REVIEW ARTICLE



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Integrating behavior and organizational change literatures to uncover crucial psychological mechanisms underlying the adoption and maintenance of organizational change

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Summary

Implementing successful organizational change is challenging, and to better understand it, researchers and practitioners have proposed a variety of models of change management. Paradoxically, while the behavior change of organizational members lies at the core of organizational change, theories and models of behavior change are rarely applied to organizational change management. Such knowledge could improve our understanding of underlying psychological mechanisms behind organizational change adoption and maintenance. Using self-determination theory as the framework, we developed a model of organizational change that integrates knowledge across the organizational and behavior change fields by (i) unifying change practices derived from organizational change models and from behavior change techniques, (ii) identifying and unifying underlying psychological mechanisms derived from theories that explain how organizational and behavior change occurs, and (iii) linking change practices to psychological mechanisms. The resulting model aims to provide theoretical and practical guidance for those involved in the planning and implementation of organizational change.

KEYWORDS

behavior change, organizational change management, reactions to change, self-determination theory

1 | INTRODUCTION

The ubiquity and inevitability of organizational change in today's world (Griffin & Grote, 2020) create an imperative for the development of evidence-based model that can be used to plan, implement, and evaluate change. Organizational change can be complex and costly to implement, and unfortunately, failures are frequent and lead to negative consequences for both organizations and individuals

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(Armenakis & Harris, 2002; Jones & Van de Ven, 2016; Stanley et al., 2005). Though research should improve the odds of successful change management, no unified framework adequately guides the adoption and maintenance of organizational change. To create such a framework, we started by integrating three streams of literature on change management, psychological factors underpinning change acceptance, and the behavior change literature. Then, to visualize pathways to successful organizational change, we developed an integrated model of organizational change (IMOC; see Figure 1) — a parsimonious structure to jointly view all organizational change

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practices and psychological mechanisms underlying change acceptance and underpinned by self-determination theory (SDT; Deci & Ryan, 1985).

SDT proposes a multidimensional conceptualization of motivation based on the degree to which a person has internalized the value of an activity, ranging from the absence of motivation to intrinsic motivation. SDT also proposes that three basic psychological needs for competence, autonomy, and relatedness promote internalization. Drawing upon SDT, the IMOC starts with the premise that the *internalization* of the value of a change is at the core of the adoption and maintenance of that change. The IMOC integrates unique non-overlapping and empirically supported practices and mechanisms contained across literatures on organizational change and behavior change, leveraging the strengths of both fields of inquiry (Cronin & George, 2023). It links change practices and psychological mechanisms to identify opportunities for enhancing our understanding of organizational change and offer actionable strategies that change agents can employ to conduct organizational transformations.

While the change management literature presents best practices through a range of models that frequently suggest step-by-step, almost recipe-like, solutions (Beer, 1980; Bodi et al., 1997; Cooperrider & Srivastva, 1987; Hiatt, 2006; Judson, 1991; Kanter et al., 1992; Kirkpatrick, 1985; Kotter, 2007; Maurer, 1996; Peters & Waterman, 1982; Satir & Baldwin, 1983; Thaler & Sunstein, 2008), they often do not explain why the steps and practices work. Accordingly, when things do not work as planned, change agents are left with little insight into potential alternative pathways to the desired outcome. Meanwhile, research on psychological factors underpinning change acceptance has empirically shown what influences change outcomes, including reviews of individual change acceptance, readiness, and mediating psychological mechanisms (e.g., Armenakis & Harris, 2009; Oreg et al., 2011). However, research on how organizational change practices influence psychological mechanisms have so far been limited to integrating only a few theories and models (Armenakis et al., 1999; Armenakis & Bedeian, 1999; Oreg et al., 2011, 2018; Stouten et al., 2018; Straatmann et al., 2016).

Finally, evidence from the rich body of individual behavior change research¹ (e.g., Michie et al., 2005) is particularly relevant to organizational change because it provides key insights into "mechanisms of action" through which change practices influence the adoption and maintenance of change of the individuals 'at the coal face' (Schenk et al., 2023). Indeed, along with its potential to contribute knowledge about additional practices and mechanisms involved in organizational change, behavior change research is known for its robust research designs inspired by clinical trial methods that more readily allow for causal inference than the more typical organizational studies, and

which some management scholars have argued we should emulate, whenever practical, to offer evidence-based practices (e.g., McFillen et al., 2013; Pfeffer & Sutton, 2006). The relatively new field of "implementation science" that has emerged from behavioral health research might enrich organizational change practice (e.g., Atkins et al., 2017; Moullin et al., 2020) by providing robust evidence that is difficult to obtain through organizational change research for feasibility reasons (e.g., difficulty of sampling many organizations undergoing similar change or having control groups; Barends et al., 2014; Erwin & Garman, 2010; Oreg et al., 2011).

In this integrative review, we discuss the IMOC from outcomes to antecedents (see Figure 1). We begin by explaining how we conceptualize change adoption and maintenance - two key indicators of successful change - and how internalization of change leads to such successful change. We then explain how we developed the front-end of the model in three steps. First, we searched the literature for empirically supported models and theories that address organizational and behavior change, drawing upon the previously separate streams in the literature. Second, we analyzed these models and theories to develop the IMOC's parsimonious sets of psychological mechanisms and change practices. Third, we analyzed which change practices are likely to affect which psychological mechanisms and, in doing so, explicate how change practices affect change internalization and, ultimately, successful change. We also discuss potential moderators (portrayed as shaded boxes in Figure 1) and what the resultant structure of the IMOC tells us about organizational change research. We end by discussing how the IMOC can be tested and used by practitioners.

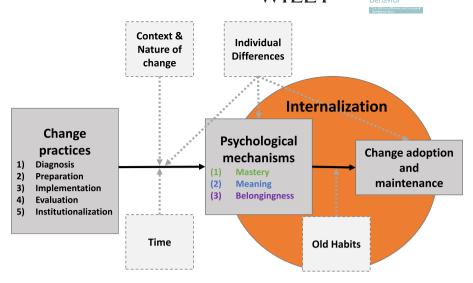
2 | CHANGE ADOPTION AND MAINTENANCE THROUGH INTERNALIZATION

The premise of the IMOC is that the success of organizational change nearly always depends on individual employees first adopting and subsequently maintaining behavior change (Whelan-Berry & Somerville, 2010). Drawing upon Herscovitch and Meyer's (2002) definition of *behavioral* support for change, we conceptualize the initial adoption of change along a continuum with five categories, including active resistance (i.e., overt opposition), passive resistance (i.e., covert opposition), compliance (i.e., reluctant minimum support), cooperation (i.e., acceptance and support), and championing (i.e., enthusiastic support). Another vital outcome for organizational change is the sustainability of change, sometimes referred to as maintenance, institutionalization, or "refreezing" (Armenakis et al., 1999). Implementation science uses a related construct called "sustainment," defined as "the continued enactment of processes, practices, or work routines that are conveyed and learned through an intervention" (Berta et al., 2019, p. 110).

Operationalizations of maintenance include continuously carrying out the behavior over a certain period (after interventions have commenced or ended), how automatic the new behaviors are, and the likelihood of enacting the correct behavior (Murray et al., 2018).

¹Behavior change research is a field of research that takes a person-centered approach to assist individuals in self-managing their health and that has focused on interventions that aim to change predominantly health-related behaviors, such as eating, exercising, and unhealthy behaviors (smoking, drinking, drug use), as well as behaviors directed at performance (sport, organizational), social (e.g., altruism), and environmental (e.g., recycling) realm. The field is also referred to as implementation science, health behavior change, health psychology, and behavior modification. We used behavior change because this is the label used by Susan Michie's health psychology's research team.

FIGURE 1 The integrated model of organizational change. This figure harmonizes the organizational change and behavior change literature to describe the main pathway (i.e., the dark grey boxes); the dashed, light grey boxes reflect potential moderators of the main pathway, which are considered in the discussion section. Colors are used to link the same constructs in subsequent figures.



Precisely at which point a change in behavior can be considered "maintained" has also received wide consideration in the behavior change literature, which typically considers 6 to 24 months of sustained engagement as proof of maintenance or habit formation after which relapsing to old behaviors becomes less likely (Kwasnicka et al., 2016; Marcus et al., 2000; Murray et al., 2018; Paganini et al., 2022). In an organizational change context, we must acknowledge that the time it takes for behavior to be maintained may depend on the type of organizational change, the context in which the change is implemented, and that time perceptions during organizational change are not linear (Bouckenooghe et al., 2021). Pending further research, we propose that maintenance is achieved when a behavior is integrated in a person's work routine and enacted competently (Birken et al., 2020; Wong et al., 2022).

The IMOC focuses on how sustainable behavior change can best be achieved using the concept of internalization offered by SDT, which is already heavily used in the field of behavior change. In addition, SDT offers a wider theoretical model that provides the psychological processes necessary to foster internalization and for dealing with increasing uncertainty in today's work environment (Gagné et al., 2022) that can ultimately guide which practices should be used to promote change adoption and maintenance. Given that behavior (change) is necessarily motivated, we assume, in line with major motivational theories (e.g., social-cognitive theory, Bandura, 2001; SDT, Deci & Ryan, 1985; goal-setting theory, Locke & Latham, 2002), that humans are the most important agents of their own behavior. Indeed, both motivational (Deci & Ryan, 1985) and organizational change theories (e.g., Herscovitch & Meyer, 2002) argue that successful adoption and maintenance of organizational change requires employees to want to change their behavior; that is, it requires that employees understand and internalize change-related values and behaviors.

Internalization is defined as a propensity of humans to take in and transform values and behaviors they get from their environment into internal tools to regulate themselves (Deci & Ryan, 1985). Internalization makes employees proactive, self-governed agents of change who volitionally and cooperatively carry on the change without the need

for external control, monitoring, or sanctioning, and who speak positively about the change (i.e., champion the change; Herscovitch & Meyer, 2002; Koestner & Losier, 2002). We argue internalization is important for both the adoption of the behavior and for its maintenance, that is, for both the behavioral "switch" and for the sustainability of that switch over time.

SDT operationalizes internalization through a continuum of motivation types, or reasons for doing something. Intrinsic motivation is defined as doing something for its enjoyment and considered completely internalized, while various forms of extrinsic motivation vary in how internalized they are: Identified regulation refers to doing something because it is considered important and meaningful, introiected regulation refers to doing something to preserve one's selfesteem, and external regulation refers to doing something to obtain a reward or avoid a punishment. Finally, amotivation represents the absence of any motivation. More internalized forms of motivation (i.e., identified and intrinsic motivation) are more positively associated with performance, organizational commitment, retention, and wellbeing, than less internalized forms of motivation (external and introjected regulations; Van den Broeck et al., 2021). Meta-analyses in the health behavior domain also provide strong support for the proposition that internalized motivation, and interventions that promote it, yield better behavioral change adoption and maintenance (Gillison et al., 2018; Ng et al., 2012; Ntoumanis et al., 2021; Sheeran et al., 2020; Teixeira et al., 2020).

Models of organizational change recognize concepts akin to internalization that are considered vital to successful change. For instance, organizational change commitment theory (Herscovitch & Meyer, 2002) provides a useful way to describe the process of change internalization. Herscovitch and Meyer defined organizational change commitment as a force or mindset that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative and demonstrated that people can commit to organizational change in three different ways: (1) continuance commitment reflects "a recognition that there are costs associated with failure to provide support for the change," (2) normative commitment

Change Internalization Motivation: Identified Amotivation External Introjected Intrinsic **Commitment:** Continuance **Normative** Affective **Behavioral** Active Passive Compliance Cooperation Championing Reaction: Resistance Resistance

FIGURE 2 Degree of change internalization captured through motivation, commitment, and behavior.

reflects "a sense of obligation to provide support for the change," and (3) affective commitment reflects "a desire to provide support for the change based on a belief in its inherent benefits" (p. 475). Jointly, the motivational and organizational change perspectives can be portrayed along a continuum of internalization (depicted in Figure 2). There is evidence that the forms of motivation proposed by SDT map onto the different commitment mindsets used in organizational change research (Gagné et al., 2008; Meyer et al., 2010), which in turn map onto the continuum of adoption from compliance to championing (Herscovitch & Meyer, 2002).² Research also demonstrates that affective commitment to change is related to deeper adoption (cooperation and championing), followed by normative commitment. Though continuance commitment to change was proposed to relate most to compliance, uncommitted employees showed similar levels of compliance. demonstrating that unless employees have compelling reasons to actively resist change, they will not do so as it may be too risky or costly (Herscovitch & Meyer, 2002).

Successful internalization of change depends on psychological states that are triggered by organizational change practices. Many theories have been developed to explain the psychological processes that lead to successful behavior change, and a large body of literature has been dedicated to identifying managerial practices and organizational strategies that yield successful change. To develop an integrative model that parsimoniously summarizes the psychological mechanisms and empirically supported practices underlying change internalization, we conducted a literature search.

3 | LITERATURE SEARCH

We established a set of criteria to identify relevant literatures: (i) wide application (could be, or has been, used for different types of change or contexts); (ii) focused on proposing a theory/framework/model

(i.e., offers new concepts and operationalizations); (iii) based on either research evidence or recognized as efficient practice in the field. Two independent literature searches were conducted. The first used the keywords "organi(s)zational change," "change management," and "organi(s)zational development" by themselves and in conjunction with the search terms "framework," "theory," and "model" using Scopus, PsycInfo (Ovid), Google Scholar, and ProQuest. We did not limit the search to a specific period, and we also searched practitioner resources/websites (e.g., www.mckinsey.com) that aim to provide guidelines for the implementation of organizational change, materials from other institutions that provide advice on organizational change management (e.g., the Workforce Development resources of the Australian National Centre for Education and Training on Addiction; State Services Authority Victoria, 2013), and textbooks on organizational change (e.g., Cummings & Worley, 2018). The second search was conducted with the keyword "behavio(u)r change" in MEDLINE and in the above-mentioned search engines. Due to the sheer volume of search results (e.g., 68 359 search results on Medline) and our goal to conduct an integrative review (Cronin & George, 2023), upon reaching a point of information saturation — not being able to identify new theoretical perspectives on behavior/organizational change — we ceased reviewing the literature and commenced summarizing and harmonizing these bodies of literature.

Figure 3 summarizes the findings from the two literature searches based on the inclusion criteria. The organizational change search uncovered literature describing 14 prescriptive models of change (i.e., models that prescribe change-related managerial practices and organizational strategies), one process-oriented change model (i.e., model explaining how practices influence resistance and acceptance of organizational change), and three theories that describe psychological mechanisms that explain change adoption and maintenance. The behavior change literature uncovered the Human Behavior Change framework from the field of behavior change (Cane et al., 2012; Carey et al., 2019; Connell et al., 2019; Johnston et al., 2021; Michie et al., 2005, 2011, 2013, 2021; Teixeira et al., 2020) and four theories that describe psychological mechanisms that explain change adoption and maintenance. Altogether, the

²Oreg et al. (2023) alternatively align responses to organizational change along two dimensions, namely activation and valence.



