Leader Affect-Based Responses and their impact on Employee Readiness for Organizational Change

Master Thesis

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Word count: 23476

June 24, 2025

Abstract

While leadership is often associated with strategic decision-making, this research analyzes how employees perceive their leaders' affect-based responses to organizational change, specifically change acceptance, change proactivity, change disengagement, and change resistance. It also analyzes how these perceptions influence key components of employee change readiness, such as appropriateness, management support, change efficacy, and personal valence. The study further analyzes whether openness to change acts as a moderator in these relationships. Data is collected from 150 employees across multiple organizations with a structured online survey. Quantitative analyses are conducted to test the hypotheses. Results show that perceived negative affect-based responses from leaders reduce employee change readiness, especially in terms of appropriateness, change efficacy, and personal valence. In contrast, positive responses show weaker and more limited effects. The relationships between leader change acceptance and employee change efficacy and between leader change proactivity and employee change efficacy are only significant and positive for employees with high openness to change; a moderating effect is found. Implications and future directions are discussed.

Keywords: change management, employee change readiness, leadership, affect-based responses

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H1. Introduction

Organizational change relies on evolving technology, shifting market dynamics, and changing consumer behavior (Armenakis & Harris, 2009). The ability of organizations to successfully navigate these changes is crucial for their survival and competitiveness in today's volatile business environment (Reeves & Whitaker, 2021; Schoemaker et al., 2018). However, implementing strategic and digital change continues to be highly challenging. Recent findings show that most business transformations do not meet their intended goals, with Bain & Company (2024) reporting that 88% fail to achieve their goals (Bain&Company, 2024). Likewise, O'Higgins (2023) found that up to 95% of digital transformation processes do not deliver the expected results (O'Higgins, 2023). One of the key factors influencing the success of change initiatives is employees' readiness to embrace and support change (Armenakis et al., 1993). In the literature, the terms readiness for change and change readiness are used synonymously, but some researchers are making a distinction. Readiness for change refers to a multifaced concept to an individual-level construct, including cognitive, emotional, and intentional components that shape employees' support for or resistance to change (Holt et al., 2007). In contrast, change readiness is observed at both the individual and organization level and is defined as "a psychological state shared by employees of an organization during which employees show collective commitment to implementing a change and a shared belief as to the collective ability to achieve that change" (Weiner et al., 2020, p. 101). In many organizations, leadership fails to support the beliefs, attitudes, and emotional responses necessary to create a change-ready workforce. Nearly 39% of change failures are linked to employee resistance and the inability of management to address it effectively (Martin, 2015; Szőts-Kováts & Kiss, 2023). This demonstrates that a critical focus on creating readiness for change is essential for helping to ensure successful implementation of change (Armenakis & Harris, 2002; Mangundjaya, 2013).

Leadership is recognized as a key factor of organizational change (Kotter, 2012), as leaders communicate the vision for change, motivate the employees, enable creating and establishing a supportive environment that will facilitate change (Higgs & Rowland, 2005). Research shows that different leadership styles, such as transformational leadership, are positively associated with employee change readiness. These styles foster commitment, build trust, and communicate an engaging vision (Armenakis et al., 1993; Holt et al., 2007). However, leaders are more than external influencers; they are also individuals who are dealing with the same

emotional pressures, uncertainties, and personal responses to organizational change as employees (Huy, 2012; Menges & Kilduff, 2015; Oreg et al., 2024).

Rather than focusing only on leaders' internal emotional experiences, recent research highlights the importance of affect-based responses, observable behaviors used by leaders that are emotionally based and made in response to change (Oreg et al., 2024). The external expressions, such as proactive engagement, visible resistance, or emotional disengagement, serve as social signals that influence the way employees process change efforts (Van Kleef et al., 2009). Affect-based responses go beyond affect as a general emotional state, they represent a more specific behavioral expression of affect, that can shape the employees' perception and behaviors (Oreg et al., 2024; Van Kleef et al., 2009).

Although leaders' affect-based responses are increasingly considered influential in shaping employee attitudes and readiness for change (Oreg et al., 2024; Van Kleef et al., 2009), most existing studies focus on employees' responses to change, rather than exploring how leaders express and regulate their own affective behavior during change (Ikart, 2023; Oreg, 2006). Despite the existing literature on affect management in organizational settings, there is limited understanding of how leaders' own affect-based responses impact employee readiness for change (Mathew et al., 2014; Oreg et al., 2024). This gap is surprising, given the recognized role of the leader-employee relationship in shaping employee attitudes toward change (Mathew et al., 2014).

Therefore, the research question is formulated as follows: *to what extent do employees' perceptions of leaders' affect-based responses influence employee readiness for change during organizational transformations?*

Academic relevance

This study contributes to theory by integrating two streams of literature: employee readiness for change as defined by Holt et al. (2007) and leadership behaviors during change, specifically affect-based responses, as described by Oreg et al. (2024). It extends existing models by recognizing that leaders are not only external influencers, but also emotionally engaged individuals whose behaviors shape employee perceptions. The study expands change management literature by exploring how leaders' affect-based responses influence specific components of employee change readiness.

Practical relevance

With the high rate of failure in organizational change initiatives (Bain&Company, 2024; O'Higgins, 2023), and the difficulties faced by organizations introducing change among employees' (Martin, 2015), understanding the role of leader affect-based responses is crucial in practice. By answering the research question, this research not only contributes to strategies for improving readiness towards change and minimizing resistance (Armenakis & Harris, 2009; Oreg & Berson, 2011), but also offers practical insights into how leaders can be trained to recognize and use their affect-based responses more effectively during change processes.

H2. Theoretical framework

2.1 Change readiness

Change readiness, at the organizational level, is explained by Weiner (2020) as the common readiness among organizational employees sharing a collective commitment to implement a change and a shared belief in their collective efficacy in implementing it. This readiness is influenced by various factors, including task demands, resource availability, and situational factors (Weiner et al., 2020). This definition underlines two aspects of change readiness: commitment and efficacy (Weiner et al., 2020). Armenakis et al. (1993) proposed a model based on five aspects that facilitate readiness for change: discrepancy, appropriateness, efficacy, principal support, and personal valence. The model provides a whole framework of assessing and developing organizational readiness by addressing both cognitive and structural aspects of change implementation (Armenakis et al., 1993).

At the individual level, change readiness is an employee's psychological, cognitive, and emotional readiness to accept, engage, and adopt organizational change (Holt et al., 2007; Rafferty et al., 2013; Vakola, 2013). Individual change readiness refers to the extent to which individuals are motivated to embrace change, highlighting both cognitive and affective components (Holt et al., 2007). This perspective highlights that the beliefs, emotions, and personal assessments from employees are likely to influence their openness to support or resist change efforts (Holt et al., 2007). While organizational readiness is a group-level construct, individual readiness is shaped by personal perceptions, attitudes, and experiences about how the change will impact them personally (Rafferty et al., 2013).

In Table 1, the most important definitions of change readiness are included. Based on these perspectives, it can be concluded that change readiness is a multidimensional concept including both organizational and individual levels. At the organizational level, change readiness can be described as a psychological environment shaped by members feeling committed to carry out a change and confident in their ability to do so (Weiner, 2020). This perspective is expressed in terms of shared attitudes, beliefs, and intentions within an organization that controls its capability for a transformation (Armenakis et al., 1993). In contrast, change readiness at the individual level is focused on one's own attitudes, feelings, and cognitive mindset towards acceptance and adoption of a change (Holt et al., 2007). Individuals who demonstrate a

proactive and positive attitude towards change are more likely to support and be active respondents in the process of transformation (Vakola, 2013). Some researchers integrate both levels, believing that change readiness is not only concerning organizational needs, but also the individual perceptions regarding how change would affect them and the broader organization (Rafferty et al., 2013). Ultimately, change readiness is a psychological and mindset-based construct requiring alignment between individual openness and organizational commitment to change, supporting a collaborative approach to managing organizational transformations.

Table 1. Definitions overview of change readiness (CR)

Author	Level	Construct	Definition
(Armenakis et al., 1993, p. 681)	Organizational	Readiness for Change	"The beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes".
(Weiner, 2020, p. 382)	Organizational	Change Readiness	"A shared psychological state in which organizational members feel committed to implementing an organizational change and confident in their collective abilities to do so".
(Rafferty et al., 2013, p. 113)	Organizational & individual	Change Readiness	"The extent to which individuals hold positive views about the need for organizational change, as well as the extent to which individuals believe that such changes are likely to have positive implications for themselves and the wider organization".
(Holt et al., 2007, p. 235)	Individual	Readiness for Change	"The extent to which an individual or individuals are cognitively and emotionally inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo".
(Vakola, 2013, p. 98)	Individual	Readiness to Change	"An individual who is ready for change is someone who demonstrates a proactive and positive attitude toward change, which can be translated into willingness to support change and confidence in succeeding in change".

