsyCap is positive and significant ($\beta = .53$, $p < .001$). Therefore, Hypothesis 3 is supported.

Hypothesis 4 proposed that PsyCap would mediate the relationship between perceived management support for change and readiness for change. Baron and Kenny's (1986) four conditions for determining mediation require that:

- (1) there is a significant relationship between the independent variable and dependent variable. This is established by the support found for Hypothesis 1, which showed a significant relationship between perceived management support for change and readiness for change;
- (2) there is a significant relationship between the independent variable and mediator. This is established by the support found for Hypothesis 3 with the significant relationship identified between perceived management support for change and PsyCap;
- (3) there is a significant relationship between the mediator and dependent variable. This was established by the support found for Hypothesis 2 in the significant relationship between PsyCap and readiness for change;

- (4) there is a reduced impact of the independent variable on the dependent variable after adding the mediating variable. Full mediation is achieved when such an impact becomes non-significant and partial mediation is achieved when such an impact still stays significant. Results in [Figure 2](#) show that after adding PsyCap, the impact of perceived management support on readiness for change was reduced but still stayed significant (from $\beta = .81, p < .001$ to $\beta = .68, p < .001$), providing support for a partial mediation.

In addition, to confirm the partial mediation model, a competing model of full mediation (i.e. without the link between perceived management support and readiness for change) was conducted. The comparison between the two models (with and without the above link) indicates that the partial mediation model has a better fit than the full mediation model ($DX^2 = 30.24, p < .001$).

To assess the significance of the mediation effect, Preacher and Hayes (2004) bootstrapping tests were adopted to examine the significance of the mediating effect of PsyCap in the relationship between perceived management support and employees' readiness for organizational change (Sobel, 1982). The bootstrapped bias corrected confidence intervals are preferred over the Sobel test because of the unrealistic assumption that the Sobel test makes regarding a normal sampling distribution for the indirect effect (Hayes, 2009; Preacher & Hayes, 2008). The results provided support for PsyCap acting as the mediator between perceived management support for change and readiness for change (the 99% confidence interval of bootstrapping was between .02 and .20, which does not include 0). Thus, Hypothesis 4 is supported.

Discussion

The aim of this study was to investigate the mediating role of the individual psychological resources embodied by psychological capital (PsyCap) in the relationship between perceived management support and employees' readiness for change. Results of SEM demonstrated that PsyCap partially mediates the relationship between management support and employees' readiness for change. This indicates that employees' responses to change are shaped by both their personal psychological resources and their perceptions of the organizational environment.

Scholarly implications

Within the existing literature on employees' responses to change, research has primarily focused on the direct effects of various antecedent variables on readiness for change (e.g. Bouckennooghe et al., 2009). In 2011, Oreg, Vakola and Armenakis suggested that relationships between antecedents and outcomes with respect to readiness for change are likely to be more complex and layered than extant research suggested (Oreg et al., 2011). They advocated that researchers examine mediating variables in the relationships between the antecedents and readiness for change itself, as a route to more comprehensive understanding of the dynamics by which individuals and organizations prepare for change. In response to this, the current study undertook to explore the mediating role of PsyCap in the relationship between perceived management support for change and readiness for change.

The study found support for all four hypotheses that were proposed. Perceived management support for change was found to be related to both readiness for change and PsyCap, PsyCap was positively related to readiness for change, and PsyCap mediated the relationship between perceived management support for change and employees' readiness for change. The study therefore suggests that when employees perceive their managers to be supportive of change, they feel more positive about their own ability to cope with oncoming challenges and are more prepared for change. This underlines the general principle that an employee's ability to respond effectively to organizational change is determined by relationships between their own psychological resources and their perceptions of the social environment in which the change is occurring.

The results of this study offer a number of important contributions to the literature on organizational change. First, the research reinforces the importance of relationships between employees and management in securing the success of a change initiative. The benefits of supportive managerial relationships are well-established in extant literature. They have been identified as relevant to a number of important organizational outcomes such as citizenship behaviour (Podsakoff, MacKenzie, Paine, & Bachrach, 2000; Whittington et al., 2004), organizational involvement (Aselage & Eisenberger, 2003; Coyle-Shapiro, 2002), commitment to organizational goals (Shore, Barksdale, & Shore, 1995) and the transfer of learning from training (Chiaburu, Van Dam, & Hutchins, 2010). Our findings confirm the importance of perceptions of management support in organizational outcomes generally, and go further to highlight their particular value in a change context. The introduction of change often sparks a sense of disruption, unease and fear among those affected. Managers and supervisors play a significant role in allaying this anxiety by providing appropriate practical and emotional support to employees. In implementing an organizational change, the current results should encourage managers and supervisors to emphasize their own commitment to the change process and demonstrate their willingness to support employees in dealing with the challenges it will bring.

Second, the study directs attention to employees' perceptions of the organization and the personal characteristics that influence those perceptions. In fostering a culture of supportive management, it cannot be assumed that support is something that can simply be bestowed by management on passive employees, with a direct impact on readiness for change. Employees' own psychological resources influence their interpretation of managerial actions, and hence they mediate the way in which management style influences employee engagement with change. The present study focused specifically on the role of PsyCap in mediating the relationship between perceived management support and readiness for change. The analysis showed that the effects of managerial and supervisor support on readiness for change are stronger when employees have robust levels of PsyCap. This finding is in line with much other work that has found PsyCap to be associated with change-related variables (Armenakis & Harris, 2009; Avey et al., 2008; Caldwell, 2011; Gondo et al., 2013; Luthans et al., 2010). It is also consistent with Fredrickson's (2001) broaden-and-build theory, in highlighting the reciprocal relationship between positive psychological states and effective engagement with the social environment. Individuals' personal characteristics influence how they interpret and respond to the environment around them, and can be drawn on to facilitate more adaptive responses to work demands (Fredrickson, 2001; Kamdar & Van Dyne, 2007; Shin, Taylor, & Seo, 2012).