TABLE 1 Psychological mechanisms of change identified in theoretical models of change and the psychological mechanism families identified in the integrated model of organizational change.

| IMOC | MROC | ТРВ | TAM | ABM | НВМ | SDT | SIT |
|---------------|---------------------------|------------------------------|-----------------------|------------------------|----------------------------|-------------------------|---|
| Mastery | Change self- efficacy | Perceived behavioral control | Perceived ease of use | Secondary appraisal | Self-efficacy; barriers | Feelings of competence | Observational learning |
| Meaning | Perceived appropriateness | | Perceived usefulness | Primary appraisal | Susceptibility | Feelings of autonomy | |
| | Perceived valence | Attitudes toward change | | | Seriousness; benefits | | |
| Belongingness | | | | | | Feelings of relatedness | Assimilation (similarity)/ identification |
| | | Subjective norms | | | | | Group norms |

Abbreviations: ABM, affect-based model; HBM, health belief model; IMOC, integrative model of organizational change; MoA, mechanisms of action; MROC, model of readiness for organizational change; SDT, self-determination theory; SIT, social identity theory; TAM, technology acceptance model; TPB, theory of planned behavior.

literature described 21 different psychological mechanisms and 26 practices. In addition to separately describing these mechanisms and practices, we describe the results of two Q-sort exercises, one that identifies non-overlapping psychological mechanisms and one that links change practices to the mechanisms.

4 | PSYCHOLOGICAL MECHANISMS UNDERLYING ADOPTION AND MAINTENANCE

Psychological mechanisms are an employee's internal processes that predict change internalization. There have been considerable

advances to systematically integrate knowledge on psychological mechanisms (Bartunek et al., 2006; Brown, 2010; Hagl et al., 2024; Holt et al., 2007; Jimmieson et al., 2008; Mathieson, 1991; Oreg et al., 2011, 2013, 2018; Rafferty et al., 2013; Rafferty & Griffin, 2006; Stouten et al., 2018), but none as comprehensive as ours in terms of the number of mechanisms considered. We begin by reviewing the seven theories uncovered in our literature search, which covered 21 psychological mechanisms considered important for change adoption and maintenance. To identify any overlap between the psychological mechanisms, we used a Q-sort process (described in detail after the individual theories), which resulted in three non-overlapping psychological mechanisms deemed essential to the adoption and maintenance of organizational change (see Table 1).



4.1 | Model of readiness for organizational change

This model (MROC; Holt et al., 2007) proposes that readiness to change, which mediates the effect of organizational change practices on change adoption and maintenance, comprises three factors. *Self-efficacy* reflects beliefs about one's own abilities to deal with the change. *Perceived appropriateness* represents beliefs about the legitimacy of the change. *Perceived valence* reflects beliefs about the personal costs and benefits of the change initiative.

4.2 | The theory of planned behavior (TPB)

This theory (TPB; Ajzen, 1991) proposes that intention is the most proximal or immediate predictor of behavior and that three beliefbased components influence intention. Positive or negative attitudes towards an activity are described as anticipating positive outcomes out of behavior engagement. Perceived behavioral control is described as feeling able to enact the behavior in question, while subjective norms are described as what is considered acceptable and mainstream behavior by other relevant people (Ajzen, 1991). Meta-analytic results in various fields support the importance of the three factors across a variety of TPB-informed interventions (Hagger et al., 2002; McEachan et al., 2011; Rich et al., 2015; Steinmetz et al., 2016), including organizational change (Ahmad et al., 2020; Dawkins & Frass, 2005; Jimmieson et al., 2008, 2009; Mathieson, 1991; Rei et al., 2002; Straatmann et al., 2016; Yang et al., 2018). Moreover, as shown in the field of behavior change, TPB is effective in predicting behavior maintenance a year after intervention (Gucciardi & Jackson, 2015).

4.3 | Technology acceptance model

Given that technology is increasingly involved in organizational change or instigates the change itself, the TAM (Davis, 1989; Venkatesh & Davis, 1996) assesses individual willingness to adopt technology. Drawing on the TPB, the TAM proposes that the intention to use a technology is a function of two independent perceptions: the *usefulness* of the technology, or whether the change will help performance, and its *ease* of use, or the extent to which change is effort-free. The TAM has received extensive empirical support for its application to technology change (Lai, 2017; Sharp, 2007; Yousafzai et al., 2007a, 2007b), and while perceived usefulness is one of the strongest predictors of intentions to adopt technology, perceived ease of use is often found to be *indirectly* related to attitudes and intentions via perceived usefulness (Moeser et al., 2013; Schepers & Wetzels, 2007).

4.4 | Affect-based model of recipients' responses to organizational change

This model (ABM; Oreg et al., 2018) considers both the valence (degree of pleasantness: positive vs negative) and activation (degree of arousal: active vs passive) of change-related emotions to cover

passive to active resistance and passive to active endorsement. Cognitive appraisals predict emotions toward change and can be divided into *primary appraisal* (how a goal is relevant to the self and whether it aligns with personal interests) and *secondary appraisal* (individual coping potential or ability to influence the event; Lazarus, 1991). Response valence is shaped by primary appraisals, while response activation is shaped by secondary appraisals.

4.5 | Health belief model

This model (HBM; Becker, 1974; Hochbaum, 1958; Rosenstock, 1966), supported by meta-analyses (Carpenter, 2010; DiMatteo et al., 2007; Harrison et al., 1992), aims to explain health behavior change, demonstrating that behavior change interventions are more effective when they address individual perceptions about susceptibility (personal relevance), seriousness (how serious the problem is that change will solve), benefits of the change, perceived barriers to change, and self-efficacy (Carpenter, 2010; Chatzisarantis et al., 2014). Interventions adopting this model deal with threat appraisal, incorporate tailored cues to change (i.e., messages, information prompting for change, change related communication), and training. Threat appraisals represent concerns over potential future losses (Lazarus & Folkman, 1984), and in the organizational change literature, the threat-based approach has been applied through capturing employees' experience of change via perceptions of what is at stake, or what the change may cost them. Fugate et al. (2012) found that threat appraisals acted as an important cognitive mechanism to explain how HBM variables (self-efficacy, susceptibility, benefits, barriers, and seriousness) predicted absenteeism and turnover, while Kump (2021) proposed how to frame threats to mobilize sustainable change.

4.6 | Self-determination theory

SDT's conceptualization of motivation (Deci & Ryan, 1985) was already described in the section on internalizing change. Another part of the theory deals with psychological mechanisms that facilitate internalization, namely, the satisfaction of three psychological needs for *autonomy* (feeling volitional), *competence* (feeling effective in influencing one's environment), and *relatedness* (feeling connected to others; Deci & Ryan, 2000). Meta-analytic evidence in both the behavioral health domain and in the work domain supports the importance of these three needs for internalization and the development of autonomous motivation and for behavioral adoption and maintenance (Ng et al., 2012; Ntoumanis et al., 2021; Teixeira et al., 2020; Van den Broeck et al., 2016) and the importance of supporting them (Slemp et al., 2024).

4.7 | Social identity theory

A social identity is defined by attributes shared with other members of a self-inclusive social category, while identification is defined through the prominence of a given group membership or category in a person's self-concept, emotional evaluation of that group membership or category, and in-group similarity and ties (Hogg & Terry, 2000). According to SIT, internalization occurs from observational learning about others' values or attitudes (behavioral norms) and identification with others acts as a socialization mechanism (Ashforth & Mael, 1989; Jimmieson et al., 2008; Terry et al., 1999). During organizational change, it is useful for organizational members to see themselves as alike as uncertainty triggers people's need for normative anchors to guide their attitudes and behaviors and derive meaning out of the change (Burke, 1991; Clark et al., 2010; Hogg, 2000; Lockwood et al., 2012; Van Dick et al., 2018).

INTEGRATION OF PSYCHOLOGICAL **MECHANISMS**

To assess the degree of commonality in the 21 psychological mechanisms that the seven theories propose, the four authors used the Q-sort method to emulate the consensus approach employed by Michie's research team (Abraham & Michie, 2008; Michie et al., 2013) and Teixeira et al. (2020). Q-sort methodology is particularly useful for capturing the complexity of individual viewpoints in a structured way and consists of two stages including judges running independent item groupings according to their similarities and differences followed by in-depth discussions for items on which agreement is low (Stephenson, 1953). In some respects, it is similar in purpose to factor analysis but uses qualitative rather than quantitative information. All authors individually organized the mechanisms according to their similarities and differences and then assigned each "grouping" a label, without imposing any predetermined grouping number. Given that individuals used their own subjectivity to sort mechanisms, it was to be expected that the different judges would arrive at different thematic combinations of mechanisms, and the authors independently came up with three to six categories with considerable overlap in which mechanisms were grouped together. A group discussion ensued to resolve differences observed between the independent Q-sorts, which led to merging some of the proposed categories and recategorizing a few mechanisms. Three groupings emerged that the authors collectively agreed could not be collapsed any further without loss of internal consistency. Further, the author team agreed that dividing the categories up into smaller sub-categories did not yield any additional unique information. The three mechanisms were labelled as mastery, meaning, and belongingness, which we define as being state-level constructs that are malleable across time and settings. We describe each of these broad groupings of mechanisms below.

Mastery is a psychological mechanism that describes people's feelings of mastery and control during organizational change. The grouping includes the following mechanisms together, all of which hold elements of mastery and control: self-efficacy from the MROC and HBM, perceived control from the TPB, perceived ease of use from TAM, competence from SDT, secondary appraisals reflecting

perceived coping potential from the ABM, perceived barriers to change from the HBM, and observational learning from SIT. These constructs address how people cope with change to continue to feel in control at work. Without the belief that one has the ability and control to manage change demands, it is doubtful there would be high levels of adoption and maintenance. Threats to mastery during change can lead to feelings of helplessness and disengagement (Seligman, 1972).

Meaning is a psychological mechanism that describes a sensemaking process during organizational change³ that leads to seeing the change as purposeful. The grouping includes the following mechanisms: five mechanisms about the meaning of the change for the self, including valence from the MROC, attitudes from the TPB, usefulness from the TAM, primary appraisals from the ABM, and susceptibility from the HBM, and two other mechanisms were deemed to be about meaning for the collective (i.e., groups of stakeholders), including perceived change appropriateness from the MROC, and seriousness from the HBM. Finally, autonomy from SDT is intimately related to the above perceptions and appraisals because it describes feelings of volition or self-endorsement towards a course of action: one must perceive an activity as legitimate and worthwhile to volitionally engage in it (Weinstein et al., 2012). Indeed, SDT research has shown the importance of having a purpose or providing a rationale (i.e., creating meaning) to satisfy the need for autonomy (Deci et al., 2006; Slemp et al., 2024; Steingut et al., 2017). In addition, SDT research has shown that people experience more meaning when they feel autonomous (Martela et al., 2018); feeling volitional helps going through a deliberate sensemaking process, meaning (or a sense of coherence) being the result of it (Ryan & Deci, 2000). Recent research ultimately has shown that relations between meaning and autonomy are reciprocal across time (Martela et al., 2024). Thus, experiencing meaning is the essence behind volition and is critical for internalizing organizational change. Threats to meaning from uncertainty created by change (Stillman & Baumeister, 2009) can therefore hamper the internalization process, leading to superficial adoption and low maintenance.

Belongingness is a psychological mechanism that describes "a need to form and maintain strong, stable relationships" (Baumeister & Leary, 1995), and resulted from the following grouping of mechanisms: relatedness from SDT, identification and group norms from SIT, and subjective norms from the TPB. These mechanisms provide cues about social forces that can be exploited or attended to and that promote the internalization of the value of the change. In a sense, belongingness can serve as a force that bolsters the other two mechanisms by providing models and feedback on how effectively one is navigating through the change and using social guides to forge one's own meaning of the change. Threats to belongingness during change can lead to feelings of alienation that disturb learning, motivation, and performance (Baumeister et al., 2005; Lustenberger & Jagacinski, 2010).

 $^{^3\}mbox{Sense-making has been defined as "the ongoing retrospective development of plausible$ images that rationalize what people are doing" (Weick et al., 2005, p. 409).

5.1 | Reflecting on the psychological mechanisms underlying adoption and maintenance

Reflecting on the three mechanisms, we note, based on the HBM, that they are not only deemed to be essential to the adoption and maintenance of change across the seven models outlined above, but they are also under threat of being undermined during organizational change. For example, mastery can be threatened when a restructuring or the introduction of a new technology changes the way in which people, who previously felt highly competent, undertake their work tasks. It can also be threatened when changes impact an employee's access to resources. Meaning can be threatened when an organization changes the nature of its activities, values, or goals (e.g., exiting or entering a new market, abandoning a deeply held value) or when the changes impact employees' decision-making power. Finally, belongingness can be threatened if an organizational change involves downsizing or the reallocation of employees to new teams. If these psychological states are imperative to organizational change success and vet are instead undermined by the changes, it is essential for organizational change processes to deal with them effectively.

Of the three mechanisms of organizational change proposed herein, belongingness has been least considered across the models, which is surprising given the considerable number of organizational change and behavioral change practices that exploit it to increase internalization and adoption (e.g., Jimmieson et al., 2008). It is also likely to be the most crucial psychological mechanism leading to maintenance because social identity processes support the learning and internalization of target behavior (e.g., Terry et al., 1999), enhancing the self-regulation necessary for maintenance (Epiphaniou & Ogden, 2010; Kwasnicka et al., 2016). For example, an important determinant of employees' ongoing support for organizational change is the degree to which employees perceive a high degree of mutual trust between them and the organization (Kim et al., 2011; Oreg & Berson, 2019).

In summary, the IMOC proposes that three psychological mechanisms are crucial to the internalization necessary to get employees to change and maintain their organizational behavior in line with proposed organizational change. In the next section, we elaborate on the change practices that are theorized to activate these psychological mechanisms.

6 | LINKING CHANGE PRACTICES TO PSYCHOLOGICAL MECHANISMS

Change practices refer to managerial activities and organizational strategies during organizational change (and in the health domain, to practices enacted by health care providers towards individuals) to plan, implement, and review organizational change (Armenakis et al., 1999; Erwin & Garman, 2010; Stouten et al., 2018). In the behavior change field, practices are often termed "techniques" (Michie et al., 2011), but we find this term less applicable to the range of practices of organizational change. Our literature search uncovered change practices from (1) prescriptive practice models, (2) a process-

focused model, (3) behavior change research, and (4) research that had not been considered in existing models.

First, we discovered 14 prescriptive practice models that are empirically supported and popular in the organizational change literature because they are simple to understand and have a ready-to-use format (Beer, 1980; Bodi et al., 1997; Bridges, 1986; Cooperrider & Srivastva, 1987; Hiatt, 2006; Judson, 1991; Kanter et al., 1992; Kirkpatrick, 1985; Kotter, 1996, 2012; Maurer, 1996; Peters & Waterman, 1982; Satir & Baldwin, 1983; Thaler & Sunstein, 2008). They describe managerial practices and organizational strategies used in a specific order (hence, "prescriptive"). A previous synthesis by Stouten et al. (2018) identified seven of these 14 prescriptive models and derived 10 practices out of them (see Table 2). Second, we identified one process-focused model (Armenakis et al., 1999) which Stouten et al. (2018) also identified, that integrates prescriptive practices empirically shown to influence resistance and acceptance of organizational change. The model uses Armenakis and Bedeian's (1999) taxonomy to describe the content (the substance of the change), context (salient factors or conditions of the change context), process (the actions and steps taken during the period of organizational change), and individual differences considerations for organizational change. Our review only focuses on process considerations as they describe practices that would influence employee adoption (see Table 2).

Third, we supplement organizational change practices with behavior change practices that appeared to be relevant to organizational change (and not in our preliminary list) drawn from Michie's *Human Behavior Change framework*, (Cane et al., 2012; Michie et al., 2005, 2011, 2016, 2021), which encompasses an extensive taxonomy of techniques (i.e., practices) proven to help change health-related behaviors (Abraham & Michie, 2008; Carey et al., 2019; Michie et al., 2011, 2016; Teixeira et al., 2020). Finally, the literature search uncovered additional practices that were not explicitly identified in these prior integrations. These practices revolved around the themes of empathy, acknowledging employees' negative feelings toward the change, and transformational leadership (Bridges, 1986; Eisenbach et al., 1999; Herold et al., 2008; Kirkpatrick, 1985; Maurer, 1996; Oreg & Berson, 2019; Satir & Baldwin, 1983; Soenen et al., 2017; Thaler & Sunstein, 2008).