2.2 Employee readiness for change theory according to Holt et al. (2007)

Holt et al. (2007) developed a theory that provides a complete framework for understanding employee readiness for organizational change. The model describes four key components determining change readiness: 1) appropriateness, 2) management support, 3) change-specific efficacy, and 4) personal valence (Holt et al., 2007). The four key components have been empirically validated in various change contexts (Armenakis et al., 2007; Rafferty et al., 2013).

Appropriateness is about whether employees question if the change is appropriate and viewed as crucial for the organization (Holt et al., 2007). Armenakis and Harris (2002) highlight that recognizing the need for change to align with organizational goals helps promote acceptance and reduce resistance (Rafferty et al., 2013). Addressing the appropriateness of change helps reduce uncertainty, making the change feel both necessary and justified. Recent studies show that aligning organizational change with employee and organizational values reduces resistance and increases motivation and further improves support and engagement (Choi, 2011; Edmondson & Bransby, 2023).

Management support is defined as the process through which leaders within the organization offer direction, resources, and encouragement during the change process (Oreg & Berson, 2011). Employees are more likely to support the change when top management demonstrates commitment to the success of the change process and participates in the change initiative (Oreg & Berson, 2011). Likewise, Weiner (2009) supports this argument by highlighting change commitment as one of the key elements of organizational change readiness. This factor aligns with transformational leadership theories that draw on leaders to inspire and motivate employees during change processes (Bass, 2006). If leaders remain present, show commitment to a change initiative, and provide a clear vision, employees are more likely to perceive the change as valid and valuable. Recent studies have developed the positive effects of leadership communication and emotional intelligence on trust and promoting a positive change climate (Andronic & Dumitraşcu, 2017; Biswas & Rahman, 2017).

Change-specific efficacy refers to the extent to which an individuals' belief in their ability to successfully implement the proposed changes (Bandura, 1982; Holt et al., 2007). Change-specific efficacy determines the level of confidence an employee will have in performing the task associated with the change. Higher levels of change-specific efficacy are associated with

greater participation in change initiatives and increased proactive engagement with change efforts (Cunningham et al., 2002). Additionally, researchers have shown that high self-efficacy in employees results in greater adaptability, decreased anxiety, and improved commitment to organizational change (Vakola, 2013).

Personal valence refers to the perceived personal benefits or costs associated with the change for individual employees (Holt et al., 2007). Personal valence includes both the positive and negative outcomes, such as career advancement or improved working conditions, and job insecurity or increased workload (Kotter, 1996). Employees who perceive personal valence in a change are more likely to show commitment and active involvement (Vakola, 2013). Employees who see the change as personally beneficial or aligned with their values are more likely to engage positively with the change process (Santos de Souza & Chimenti, 2024).

2.3 Employee change readiness and leadership

Leadership significantly influences an individual or organization's readiness for change, both directly and indirectly. According to Armenakis and Bedeian (1999), leadership is central to guiding and motivating individuals to go through change's complexities and challenges (Armenakis & Bedeian, 1999). Leaders' influence readiness directly by compelling a vision, showing commitment, and providing information about the change, which increases employees' perceptions of the change as valid and needed (Jones et al., 2005; Kotter, 1996). Although the traditional understanding of leadership suggests a focus on vision creation and communication, recent research discusses how leaders' affect-based responses such as visible enthusiasm, resistance, or disengagement also represent important social signs that shape employees' interpretation and response to change (Oreg et al., 2024; Van Kleef et al., 2009).

Leadership also influences employees' readiness for change indirectly through self-efficacy and resilience, improving their change readiness and helping them adapt to organizational transformations (Akbar & Tirtoprojo, 2021; Bandura, 1997). Leaders' affect-based responses provide reassurance, minimizes uncertainty and reduces resistance through perceptions of psychological safety and responsiveness (Oreg et al., 2024; Van Kleef et al., 2009). Positive emotional expressions, such as enthusiasm or optimism, influence employees' affective experiences of the change process, promoting higher engagement and confidence (Sy et al., 2005; Wang, 2022). In contrast, negative affect-based responses like disengagement or visible

resistance may indicate detachment or uncertainty, which can reduce trust and create perceptions of instability or inconsistency (Higgs & Rowland, 2005; Kotter, 1996).

2.4 Affect-based responses

2.4.1 Definition affect-based responses

Affect-based responses reflect individuals' behavioral expressions of their emotional reactions to organizational change, shaped by both the degree to which an emotion is felt (activation) and the tone of the individuals' experience (valance) (Oreg et al., 2024). Affect-based responses reflect individuals' behavioral expressions and affective responses, and show how individuals, particularly leaders, respond to change through externally observable patterns of behavior. These responses act as emotional signs, indicating how leaders interpreted the change situations shaping how employees interpret and emotionally respond to organizational transformations (Van Kleef et al., 2009). Drawing from affective events theory, these responses are not just reflections of an internal emotion but are influential events in themselves that affect attitudes and behaviors of followers (Weiss & Cropanzano, 1996).

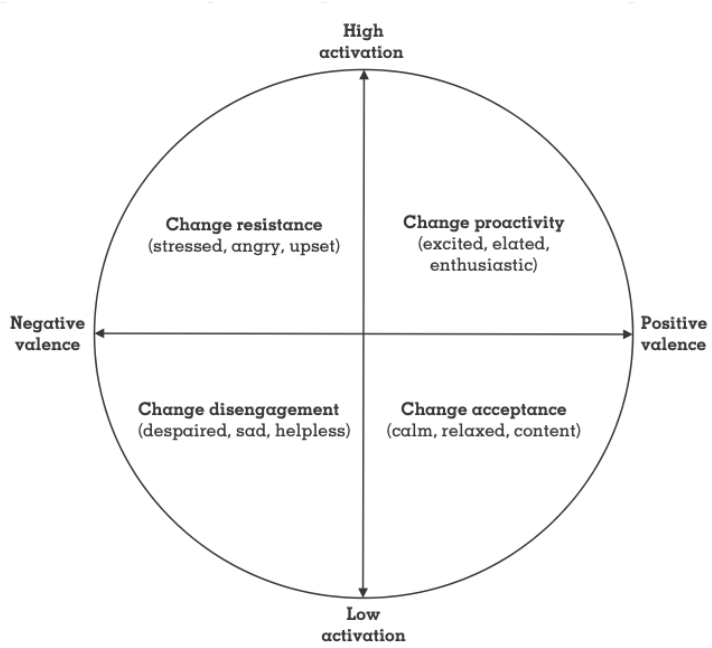
Affect-based responses, as described by Oreg et al. (2024), differ from broader affective traits or moods, as affect-based responses are context dependent, and focused on change events. Affect-based responses serve as socially relevant signals that employees interpret when determining the legitimacy, safety, and implications of organizational change (Van Kleef et al., 2009). Leaders' affect-based responses are particularly influential, because they may be perceived as support or concern before shaping employees' cognitive and emotional evaluations of the change process (Menges & Kilduff, 2015).

2.4.2 Circumplex model of affect-based responses

Oreg et al. (2018) developed the circumplex of change recipients' responses to change and underlying core affect-based response, as illustrated in Figure 1. The model explains how emotional experiences during organizational change can be understood using two dimensions: valence (positive to negative) and activation (high to low) (Posner et al., 2005; Russell, 1980). This model, developed by Oreg et al. (2018) and built upon earlier affective theories such as the circumplex model of affect (Russell, 1980), includes four dimensions of affect-based responses. First, change acceptance (pleasant, low activation): feeling content and calm

regarding the change. Second, change proactivity (pleasant, high activation): representing excitedness' and anticipation toward the change. Third, change disengagement (unpleasant, low activation): feeling discouraged or helpless in response to the change. Last, change resistance (unpleasant, high activation): representative of anger and anxiety toward the change (Oreg et al., 2018). These responses can be categorized into positive (change acceptance and change proactivity) and negative (change disengagement and change resistance) valence to distinguish between constructive and non-constructive emotional responses in the change process (Oreg et al., 2018). The twelve emotions used in this study – stressed, angry, upset; despaired, sad, helpless; excited, elated, enthusiastic; calm, relaxed, content – have been selected to reflect the key emotions linked to each quadrant of the circumplex model. Understanding these quadrants can help leaders and change managers shape their strategies. For instance, change managers may focus on motivating individuals across the 'change acceptance' quadrant to be proactive, while supporting those who show resistance by addressing their concerns and guiding them toward greater acceptance (Oreg et al., 2024).

Figure 1. Circumplex of change recipients' responses to change and underlying core affect (Oreg et al., 2018).