Implications for practitioners

These empirical results have important practical applications. The finding that PsyCap mediates the effects of supportive managerial relationships suggests that efforts to foster readiness for change should be multi-levelled, targeting employees' personal psychological resources as well as management behaviour. Top-down organizational initiatives will have limited effect if they are not accompanied by efforts to foster employees' levels of hope, self-efficacy, resilience and optimism – the four components of PsyCap. As a state-level individual difference variable, PsyCap is malleable by definition, and research has indeed established that PsyCap can be developed and enhanced through training (Bolier et al., 2013; Luthans et al., 2010; Peterson et al., 2011; Zhang et al., 2014). For instance, Luthans, Avey, Avolio, Norman, and Combs (2006) describe a micro-intervention that increases PsyCap by targeting individuals' hope, optimism, efficacy and resilience; while Luthans, Avey, and Patera (2008) present experimental evidence that a web-based training programme successfully increased PsyCap levels. Investing in such initiatives, by allowing employees the time, space and activities to develop PsyCap, would cultivate readiness for change among employees and foster greater propensity to adapt effectively to change demands.

Strengths, limitations and future research

This study offers a number of routes to advance the prevailing literature. In the first instance, the results confirm Oreg et al.'s (2011) suggestion regarding the importance of considering mediating variables between identified antecedents of readiness for change and readiness for change itself. This is also in line with recent attempts to reformulate conceptualization of readiness for change as a complex multidimensional process rather than stable psychological entity (Stevens, 2013). Specifically, the current data suggest a more complex relationship between perceived management support and readiness for change than has previously been considered. This precedent may apply to other process- and climate-based antecedents of readiness for change. Future research that expands on these possibilities will lead to more powerful theoretical accounts of organizational change and more finely-honed strategies for aiding real-world instances of organizational change.

A further advance on existing literature is the study's demonstration of the importance of state-like individual difference variables in the processes of organizational change, a topic which has been largely overlooked in research to date (Choi, 2011). While previous research has established that PsyCap is related to a number of work-related behaviours (Avey et al., 2011; Jian & Hanling, 2009; Luthans et al., 2010; Meyers, van Woerkom, & Bakker, 2012), this study extends the application of PsyCap to include readiness for change. As such, it confirms Choi's (2011) proposition that the relationship between state-like elements of personality and readiness for change offers a potentially rich source of insight. The intrinsic malleability of state-level variables means that research on their operation can directly inform practical interventions, since these attributes can be targeted to serve positive organizational outcomes. The research is therefore of applied as well as theoretical value. The applied relevance and validity of the study is further reinforced by its origins in a genuine context of organizational change rather than an experimentally-generated hypothetical scenario.

These strengths notwithstanding, the results must be considered in light of a number of methodological limitations. In particular, reliance on self-report measures from a single organization at a single point in time is problematic, because temporal relationships between the focal variables cannot be established. It is difficult to ascertain the direction of causality between the variables. Does management support foster PsyCap, or does PsyCap lead people to interpret management's actions in more positive ways? It is likely that both of these interpretations are partially and simultaneously true, with the different constructs operating in a mutually sustaining manner (in the vein of Fredrickson's, 2001, 'broaden-and-build' theory). As previously discussed, previous research establishes a causal effect of perceptions of managers on psychological capital and job performance (Rego et al., 2012); this is therefore a conceptually and empirically plausible directionality. Nevertheless, a multi-wave data collection methodol would be invaluable for clarifying these dynamics. Although situational constraints prevented the use of a longitudinal design in this case, this should be a priority for future research. Examining this mediational model during specific organizational discontinuous events and incremental change processes (Brown & Eisenhardt, 1997; Weick & Quinn, 1999) presents an especially interesting avenue to explore.

A further limitation of the current study relates to the relatively small sample size, and its specificity to the employees of one organization. The response rate was low, although not atypical of web-based surveys in organizational contexts (Frey, 2000; Klassen & Jacobs, 2001). Further research should seek to replicate the results with a larger sample and in a more diverse array of organizational contexts. Future research may also benefit from including a qualitative component, which would help describe and contextualize the dynamic interrelations between psychological resources, relationships with management and responses to organizational change. This could inform a more refined model that could be tested in further quantitative studies. Since the current study investigated only three variables, future research should also extend investigation of mediation and moderation to the many other variables that have been linked to organizational change (Oreg et al., 2011). It would be interesting to explore whether PsyCap mediates the effects of other environmental variables that influence readiness for change, for instance peer support or access to advice networks (Vardaman, Amis, Dyson, Wright, & Van de Graaff Randolph, 2012). Finally, to optimize the value of this research field to organizational practice, developing and testing the effectiveness of a PsyCap intervention on readiness for change should be a clear prerogative for future research.

Conclusion

This study established that PsyCap plays a partial mediating role in the relationship between perceived management support and readiness for change. By examining the inter-relationships between multiple variables, including state-based individual differences, the research addresses recognized weaknesses in the existing literature and offers a more holistic and ecologically valid insight into the processes by which employees ready themselves for change. Given the prevailing evidence that levels of PsyCap can be enhanced by tailored interventions (Bolier et al., 2013; Zhang et al., 2014), these findings also offer an empirical foundation on which to build finely tailored interventions to cultivate readiness for change. It is hoped that this study will spur additional research that

expands on its findings, with the aim of informing initiatives that help organizations to navigate the complex internal challenges that change presents.

Disclosure statement

No potential conflict of interest was reported by the authors.

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