Altogether, our search yielded a long list of practices that overlapped substantially. We reorganized them under 26 non-overlapping practices that we ordered according to well-known organizational change stages: diagnosis, preparation, implementation, evaluation, and institutionalization (see Table 2). Because it may not be possible for an organization to adopt all 26 practices due to time, costs, and resources, it is important to choose a combination of practices that would efficiently influence the three psychological mechanisms. Therefore, it is important to understand how each practice is likely to influence the three psychological mechanisms that lead to adoption and maintenance of change.

Informed by the sorting method used by Michie's research team (Michie et al., 2008, 2013), the four authors conducted another Q-sort to organize the 26 practices according to how they would influence the three psychological mechanisms based on the literature

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 TABLE 2
 Organizational practices derived from the change models and theories.

| TABLE 2 Organizational pra | ctices derived from the chang | ge models and theories. | | |
|--|---|---|---|---|
| IMOC | Stouten et al. (2018) | Armenakis et al. (1999) | Health behavior change model | Other sources |
| Diagnosis: | | | | |
| (1) Uncovering discrepancies between actual and desired states | Assess the opportunity or problem motivating the change | | Discrepancy between current behavior and goal | |
| (2) Assessing appropriateness of potential solutions | | | Assessing pros and cons of the change | |
| (3) Assessing organizational readiness (including financial, material, and human resources) | | Attributes of organizational members | Problem solving | |
| Preparation: | | | | |
| (4) Fostering understanding of the change | | Communicating the appropriateness of the change | Information about consequences | |
| (5) Enhancing leadership capability | | Communicating ability to implement the change | | |
| (6) Finding political support | | Communicating organizational support | Information about others' approval | |
| (7) Creating cognitive dissonance or urgency (creating a need for change) | Mobilize energy for change | Communicating the discrepancy | Salience of consequences; incompatible beliefs | |
| (8) Having credible sources to deliver information | | Credibility of the change agents | Credible source | |
| (9) Appropriate information sharing | Communicate the vision | Persuasive communication | Framing/reframing; reattribution | |
| (10) Having a compelling vision for the change (including what, why and anticipated outcomes) | Formulate a clear compelling vision | Personal valence (intrinsic/extrinsic benefits of the change) | Behavioral contract | Transformational leadership (inspiring through a vision) |
| (11) Forming powerful coalitions of change champions | Select and support a guiding change coalition | | Exposure, associative learning; identification of self as role model; commitment | |
| (12) Acknowledging employees' negative feelings toward the change | | | Reduce negative emotions; anticipated regret; stress management; conserving mental resources | Empathy; transformational leadership (supporting followers' needs) |
| Implementation: | | | | |
| (13) Goal setting at all organizational levels | | | Goal setting; action planning | |
| (14) Restructuring organizational context to align change with other organizational characteristics | Institutionalize change in company culture, practices, and management succession | Human resource management practices; formalization activities | Restructuring the physical and the social environments | |
| (15) Formal training and practice of new change skills | Develop and promote change-related knowledge and ability | Training and development | Instruction on how to perform behavior; behavioral practice/ rehearsal; graded tasks; mental rehearsal | |
| (16) Vicarious learning | | Vicarious learning | Demonstration of the behavior; vicarious consequences; associative learning; social comparisons | Transformational leadership (having a role model) |
| (17) Active participation | Empower others to act | Participative decision- making | Participative goal setting; problem solving; action planning; review | Transformational leadership (stimulating innovation) |
| (18) Experimentation and trialing | | Enactive mastery; diffusion practices | Exposure; graded tasks | |



TABLE 2 (Continued)

| IMOC | Stouten et al. (2018) | Armenakis et al. (1999) | Health behavior change model | Other sources |
|--|--|---|---|---------------|
| (19) Feedback | | Performance appraisal | Feedback on behavior and outcomes; social comparison; verbal persuasion about capability | |
| Evaluation: | | | | |
| (20) Monitoring progress | Monitor and strengthen the change process | Management of internal/external information | Review outcome goal; monitoring by others; self- monitoring | |
| Institutionalization: | | | | |
| (21) Reinforcing change with appropriate incentives | Identify short-term wins and use to reinforce change | Employee selection; compensation | Rewards (material, social, self) | |
| (22) Remove barriers | | | Remove aversive stimuli | |
| (23) Repetition to transform changes into new habits | | | Habit formation and reversal; behavioral practice/rehearsal/ substitution; generalization of target behavior | |
| (24) Social support to create new social norms | | | Social support; information about others' approval | |
| (25) Cueing to make new behaviors more automatic | | | Prompts/cues; adding objects to the environment; self-talk | |
| (26) Developing rites and ceremonies to reinforce the change | | Rites and ceremonies | | |

Abbreviation: IMOC, integrative model of organizational change.

and empirical evidence on these practices and the psychological theories the mechanisms are based on. An initial discussion led us to acknowledge that a particular practice could influence more than one psychological mechanism. Using a Venn diagram with each circle of the diagram representing a psychological mechanism, each practice was placed inside one of the circles or inside one of the intersections between the circles, allowing seven possible categories and an eighth category where no mechanism was activated considered as well. Once all authors had completed their individual Q-sorts, the results were compared, and discrepancies were resolved through a discussion to reach consensus. Table 3 presents the results of our Q-sort and below we explain what evidence supports them.

6.1 | Practices that activate meaning

6.1.1 | Practices #1 and #7

Conduct a good diagnosis using collected information from multiple sources to uncover discrepancies between actual and desired states, and then create a need for change by creating cognitive dissonance or urgency through outlining the benefits of changing and the

⁴We also invited eleven organizational psychology experts to indicate which, if any, of the three mechanisms would be triggered by each practice using checkboxes through a Qualtrics survey. Two of the practices were recategorized by the author team as informed by the responses from these experts.

consequences of not changing to employees (Çalışkan & Gökalp, 2020; Güntner et al., 2019; Laurin et al., 2012; Nutt, 1986; Szamosi & Duxbury, 2002). These practices all legitimize the proposed change and communicate it effectively (Dutton et al., 2001; Huy et al., 2014; Rousseau, 2018; Rousseau & Tijoriwala, 1999; Teixeira et al., 2020; Värttö, 2019). Research has also shown that providing a rationale is predictive of autonomous motivation (i.e., being motivated by meaning and interest) during uninteresting activities (Steingut et al., 2017).

6.1.2 | Practice #4

Foster initial buy-in and understanding by communicating the outcomes of the diagnosis, such as what change is needed and why change is needed, what potential solutions exist, and what capabilities the organization has for the change (Kanter et al., 1992; Lau & Woodman, 1995; Nutt, 1986; Rousseau, 2018; Rousseau & Tijoriwala, 1999; Self et al., 2007; Szamosi & Duxbury, 2002; Wagner, 1994).

6.1.3 | Practice #10

Provide a compelling vision for the change that delineates what will change and why, with anticipated outcomes (Armenakis & Harris, 2009; Rousseau, 1996; Rousseau & ten Have, 2022; Stouten et al., 2018). A vision should convey how fairness played a role in the

 TABLE 3
 Integrating change practices with stages and psychological mechanisms.

| IMOC | Mastery | Meaning | Belongingness |
|---|---------|---------|---------------|
| Diagnosis: | | | |
| (1) Uncover discrepancies between actual and desired states | | х | |
| (2) Assess appropriateness of potential solutions | х | х | |
| (3) Assess organizational readiness (including financial, material, and human resources) | х | | |
| Preparation: | | | |
| (4) Foster understanding of the change | | х | |
| (5) Enhance leadership capability | х | х | x |
| (6) Find political support | | х | x |
| (7) Create cognitive dissonance or urgency (creating a need for change) | | х | |
| (8) Have credible sources to deliver information | х | Х | |
| (9) Appropriate information sharing (i.e., effective communication) | х | х | х |
| (10) Have a compelling vision for the change (including what, why and anticipated outcomes) | | Х | |
| (11) Form powerful coalitions of change champions | х | х | x |
| (12) Acknowledge employees' negative feelings toward the change | | х | x |
| Implementation: | | | |
| (13) Goal setting at different organizational levels | х | Х | |
| (14) Restructure the organizational context to align change with other organizational characteristics | х | х | |
| (15) Formal training and practice of new change skills | х | | |
| (16) Vicarious learning | х | | х |
| (17) Active participation | х | х | x |
| (18) Experimentation and trialing | х | | |
| (19) Feedback | х | х | |
| Evaluation: | | | |
| (20) Monitor progress | х | х | |
| Institutionalization: | | | |
| (21) Reinforce change with appropriate incentives | х | х | |
| (22) Remove barriers | х | | |
| (23) Repetition to transform changes into new habits | х | | |
| (24) Social support to create new social norms | | | х |
| (25) Cueing to make new behaviors more automatic | х | | |
| (26) Develop rites and ceremonies to symbolically reinforces the change | х | × | х |

Abbreviation: IMOC, integrative model of organizational change.

decision-making process (Melkonian et al., 2011; Nordhall & Knez, 2018; Rodell & Colquitt, 2009) as it influences the extent to which the change can be internalized (Tyler & Blader, 2003; van Knippenberg et al., 2006).

6.2 | Practices that activate mastery

6.2.1 | Practice #3

Assessing the organization's readiness for change (e.g., consideration of financial, material, and human resources; Armenakis & Harris, 2009; Armenakis et al., 1999; Rousseau & ten Have, 2022) helps ascertain the chance of success and build confidence (Güntner et al., 2019; Weiner, 2009).

6.2.2 | Practice #15

Learning new things, through formal training and rehearsing (Armenakis et al., 1999; Kim et al., 2019; Rerup & Feldman, 2011; Sartori et al., 2018; Weick, 1984) may improve internalization because learning relates inversely to uncertainty and directly to psychological safety (Edmondson, 1999) and to mastery (Yoon & Kayes, 2016).

6.2.3 | Practices #18 and #23

Experimenting and trialing are often described as ways to test the grounds, make graded changes, and inform adjustments and corrections to increase the odds of successful change (Feldman & Pentland, 2003; Stouten et al., 2018), while rehearsing (i.e., repetition)



helps turn changes into new habits (Gefen, 2003; Lally et al., 2010; Neal et al., 2006). Together, they help build competence and confidence (Kim et al., 2019).

6.2.4 | Practice #22

Removing anything that makes the change aversive is important to avoid discouraging engagement in the new behaviors (i.e., barriers; Cane et al., 2012; Carey et al., 2019; Reay et al., 2006; Soenen et al., 2017; Teixeira et al., 2020).

6.2.5 | Practice #25

Cueing to make new behaviors more automatic through ongoing communications reminding people of new behaviors and norms (Gollwitzer, 1999; Johnston et al., 2021; Kwasnicka et al., 2016; "repeated messages" according to Kotter, 1996) is particularly important for behavioral maintenance (Pedersen & Dunne, 2020); when behavior becomes automated with the support of cues and practice, conscious control of this behavior decreases and demands for self-regulation decline (Kwasnicka et al., 2016; Pedersen & Dunne, 2020) and help stabilize behavior following organizational changes (Brown et al., 2018; Edmondson, 2002; Gardner et al., 2012; Russell et al., 2017).

6.3 | Practices that activate meaning and mastery

6.3.1 | Practice #2

Assessing the appropriateness of potential solutions relative to the desired state provides a way of seeing whether the change delivers the solution to overcome the discrepancy between actual and desired states (Armenakis & Harris, 2009; Holt et al., 2007; Neves, 2009; Rafferty & Griffin, 2006).

6.3.2 | Practice #8

Having credible sources (people who believe in the change and are considered knowledgeable and competent; Beer, 1980; Hiatt, 2006; Kotter, 1996; Stouten et al., 2018) can provide information on both the necessity of the change and how to implement it effectively (Rousseau, 2018; Rousseau & ten Have, 2022; Teixeira et al., 2020).

6.3.3 | Practice #13

Goal setting at different organizational levels from higher-level strategy to unit and team goals, and to individual employee goals (Armenakis et al., 1999; Gollwitzer, 1999; Rousseau & ten Have, 2022;

Rousseau & Tijoriwala, 1999) helps transform the vision into individual goals. Activities that create hierarchical goal setting across the different layers of the organization can help people find their "role" in the change process relative to their organizational position and capabilities (Gagné, 2018).

6.3.4 | Practice #19

Feedback on how organizational members fare through the change in terms of behavioral adoption and performance is crucial during learning and experimentation (Nadler, 1976), as it helps consolidate and reinforce the change (Kotter, 1996). Feedback also provides information about whether the change was indeed the right solution to solve an organizational issue (Oreg et al., 2011; Wagner, 1994) and helps identify issues and readjust strategies and resources (Beer, 1980; Stouten et al., 2018). Lack of feedback has been shown to interfere with the change process (Neubert, 1998).

6.3.5 | Practice #21

Reinforcing new behaviors through appropriate incentives that can include tangible rewards and verbal praise (Armenakis et al., 2000; Hoskins et al., 2019; Wruck, 2000) signals mastery and what is valued by the organization (Kaplan & Henderson, 2005; Teixeira et al., 2020). However, SDT warns against relying too much on tangible incentives (and instead rely more on verbal ones, such as recognition and positive feedback) because these can under some circumstances decrease feelings of autonomy and, therefore, impair the internalization of the value of the change (Deci et al., 1999; Hoskins et al., 2019).

6.4 | Practices that indirectly activate meaning and mastery

6.4.1 | Practice #14

It is important to restructure the larger organizational context to ensure the change aligns with other organizational characteristics, such as adjusting the physical environment, roles, tasks, methods, and lines of communication. This supports and informs other practices, including assessing the appropriateness of the solutions and the organization's readiness for the change, and removing any barriers that would discourage employees to push through (Stouten et al., 2018; Szamosi & Duxbury, 2002; Teixeira et al., 2020; Zheng et al., 2010).

6.4.2 | Practice #20

Collecting baseline information during diagnosis as well as continued data collection during implementation and beyond to monitor progress is important to bring about needed corrections and adjustments during implementation and institutionalization (e.g., Armenakis et al., 1999; Beer, 1980; Cummings & Worley, 2018; Stouten et al., 2018). Information can be obtained from various sources, including all involved and affected organizational members and other stakeholders (Rousseau & ten Have, 2019). This practice should influence other practices, including feedback, uncovering discrepancies between actual and desired states, and cognitive dissonance creation by providing the evidence necessary to validate the need for change (Cummings & Worley, 2018).

6.5 | Practices that activate belongingness

6.5.1 | Practice #24

Providing social support to create new social norms (Jimmieson et al., 2008, 2009; Kim et al., 2011) can make people feel understood and cared for during what for many may be a difficult period (Carey et al., 2019; Huy, 2002; Teixeira et al., 2020). When leaders attend to idiosyncratic needs, they convey that everyone is important which helps them adjust to new realities (Bruch & Sattelberger, 2001; Smollan & Morrison, 2019).

Two other practices activate *belongingness* in conjunction with *meaning*.

6.5.2 | Practice #6

Political support for the change involves getting a critical mass of key decision-makers on board, which elevates affective reactions to organizational change to a higher organizational level through emotional contagion, cooperative behavior, and group norms (Armenakis & Bedeian, 1999; Barsade, 2002; Huy, 1999; Kelly & Barsade, 2001; Neves, 2009, 2011; Neves & Caetano, 2009; Rousseau, 2018; Self et al., 2007).