2.4.3 Emotions as Social Information (EASI) model

To better understand how employees interpret emotional expressions made by leaders during an organizational change, the Emotions as Social Information (EASI) model offered by Van

Kleef (2009) can be a useful theoretical perspective. The model suggests that emotional expressions are more than just personal affective states; they serve as social signals to direct observers' perceptions, judgements, and behavior. Emotions influence others in two important ways: 1) inferential processes, where observers assess the expresser's intentions, competence, or position (e.g. "*does my leader support this change*"), and 2) affective reactions, where the observer experiences similar or contrasting emotions in response (Van Kleef et al., 2010; Van Kleef et al., 2009). Therefore, emotions support regulation of social interactions and outcomes through other cognitive and affective responses. Leaders' affect-based responses have strategic informational value within organizational contexts, and particularly during times of change (Gooty et al., 2010; Sy et al., 2005). When a leader presents enthusiasm for change, this could signal confidence and legitimacy, fostering employee engagement. Alternatively, when a leader presents as disengaged or resistant, this can signal either disapproval, risk, or instability, leading employees to question the credibility or success of the change initiative (Ashkanasy & Humphrey, 2011; George, 2000). This is consistent with the EASI model's perspective that affect-based responses are interpreted within context, and their effects depends not only on the behavior expressed, but also of the observers' traits and the social relationships between the individuals (Van Kleef, 2014). Importantly, the perception of the genuineness and consistency of affect-based responses is influential (Dasborough & Ashkanasy, 2002). Employees are more likely to be influenced by leader emotions when they perceive the emotions as consistent with the situation, and prior leader behavior (Dasborough & Ashkanasy, 2002; Humphrey et al., 2008). In the context of this study, the EASI model helps illustrate how affect-based responses from leaders, like change acceptance, change proactivity, change disengagement, and change resistance are interpreted by employees as support or rejection. Since this study relies on employee perceptions of leader emotions, rather than leaders' self-reports, it reflects the social interpretation process highlighted in the EASI model.

Research demonstrates that employees are influenced by affect-based responses from leaders, especially in uncertain situations to form judgments about organizational circumstances, particularly during change (Menges & Kilduff, 2015; Oreg et al., 2018). Thus, affect-based responses do not just reflect a leaders' feelings, they shape employees' thoughts and feelings about the change, key dimensions of change readiness, such as appropriateness, management support, change efficacy, and personal valence (Holt et al., 2007; Rafferty & Griffin, 2006). The EASI model extends the circumplex of change recipients' responses to change and underlying core affect-based response, by providing a social-cognitive dimensions: it explains

not just how affect-based responses are organized in terms of valence and activation (Russell, 1980), but how they are interpreted and responded to within a group or organizational context.

2.5 Leader affect-based responses and employee change readiness

Leaders' affect-based responses influence the employees' readiness for change. Affect-based responses are more specific than general affect or emotional states. Affect-based responses are the behavioral expression of the emotional reactions to organizational change and act as social signs, which employees interpret when they consider the change initiatives (Oreg et al., 2024). These responses may impact how employees evaluate key aspects of change readiness, including the appropriateness of the change, the level of management support, confidence in implementing the change (change efficacy), and perceived personal benefits (personal valence) (Holt et al., 2007). For example, proactive or accepting leader behaviors signal support and commitment, which could promote engagement and trust of employees in the change process (Ashkanasy & Humphrey, 2011; Van Kleef et al., 2009). In contrast, when leaders demonstrate resistance or disengagement, employees may view the change as risky or unjustified, decreasing their motivation and cognitive readiness (Higgs & Rowland, 2005; Oreg et al., 2024). Leaders with the ability to manage and adjust their affective behaviors would be better suited to have a positive influence on employees' emotional states and increase readiness for change (Cherniss et al., 2006; Mayer et al., 2008)

2.6 Openness to change

2.6.1 Definition openness to change

Openness to change is the readiness of an individual to accept, embrace, and actively participate in organizational change (Wanberg & Banas, 2000). It indicates a mind-set that is flexible, curious, and open to embracing new behaviors. Individuals who are more open to change are more likely to see it as a change for personal and organizational growth, rather than as a threat and are more involved in the change process (Choi, 2011; Judge et al., 1999). Sinval, Miller, and Marôco (2021) created a multidimensional model in which openness to change includes positive feelings and attitudes toward change, cognitive beliefs about the benefits of change, and readiness to change behaviorally. These three related components, affective, cognitive, and behavioral, collectively forming an individuals' overall change readiness (Choi, 2011; Sinval et al., 2021): 1) the affective component is characterized by emotional responses, such as

enthusiasm or anxiety, in response to change, 2) the cognitive component includes beliefs and thoughts regarding whether the change is beneficial or necessary, and 3) the behavioral component is based on the openness to implement or take proactive actions during the change process.

Openness to change may provide a moderating role in this relationship, influencing how employees respond to leaders' affect-based responses during organizational change. Employees who are open to change are more sensitive and responsive to a leader who expresses enthusiasm, optimism, or concern, thereby increasing or decreasing their openness to change, depending on the affect-based responses of the leader (Oreg, 2006).

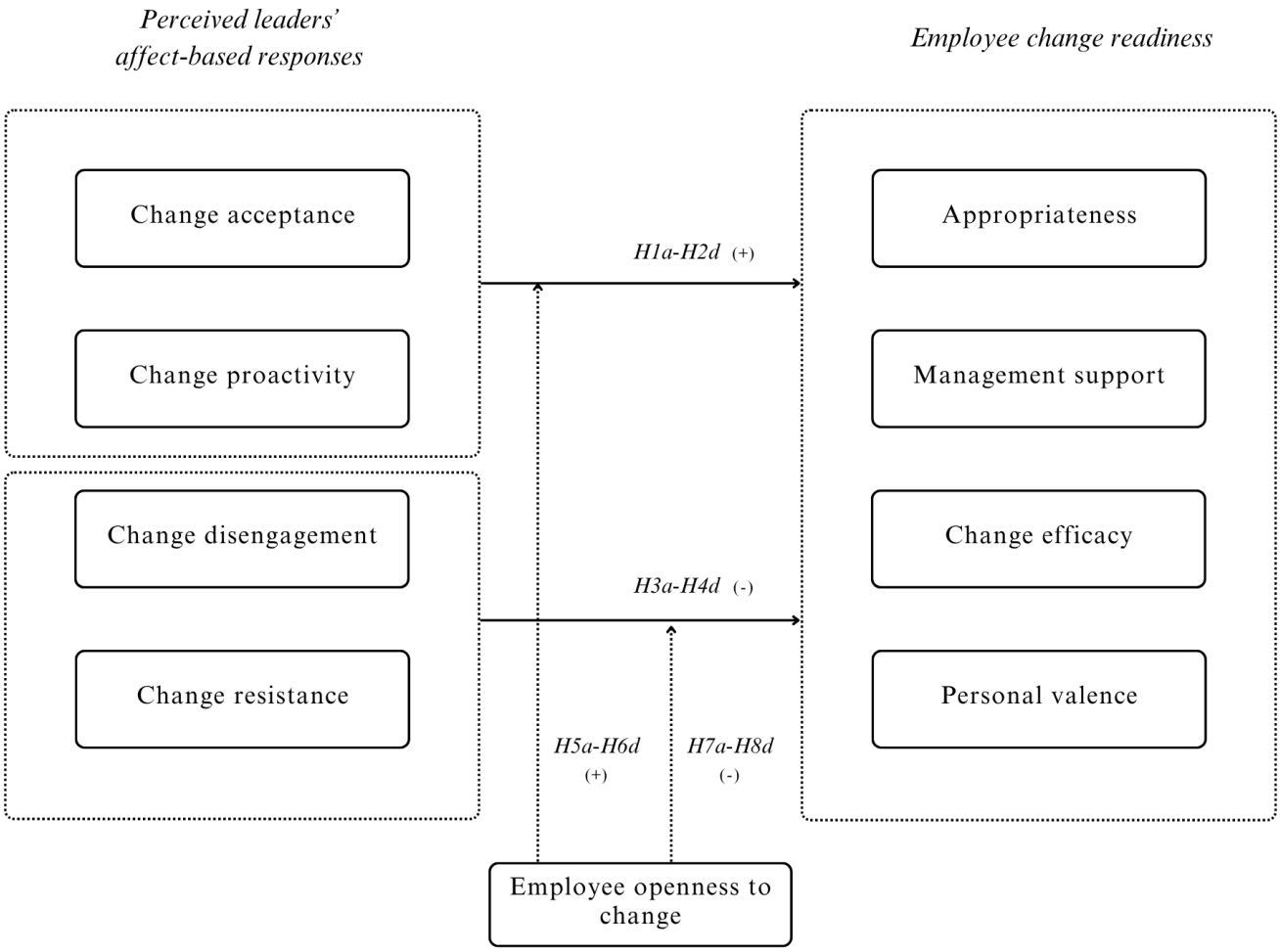
2.6.2 Openness to change and affect-based responses

Openness to change also closely interacts with the emotional dynamics of change as described in the circumplex model of affect-based responses (Oreg et al., 2018). Section 2.4.2 provides a further explanation of the model (see Figure 1). Individuals with high openness to change are more likely to fall within the positive quadrants of this circumplex, like change acceptance and change proactivity, thereby expressing emotions such as enthusiasm and excitement in response to organizational change. In contrast, low openness to change is most likely related to negative high-activation emotions such as anxiety and frustration, which indicate change resistance and change disengagement (Oreg et al., 2018). As defined by the affective events theory (AET) (Weiss & Cropanzano, 1996), leader behavior acts as an emotional event that can influence employee attitudes. Employees with lower levels of openness to change may depend more on external signs, while those with higher openness to change may be more resilient and rely on positive internal motivations (Vakola, 2013; Wanberg & Banas, 2000).