6.5.3 | Practice #12

Acknowledging negative feelings about the change can make people feel that their concerns are taken into consideration in decision-making and has been shown to be important to build trust, internalization, and acceptance of organizational change (Bridges, 1986; Gagné et al., 2000; Kirkpatrick, 1985; Maurer, 1996; Nutt & Keville, 2016; Satir & Baldwin, 1983; Thaler & Sunstein, 2008).

6.5.4 | Practice #16

Vicarious learning through appropriate role models could influence both *Belongingness* and *Mastery* (Armenakis et al., 1999; Bandura, 1982; Caldwell, 2001; Jimmieson et al., 2008, 2009; Lockwood et al., 2012; Roth et al., 2007; Terry et al., 1999).

Identifying with role models who emulate desired behaviors can serve to both strengthen ties between key individuals (e.g., leaders and change champions) and to make certain norms more salient or reinforce new ones. At the same time, seeing role models succeed and experience positive consequences can encourage imitation and build confidence (Jimmieson et al., 2008, 2009; Terry et al., 1999).

6.6 | Practices that activate the three psychological mechanisms

6.6.1 | Practice #5

Enhancing the leadership capability of those in charge of the change means selecting people across all organizational layers to lead the change, giving them the skills and tools they need to lead effectively, the power to lead, and connecting them with followers (Amiot et al., 2006; Battilana et al., 2010; Lok et al., 2005; Rich et al., 2015; Stouten et al., 2018). These empowered leaders can together form powerful coalitions of champions (Practice #11) to drive the change process (Bies, 2013; Caldwell, 2006; Kellogg, 2012; McCracken & McIvor, 2013; ten Have et al., 2016). Well-prepared leaders/champions can make the change more desirable to employees as champions will speak enthusiastically and convincingly to others about the change, while also providing the perception that the change is more widely valued and accepted and thus must considered seriously.

6.6.2 | Practice #9

Appropriately sharing information through effective communication channels involves explaining the *what*, *why*, and *how* of change. General sharing should make employees feel that the organization considers them to be important stakeholders, while sharing the "what" and "why" would influence *Meaning*, and the 'how' would influence *Mastery* (Amiot et al., 2006; Bordia et al., 2004; Cobb et al., 1995; Dutton et al., 2001; Elving, 2005; Gopinath & Becker, 2000; Oreg et al., 2011; Straatmann et al., 2016).

6.6.3 | Practice #17

Participation involves letting employees decide on the "what" and "how" of change through consensus (Cobb et al., 1995; Vroom & Jago, 1988; Wagner, 2009). Participation empowers employees (Bordia et al., 2004; Stouten et al., 2018), which means employees are likely to experience more competence, autonomy, meaning, and impact (Thomas & Velthouse, 1990). Active participation as part of the process of goal setting would enhance both individual sensemaking and a sense of ownership of the change, and also stretch individual skills (Dirks et al., 1996; Golden-Biddle, 2013; Jabri et al., 2008; Kao, 2017; Ketelaar et al., 2012; Kim et al., 2019; Latham et al., 1994;

Oreg et al., 2011; Valleala et al., 2015; Värttö, 2019; Wiedner et al., 2017). In addition, participation involves contact and collaborative work with other stakeholders, which would promote feelings of *Belongingness* (Huang, 2022; Jimmieson et al., 2008; Neville & Reicher, 2011; Straatmann et al., 2016).

6.6.4 | Practice #26

Developing rites and ceremonies to symbolically reinforce the change by celebrating progress and success signal commitment to the change and the new social order while also promoting solidarity and inclusion (Errida & Lotfi, 2021; Harris & Sutton, 1986; Smith & Stewart, 2011), thereby enhancing the meaning of the change, informing people about their effectiveness, and bringing them together (Harris & Sutton, 1986; Islam & Zyphur, 2009; Ozenc & Hagan, 2018).

One last practice that cuts across some of the others mentioned previously is transformational leadership (Herold et al., 2008; Kao, 2017; Oreg & Berson, 2019; Soenen et al., 2017; Rousseau & ten Have, 2022). Transformational leadership consists of having a role model that is admired and respected (akin to vicarious learning in #16), inspiring followers through a vision (much like communicating a compelling vision in #10), stimulating innovation (akin to participation in #17), and supporting individual followers' needs (akin to acknowledging feelings in #12; Bass & Avolio, 1989). It is especially effective at fulfilling psychological needs (Hetland et al., 2011) and making people understand the "what" and "why" of the change. Related to the recommended practice of enhancing leadership capability (#5), training leaders to act transformationally and apply these skills in their role as change agents has been shown to be effective (Bruch & Sattelberger, 2001; Oreg & Berson, 2019).

6.7 | Evaluating links between practices under each stage of organizational change and the psychological mechanisms

As a final step, we analyzed how practices under each of the five stages of organizational change address the three mechanisms, keeping in mind two considerations: (1) Are the three psychological mechanisms covered in each stage? and (2) What are the implications if mechanisms are absent?

The three practices under the diagnosis stage involved mastery and meaning, but none involved belongingness (see Table 3). Is belongingness important for the successful evaluation of the need for change, solutions, and readiness? On the one hand, it may be less critical if only top leaders conduct the diagnosis. On the other hand, proponents for the participation of all stakeholders in all stages of change might argue for promoting the involvement of all stakeholders in diagnosing needs, solutions, and readiness is critical, as it would enhance belongingness. In practice, most medium-to-large organizations would struggle to involve all stakeholders and may instead adopt a consultative feedback process approach on proposals prepared by top

management that outline the need for change and the proposed solutions; hence, why the practice of "active participation" is in the implementation phase in many models (see Table 2). Thus, while many advocate for wide participation during all stages of change to curb resistance, others argue participation should be considered only when stakeholders are competent and motivated to participate, and when there is enough time and resources to involve them (Pasmore & Fagans, 1992). As a compromise, a representative sampling of relevant members at all levels could participate in diagnosing (Rousseau & ten Have, 2022). These members should have the characteristics of change champions (knowledgeable and credible) and be empowered to effectively sell the change solutions to the rest of the organization.

Practices under the preparation stage appeared to cover all three mechanisms, with a particular emphasis on meaning. Indeed, a substantial element of preparation is "selling" the need for change to all stakeholders; that is building a sense of meaning regarding the proposed change. Likewise, practices under the implementation stage also covered all three mechanisms with a relatively stronger emphasis on mastery. Indeed, mastery would seem an appropriate focus given the attention in this stage given to action. Interestingly, there are parallels between what we observed with respect to the preparation and implementation stages and the mindset theory of action phases (Gollwitzer, 2012), which distinguishes between the phase of deliberation and commitment to a course of action or goal where people must choose what they will do and why they choose to do something akin to finding meaning — and a phase of goal implementation where people must focus on how they will realize the goal — akin to mastery development. Both phases of goal pursuit have been found to be crucial to goal attainment (Koestner et al., 2002).

Moving onto the evaluation phase, we find that the single practice goes hand in hand with the practices in the diagnosis stage as a review following implementation of whether things have changed according to plan, whether desired results ensued, and whether adjustments need to be made. As such, it was deemed to be linked to the same mastery and meaning mechanisms as in the diagnosis stage. However, the same concerns about the need for, and feasibility of, participation to enhance belongingness applies.

Finally, practices under the institutionalization stage touched on the three mechanisms but again with a stronger emphasis on mastery. Mastery promoted through these practices is indeed essential to reinforce learning, and the meaning and belongingness fostered by social support and rites are important to keep the momentum garnered in the implementation stage.

7 | DISCUSSION

We created an integrated framework of organizational change adoption and maintenance that is informed by SDT and by well-researched change practices and change-related psychological mechanisms from the organizational change and the behavioral change literatures. SDT provides the concept of internalization to highlight the importance of adopting practices that promote the internalization of the value

of change, which underpins employee autonomous motivation, affective commitment, the championing of change. Defined as assimilating social demands and transforming them into personally endorsed goals, internalization leads employees to volitionally carry out the change without needing to control, monitor, and sanction them. Because autonomous motivation has been associated with persistence and habit formation in the behavior change domain, SDT helps elevate organizational change theory to consider the sustainability of organizational change.

Our literature search uncovered 21 psychological mechanisms that we categorized under three broad psychological mechanisms, namely *mastery*, *meaning*, and *belongingness*. Though these mechanisms appear to be close to the three psychological needs from SDT, namely, competence, autonomy, and relatedness, there are some fundamental differences between them. The biggest difference is that some of the components of the mechanisms might not fit all the criteria to be called basic psychological needs. The criteria to determine whether a need is basic and universal requires them to contribute to development and well-being, to predict psychopathology, having pervasive effects on cognitive, affective, and behavioral functioning, to show evolutionary advantages, be non-substitutable, and to be found in every culture (Vansteenkiste et al., 2020). For example, meaning has been put to the test and deemed to not fit all the criteria, particularly because it is substitutable with autonomy (Ryan & Deci, 2017).

Mastery encompasses the need for competence, but also elements of control, ease, coping, and learning. Meaning encompasses the need for autonomy, argued to be intricately linked to sensemaking, while also including perceived need for change, appropriateness, relevance, usefulness, and benefits. Though the literature on organizational change has emphasized conveying a need for change and participation as good means to promote change acceptance, it has not elaborated yet on why these practices are crucial; an SDTbased explanation would argue that these practices work because they satisfy the need for autonomy. Finally, belongingness encompasses the need for relatedness, but more largely includes social identity and the desire to follow social norms that improve perceived fit and grounding. Given that competence, autonomy, and relatedness are theorized in SDT to influence internalization, and because each of them is embedded into one of the three IMOC mechanisms along with closely related mechanisms, the IMOC proposes that the three psychological mechanisms should promote the internalization of change, and consequently the adoption and maintenance of change.

Our literature search also uncovered 26 unique change practices that the IMOC links to the three psychological mechanisms. Assessing how the psychological mechanisms are covered during each stage of change has revealed how some psychological mechanisms might be better covered than others at certain stages of change. We could interpret this finding in two ways. First, it could mean that some mechanisms are more important than others at different stages. For example, relatedness may be less important in the diagnostic stage. But it could also mean that some mechanisms are neglected during some stages of change. For example, promoting participation during the diagnosis stage may lead to better adoption

and maintenance because it helps people feel more included. Even though we drew more heavily on SDT to build the IMOC, the resulting model aligns well with all the theories from which it draws, each of which provides essential insights into the psychology of organizational change.

7.1 | Testing and applying the IMOC

The integration of practices and mechanisms provides a more manageable list of the most crucial and non-overlapping practices and psychological mechanism empirically proven to drive change adoption and maintenance. Though there is strong evidence in both the behavioral health and organizational change domains that practices delivered jointly are synergistically more effective than when delivered on their own (Atkins et al., 2017; Carey et al., 2019; Gillison et al., 2018; Johnston et al., 2021; Lok et al., 2005; Michie et al., 2021; Neuman et al., 1989), available resources can limit an organization's the ability to use many. By helping practitioners choose the right combination of practices that covers all three psychological mechanisms, the IMOC can ensure resources are optimally used. Future research could refine our knowledge of which combinations of practices best cover all three psychological mechanisms. For example, studies could test whether it is equally effective and more economical to use a single practice that influences the three psychological states (e.g., participation) rather than a combination of three practices that each influence only one psychological state (e.g., acknowledging negative feelings, communicate a gap between actual and desired states, and training). Ideally these tests would be done through rigorous longitudinal or quasi-experimental field research of organizational change that uses careful timing of assessments to best capture when psychological mechanisms are triggered by organizational change practices, and when adoption and maintenance can be evidenced (Dormann & Griffin, 2015).

The IMOC can also assist in testing the effectiveness of newly developed organizational change practices that go beyond the 26 identified in our literature review, and perhaps some that would fill the gaps identified in covering belongingness issues at certain stages of change. For example, succession planning and inclusiveness best practices that help preserve internal knowledge and promote new networks could potentially be embedded in organizational change practices (Rousseau & ten Have, 2022). Peer-support groups for stakeholders who have lost contacts and networks following change could help them develop new identities and networks (typically at the moment, employee assistance programs, which are delivered by external providers, are the only resource organizations provide for employees to cope with the loss of colleagues).

The resulting IMOC can be useful to practitioners in guiding organizational change plans. Without the IMOC, people are left to "choose" amongst the multiple models and theories without any guidance to know which ones they should use or how they could use them conjointly. By linking practices to specific psychological mechanisms, the IMOC can assist practitioners in ensuring they include practices that cover all three psychological mechanisms at each stage of change.

7.2 | Boundaries and potential extensions of the IMOC

Though the IMOC synthesizes many organizational change models and theories (Cronin & George, 2023), it is always challenging to create comprehensive models that efficiently deal with complex systems and processes. Due to our selective literature search approach, we cannot claim that the list of practices and underlying mechanisms is exhaustive. Indeed, creating an exhaustive list was never the intent of this model and future research should feel encouraged to look beyond the practices and mechanisms proposed in this paper by developing ontologies of practices and mechanisms of organizational change (cf. Schenk et al., 2023). Future research could also investigate the necessity and sufficiency of the three psychological mechanisms to predict change adoption and maintenance. Additionally, we point out some of the deliberate omissions in the IMOC, which are included in Figure 1 as shaded boxes. First, the IMOC omits context (e.g., organizational size, industry, economy), and any research testing the IMOC may benefit from taking it into consideration. Armenakis and Bedeian (1999) include context as an important component of organizational change, particularly in affecting change feasibility and appropriateness.

Second, evidence from some theories, including TAM (Yousafzai et al., 2007a, 2007b), TBP (Hagger & Chatzisarantis, 2009; McEachan et al., 2011; Steinmetz et al., 2016), and HBM (Carpenter, 2010), as well organizational change reviews and taxonomies (e.g., Armenakis & Bedeian, 1999; Grimshaw et al., 2020; Oreg et al., 2011; Stouten et al., 2018) indicate that the nature of the change is an important moderator of the effectiveness of change practices. Building from existing evidence, the nature of change is expected to drive the choice of practices to use during organizational change and moderate whether and how practices activate psychological mechanisms. In other words, we argue that the psychological mechanisms crucial to adoption and maintenance will be the same regardless of the nature of change; that is, internalization of the value of change will always be promoted by mastery, meaning and belongingness, but that they will be affected differently by practices depending on the nature of the change. For example, restructuring an organization following a merger and the introduction of a new virtual communication technology might require different training requirements whereby rehearsal and experimentation might be more useful in the latter but useless and impractical in the former. Consequently, rehearsal and experimentation would have different effects on feelings of mastery across these two types of organizational change. Future research can expand our model by adding a layer to cover the most frequent types of organizational change to help specify which practices are likely to have the most powerful influence on the psychological mechanisms.

Third, individual differences may have a direct influence on the psychological mechanisms and the adoption and maintenance of organizational change and also influence the efficacy of some organizational change practices (Armenakis & Bedeian, 1999; Oreg et al., 2011; Stouten et al., 2018; Vakola et al., 2013; Yousafzai et al., 2007a).

A wide array of individual differences has been found to predispose employees to react more or less positively to organizational change, including personality traits, self-concept, and emotional intelligence (Judge et al., 1999; Vakola et al., 2003; Wanberg & Banas, 2000). Dispositional resistance to change comprises a need for routine, emotional responsiveness, a short-term focus on outcomes, and cognitive rigidity (Oreg, 2003, 2006), while optimism leads to more favorable perceptions of, and responses to, organizational change (Stouten et al., 2018).

Fourth, we must consider the time element, particularly in terms of encouraging researchers and practitioners to consider how long it "should" take for adoption to happen, when maintenance has been achieved, and when to measure the outcomes of change (Chatzisarantis et al., 2015; Dormann & Griffin, 2015). Incorporating the concept of internalization might help future research move away from examining change adoption as a static phenomenon toward assessing it in a more dynamic fashion by examining changes in motivation, commitment, and behaviors indicating internalization (i.e., movement up and down the continuum depicted in Figure 2; Bouckenooghe et al., 2021). In addition, maintenance post adoption should be monitored as lapses to earlier patterns of behavior are frequently observed and "strengthening" adopted behavior is as important as its initial adoption (Marcus et al., 2000). Subjective time experiences (i.e., experiences of the past, present, and future) could also be considered as potential moderators that might influence the psychological mechanisms of change adoption and maintenance (Shipp & Sanders, 2021). For example, how people view the short versus long-term benefits of organizational change, the timing of organizational change practices, and the extent to which they focus their attention to the past, the present and the future, are likely to be influenced by some change practices (e.g., a compelling vision) and in turn influence adoption and maintenance behaviors. The IMOC, because of its focus on three psychological mechanisms, might therefore serve as a guide to inform future research on time issues in organizational change.

In addition, organizational change practices may have different effects depending on when and in which order they are executed (Kotter, 2007). A good demonstration of these issues comes from Kim et al. (2011) who found that employees' beliefs about the benefits of change predicted their change-supportive behavior earlier in the change (18 months from initiation of change), while the quality of their employment relationships contributed to their change-supportive behavior later during the change (24 months from initiation of change). These results imply that it might pay to focus efforts on creating meaning early in the process, whereas later, it pays to focus efforts on maintaining and enhancing belongingness. Interestingly, active participation was the only consistent predictor of change-supportive behavior in this study, perhaps because, as we proposed, it influences all three psychological mechanisms.

Fifth, we must consider the impact that old habits may have on the adoption and maintenance of these new behaviors. Behavior change research shows that breaking a habit demands extra effort and that "relapse" is frequent (Hofmann et al., 2008; Kwasnicka et al., 2016). Though one of the practices included in the IMOC is habit formation,

that is, to attempt to turn new necessary behaviors into habits through repetition and gradual automation (Rothman, 2000), while linking the behavior to a stable context and identity can create durable change (Verplanken & Whitmarsh, 2021), considering old habits in the process of adoption/maintenance of change is also something that must be considered.

Finally, future research could consider how the IMOC might apply to individual versus collective psychological mechanisms and actions. We focused the IMOC at the individual level, and the behavioral health literature focuses on this level of analysis. However, organizational change depends on both individual and collective actions and reactions (Kanitz et al., 2023; Pallotti et al., 2023; Sverdlik & Oreg, 2023). Multilevel tests of the IMOC could focus on whether change practices have the same impact on individual versus collective psychological mechanisms (e.g., self-efficacy versus collective efficacy; Bandura, 1997), individual versus collective motivation (Grenier et al., 2024), and individual versus collective action (e.g., individual stalling versus industrial action).

We also point out some limits to the method we used to create the IMOC. First, we advise interested researchers to validate the IMOC beyond the Q-sorts performed by the four co-authors. For example, consensus research in behavioral health (e.g., Connell et al., 2019; Michie et al., 2021; Teixeira et al., 2020) has used 16 to 100 experts, and Armenakis and Harris's (2009) taxonomy was empirically validated by other research groups. Second, more research is needed to support some of the proposed linkages as we discovered that some links between practices and mechanisms have stronger empirical support than others.

8 | CONCLUSION

We created the IMOC out of an analysis of overlap and complementarity between organizational change practice models, organizational change theories, and behavioral change research and theories. The model identifies three important psychological mechanisms that predict the adoption and maintenance of organizational change, closely related to the three psychological needs proposed by SDT, and links organizational change practices to these mechanisms. The use of the concept of internalization, also proposed by SDT, can help steer the field away from seeing resistance as a natural inclination of human beings (Burnes, 2015) toward seeing them instead as organisms that are naturally inclined to reflectively embrace change when it is meaningful, when they can handle it, and when it does not threaten their social networks (Ryan, 1995).

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CONFLICT OF INTEREST STATEMENT

The authors have no conflict of interest to declare.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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REFERENCES

Abraham, C., & Michie, S. (2008). A taxonomy of behavior change techniques used in interventions. *Health Psychology*, 27(3), 379–387. https://doi.org/10.1037/0278-6133.27.3.379

Ahmad, A., Butt, A., Chen, D., & Liu, B. (2020). A mediated model of the effect of organizational culture on the intentions to engage in changesupportive behaviors: Insights from the theory of planned behavior. *Journal of Management and Organization.*, 29, 345–365. https://doi. org/10.1017/jmo.2020.41

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior* and Human Decision Processes, 50, 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Amiot, C. E., Terry, D. J., Jimmieson, N. L., & Callan, V. J. (2006). A longitudinal investigation of coping processes during a merger: Implications for job satisfaction and organizational identification. *Journal of Management*, 32(4), 552–574. https://doi.org/10.1177/0149206306287542

Armenakis, A., & Harris, S. G. (2009). Reflections: Our journey in organizational change research and practice. *Journal of Change Management*, 9, 127–142. https://doi.org/10.1080/14697010902879079

Armenakis, A. A., & Bedeian, A. G. (1999). Organizational change: A review of theory and research in the 1990s. *Journal of Management*, 25(3), 293–315. https://doi.org/10.1177/014920639902500303

Armenakis, A. A., & Harris, S. G. (2002). Crafting a change message to create transformational readiness. *Journal of Organizational Change Management*, 15(2), 169–183. https://doi.org/10.1108/09534810 210423080

Armenakis, A. A., Harris, S. G., & Field, H. S. (1999). Making change permanent: A model for institutionalizing change interventions. In W. A. Pasmore & R. W. Woodman (Eds.), Research in organizational change and development (pp. 97–128). JAI Press. https://doi.org/10.1016/S0897-3016(99)12005-6

Armenakis, A. A., Harris, S. G., & Feild, H. S. (2000). Making change permanent a model for institutionalizing change interventions. *In Research in organizational change and development* (pp. 97–128). Emerald Group Publishing Limited.

Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. Academy of Management Review, 14(1), 20–39. https://doi.org/10.2307/258189

Atkins, L., Francis, J., Islam, R., O'Connor, D., Patey, A., Ivers, N., Foy, R., Duncan, E. M., Colquhoun, H., Grimshaw, J. M., Lawton, R., & Michie, S. (2017). A guide to using the theoretical domains framework of behavior change to investigate implementation problems. *Implementation Science*, 12, 77. https://doi.org/10.1186/s13012-017-0605-9

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122–147. https://doi.org/10.1037/0003-066X.37. 2.122

Bandura, A. (1997). Self-efficacy: The exercise of control. Freeman.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, *52*(1), 1–26. https://doi.org/10.1146/annurev.psych.52.1.1

Barends, E., Janssen, B., ten Have, W., & ten Have, S. (2014). Effects of change Interventions: What kind of evidence do we really have? *The Journal of Applied Behavioral Science*, 50(1), 5–27. https://doi.org/10.1177/0021886312473152

- Barsade, S. G. (2002). The ripple effect: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly*, 47(4), 644–675. https://doi.org/10.2307/3094912
- Bartunek, J. M., Rousseau, D. M., Rudolph, J. W., & DePalma, J. A. (2006). On the receiving end: Sensemaking, emotion, and assessments of an organizational change initiated by others. *Journal of Applied Behavioral Science*, 42(2), 182–206. https://doi.org/10.1177/0021886305285455
- Bass, B. M., & Avolio, B. J. (1989). Manual: The multifactor leadership questionnaire. Consulting Psychologists Press.
- Battilana, J., Gilmartin, M., Sengul, M., Pache, A. C., & Alexander, J. A. (2010). Leadership competencies for implementing planned organizational change. *Leadership Quarterly*, 21(3), 422–438. https://doi.org/10.1016/j.leaqua.2010.03.007
- Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Twenge, J. M. (2005). Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, 88(4), 589-604. https://doi.org/10.1037/0022-3514.88. 4 589
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497
- Becker, M. H. (1974). The health belief model and personal health behavior. Charles B. Slack.
- Beer, M. (1980). Organization change and development: A systems view. Goodvear.
- Berta, W. B., Wagg, A., Cranley, L., Doupe, M. B., Ginsburg, L., Hoben, M., MacEachern, L., Chamberlain, S., Clement, F., Easterbrook, A., Keefe, J. M., Knopp-Sihota, J., Rappon, T., Reid, C., Song, Y., & Estabrooks, C. A. (2019). Sustainment, Sustainability, and Spread Study (SSaSSy): Protocol for a study of factors that contribute to the sustainment, sustainability, and spread of practice changes introduced through an evidence-based quality-improvement intervention in Canadian nursing homes. *Implementation Science*, 14, 109. https://doi.org/10.1186/s13012-019-0959-2
- Bies, R. J. (2013). The delivery of bad news in organizations. *Journal of Management*, 39, 136–162. https://doi.org/10.1177/0149206312461053
- Birken, S. A., Haines, E. R., Hwang, S., Chambers, D. A., Bunger, A. C., & Nilsen, P. (2020). Advancing understanding and identifying strategies for sustaining evidence-based practices: A review of reviews. *Implementation Science*, 15(1), 88. https://doi.org/10.1186/s13012-020-01040-9
- Bodi, A., Maggs, G., & Edgar, D. (1997). When too much change is never enough. Business & Professional Publishing.
- Bordia, P., Hobman, E., Jones, E., Gallois, C., & Callan, V. (2004). Uncertainty during organizational change: Types, consequences, and management strategies. *Journal of Business and Psychology*, 18(4), 507–532. https://doi.org/10.1023/B:JOBU.0000028449.99127.f7
- Bouckenooghe, D., Schwarz, G. M., Kanar, A., & Sanders, K. (2021). Revisiting research on attitudes toward organizational change: Bibliometric analysis and content facet analysis. *Journal of Business Research*, 135, 137–148. https://doi.org/10.1016/j.jbusres.2021.06.028
- Bridges, W. (1986). Managing organizational transitions. *Organizational Dynamics*, 158(1), 24–33. https://doi.org/10.1016/0090-2616(86) 90023-9
- Brown, D. J., Hagger, M. S., Morrissey, S., & Hamilton, K. (2018). Predicting fruit and vegetable consumption in long-haul heavy goods vehicle drivers: Application of a multi-theory, dual-phase model and the contribution of past behavior. *Appetite*, 121, 326–336. https://doi.org/10. 1016/j.appet.2017.11.106
- Brown, S. C. (2010). Technology acceptance and organizational change: An integration of theory. Retrieved from Abstracts International Section A: Humanities & Social Sciences, 71(2-A), 619.
- Bruch, H., & Sattelberger, T. (2001). Lufthansa's transformation marathon: Process of liberating and focusing change energy. *Human Resource Management*, 40, 249–259. https://doi.org/10.1002/hrm.1015

- Burke, P. J. (1991). Identity processes and social stress. American Sociological Review, 56, 836–849. https://doi.org/10.2307/2096259
- Burnes, B. (2015). Understanding resistance to change Building on Coch and French. *Journal of Change Management*, 15(2), 92–116. https://doi.org/10.1080/14697017.2014.969755
- Caldwell, R. (2001). Champions, adapters, consultants and synergists:

 The new change agents in HRM. *Human Resource Management Journal*, 11(3), 39–52. https://doi.org/10.1111/j.1748-8583.2001. tb00044.x
- Caldwell, R. (2006). Agency and change: Rethinking change agency in organizations. Routledge. https://doi.org/10.4324/9780203087565
- Çalışkan, Ö., & Gökalp, G. (2020). A micro-level perspective in organizational change: cognitive dissonance, sense-making and attitude change. *Kuram ve Uygulamada Eğitim Yönetimi*, 26(4), 719–742. https://doi.org/10.14527/kuey.2020.016
- Cane, J., O'Connor, D., & Michie, S. (2012). Validation of the theoretical domains framework for use in behavior change and implementation research. *Implementation Science*, 7, 37. https://doi.org/10.1186/ 1748-5908-7-37
- Carey, R. N., Connell, L., Johnston, M., Rothman, A., de Bruin, M., Kelly, M. P., & Michie, S. (2019). Behavior change techniques and their mechanisms of action: A synthesis of links described in published intervention literature. Annals of Behavioral Medicine, 53(8), 693–707. https://doi.org/10.1093/abm/kay078
- Carpenter, C. J. (2010). A meta-analysis of the effectiveness of health belief model variables in predicting behavior. *Health Communication*, 25(8), 661–669. https://doi.org/10.1080/10410236.2010.521906
- Chatzisarantis, N., Hagger, M. S., Kamarova, S., & Kawabata, M. (2014). The health belief model. In R. C. Eklund & G. Tenenbaum (Eds.), Encyclopaedia of Sport and Exercise Psychology. Wiley.
- Chatzisarantis, N., Kamarova, S., Kawabata, W., & Hagger, M. (2015). Developing and evaluating utility of school-based intervention programs in promoting leisure-time physical activity: An application of the theory of planned behavior. *International Journal of Sport Psychology*, 46(2), 95.
- Clark, S. M., Gioia, D. A., Ketchen, D. J. Jr., & Thomas, J. B. (2010). Transitional identity as a facilitator of organizational identity change during a merger. Administrative Science Quarterly, 55, 397–438. https://doi.org/10.2189/asqu.2010.55.3.397
- Cobb, A. T., Folger, R., & Wooten, K. (1995). The role justice plays in organizational change. *Public Administration Quarterly*, 19, 135–151.
- Connell, L. E., Carey, R. N., de Bruin, M., Rothman, A. J., Johnston, M., Kelly, M. P., & Michie, S. (2019). Links between behavior change techniques and mechanisms of action: An expert consensus study. Annals of Behavioral Medicine, 53(8), 708–720. https://doi.org/10.1093/abm/ kay082
- Cooperrider, D. L., & Srivastva, S. (1987). Appreciative inquiry in organizational life. In R. W. Woodman & W. A. Pasmore (Eds.), Research in organizational change and development (pp. 129–169). JAI Press.
- Cronin, M. A., & George, E. (2023). The why and how of the integrative review. *Organizational Research Methods*, 26, 168–192. https://doi.org/10.1177/1094428120935507
- Cummings, T. G., & Worley, C. G. (2018). Organization development and change (11th edition). Cengage Learning.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13, 318–339. https://doi.org/10.2307/249008
- Dawkins, C. E., & Frass, J. W. (2005). Decision of union workers to participate in employee involvement: An application of the theory of planned behavior. *Employee Relations*, 27, 511–531. https://doi.org/10.1108/01425450510612031
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627–668. https://doi.org/10.1037/0033-2909.125.6.627