2.7 Theoretical model and hypotheses

This study analyzes how leader affect-based responses influence key components of employee readiness for change, such as appropriateness, management support, change efficacy, and personal valence (Barsade & Gibson, 2007; Oreg et al., 2018). It also explores whether openness to change moderates this relationship. A schematic representation of the theoretical model is presented in Figure 2.

Figure 2. Theoretical model



The hypotheses formulated in this study are based on leaders' affect-based responses and organizational change literature. Positive leader behaviors, like change acceptance, suggest a positive influence on perceptions of appropriateness. When leaders visibly accept change, it indicates that leaders' responses align with organizational goals and reduce uncertainty. It makes employees more likely to view the change as valid and well-founded, thereby improving employees' perceptions of its appropriateness (Herold et al., 2008; Oreg et al., 2024). Further, change acceptance may improve perceptions of management support. If employees perceive their leaders to be supportive of the change, they are more likely to see behavior as encouraging broader management support, which in turn increases their willingness to be part of the change process (Holt et al., 2007). In addition, change acceptance may positively influence perceptions of change efficacy. When employees see their leaders accept the change, employees are more likely to see the change as manageable and aligned with the organization's strategy, to reduce uncertainty and build confidence (Herold et al., 2008; Rafferty & Griffin, 2006). Additionally, change acceptance may improve perceptions of personal valence. When employees think their

leader is accepting the change, they are more likely to perceive this behavior as a signal that the change will personally benefit them or align with their individual goals (Rafferty & Griffin, 2006). The following hypotheses have been formulated:

Hypothesis 1a (H1a): Employees' perception of their leaders' change acceptance is positively related to their perception of appropriateness

Hypothesis 1b (H1b): Employees' perception of their leaders' change acceptance is positively related to their perception of management support

Hypothesis 1c (H1c): Employees' perception of their leaders' change acceptance is positively related to their perception of change efficacy

Hypothesis 1d (H1d): Employees' perception of their leaders' change acceptance is positively related to their perception of personal valence

Positive leader behaviors, such as change proactivity, are expected to improve perceptions of appropriateness. When leaders show a proactive behavior towards change by initiating early communication about the change, preparing for obstacles, and engaging actively throughout the change process, the leaders build commitment and alignment. When employees see the leader visibly engaged in the change, it is a sign to employees that the change is well-planned and legitimate, thereby improving their perceptions of its appropriateness (Herold et al., 2008; Yukl, 2022). Also, employee perceptions of management support might be improved by the change proactivity of the leader. When leaders take proactive actions, it signals their involvement through visible support. These behaviors are seen as a form of management support that improves employee confidence and motivation (Herold et al., 2008). Additionally, proactivity may improve employees' sense of change efficacy through leading by example and supportive communication, resulting in employees perceiving change as more manageable and feasible (Bandura, 1997; Herold et al., 2008). Further, change proactivity may also improve perceptions of personal valence. Proactive leaders help build an optimistic change environment that makes it more likely employees will see personal benefits (Burnes & By, 2012; Herold et al., 2008). The following hypotheses have been formulated:

Hypothesis 2a (H2a): Employees' perception of their leaders' change proactivity is positively related to their perception of appropriateness

Hypothesis 2b (H2b): Employees' perception of their leaders' change proactivity is positively related to their perception of management support

Hypothesis 2c (H2c): Employees' perception of their leaders' change proactivity is positively related to their perception of change efficacy

Hypothesis 2d (H2d): Employees' perception of their leaders' change proactivity is positively related to their perception of personal valence

On the other hand, leader behaviors that are negative, such as change disengagement, may weaken appropriateness. Leaders who are perceived as disengaged may seem uninterested or emotionally distant, which may decrease employee's confidence in the appropriateness of the change effort (Vakola et al., 2004; van Dam & Oreg, 2007). Also, leaders who are disengaged signal a lack of investment or interest which lowers the possibility of employees feeling supported through the change process (Vakola et al., 2004; van Dam & Oreg, 2007). Further, leaders who may be viewed as disengaged may not provide employees with the reassurance or direction for employees to feel capable during the transition, which can result in decreased efficacy and increased anxiety (Bass, 2006; Vakola et al., 2004; van Dam & Oreg, 2007). Additionally, change disengagement may also reduce perceptions of personal valence. Leaders who seem disengaged may create uncertainty by showing a lack of emotional engagement, suggesting change has no personal and organizational relevance (Vakola et al., 2004; van Dam & Oreg, 2007). The following hypotheses have been formulated:

Hypothesis 3a (H3a): Employees' perception of their leaders' change disengagement is negatively related to their perception of appropriateness

Hypothesis 3b (H3b): Employees' perception of their leaders' change disengagement is negatively related to their perception of management support

Hypothesis 3c (H3c): Employees' perception of their leaders' change disengagement is negatively related to their perception of change efficacy

Hypothesis 3d (H3d): Employees' perception of their leaders' change disengagement is negatively related to their perception of personal valence

Leader behaviors that are negative, such as change resistance, may weaken appropriateness. When leaders, through direct resistance or negative emotions, give the impression of being non-supportive towards change, this may indicate to employees that the change is unnecessary or problematic. Such behaviors can lead employees to question whether the change is appropriate and has strategic value, reducing their confidence in its credibility (Giangreco & Peccei, 2005; Oreg, 2006). Leader resistance may reduce perceptions of management support. Leaders who resist change minimize communication and avoid providing guidance during the change process. This lack of involvement can be interpreted by employees as having no management support (Herold et al., 2008; Wanberg & Banas, 2000). Furthermore, change resistance can reduce employee change efficacy. Employees may see the resistance in a leader, who is supposed to lead and motivate others, and may lose confidence in the feasibility of the change (Giangreco & Peccei, 2005). Additionally, change resistance can negatively affect perceptions of personal valence. Leaders can generate cynicism or fear about the implications of change and therefore further reduce the chance that employees perceive the feeling that the change is beneficial (Giangreco & Peccei, 2005; Oreg, 2006). The following hypotheses have been formulated:

Hypothesis 4a (H4a): Employees' perception of their leaders' change resistance is negatively related to their perception of appropriateness

Hypothesis 4b (H4b): Employees' perception of their leaders' change resistance is negatively related to their perception of management support

Hypothesis 4c (H4c): Employees' perception of their leaders' change resistance is negatively related to their perception of change efficacy

Hypothesis 4d (H4d): Employees' perception of their leaders' change resistance is negatively related to their perception of personal valence

Although previous studies show that openness to change is a significant predictor of change readiness, its moderating role in the relationship between leaders' affect-based responses and

employee change readiness has not been analyzed (Oreg, 2006; Wanberg & Banas, 2000). Openness to change is how willing a person is to accept and support changes in an organization (Wanberg & Banas, 2000). This personal trait is especially important in shaping how employees interpret and respond to leaders' affective signals. Employees with a high level of openness to change are more likely to process leaders' expressions, especially when leaders express support for the change through acceptance or proactive behavior (Oreg, 2006; Oreg et al., 2018; Wanberg & Banas, 2000). When employees are open to change, they are likely to perceive a leader' acceptance or proactivity as reliable and motivational, leading to the improvement of their own perceptions of appropriateness, management support, change efficacy, and personal valence (Herold et al., 2008; Rafferty & Griffin, 2006). Moreover, openness to change may increase employees' responses to positive affect-based responses from leaders, therefore supporting the perception that the change aligns with organizational goals and personal values (Judge et al., 1999). The following hypotheses have been formulated:

Hypothesis 5 (H5): Employee openness to change moderates the relationships between perceived leaders' change acceptance and (a) appropriateness, (b) management support, (c) change efficacy, and (d) personal valence, such that the positive relationships are stronger when openness to change is high than when it is low.

Hypothesis 6 (H6): Employee openness to change moderates the relationships between perceived leaders' change proactivity and (a) appropriateness, (b) management support, (c) change efficacy, and (d) personal valence, such that the positive relationships are stronger when openness to change is high than when it is low.