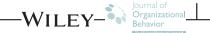


- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. Plenum Press. https://doi.org/10.1007/978-1-4899-2271-7
- Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Deci, E. L., Weinstein, N., & Ryan, R. M. (2006). Is meaning a basic need: Viewing it from the self-determination theory perspective. In annual conference of the Society for Personality and Social Psychology, CA.
- DiMatteo, M. R., Haskard, K. B., & Williams, S. L. (2007). Health beliefs, disease severity, and patient adherence: A meta-analysis. *Medical Care*, 45(6), 521–528. https://doi.org/10.1097/MLR.0b013e318032937e
- Dirks, K. T., Cummings, L. L., & Pierce, J. L. (1996). Psychological ownership in organizations: Conditions under which individuals promote and resist change. Research in Organizational Change and Development, 9, 1–23
- Dormann, C., & Griffin, M. A. (2015). Optimal time lags in panel studies. Psychological Methods, 20(4), 489–505. https://doi.org/10.1037/met0000041
- Dutton, J. E., Ashford, S. J., O'Neill, R. M., & Lawrence, K. A. (2001). Moves that matter: Issue selling and organizational change. Academy of Management Journal, 44, 716–736. https://doi.org/10.2307/3069412
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. Administrative Science Quarterly, 44, 350–383. https://doi.org/10.2307/2666999
- Edmondson, A. (2002). The local and variegated nature of learning in organizations: A group-level perspective. *Organization Science*, 13, 128–146. https://doi.org/10.1287/orsc.13.2.128.530
- Eisenbach, R., Watson, K., & Pillai, R. (1999). Transformational leadership in the context of organizational change. *Journal of Organizational Change Management*, 12(2), 80–89. https://doi.org/10.1108/09534819910263631
- Elving, W. J. (2005). The role of communication in organisational change. Corporate Communications: An International Journal, 10(2), 129–138. https://doi.org/10.1108/13563280510596943
- Epiphaniou, E., & Ogden, J. (2010). Successful weight loss maintenance and a shift in identity: From restriction to a new liberated self. *Journal* of *Health Psychology*, 15(6), 887–896. https://doi.org/10.1177/ 1359105309358115
- Errida, A., & Lotfi, B. (2021). The determinants of organizational change management success: Literature review and case study. *International Journal of Engineering Business Management*, 13, 184797902110162. https://doi.org/10.1177/18479790211016273
- Erwin, D. G., & Garman, A. N. (2010). Resistance to organizational change: Linking research and practice. *Leadership and Organization* Development Journal, 31(1), 39–56. https://doi.org/10.1108/ 01437731011010371
- Feldman, M. S., & Pentland, B. T. (2003). Reconceptualizing organizational routines as a source of flexibility and change. Administrative Science Quarterly, 48, 94–118. https://doi.org/10.2307/3556620
- Fugate, M., Prussia, G. E., & Kinicki, A. J. (2012). Managing employee withdrawal during organizational change: The role of threat appraisal. *Journal of Management*, 38(3), 890–914. https://doi.org/10.1177/ 0149206309352881
- Gagné, M. (2018). From strategy to action: Transforming organizational goals into organizational behavior. *International Journal of Management Reviews*, 20, 83–104. https://doi.org/10.1111/ijmr.12159
- Gagné, M., Chemolli, E., Forest, J., & Koestner, R. (2008). A temporal analysis of the relation between organizational commitment and work motivation. *Psychologica Belgica*, 48(2–3), 219–241. https://doi.org/10.5334/pb-48-2-3-219
- Gagné, M., Koestner, R., & Zuckerman, M. (2000). Facilitating acceptance of organizational change: The importance of self-determination. *Journal of Applied Social Psychology*, 30(9), 1843–1852. https://doi.org/10. 1111/j.1559-1816.2000.tb02471.x

- Gagné, M., Parker, S. K., Griffin, M. A., Dunlop, P. D., Knight, C., Klonek, F. E., & Parent-Rocheleau, X. (2022). Understanding and shaping the future of work with self-determination theory. *Nature Reviews Psychology*, 1, 378–392. https://doi.org/10.1038/s44159-022-00056-w
- Gardner, B., de Bruijn, G. J., & Lally, P. (2012). Habit, identity, and repetitive action: A prospective study of binge-drinking in UK students. British Journal of Health Psychology, 17, 565–581. https://doi.org/10.1111/j.2044-8287.2011.02056.x
- Gefen, D. (2003). TAM or just plain habit: A look at experienced online shoppers. *Journal of End User Computing*, 15, 1–13. https://doi.org/10.4018/joeuc.2003070101
- Gillison, F. B., Rouse, P., Standage, M., Sebire, S. J., & Ryan, R. M. (2018). A meta-analysis to promote motivation for health behavior change from a self-determination theory perspective. *Health Psychology Review*, 13(1), 110–130. https://doi.org/10.1080/17437199.2018.1534071
- Golden-Biddle, K. (2013). How to change an organization without blowing it up. MIT Sloan Management Review, 54, 35–41.
- Gollwitzer, P. M. (1999). Implementation intentions: Strong effects of simple plans. American Psychologist, 54(7), 493–503. https://doi.org/10.1037/0003-066X.54.7.493
- Gollwitzer, P. M. (2012). Mindset theory of action phases. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 526–545). Sage Publications Ltd. https://doi.org/ 10.4135/9781446249215.n26
- Gopinath, C., & Becker, T. E. (2000). Communication, procedural justice, and employee attitudes: Relationships under conditions of divestiture. *Journal of Management*, 26(1), 63–83. https://doi.org/10.1177/014920630002600107
- Grenier, S., Gagné, M., & O'Neill, T. (2024). Self-determination theory and its implications for team motivation. *Applied Psychology*. Advance online publication. https://doi.org/10.1111/apps.12526
- Griffin, M. A., & Grote, G. (2020). When is more uncertainty better? A model of uncertainty regulation and effectiveness. *Academy of Management Review*, 45, 745–765. https://doi.org/10.5465/amr.2018.0271
- Grimshaw, J. M., Patey, A. M., Kirkham, K. R., Hall, A., Dowling, S. K., Rodondi, N., Ellen, M., Kool, T., van Dulmen, S. A., Kerr, E. A., Linklater, S., Levinson, W., & Bhatia, R. S. (2020). De-implementing wisely: Developing the evidence base to reduce low-value care. BMJ Quality and Safety, 29, 409–417. https://doi.org/10.1136/bmjqs-2019-010060
- Gucciardi, D. F., & Jackson, B. (2015). Understanding sport continuation: An integration of the theories of planned behavior and basic psychological needs. *Journal of Science & Medicine in Sport*, 18(1), 31–36. https://doi.org/10.1016/j.jsams.2013.11.011
- Güntner, A. V., Endrejat, P., & Kauffeld, S. (2019). Guiding change: Using motivational interviewing within organizations. *Gruppe, Interaktion, Organisation: Zeitschrift für Angewandte Organisationspsychologie*, 50, 129–139. https://doi.org/10.1007/s11612-019-00459-z
- Hagger, M. S., & Chatzisarantis, N. L. (2009). Integrating the theory of planned behaviour and self-determination theory in health behaviour: A meta-analysis. *British Journal of Health Psychology*, 14(2), 275–302. https://doi.org/10.1348/135910708X373959
- Hagger, M. S., Chatzisarantis, N. L. D., & Biddle, S. J. H. (2002). A meta-analytic review of the theories of reasoned action and planned behavior in physical activity: Predictive validity and the contribution of additional variables. *Journal of Sport and Exercise Psychology*, 24(1), 3– 32. https://doi.org/10.1123/jsep.24.1.3
- Hagl, C., Kanitz, R., Gonzalez, K., & Hoegl, M. (2024). Change management interventions: Taking stock and moving forward. *Human Resource Management Review*, 34(1), 101000. https://doi.org/10.1016/j.hrmr. 2023.101000
- Harris, S., & Sutton, R. (1986). Function of parting ceremonies in dying organizations. Academy of Management Journal, 29, 5–30. https://doi. org/10.2307/255857

- Harrison, J. A., Mullen, P. D., & Green, L. W. (1992). A meta-analysis of studies of the health belief model with adults. *Health Education Research*, 7(I), 107–116. https://doi.org/10.1093/her/7.1.107
- Herold, D. M., Fedor, D. B., Caldwell, S., & Liu, Y. (2008). The effects of transformational and change leadership on employees' commitment to a change: A multilevel study. *Journal of Applied Psychology*, 93(2), 346– 357. https://doi.org/10.1037/0021-9010.93.2.346
- Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology*, 87(3), 474–487. https://doi.org/10.1037/0021-9010.87. 3.474
- Hetland, H., Hetland, J., Schou Andreassen, C., Pallesen, S., & Notelaers, G. (2011). Leadership and fulfillment of the three basic psychological needs at work. Career Development International, 16(5), 507–523. https://doi.org/10.1108/13620431111168903
- Hiatt, J. M. (2006). ADKAR: A model for change in business, government and our community. Prosci Research.
- Hochbaum, G. M. (1958). Public participation in medical screening programs: A sociopsychological study, public health service. Public Health Service Publication Number 572. United States Government Printing Office.
- Hofmann, W., Friese, M., & Wiers, R. W. (2008). Impulsive versus reflective influences on health behavior: A theoretical framework and empirical view. *Health Psychology Review*, 2, 111–137. https://doi.org/10.1080/17437190802617668
- Hogg, M. (2000). Subjective uncertainty reduction through self-categorisation: A motivational theory of social identity processes. European Review of Social Psychology, 11(1), 223–255. https://doi.org/10.1080/14792772043000040
- Hogg, M., & Terry, D. (2000). Social identity and self-categorization processes in organizational contexts. Academy of Management Review, 25(1), 121–140. https://doi.org/10.2307/259266
- Holt, D. T., Armenakis, A. A., Field, H. S., & Harris, S. G. (2007). Readiness for organizational change: The systematic development of a scale. *The Journal of Applied Behavioral Science*, 43(2), 232–255. https://doi.org/ 10.1177/0021886306295295
- Hoskins, K., Ulrich, C. M., Shinnick, J., & Buttenheim, A. M. (2019). Acceptability of financial incentives for health-related behavior change: An updated systematic review. *Preventive Medicine*, 126, 105762. https://doi.org/10.1016/j.ypmed.2019.105762
- Huang, R. T. (2022). Exploring the roles of self-determined motivation and perceived organizational support in organizational change. European Journal of Management & Business Economics. https://doi.org/10.1108/ EJMBE-03-2022-0056
- Huy, Q. N. (1999). Emotional capability, emotional intelligence, and radical change. Academy of Management Review, 24(2), 325–345. https://doi. org/10.5465/AMR.1999.1893939
- Huy, Q. N. (2002). Emotional balancing of organizational continuity and radical change: The contribution of middle managers. *Administrative Science Quarterly*, 47(1), 31–69. https://doi.org/10.2307/3094890
- Huy, Q. N., Corley, K. G., & Kraatz, M. S. (2014). From support to mutiny: Shifting legitimacy judgments and emotional reactions impacting the implementation of radical change. Academy of Management Journal, 57(6), 1650–1680. https://doi.org/10.5465/amj.2012.0074
- Islam, G., & Zyphur, M. J. (2009). Rituals in organizations: A review and expansion of current theory. *Group and Organization Management*, 34(1), 114–139. https://doi.org/10.1177/1059601108329717
- Jabri, M., Adrian, A., & Boje, D. (2008). Reconsidering the role of conversations in change communication: A contribution based on Bakhtin. *Journal of Organizational Change Management*, 21(6), 667–685. https://doi.org/10.1108/09534810810915718
- Jimmieson, N. L., Peach, M., & White, K. M. (2008). Utilizing the theory of planned behavior to inform change management: An investigation of employee intentions to support organizational change. *Journal of Applied Behavioral Science*, 44(2), 237–262. https://doi.org/10.1177/ 0021886307312773

- Jimmieson, N. L., White, K. M., & Zajdlewicz, L. (2009). Psychosocial predictors of intentions to engage in change supportive behaviors in an organizational context. *Journal of Change Management*, 9(3), 233–250. https://doi.org/10.1080/14697010903125472
- Johnston, M., Carey, R. N., Connell Bohlen, L. E., Johnston, D. W., Rothman, A. J., de Bruin, M., Kelly, M. P., Groarke, H., & Michie, S. (2021). Development of an online tool for linking behavior change techniques and mechanisms of action based on triangulation of findings from literature synthesis and expert consensus. *Translational Behavioral Medicine*, 11(5), 1049–1065. https://doi.org/10.1093/tbm/ ibaa050
- Jones, S. L., & Van de Ven, A. H. (2016). The changing nature of change resistance: An examination of the moderating impact of time. *Journal* of Applied Behavioral Science, 52(4), 482–506. https://doi.org/10. 1177/0021886316671409
- Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999). Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology*, 84(1), 107–122. https://doi.org/10.1037/0021-9010.84.1.107
- Judson, A. (1991). Changing behavior in organizations: Minimizing resistance to change. Basil Blackwell.
- Kanitz, R., Gonzalez, K., Berger, S., Reinwald, M., Huettermann, H., & Franczak, J. (2023). Am I the only one? Consequences of change championing (a)symmetry on group- and individual-level change outcomes. *Journal of Organizational Behavior*, 44(7), 1048–1065. https://doi.org/10.1002/job.2683
- Kanter, R. M., Stein, B. A., & Jick, T. D. (1992). The challenge of organizational change: How companies experience it and leaders guide it. Free Press.
- Kao, R. H. (2017). The relationship between work characteristics and change-oriented organizational behavior: A multi-level study on transformational leadership and organizational climate in immigration workers. Personnel Review, 46, 1890–1914. https://doi.org/10.1108/ PR-01-2016-0012
- Kaplan, S., & Henderson, R. (2005). Inertia and incentives: Bridging organizational economics and organizational theory. Organization Science, 16(5), 453–562. https://doi.org/10.1287/orsc.1050.0154
- Kellogg, K. C. (2012). Making the cut: Using status-based countertactics to block social movement implementation and microinstitutional change in surgery. *Organizational Science*, 23, 1546–1570. https://doi.org/10. 1287/orsc.1110.0704
- Kelly, J. R., & Barsade, S. G. (2001). Mood and emotions in small groups and work teams. *Organizational Behavior and Human Decision Processes*, 86(1), 99–130. https://doi.org/10.1006/obhd.2001.2974
- Ketelaar, E., Beijaard, D., Boshuizen, H. P. A., & Den Broka, P. J. (2012). Teachers' positioning towards an educational innovation in the light of ownership, sense-making and agency. *Teaching and Teacher Education*, 28(2), 273–282. https://doi.org/10.1016/j.tate.2011.10.004
- Kim, B. J., Rousseau, D. M., & Tomprou, M. (2019). Training and diffusion of change: The impact of training and proactivity on change-related advice giving. The Journal of Applied Behavioral Science, 55(4), 453– 476. https://doi.org/10.1177/0021886319865323
- Kim, T. G., Hornung, S., & Rousseau, D. M. (2011). Change-supportive employee behavior: Antecedents and the moderating role of time. *Journal of Management*, 37(6), 1664–1693. https://doi.org/10.1177/ 0149206310364243
- Kirkpatrick, D. (1985). How to manage change effectively. (Ed.) San Francisco: Jessey-Bass; Ford, J., & Ford, L. (2009). Stop blaming resistance and start using it. Organizational Dynamics, 39, 24–36.
- Koestner, R., Lekes, N., Powers, T. A., & Chicoine, E. (2002). Attaining personal goals: Self-concordance plus implementation intentions equals success. *Journal of Personality and Social Psychology*, 83(1), 231–244. https://doi.org/10.1037/0022-3514.83.1.231
- Koestner, R., & Losier, G. F. (2002). Distinguishing three ways of being highly motivated: A closer look at introjection, identification, and



- intrinsic motivation. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 101–121). University of Rochester Press.
- Kotter, J. P. (1996). Leading change. Harvard Business Press.
- Kotter, J. P. (2007). Leading change: Why transformation efforts fail. *Harvard Business Review*, 73, 59–67.
- Kotter, J. P. (2012). Accelerate! How the most innovative companies capitalize on today's rapid-fire strategic challenges and still make their numbers. *Harvard Business Review*, 90, 43–58.
- Kump, B. (2021). When do threats mobilize managers for organizational change toward sustainability? An environmental belief model. *Business Strategy and the Environment*, 30, 2713–2726. https://doi.org/10. 1002/bse.2773
- Kwasnicka, D., Dombrowski, S. U., White, M., & Sniehotta, F. (2016). Theoretical explanations for maintenance of behavior change: A systematic review of behavior theories. *Health Psychology Review*, 10(3), 277–296. https://doi.org/10.1080/17437199.2016.1151372
- Lai, P. C. (2017). The literature review of technology adoption models and theories for the novelty technology. *Journal of Information Systems & Technology Management*, 14(1), 21–38. https://doi.org/10.4301/ S1807-17752017000100002
- Lally, P., van Jaarsveld, C. H. M., Potts, H. W. W., & Wardle, J. (2010). How are habits formed: Modelling habit formation in the real world. European Journal of Social Psychology, 40, 998–1009. https://doi.org/ 10.1002/ejsp.674
- Latham, G. P., Winters, D. C., & Locke, E. A. (1994). Cognitive and motivational effects of participation: A mediator study. *Journal of Organizational Behavior*, 15, 49-63. https://doi.org/10.1002/job. 4030150106
- Lau, C. M., & Woodman, R. (1995). Understanding organizational change: A schematic perspective. Academy of Management Journal, 38(2), 537–554. https://doi.org/10.2307/256692
- Laurin, K., Kay, A. C., & Fitzsimons, G. J. (2012). Reactance versus rationalization: Divergent responses to policies that constrain freedom. Psychological Science, 23(2), 205–209. https://doi.org/10.1177/0956797611429468
- Lazarus, R. S. (1991). Cognition and motivation in emotion. American Psychologist, 46(4), 352–367. https://doi.org/10.1037/0003-066X.46. 4.352
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer.
 Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. American Psychologist, 57(9), 705–717. https://doi.org/10.1037/0003-066X.57.9.705
- Lockwood, P., Shaughnessy, S. C., Fortune, J. L., & Tong, M. (2012). Social comparisons in novel situations: Finding inspiration during life transitions. *Personality and Social Psychology Bulletin*, 38(8), 985–996. https://doi.org/10.1177/0146167212447234
- Lok, P., Hung, R. Y., Walsh, P., Wang, P., & Crawford, J. (2005). An integrative framework for measuring the extent to which organizational variables influence the success of process improvement programmes. *Journal of Management Studies*, 42, 1357–1381. https://doi.org/10.1111/j.1467-6486.2005.00547.x
- Lustenberger, D. E., & Jagacinski, C. M. (2010). Exploring the effects of ostracism on performance and intrinsic motivation. *Human Performance*, 23(4), 283–304. https://doi.org/10.1080/08959285.2010.501046
- Marcus, B. H., Forsyth, L. H., Stone, E. J., Dubbert, P. M., McKenzie, T. L., Dunn, A. L., & Blair, S. N. (2000). Physical activity behavior change: issues in adoption and maintenance. *Health Psychology*, 19(1S), 32–41. https://doi.org/10.1037/0278-6133.19.Suppl1.32
- Martela, F., Ryan, R. M., & Steger, M. F. (2018). Meaningfulness as satisfaction of autonomy, competence, relatedness, and beneficence: Comparing the four satisfactions and positive affect as predictors of meaning in life. *Journal of Happiness Studies*, 19, 1261–1282. https://doi.org/10.1007/s10902-017-9869-7
- Martela, F., Unanue, J., Gómez, M., & Unanue, W. (2024). Reciprocal relations between meaning in life, beneficence, and psychological needs

- for autonomy, competence, and relatedness: Evidence from a three-wave longitudinal study. *Journal of Happiness Studies*, 25(3), 29. https://doi.org/10.1007/s10902-024-00741-y
- Mathieson, K. (1991). Predicting user intentions: Comparing the technology acceptance model with the theory of planned behavior. *Information Systems Research*, 2(3), 173–191. https://doi.org/10.1287/isre.2.3173
- Maurer, R. (1996). Beyond the wall of resistance. Bard Press.
- McCracken, M., & McIvor, R. (2013). Transforming the HR function through outsourced shared services: Insights from the public sector. *International Journal of Human Resource Management*, 24, 1685–1707. https://doi.org/10.1080/09585192.2012.725070
- McEachan, R. R. C., Conner, M., Taylor, N. J., & Lawton, R. J. (2011). Prospective prediction of health-related behaviors with theory of planned behavior: A meta-analysis. *Health Psychology Review*, 5(2), 97–144. https://doi.org/10.1080/17437199.2010.521684
- McFillen, J. M., O'Neil, D. A., Balzer, W. K., & Varney, G. H. (2013). Organizational diagnosis: An evidence-based approach. *Journal of Change Management*, 13, 223–246. https://doi.org/10.1080/14697017.2012.679290
- Melkonian, T., Monin, P., & Noorderhaven, N. (2011). Distributive justice, procedural justice, exemplarity, and employees' willingness to cooperate in M&A integration processes: Analysis of the air France-KLM merger. Human Resource Management, 50, 809–837. https://doi.org/10.1002/hrm.20456
- Meyer, J. P., Gagné, M., & Parfyonova, N. M. (2010). Toward an evidence-based model of engagement: What we can learn from motivation and commitment research. In S. L. Albrecht (Ed.), New horizons in management. Handbook of employee engagement: Perspectives, issues, research and practice (pp. 62–73). Edward Elgar. https://doi.org/10.4337/9781849806374.00011
- Michie, S., Ashford, S., Sniehotta, F. F., Dombrowski, S. U., Bishop, A., & French, D. P. (2011). A refined taxonomy of behavior change techniques to help people change their physical activity and healthy eating behaviors: The CALO-RE taxonomy. *Psychology and Health*, *26*(11), 1479–1498. https://doi.org/10.1080/08870446.2010.540664
- Michie, S., Carey, R., Johnston, M., Rothman, A., de Bruin, M., Kelly, M., & Connell, L. (2016). From theory-inspired to theory-based interventions: A protocol for developing and testing a methodology for linking behavior change techniques to theoretical mechanisms of action. Annals of Behavioral Medicine, 52(6), 501–512. https://doi.org/10.1007/s12160-016-9816-6
- Michie, S., Johnston, M., Abraham, C., Lawton, R., Parker, D., Walker, A., & "Psychological Theory" Group. (2005). Making psychological theory useful for implementing evidence-based practice: A consensus approach. BMJ Quality and Safety of Health Care, 14, 26–33. https://doi.org/10.1136/qshc.2004.011155
- Michie, S., Johnston, M., Francis, J., Hardeman, W., & Eccles, M. (2008). From theory to intervention: mapping theoretically derived behavioural determinants to behaviour change techniques. *Applied Psychology*, 57(4), 660–680.
- Michie, S., Johnston, M., Rothman, A. J., de Bruin, M., Kelly, M. P., Carey, R. N., Bohlen, L. E. C., Groarke, H. N. K., Anderson, N. C., & Zink, S. (2021). Developing an evidence-based online method of linking behaviour change techniques and theoretical mechanisms of action: A multiple methods study. Health Services and Delivery Research, 9(1), 1–168. https://doi.org/10.3310/hsdr09010
- Michie, S., Richardson, M., Johnston, M., Abraham, C., Francis, J., Hardeman, W., Eccles, M. P., Cane, J., & Wood, C. E. (2013). The behavior change technique taxonomy of 93 hierarchically clustered techniques: Building an international consensus for the reporting of behavior change interventions. Annals of Behavioral Medicine, 46(1), 81–95. https://doi.org/10.1007/s12160-013-9486-6
- Moeser, G., Maoryson, H., & Schwenk, G. (2013). Determinants of online social business network usage behavior—Applying the technology

- acceptance model and its extensions. *Psychology*, *4*(4), 433–437. https://doi.org/10.4236/psych.2013.44061
- Moullin, J. C., Dickson, K. S., Stadnick, N. A., Becan, J. E., Wiley, T., Phillips, J., & Aarons, G. A. (2020). Exploration, preparation, implementation, sustainment (EPIS) framework. In P. Nilsen & S. A. Birken (Eds.), Handbook on implementation science (pp. 32-61). Edward Elgar. https://doi.org/10.4337/9781788975995.00009
- Murray, J. M., Brennan, S. F., French, D. P., Patterson, C. C., Kee, F., & Hunter, R. F. (2018). Mediators of behavior change maintenance in physical activity interventions for young and middle-aged adults: A systematic review. Annals of Behavioral Medicine, 52(6), 513–529. https://doi.org/10.1093/abm/kay012
- Nadler, D. A. (1976). The use of feedback for organizational change: Promises and pitfalls. Group and Organization Studies, 1, 177–186. https://doi.org/10.1177/105960117600100205
- Neal, D. T., Wood, W., & Quinn, J. M. (2006). Habits A repeat performance. Current Directions in Psychological Science, 15, 198–202. https://doi.org/10.1111/j.1467-8721.2006.00435.x
- Neubert, M. J. (1998). The value of feedback and goal setting over goal setting alone and potential moderators of this effect: A meta-analysis. *Human Performance*, 11, 321–335. https://doi.org/10.1207/s15327043hup1104_2
- Neuman, G. A., Edwards, J. E., & Raju, N. S. (1989). Organizational development interventions: A meta-analysis of their effects on satisfaction and other attitudes. *Personnel Psychology*, 42(3), 461–489. https://doi.org/10.1111/j.1744-6570.1989.tb00665.x
- Neves, P. (2009). Readiness for change: Contributions for employee's level of individual change and turnover intentions. *Journal of Change Management*, 9(2), 215–231. https://doi.org/10.1080/14697010902879178
- Neves, P. (2011). Building commitment to change: The role of perceived supervisor support and competence. European Journal of Work and Organizational Psychology, 20, 437–450. https://doi.org/10.1080/ 13594321003630089
- Neves, P., & Caetano, A. (2009). Commitment to change: Contributions to trust in the supervisor and work outcomes. Group and Organization Management, 34, 623–644. https://doi.org/10.1177/1059601109350980
- Neville, F., & Reicher, S. (2011). The experience of collective participation: Shared identity, relatedness and emotionality. Contemporary Social Science, 6(3), 377–396. https://doi.org/10.1080/21582041.2012.627277
- Ng, J. Y., Ntoumanis, N., Thøgersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Duda, J. L., & Williams, G. C. (2012). Self-determination theory applied to health contexts: A meta-analysis. *Perspectives on Psychological Science*, 7(4), 325–340. https://doi.org/10.1177/1745691612447309
- Nordhall, O., & Knez, I. (2018). Motivation and justice at work: The role of emotion and cognition components of personal and collective work identity. Frontiers in Psychology, 8, 2307. https://doi.org/10.3389/ fpsyg.2017.02307
- Ntoumanis, N., Ng, J. Y. Y., Prestwich, A., Quested, E., Hancox, J. E., Thøgersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Lonsdale, C., & Williams, G. C. (2021). A meta-analysis of self-determination theory-informed intervention studies in the health domain: effects on motivation, health behavior, physical, and psychological health. *Health Psychology Review*, 15, 214–244. https://doi.org/10.1080/17437199. 2020.1718529
- Nutt, K., & Keville, S. (2016). '... you kind of frantically go from one thing to the next and there isn't any time for thinking any more': A reflection on the impact of organizational change on relatedness in multidisciplinary teams. *Reflective Practice*, 17(2), 221–232. https://doi.org/10. 1080/14623943.2016.1159552
- Nutt, P. C. (1986). Tactics of implementation. Academy of Management Journal, 29(2), 230–261. https://doi.org/10.2307/256187
- Oreg, S. (2003). Resistance to change: Developing an individual difference measure. *Journal of Applied Psychology*, 88(4), 680–693. https://doi.org/10.1037/0021-9010.88.4.680

- Oreg, S. (2006). Personality, context, and resistance to organizational change. *European Journal of Work and Organizational Psychology*, 15(1), 461–524. https://doi.org/10.1080/13594320500451247
- Oreg, S., Bartunek, J. M., Lee, G., & Do, B. (2018). An affect-based model of recipients' responses to organizational change events. *Academy of Management Review*, 43(1), 65–86. https://doi.org/10.5465/amr.2014. 0335
- Oreg, S., & Berson, Y. (2019). Leaders' impact on organizational change: Bridging theoretical and methodological chasms. *The Academy of Management Annals*, 13(1), 272–307. https://doi.org/10.5465/annals. 2016.0138
- Oreg, S., Michel, A., & By, R. T. (2013). The psychology of organizational change: Viewing change from the employee's perspective. Cambridge University Press. https://doi.org/10.1017/CBO9781139096690
- Oreg, S., Sverdlik, N., Paine, J. W., & Seo, M. G. (2023). Activation and valence in responses to organizational change: Development and validation of the change response circumplex scale. *Journal of Applied Psychology*, 109, 135–155. https://doi.org/10.1037/apl0001132
- Oreg, S., Vakola, M., & Armenakis, A. (2011). Change recipients' reactions to organizational change. *Journal of Applied Behavioral Science*, 47, 461–524. https://doi.org/10.1177/0021886310396550
- Ozenc, F. K., & Hagan, M. (2018). Ritual design: Crafting team rituals for meaningful organizational change. In Advances in affective and pleasurable design. Proceedings of the AHFE 2017 International Conference on Affective and Pleasurable Design (pp. 146–157). Springer International Publishing.
- Paganini, S., Ramsenthaler, C., Wurst, R., & Fuchs, R. (2022). Adoption and maintenance of physical activity: Mediation analysis of a psychological intervention. *Health Psychology*, 41(9), 573–584. https://doi.org/10. 1037/hea0001206
- Pallotti, F., Mascia, D., & Giorgio, L. (2023). A multilevel study of social networks and collective reactions to organizational change. *Journal of Organizational Behavior*, 44(7), 1109–1128. https://doi.org/10.1002/job.2687
- Pasmore, W. A., & Fagans, M. R. (1992). Participation, individual development, and organizational change: A review and synthesis. *Journal of Management*, 18(2), 375–397. https://doi.org/10.1177/014920639201800208
- Pedersen, M., & Dunne, S. (2020). Dewey's broad account of habit and its relevance for change management: A conceptual clarification with pragmatic illustrations. *Journal of Change Management*, 20(3), 247– 263. https://doi.org/10.1080/14697017.2020.1755342
- Peters, T. J., & Waterman, R. H. (1982). In search of excellence: Lessons from America's best-run companies. Harper & Row.
- Pfeffer, J., & Sutton, R. I. (2006). Evidence-based management. Harvard Business Review. January
- Rafferty, A. E., & Griffin, M. (2006). Perceptions of organizational change: A stress and coping perspective. *Journal of Applied Psychology*, 91(5), 1154–1162. https://doi.org/10.1037/0021-9010.91.5.1154
- Rafferty, A. E., Jimmieson, N. L., & Armenakis, A. A. (2013). Change readiness: A multilevel review. *Journal of Management*, 39(1), 110–135. https://doi.org/10.1177/0149206312457417
- Reay, T., Golden-Biddle, K., & Germann, K. (2006). Legitimizing a new role: Small wins and microprocesses of change. Academy of Management Journal, 49(5), 977–998. https://doi.org/10.5465/amj.2006. 22798178
- Rei, A., Lang, S. S., & Welker, R. B. (2002). Assessment of validity of IS success models: An empirical test and theoretical analysis. *Information Systems Research*, 13, 50–69. https://doi.org/10.1287/isre.13.1.50.96
- Rerup, C., & Feldman, M. S. (2011). Routines as a source of change in organizational schemata: The role of trial-and-error learning. Academy of Management Journal, 54, 577–610. https://doi.org/10.5465/amj.2011.61968107
- Rich, A., Brandes, K., Mullan, B., & Hagger, M. (2015). Theory of planned behavior and adherence in chronic illness: A meta-analysis. *Journal of*