In contrast, leaders who show disengagement or resistance toward change may express uncertainty, doubt or opposition, which are affect-based responses that can decrease employee motivation and trust (Giangreco & Peccei, 2005; Oreg, 2006). Employees low in openness to change are particularly vulnerable to these responses as they are much more likely to interpret these responses as validation that the change is ineffectively managed and unnecessary (Oreg, 2006; Wanberg & Banas, 2000). However, employees high on openness to change may be more resilient to negative affect-based responses from leaders. Their internal motivation to adapt may help minimize the negative effects of leader disengagement or resistance, reducing the influence on appropriateness, management support, change efficacy, and personal valence (Vakola et al., 2004). The following hypotheses have been formulated:

Hypothesis 7 (H7): Employee openness to change moderates the relationships between perceived leaders' change disengagement and (a) appropriateness, (b) management support, (c) change efficacy, and (d) personal valence, such that the negative relationships are weaker when openness to change is high than when it is low.

Hypothesis 8 (H8): Employee openness to change moderates the relationships between perceived leaders' change resistance and (a) appropriateness, (b) management support, (c) change efficacy, and (d) personal valence, such that the negative relationships are weaker when openness to change is high than when it is low.

H3. Methodology

3.1 Research design

3.1.1 Quantitative research design

This study used a quantitative research design to analyze the extent to which leaders' affect-based responses influence employee readiness for change during organizational transformations. The survey method supported consistent data collection and validated the potential external validity of findings (Bryman, 2016; Creswell & Creswell, 2017; Queirós et al., 2017).

3.1.2 Sample size

According to Cohen (1992) and Tabachnick et al. (2013), achieving the appropriate sample size is essential in order to identify effect sizes and ensure statistical power. Small sample sizes increase the risk of bias and reduce the ability to detect significant relationships, potentially leading to Type II errors (Aguinis & Gottfredson, 2010; Shieh, 2009). As this study included multiple regression analyses (for H1–H4) and moderation analyses (for H5–H8), a preliminary power analysis was performed for multiple linear regression (with multiple predictors) (Faul et al., 2009). The analysis assumed a typical medium-sized effect ($f^2 = 0.15$); with significance levels of $\alpha = .05$ and power $(1 - \beta) = .80$. The analysis considered up to 10 predictors (independent and control variables). The minimum sample size to reliably estimate a medium effect in multiple regression is 118 participants, as calculated using G*Power (Faul et al., 2009). In consideration of these recommendations, non-response, and an aim for reliable statistical analysis, this study targets a sample of at least 150 respondents (Cohen, 1992; Tabachnick et al., 2013).

3.2 Data collection

3.2.1 Sampling procedure

The questionnaire was distributed electronically via a web-based survey platform, Qualtrics Experience Management. Online distribution is cost-effective, allows broad geographic reach, simplifies data collection and reduces social desirability bias, particularly for sensitive topics like leadership perceptions (Kreuter et al., 2008; Wright, 2005).

The research used a combination of convenience sampling and snowball sampling. Convenience sampling allows for easy access to respondents through professional contacts, social media, and workplace contacts (Dornyei, 2007; Saumure & Given, 2008). The data were collected via an online questionnaire administered in the Qualtrics system. The survey was shared through LinkedIn, Instagram, Facebook, WhatsApp, and email, which will allow for a wide reach. Respondents were asked to share the survey within their professional networks who meet the inclusion criteria, expanding the reach through snowball sampling, a common non-probability method in organizational research when the researcher has limited access to the specific populations and when criteria must be met for participation (Biernacki & Waldorf, 1981; Emerson, 2015). To reduce homogeneity bias in snowball sampling (Heckathorn, 2011), the survey was distributed to a selected group of individuals from the researchers' personal and professional network. These initial contacts included people from different functional areas (e.g. HR, operations, IT, marketing), various organization sizes (small businesses to large multinationals), and a mix of genders. The invitation text used to recruit respondents, including the message to forward the survey, is included in Appendix A.

3.2.2 Description of the sample

Participants were selected based on three inclusion criteria. First, they had to be currently employed in an organization in the Netherlands. Second, they had to experience or have experienced an organizational change, such as a restructuring, strategy shift, or digital transformation. Third, participants were required to report to a direct manager. This level of manager is often referred to as the direct supervisor or immediate manager, whose frequent interaction with employees makes them particularly influential in shaping perceptions (Dansereau Jr et al., 1975).

Employees across different industries and levels of hierarchy were included to improve the external validity of the results (Bryman, 2016). Organizational size may influence how leadership is perceived and how change is experienced; larger organizations often have more formalized change processes and communication structures, which may affect employees' access to and interpretation of their leaders' emotional expressions (Rafferty & Griffin, 2006). This study focused exclusively on employees in the Netherlands to ensure consistency in cultural interpretation. Dutch organizational culture is typically characterized by having high individualism, low power distance, and a preference for direct communication (Hofstede, 2001;

House et al., 2004). Limiting the sample to Dutch employees strengthened internal validity by avoiding cross-cultural variation (Tsui et al., 2007). To minimize misinterpretation and improve response quality, the survey was translated into Dutch and kept short – taking around 10 minutes to complete – and easy to follow to reduce dropout and maintain engagement (Krosnick, 2010). To ensure that the translated version was comparable to the original, a back-translation method was used. For the back-translation, the survey was first translated from English to Dutch and then translated from Dutch to English by a second, independent translator. The back-translation process was useful for identifying any differences in order to ensure clarity and consistency of meaning (Brislin, 1970; Van de Vijver & Leung, 2021).

In total, 247 individuals responded to the survey, although 97 were excluded due to incomplete or unqualified responses. The sample consisted of 150 respondents. In addition to demographic information such as age and gender of the employee, the survey also collected data on relevant organizational variables, such as organizational size, employee tenure, gender of the manager, and the experience of a manager in a leadership role, which served as control variables in the analysis. A full overview of the sample characteristics and descriptive statistics are provided in Tables 2 and 3.

Respondents had an average of 29.14 years (SD = 11.07), ranging between 18 and 64 years. The average organizational tenure was 5.73 (SD = 7.28), and the average size of organizations was 540.40 (SD = 1628.77). Most of the sample identified as female (61.3%) compared to male (38.7%). When asked about the gender of their direct manager, 67.3% reported their manager was male, while 32.7% reported their manager was female. Respondents were also asked to state the length of time they have known their manager, which averaged 3.70 years (SD = 3.73). Of the respondents, 52.7% reported that their manager had “a lot of experience”, 29.3% reported “some experience”, 15.3% reported “limited experience”, and 2.7% reported “no experience”.

Table 2. Frequencies sample characteristics

Demographics	**Frequency**	**%**
Gender		
Male	58	38.7
Female	92	61.3
Other	0	0.0

Experience manager		
No experience	4	2.7
Limited experience	23	15.3
Some experience	44	29.3
A lot of experience	79	52.7
Managers gender		
Male	101	67.3
Female	49	32.7

Table 3. Descriptive statistics

Variables	*Valid*	*Missing*	*Mean*	*Std. deviation*	*Minimum*	*Maximum*
Employee ages	150	0	29.141	11.067	18.000	64.000
Experience manager	150	0	3.320	0.830	1.000	4.000
Employee gender	150	0	0.613	0.489	0.000	1.000
Gender of manager	150	0	0.327	0.471	0.000	1.000
Employee tenure	150	0	5.728	7.275	0.100	37.000
Organization size	150	0	540.402	1628.765	4.000	17.000

3.2.3 Questionnaire and scales

Structure of the survey

The questionnaire was divided into five sections, each capturing the key variables necessary to test the research hypotheses. See appendix A for the full questionnaire. The order of the survey was carefully structured to improve clarity, reduce bias, and maintain cognitive flow for respondents (Schwarz, 1999).

The survey begins by asking respondents to think about a specific change within their organization experienced in the past 24 months. To provide a consistent reference point, respondents were asked to briefly explain the change. This process, called cognitive priming, is intended to help position responses based on a common, concrete experience (Tourangeau et al., 2000). This section also clarified the meaning of "manager," which was defined as their immediate supervisor - often called a functional manager - to clarify definitions at a critical methodology point in the survey (Yukl, 2022).

The next section assessed the dependent variables using the Change Readiness Scale (Holt et al., 2007), which has four dimensions: appropriateness, management support, change efficacy, and personal valence. Respondents rated each item on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Placing this section immediately after the priming was intended to keep the change context fresh in the respondent's mind to better help them make reflective judgments (Schwarz, 1999).

The third part of the survey measured the participants' general attitude toward change in organizations, using the Openness toward Organizational Change Scale (OTOCS) (Miller et al., 1994; Sinval et al., 2021). This measure was presented after participants' assessment of change readiness to provide a context that allows one to view their general personality traits aside from their attitude towards a specific change (Wanberg & Banas, 2000).

The fourth section measured the selected independent variables using the Change Response Circumplex Scale (CRCS) (Oreg et al., 2024), which asked about employees' perceptions of their leader affect-based responses to change. The scale included four categories of affect-based responses: change acceptance, change proactivity, change disengagement, and change resistance. The respondents rated the frequency of each behavior using a 5-point Likert scale (from 1 = never to 5 = always). These items were selected to represent the affect-based model of leader behavior in terms of both active and passive emotional response.

The last section collected demographic and organizational background data to be used as control variables. Specifically: age of the employee, gender of the employee, employee tenure, size of the organization, manager's gender, and manager's leadership experience. Placing these questions at the end was intended to minimize social desirability bias and keep the respondents as engaged as possible during the theoretical section of the survey (Krosnick, 2010; Wright, 2005).

Scales

To ensure reliable and valid measurement of key constructs in this study, previously validated scales were used. The main variables of interest are employee change readiness, openness to change, and perceived leader affect-based responses. Each construct is measured using standardized instruments with measurement qualities, ensuring internal consistency, reliability,

and validation. To assess each scale's reliability, Cronbach's alpha (α) was used, a statistic that indicates a scale's internal consistency. A Cronbach's alpha of 0.70 is acceptable, and an alpha greater than 0.80 indicates strong reliability (Nunnally & Bernstein, 1994).

Change readiness

This study used the Change Readiness Scale developed by Holt et al. (2007), which assesses perceptions of personal and organizational readiness for change. This scale was chosen because it provides a complete view of change readiness, capturing both individual and organizational factors that are essential for understanding employee responses to change. While change readiness scale items (Holt et al., 2007) such as "*There are legitimate reasons for us to make this change*" are written collectively; they are intended to be responded to individually. This approach allowed the assessment of individual-level outcomes from an organizational construct, which is frequently shaped from personal experience and meaning (Holt et al., 2007). Holt et al. (2007) note that this scale can also be reliably used to assess past organizational change, indicating the appropriateness of asking participants about changes that took place up to previous years. Individual-level perceptions of collective change readiness have been shown to reliably access organizational change processes (Holt et al., 2007).

The scale included four dimensions: appropriateness, management support, change efficacy, and personal valence. The scale consists of Likert-scale items; respondents rated each statement on a 5-point scale that ranged from 1 = strongly disagree to 5 = strongly agree. Example items included statements such as "*I believe that this change is necessary for the success of the organization*" to measure appropriateness, "*Management is providing the support I need to implement this change*" to measure management support, "*I feel confident that I can successfully implement this change*" to measure change efficacy, and "*This change will benefit me personally*" to measure personal valence.

The scale demonstrated a high level of reliability, with Cronbach's alpha values of $\alpha = 0.880$ for appropriateness, $\alpha = 0.760$ for management support, $\alpha = 0.723$ for change efficacy, and $\alpha = 0.811$ for personal valence. Higher scoring indicated a stronger sense of change readiness, while lower scores reflected skepticism or resistance.

Openness to change

This study used the Openness Toward Organizational Change Scale (OTOCS) of Miller et al. (1994) that considers various dimensions of openness to change. This scale was selected because it reliably reflects employees' openness to embrace change across different organizational contexts, improving the scope of more specific readiness measures (Miller et al., 1994). The scale assesses key aspects of openness, including positive affective attitudes toward change, cognitive beliefs about its benefits, and behavioral readiness to adopt change (Sinval et al., 2021). The scale has five-point Likert-scale items from 1 = strongly disagree to 5 = strongly agree. Example items included statements such as "*I feel excited about changes happening in my organization*" representing the affective component, "*I believe the changes will improve the way we work*" reflecting the cognitive component, and "*I am ready to adjust my work habits to fit the new system*" reflecting the behavioral component.

The Cronbach's alpha value of $\alpha = 0.771$ indicated acceptable reliability. Higher scores reflected greater openness to change, whereas lower scores suggested the opposite.

Perceived leader affect-based responses

This study used the Change Response Circumplex Scale (CRCS) to measure employees' perceptions of their leaders' affect-based responses to change (Oreg et al., 2024). The CRCS was chosen for its strong theoretical foundation and its ability to capture a broad range of affect-based responses, as employees perceived in their leaders, along the dimensions of activation and valence (Oreg et al., 2024). The scale consists of Likert-scale items from 1 = never to 5 = always. An example item included: "*My manager is actively supportive of the change".*

The CRCS has been tested in various organizations and has shown very reliable results. The scale demonstrated a high level of reliability, with Cronbach's alpha values of $\alpha = 0.741$ for change acceptance, $\alpha = 0.862$ for change proactivity, $\alpha = 0.474$ for change disengagement, and $\alpha = 0.911$ for change resistance. However, the Cronbach's alpha for change disengagement ($\alpha = 0.474$) is lower than the threshold of 0.70. This indicated low internal consistency, meaning the items aimed to measure this construct may not be measuring the same underlying construct consistently (Hair Jr et al., 2010).

In addition to the CRCS, this study included self-developed questions based on the affect-based responses model of Oreg et al. (2018) for exploratory research. This model focuses on twelve

key emotions divided into four categories: stressed, angry, upset, despaired, sad, helpless, excited, elated, enthusiastic, calm, relaxed, and content. The self-developed items were added because the CRCS does not reflect the twelve emotions identified by Oreg et al. (2018). Combining these with the CRCS allowed for a more complete analysis by linking general affective patterns with specific emotional experiences during organizational change.

3.3 Quantitative data analysis

The quantitative data analysis for this study was performed using JASP, an open-source statistical software package specifically developed to support psychological research (Wagenmakers et al., 2018). Data were screened for missing values using SPSS Statistics. The original dataset consisted of 247 responses collected via Qualtrics. Several steps were taken to clean the data before conducting the main analyses. First, practice responses (previews) entered by the research were identified based on "status" and "progress" columns were removed (n = 3). Second, respondents with less than a 93% completion rate were excluded to guarantee sufficient data for any analysis, especially for constructs with multiple items (n = 74). Third, responses with unrealistically short completion times (e.g. less than 23 seconds) were considered potential straight-lining or low-effort responses. These were removed after analyzing them. Following the cleaning process, the final sample consisted of 150 valid responses. Also, mean imputation was applied only for a small amount of missing data to ensure statistical power to draw conclusions without affecting the variance (Allison, 2009; Schafer & Graham, 2002). Additionally, relevant variables were recoded and transformed to ensure statistical consistency and meet the assumptions of the analyses (Tabachnick et al., 2013).

A confirmatory factor analysis (CFA) was conducted to assess the measurement quality and construct validity of the theoretical model. CFA is a theory-driven statistical method that measures the extent to which the observed data corresponds to a specific model by assessing the relationship between observed variables and their underlying theoretical constructs (Brown, 2015; Kline, 2023). The CFA included the nine constructs proposed in the literature: change readiness (including appropriateness, management support, change efficacy, and personal valence), leader affect-based responses to change (including change acceptance, change proactivity, change disengagement, and change resistance), and openness to change. Items with factor loadings below 0.50 or that had high cross-loadings were reviewed and potentially excluded to improve model fit and confirm construct validity (Hair Jr et al., 2010).

After validating the measurement model, hypothesis testing continued with a series of multiple regression analyses. Each of the four leader affect-based responses was used as an independent predictor for each of the four dependent variables representing employee change readiness. This structure resulted in a total of 16 regression models (4 DVs x 4 IVs), with and without control variables. Moderation analyses were also performed to explore the effects of openness to change. Openness to change was tested as a moderator of the relationship between perceived leaders' affect-based responses and employee change readiness. Using Aiken and West (1991) to outline the steps for testing moderation, the independent variable and moderator were mean-centered, and an interaction term was created. The models were conducted in four steps: 1) the control variables were added first, 2) the independent variable was entered second, 3) the moderator was entered third, and 4) the interaction term was added last. Drawing from the survey content, a variety of control variables were included in the regression models to strengthen the results and control for possible confounding influences (Becker, 2005). These control variables consist of the employee's age and gender, employee's tenure, organizational size, the manager's gender, and the manager's level of leadership experience, which was measured on a scale ranging from no experience to a lot of experience.

In this study, the gender of the leader was included as a control variable in the regression analyses to account for potential differences in the ways leadership behaviors are perceived across male and female leaders. This analysis was informed by prior research suggesting that female and male leaders may express behavior differently, thus affecting how changing environments may be perceived both by their employees and through employee change readiness (Eagly et al., 2007; Van Kleef et al., 2009).

All variables were analyzed for multicollinearity using tolerance and VIF, using the threshold of tolerance > 0.10; VIF < 5 (Hair Jr et al., 2010). All statistical tests were considered significant at $P < 0.05$ (Cox, 1982). To provide information about the practical significance of the findings, effect size was included, using Cohen's d for t-tests and R^2 for regression analysis (Cohen, 1992; Tabachnick et al., 2019).

H4. Results

Chapter 4 shows the results of the different statistical analyses that are used to test the hypotheses. It includes descriptive statistics, correlation analysis, confirmatory factor analysis, regression analyses (including moderation effects), and ends with exploratory findings and a visual summary of the key results.