- Behavioral Medicine, 38, 673-688. https://doi.org/10.1007/s10865-015-9644-3
- Rodell, J. B., & Colquitt, J. A. (2009). Looking ahead in times of uncertainty: The role of anticipatory justice in an organizational change context. *Journal of Applied Psychology*, 94, 989–1002. https://doi.org/10.1037/a0015351
- Rosenstock, I. M. (1966). Why people use health services. *Milbank Memory Fund Quarterly*, 44, 94–127. https://doi.org/10.2307/3348967
- Roth, G., Assor, A., Kanat-Maymon, Y., & Kaplan, H. (2007). Autonomous motivation for teaching: How self-determined teaching may lead to self-determined learning. *Journal of Educational Psychology*, 99(4), 761–774. https://doi.org/10.1037/0022-0663.99.4.761
- Rothman, A. J. (2000). Toward a theory-based analysis of behavioral maintenance. *Health Psychology*, 19(Suppl. 1), 64–69. https://doi.org/10.1037/0278-6133.19.Suppl1.64
- Rousseau, D. M. (1996). Changing the deal while keeping the people. Academy of Management Executive, 10, 50-61.
- Rousseau, D. M. (2018). Making evidence-based organizational decisions. *Organizational Dynamics*, 47(3), 135–146. https://doi.org/10.1016/j.orgdvn.2018.05.001
- Rousseau, D. M., & ten Have, S. (2022). Evidence-based change management. Organizational Dynamics, 51(3), 100899. https://doi.org/10.1016/j.orgdyn.2022.100899
- Rousseau, D. M., & Tijoriwala, S. A. (1999). What's a good reason to change? Motivated reasoning and social accounts in promoting organizational change. *Journal of Applied Psychology*, 84(4), 514–528. https://doi.org/10.1037/0021-9010.84.4.514
- Russell, S. V., Young, C. W., Unsworth, K. L., & Robinson, C. (2017). Bringing habits and emotions into food waste behavior. *Resources, Conservation and Recycling*, 125, 107–114. https://doi.org/10.1016/j.resconrec.2017.06.007
- Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 63(3), 397–427.
- Ryan, R. M., & Deci, E. L. (2000). The darker and brighter sides of human existence: Basic psychological needs as a unifying concept. *Psychological Inquiry*, 11(4), 319–338. https://doi.org/10.1207/S15327965PLI1104_03
- Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford publications. https://doi.org/10.1521/978.14625/28806
- Sartori, R., Costantini, A., Ceschi, A., & Tommasi, F. (2018). How do you manage change in organizations? Training, development, innovation, and their relationships. Frontiers in Psychology, 9, 313. https://doi.org/ 10.3389/fpsyg.2018.00313
- Satir, V., & Baldwin, M. (1983). Satir step by step. Science and Behavior Books.
- Schenk, P. M., Wright, A. J., West, R., Hastings, J., Lorencatto, F., Moore, C., Hayes, E., Schneider, V., Howes, E., & Michie, S. (2023). An ontology of mechanisms of action in behaviour change interventions. Wellcome Open Research, 8, 337. https://doi.org/10.12688/wellcomeopenres.19489.1
- Schepers, J., & Wetzels, M. (2007). A meta-analysis of the technology acceptance model: Investigating subjective norm and moderation effects. *Information & Management*, 44, 90–103. https://doi.org/10. 1016/j.im.2006.10.007
- Self, D. R., Armenakis, A. A., & Schraeder, M. (2007). Organizational change content, process, and context: A simultaneous analysis of employee reactions. *Journal of Change Management*, 7(2), 211–229. https://doi. org/10.1080/14697010701461129
- Seligman, M. E. (1972). Learned helplessness. *Annual Review of Medicine*, 23(1), 407-412. https://doi.org/10.1146/annurev.me.23.020172. 002203
- Sharp, J. H. (2007). Development, extension, and application: A review of the Technology Acceptance Model. *Information Systems Education Journal*, 5(9), 1–11.

- Sheeran, P., Wright, C. E., Avishai, A., Villegas, M. E., Lindemans, J. W., Klein, W. M. P., Rothman, A. J., Miles, E., & Ntoumanis, N. (2020). Self-determination theory interventions for health behavior change: Meta-analysis and meta-analytic structural equation modeling of randomized controlled trials. *Journal of Consulting and Clinical Psychology*, 88, 726–737. https://doi.org/10.1037/ccp0000501
- Shipp, A. J., & Sanders, K. J. (2021). The "other" time: A review of the subjective experience of time in organizations. Academy of Management Annals, 15(1), 299–334. https://doi.org/10.5465/annals.2018.0142
- Slemp, G. R., Field, J. G., Ryan, R. M., Forner, V. W., Van den Broeck, A., & Lewis, K. J. (2024). Interpersonal supports for basic psychological needs and their relations with motivation, well-being, and performance: A meta-analysis. *Journal of Personality and Social Psychology*. Advance online publication. https://doi.org/10.1037/pspi0000459
- Smith, A. C. T., & Stewart, B. (2011). Organizational rituals: Features, functions and mechanisms. *International Journal of Management Reviews*, 13, 113–133. https://doi.org/10.1111/j.1468-2370.2010.00288.x
- Smollan, R. K., & Morrison, R. L. (2019). Supporting others through stressful organizational change. The Journal of Applied Behavioral Science, 55(3), 327–351. https://doi.org/10.1177/0021886319832518
- Soenen, G., Melkonian, T., & Ambrose, M. L. (2017). To shift or not to shift? Determinants and consequences of phase shifting on justice judgments. Academy of Management Journal, 60, 798–817. https://doi. org/10.5465/ami.2014.0181
- Stanley, D. J., Meyer, J. P., & Topolnytsky, L. (2005). Employee cynicism and resistance to organizational change. *Journal of Business & Psychology*, 19(4), 429–459. https://doi.org/10.1007/s10869-005-4518-2
- State Services Authority Victoria. (2013). Organizational change: An ideas sourcebook for the Victorian public sector. Melbourne, Victoria, Australia. Retrieved from https://vpsc.vic.gov.au/wp-content/uploads/2015/03/Organisational-Change Web.pdf
- Steingut, R. R., Patall, E. A., & Trimble, S. S. (2017). The effect of rationale provision on motivation and performance outcomes: A meta-analysis. *Motivation Science*, 3(1), 19–50. https://doi.org/10.1037/mot0000039
- Steinmetz, H., Knappstein, M., Ajzen, I., Schmidt, P., & Kabst, R. (2016). How effective are behavior change interventions based on the theory of planned behavior? A three-level meta-analysis. Zeitschrift für Psychologie, 224, 216–233. https://doi.org/10.1027/2151-2604/ a000255
- Stephenson, W. (1953). The study of behavior. University of Chicago Press.
 Stillman, T. F., & Baumeister, R. F. (2009). Uncertainty, belongingness, and four needs for meaning. Psychological Inquiry, 20(4), 249–251. https://doi.org/10.1080/10478400903333544
- Stouten, J., Rousseau, D. M., & de Cremer, D. (2018). Successful organizational change: Integrating the management practice and scholarly literatures. Academy of Management Annals, 12(2), 752–788. https://doi.org/10.5465/annals.2016.0095
- Straatmann, T., Kohnke, O., Hattrup, K., & Mueller, K. (2016). Assessing employees' reactions to organizational change: An integrative framework of change-specific and psychological factors. The Journal of Applied Behavioral Science, 52(3), 265–295. https://doi.org/10.1177/ 0021886316655871
- Sverdlik, N., & Oreg, S. (2023). Beyond the individual-level conceptualization of dispositional resistance to change: Multilevel effects on the response to organizational change. *Journal of Organizational Behavior*, 44(7), 1066–1077. https://doi.org/10.1002/job.2678
- Szamosi, L. T., & Duxbury, L. (2002). Development of a measure to assess organizational change. *Journal of Organizational Change Management*, 15(2), 184–201. https://doi.org/10.1108/09534810210423107
- Teixeira, P. J., Marques, M. M., Silva, M. N., Brunet, J., Duda, J. L., et al. (2020). A classification of motivation and behavior change techniques used in self-determination theory-based interventions in health contexts. *Motivation Science*, *6*(4), 438–455.
- ten Have, S., ten Have, W., Huijsmans, A. B., & Otto, M. (2016). Reconsidering change management: Applying evidence-based insights in change

- management practice. Routledge. https://doi.org/10.4324/97813 15646015
- Terry, D. J., Hogg, M. A., & White, K. M. (1999). The theory of planned behavior: Self-identity, social identity and group norms. *British Journal* of Social Psychology, 38, 225–244. https://doi.org/10.1348/ 014466699164149
- Thaler, R., & Sunstein, C. (2008). Nudge: Improving decisions about health, wealth, and happiness. Yale University Press.
- Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. Academy of Management Review, 15(4), 666–681. https://doi.org/10.2307/258687
- Tyler, T. R., & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7, 349–361. https://doi.org/10.1207/S15327957PSPR0704_07
- Vakola, M., Armenakis, A., & Oreg, S. (2013). Reactions to organizational change from an individual differences perspective: A review of empirical research. In S. Oreg, A. Michel, & R. T. By (Eds.), The psychology of organizational change: Viewing change from the employee's perspective (pp. 95-122). Cambridge University Press. https://doi.org/10.1017/ CBO9781139096690.008
- Vakola, M., Tsaousis, I., & Nikolaou, I. (2003). The role of emotional intelligence and personality variables on attitudes toward organizational change. *Journal of Managerial Psychology*, 19(2), 88–110. https://doi.org/10.1108/02683940410526082
- Valleala, U. M., Herranen, S., Collin, K., & Paloniemi, S. (2015). Fostering learning opportunities through employee participation amid organizational change. *Vocations and Learning*, 8(1), 1–34. https://doi.org/10. 1007/s12186-014-9121-0
- Van den Broeck, A., Ferris, D. L., Chang, C.-H., & Rosen, C. C. (2016). A review of self-determination theory's basic psychological needs at work. *Journal of Management*, 42(5), 1195–1229. https://doi.org/10. 1177/0149206316632058
- Van den Broeck, A., Howard, J., Van Vaerenbergh, Y., Leroy, H., & Gagné, M. (2021). Beyond intrinsic and extrinsic motivation: A meta-analysis on self-determination theory's multidimensional conceptualization of work motivation. *Organizational Psychology Review*, 11(3), 240–273. https://doi.org/10.1177/20413866211006173
- Van Dick, R., Ciampa, V., & Liang, S. (2018). Shared identity in organizational stress and change. Current Opinion in Psychology, 23, 20–25. https://doi.org/10.1016/j.copsyc.2017.11.005
- van Knippenberg, B., Martin, L., & Tyler, T. (2006). Process-orientation versus outcome-orientation during organizational change: The role of organizational identification. *Journal of Organizational Behavior*, 27, 685–704. https://doi.org/10.1002/job.391
- Vansteenkiste, M., Ryan, R. M., & Soenens, B. (2020). Basic psychological need theory: Advancements, critical themes, and future directions. *Motivation and Emotion*, 44(1), 1–31. https://doi.org/10.1007/s11031-019-09818-1
- Värttö, M. (2019). Democratization of organizational change process through deliberation. *Leadership & Organization Development Journal*, 40(7), 791–802. https://doi.org/10.1108/LODJ-02-2019-0066
- Venkatesh, V., & Davis, F. D. (1996). A model of the antecedents of perceived ease of use: Development and test. *Decision Sciences*, 27, 451–481. https://doi.org/10.1111/j.1540-5915.1996.tb01822.x
- Verplanken, B., & Whitmarsh, L. (2021). Habit and climate change. *Current Opinion in Behavioral Sciences*, 42, 42–46. https://doi.org/10.1016/j.cobeha.2021.02.020
- Vroom, V. H., & Jago, A. G. (1988). The new leadership: Managing participation in organizations. Prentice Hall.
- Wagner, J. A. (1994). Participation's effects on performance and satisfaction: A reconsideration of research evidence. Academy of Management Review, 19, 312–330. https://doi.org/10.2307/258707
- Wagner, J. A. (2009). Use participation to share information and distribute knowledge. In E. A. Locke (Ed.), Handbook of principles of organizational behavior (pp. 445–460). Wiley.

- Wanberg, C. R., & Banas, J. T. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology*, 85(1), 132–142. https://doi.org/10.1037/0021-9010.85.1.132
- Weick, K. (1984). Small wins: Redefining the scale of social problems. American Psychologist, 39, 40–49. https://doi.org/10.1037/0003-066X.39.1.40
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. Organization Science, 16(4), 409–421. https://doi.org/10.1287/orsc.1050.0133
- Weiner, B. J. (2009). A theory of organizational readiness for change. Implementation Science, 4, 67. https://doi.org/10.1186/1748-5908-4-67
- Weinstein, N., Ryan, R. M., & Deci, E. L. (2012). Motivation, meaning, and wellness: A self-determination perspective on the creation and internalization of personal meanings and life goals. In P. T. P. Wong (Ed.), *The human quest for meaning: Theories, research, and applications* (2nd ed.) (pp. 81–106). Routledge/Taylor & Francis Group
- Whelan-Berry, K. S., & Somerville, K. A. (2010). Linking change drivers and the organizational change process: A review and synthesis. *Journal of Change Management*, 10(2), 175–193. https://doi.org/10.1080/14697011003795651
- Wiedner, R., Barrett, M., & Oborn, E. (2017). The emergence of change in unexpected places: Resourcing across organizational practices in strategic change. *Academy of Management Journal*, 60(3), 823–854. https://doi.org/10.5465/amj.2014.0474
- Wong, D. R., Schaper, H., & Saldana, L. (2022). Rates of sustainment in the universal stages of implementation completion. *Implementation Science Communications*, 3, 2. https://doi.org/10.1186/s43058-021-00250-6
- Wruck, K. H. (2000). Compensation, incentives and organizational change: ideas and evidence from theory and practice. In M. Beer & N. Nohria (Eds.), *Breaking the code of change*. Harvard Business School Press. https://doi.org/10.2139/ssrn.203268
- Yang, Y., Choi, J., & Lee, K. (2018). Theory of planned behavior and different forms of organizational change behavior. Social Behavior and Personality: An International Journal, 46, 1657–1672. https://doi.org/ 10.2224/sbp.6832
- Yoon, J., & Kayes, D. C. (2016). Employees' self-efficacy and perception of individual learning in teams: The cross-level moderating role of teamlearning behavior. *Journal of Organizational Behavior*, 37, 1044–1060. https://doi.org/10.1002/job.2092
- Yousafzai, S. Y., Foxall, G. R., & Pallister, J. G. (2007a). Technology acceptance: A meta-analysis of the TAM: Part 1. Journal of Modelling in Management, 2(3), 251–280. https://doi.org/10.1108/174656607108 34453
- Yousafzai, S. Y., Foxall, G. R., & Pallister, J. G. (2007b). Technology acceptance: A meta-analysis of the TAM: Part 2. Journal of Modelling in Management, 2(3), 281–304. https://doi.org/10.1108/174656607108 34462
- Zheng, W., Yang, B., & McLean, G. N. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. *Journal of Business Research*, 63, 763–771. https://doi.org/10.1016/j.jbusres.2009.06.005

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