4.1 Descriptive statistics and correlation

4.1.1 Descriptive statistics

The descriptive statistics for all key variables, including mean, standard deviation, and distribution shape are illustrated in Table 4. All constructs were assessed using the 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

Table 4. Descriptive statistics variables

Variables	*Mean*	*Std. deviation*	*Skewness*	*Shapiro-Wilk*	*P-value of Shapiro-wilk*
Appropriateness	3.75	0.85	-0.66	0.96	< .001
Management support	3.60	0.78	-0.63	0.96	< .001
Change efficacy	3.81	0.67	-0.74	0.95	< .001
Personal valence	3.81	0.94	-0.82	0.91	< .001
Openness to change	3.66	0.75	-0.33	0.96	< .001
Change acceptance	3.92	0.69	-0.59	0.93	< .001
Change proactivity	3.76	0.88	-0.46	0.93	< .001
Change disengagement	2.16	0.85	0.53	0.93	< .001
Change resistance	1.63	0.81	1.52	0.78	< .001

Skewness values inform us about how symmetric distributions are. Values between -1 and +1 are generally considered acceptable when analyses are based on maximum likelihood estimation (Kline, 2023). All constructs except for change resistance (skewness = 1.52) met this criterion. Change resistance's positive skewness reflects the majority of respondents revealing low resistance to change.

4.1.2 Correlation matrix

Prior to completing confirmatory factor analysis (CFA), a Pearson correlation matrix was calculated to analyze the bivariate relationship between the key theoretical constructs. The correlation results, shown in Appendix B: Table 5, provide an overview of the relationships between the key variables and serve to assess potential multicollinearity and data suitability for further analysis (Field, 2024; Hair Jr et al., 2010). For example, change acceptance and change proactivity are highly positively correlated and significant (r = 0.686**). Appropriateness was also moderately positively correlated and significant with openness to change (r = 0.510**), and management support (r = 0.569**). On the other hand, the two negative constructs, change disengagement and change resistance, were negatively correlated and significant with the positive constructs. For example, change disengagement was negatively correlated with change acceptance (r = -0.424**). Change disengagement and change resistance were both highly positively correlated with one another (r = 0.609**). However, both remained below the multicollinearity threshold of r = 0.80 (Kline, 2023), indicating that these constructs were related but statistically distinct.

4.2 Confirmatory Factor Analysis

To evaluate the construct validity of the existing measurement scales, a confirmatory factor analysis (CFA) was conducted in JASP. CFA is a theoretical tool that allows researchers to evaluate how well the data fit a measurement model by analyzing relationships between indicators and theoretical constructs (Brown et al., 2005; Kline, 2023). While Cronbach's alpha was used to estimate internal consistency reliability, it does not provide an indication of observed variables accurately measuring the underlying theoretical constructs (Cortina, 1993; Kline, 2023). Although high alpha values indicated reliable internal consistency, they are not sufficient to confirm factorial validity or the expected loadings of items on their theoretical variables (DeVellis & Thorpe, 2021; Hair Jr et al., 2010). The measurement model included nine theoretical constructs: appropriateness, management support, change efficacy, personal valence, openness to change, change acceptance, change proactivity, change disengagement, and change resistance.

4.2.1 Model fit

A series of model fit indices were analyzed to determine how well the measurement model fits the observed data. The CFA included all nine variables used in this study: the four dimensions of employee change readiness, the four perceived leader affect-based responses, and the moderator openness to change. Including all constructs confirmed that the full measurement model underlying the later regression and moderation analysis was validated.

In CFA, the model fit was typically analyzed by comparing the hypothesized model to a null model – also called the independence model – which assumed that there were no relationships among any of the observed variables; it is the worst possible model (Byrne, 2013). The chi-square value for the null model ($X^2 = 3222.23$) was higher than that of the hypothesized model ($X^2 = 978.24$, $p < 0.001$), indicating that the hypothesized model offered a significantly better explanation of the observed data than assuming independence (see Table 6). Traditionally, a significant chi-square statistic was interpreted as poor fit; however, the chi-square test is highly sensitive to sample sizes (Kline, 2023). A significant chi-square does not necessarily indicate inadequate model fit. Therefore, additional fit indices were required to draw a more accurate conclusion about the adequacy of the model (Kline, 2023; Schermelleh-Engel et al., 2003).

Table 6. Chi-square test

Model	X^2	*df*	*p*
Null model	3222.23	595	
Hypothesized model	978.24	524	< .001

Key fit indices suggested the model was acceptable (see Table 7). Although the chi-square test was significant and both CFI (0.83) and TLI (0.80) were below the 0.90 threshold for a measurement model (Hu & Bentler, 1999), RMSEA (0.076) is well within the acceptable range of < 0.08 (Browne, 1993; Hooper et al., 2007). These mixed results in CFA were not uncommon, especially with more complex models (Hu & Bentler, 1999; Kline, 2023). In terms of multiple indices, the overall model fit indicates an acceptable fit.

Table 7. Fit indices

Index	*Value*
Comparative Fit Index (CFI)	0.827
Tucker-Lewis Index (TLI)	0.804

Root means square error of approximation (RMSEA)	0.076

4.2.2 Convergent validity

Convergent validity is defined as the degree to which multiple indicators of the same construct are positively related and together explain a significant proportion of the variance in that construct (Hair Jr et al., 2010). It is assessed using two criteria: 1) the size of standardized factor loadings and 2) average variance extracted (AVE). Convergent validity was considered sufficient when standardized factor loadings were ≥ 0.50 (ideally ≥ 0.70) and when the AVE of each construct was above 0.50 (Hair Jr et al., 2010). High factor loadings indicated that the indicators strongly reflect the constructs, while an AVE above 0.50 showed that the constructs explained more than half of the variances in their indicators. Therefore, if both criteria are met, there is sufficient evidence of convergent validity.

Factor loadings

In the CFA model (see Appendix B: Table 8), some of the indicators had factor loadings below the 0.50 threshold, indicating weak associations between the indicators and their constructs. At the lower end of loadings were openness to change item 1 (loading = 0.243), change efficacy items 1 and 6 (0.492 and 0.373), and management support item 6 (0.449). Following the methodological guidance, these poorly performing items were removed to strengthen construct validity (Brown, 2015; Hair Jr et al., 2010). While the items that are removed come from validated scales, the low factor loading in this study may relate to translation or interpretation problems, as well as characteristics of the specific sample. During translation there can be subtle shifts of meaning that change how respondents understood or answered the items (Brislin, 1970). Also, the factors related to the sample, such as industry background, organizational structure, or respondent characteristics may have influenced how respondents understand the meaning of items, or how relevant items are in their context (Van de Vijver & Leung, 2021). In Table 8, the excluded items were marked in gray to distinguish them from those retained in the final model.

One significant outlier was Change Disengagement item 1, which also had a very low factor loading (0.263), suggesting limited convergent validity. However, removing this item would have left the construct with only two remaining indicators. Reliability measures such as Cronbach's alpha require at least three items to provide a reliable interpretation and so removing

it would have resulted in no means to assess the internal consistency. Therefore, the item was included despite its very low loading, and the results related to change disengagement should be interpreted with caution due to concerns about the construct's weak reliability and insufficient measurement validity. Most of the retained items had strong loadings above 0.60, and in several cases as high as 0.70, which suggests acceptable shared variance with the theoretical constructs.

Average Variance Extracted (AVE)

The initial AVE model is presented in Appendix B: Table 9, while the revised model is shown in Table 10. An AVE of ≥ 0.50 was accepted as a threshold, indicating that at least 50% of the variance in the indicators was explained by the theoretical variable (Fornell & Larcker, 1981; Hair Jr et al., 2010). In research, values between 0.45 and 0.50 were also acceptable when constructs show good internal consistency and theoretical relevance (Henseler et al., 2009; Malhotra, 1996). The refinement ultimately improved the AVE for several constructs. Especially the AVE for appropriateness, management support, change efficacy, and openness to change improved compared to the initial model. For example, openness to change improved from 0.454 to 0.520, change efficacy improved from 0.338 to 0.407, and management support improved from 0.352 to 0.449.

Strong AVE values were found for change resistance (0.779), change proactivity (0.684), personal valence (0.594), change acceptance (0.523), and openness to change (0.520). Appropriateness (0.490) barely misses the conventional threshold but passes the adjusted threshold of 0.45, and this construct shows strong factor loadings and reliability. Management support (0.449) passed the adjusted criteria; however, the interpretation should be treated with caution.

Table 10. Average variance extracted (AVE)

Factor	*AVE*
Appropriateness	0.490
Management support	0.449
Change efficacy	0.407
Personal valence	0.594
Openness to change	0.520
Change acceptance	0.523

Change proactivity	0.684
Change disengagement	0.240
Change resistance	0.779

4.2.3 Factor covariances

To understand the internal structure of the model, the relationships between the theoretical variables were evaluated in terms of factor covariances. The covariances present how strongly constructs are related as theoretical constructs and whether separate variables can be statistically distinguished (Kline, 2023). Most constructs showed moderate, theoretically consistent covariances. For example, change acceptance and change proactivity had a large covariance (0.84), reflecting their conceptual alignment; similarly, change resistance and change disengagement were also found to be strongly positively associated (see Appendix B: Table 11).

4.2.4 Discriminant validity

Discriminant validity refers to the degree to which a theoretical construct is statistically separated from other constructs in the model (Fornell & Larcker, 1981; Kline, 2023). It ensures that indicators intended to measure one construct do not overlap too much with indicators of another, thereby supporting the unique quality of each theoretical dimension. The heterotrait-monotrait ratio of correlations (HTMT) was used to check for discriminant validity (Henseler et al., 2015). Unlike the correlation matrix, which shows the overall relationships between constructs, HTMT evaluates the level of similarity between constructs based on their item-level correlations. While constructs may be different using traditional correlations, HTMT provides a more sensitive criterion to detect issues of construct overlap by comparing heterotrait-heteromethod correlations to monotrait-heteromethod correlations (Henseler et al., 2015). The HTMT values between all pairs of constructs were analyzed, with specific focus on values that come close to or go beyond the threshold of 0.85. Values lower than this threshold indicate acceptable discriminant validity, while values higher than this threshold indicate that two constructs are not statistically separate (Hair Jr et al., 2010; Henseler et al., 2015). In this case, the HTMT values were all lower than 0.85 (see Table 12). The highest HTMT was observed between change acceptance and change proactivity (HTMT = .84), which is close to the threshold of 0.85, but still within the acceptable range. This is theoretically justifiable, as these

two constructs were conceptually related, both indicating proactive and positive responses to organizational change (Oreg & Berson, 2011).

Table 12. Heterotrait-monotrait ratio of correlations (HTMT)

Appro-priateness	*Management support*	*Change efficacy*	*Personal valence*	*Open to change*	*Change Accept.*	*Change Proact.*	*Change Diseng.*	*Change Resistance*
1.000								
0.676	1.000							
0.527	0.274	1.000						
0.477	0.259	0.488	1.000					
0.586	0.340	0.602	0.399	1.000				
0.422	0.438	0.092	0.136	0.282	1.000			
0.367	0.491	0.062	0.048	0.393	0.840	1.000		
0.255	0.285	0.238	0.660	0.252	0.553	0.370	1.000	
0.327	0.168	0.387	0.443	0.373	0.324	0.265	0.706	1.000

4.2.5 Reliability

Table 13 shows the internal consistency reliability estimates for each of the constructs using two common coefficients Cronbach's alpha (α) and McDonald's omega (ω). Both measures assess how consistently items in the scale measure the same theoretical construct (Hair Jr et al., 2010; Tavakol & Dennick, 2011). Cronbach's alpha is viewed as acceptable for any value over 0.70 and generally values above 0.80 indicate good to excellent reliability (Hair Jr et al., 2010). McDonald's omega is considered a more accurate estimate of internal consistency; it can be defined in multiple ways without the assumption of equal factor loadings (Dunn et al., 2014; Hayes & Coutts, 2020).

As shown in Table 13, each of the constructs, except for change disengagement, shows acceptable or strong reliability in terms of both α and ω. The highest reliability was observed for change resistance (α = .911, ω = .915) and change proactivity (α = .862, ω = .869), indicating very strong internal consistency. In contrast, change disengagement was the only construct with weak reliability (α = .474, ω = .440), which aligned with earlier concerns based on its low AVE and factor loadings. Although there were limitations, the construction was retained for several reasons. First, removing the weakest item would only leave two items which were below the recommended minimum for evaluating internal consistency or conducting CFA (Hair Jr et al.,

2010). Second, change disengagement represented a distinct and relevant dimension of the circumplex model of affect-based responses to change (Oreg et al., 2018; Oreg et al., 2024) and represents low-activation negative reactions that are not explained by other constructs in the model. Third, the low internal consistency might have resulted from translation or interpretation issues, since the original scale was developed in a different language-based context. Subtle changes in the meaning when translating could have influenced how respondents understand and respond to items (Brislin, 1970; Van de Vijver & Leung, 2021). For these reasons, the construct was included, but these should be interpreted with caution in further analyses.

Table 13. Reliability of the variables

Variables	McDonalds' ω	Cronbach's α
Appropriateness	0.894	0.887
Management support	0.770	0.750
Change efficacy	0.736	0.718
Personal valence	0.814	0.811
Openness to change	0.782	0.750
Change acceptance	0.777	0.741
Change proactivity	0.869	0.862
Change disengagement	0.440	0.474
Change resistance	0.915	0.911
Total	**0.837**	**0.877**

4.3 Linear regression analysis

As the core of the results section, this part presents the main outcomes of regression analyses. The regression analyses followed a structured approach to analyze how perceived leader affect-based responses were related to various components of employee change readiness. The overall model fit was assessed using the ANOVA test and R^2, which indicate the proportion of variance in the dependent variable explained by the model (Field, 2024; Hair Jr et al., 2010). Model 1 included the control variables – employee age, gender of the employee, employee tenure, organizational size, gender of the manager, and experience of the manager – to control potential demographic and organizational influences. Gender of the leader was included as a control variable and did not significantly predict any of the dependent variables, suggesting that employees' perceptions of appropriateness, management support, change efficacy, and personal valence were not significantly different depending on whether their leader was a man or a

woman (p > .005). Model 2 extended this by adding the independent variables change acceptance, change proactivity, change disengagement, and change resistance to assess the effect of the independent variables.

This analytical approach provided a systematic analysis of the hypotheses to assess whether each can be supported or not supported based on the significance of the observed effects. The tolerance and VIF (Variance Inflation Factor) values were acceptable (tolerance > 0.1, VIF < 5), indicating that multicollinearity was not an issue for each model (Hair Jr et al., 2010).

4.3.1 Linear regression analysis: employee appropriateness

Model fit

Model 1 and Model 2 were statistically significant predictors of appropriateness, according to the ANOVA outputs (see Table 14). Indicating that the combined effect of the independent variables was significant in predicting appropriateness. The R^2 of Model 1 suggested that the variables explained 10.6% (R^2 = .106) of the variance of appropriateness, which slightly improved in Model 2 (R^2 = .263) (see Table 15). This represented a significant increase of ΔR^2 = .157, indicating that these leader-related predictors added an additional explanatory power of 15.7% to the model. Cohen (2013) indicates R^2 values around 0.13 represent medium effect sizes, while values above 0.26 represent large effects.

Table 14. ANOVA test appropriateness

	β (Model 1)	*β* (Model 2)
Sum of Squares		
Regression	11.302	28.077
Residual	95.586	78.811
Total	106.888	106.888
df		
Regression	6	10
Residual	143	139
Total	149	149
Mean Square		
Regression	1.884	2.808
Residual	0.668	0.567
F	2.818*	4.952**

$^{+}p < .10$, $*p < .05$, $**p < .01$

Individual predictors

In Model 2, only change resistance (β = -.282, p = .004) was a statistically significant negative predictor (see Table 15). A negative predictor means that higher levels of perceived leader change resistance were associated with lower perceptions of change appropriateness among employees. The remaining independent variables were not statistically significant (all p > 0.05).

Table 15. Regression Coefficients from appropriateness

Variables	*β* (Model 1)	*β* (Model 2)
Control Variables		
Gender	-.232*	-.182*
Gender of manager	.072	.038
Employee tenure	-.089	-.073
Organization size	-.109	-.151*
Employee age	-.008	-.050
Experience manager	.236*	.153*
Independent Variable		
Change acceptance		.133
Change proactivity		.163
Change disengagement		.051
Change resistance		-.282*
R^2	.106	.263
ΔR^2		.157

$^{+}p < .10$, $*p < .05$, $**p < .01$

Control variables

Several control variables were included in both regression models that predict the appropriateness of employees to account for demographic and organizational influences. In Model 1, which included only control variables, gender was found to be significant and negative (β = -.232, p = .008). This suggested that female employees were significantly less likely than their male employees to perceive the organizational change as appropriate. This effect continued in Model 2 (β = -.182, p = .026), indicating that even after introducing leader affect-based response variables, gender remained a strong predictor. Perceived managerial experience was also statistically significant in both models (Model 1: β = .236, p = .004; Model 2: β = .153, p = .048). The positive standardized coefficients showed that employees perceived their change

as more appropriate when they thought the manager had more experience in their manager role. Interestingly, organizational size was not significant in Model 1 (β = -.109, p = .177), but became significant and negative in Model 2 (β = -.151, p = .047). This suggested that employees in larger organizations tend to perceive organizational change as less appropriate. Neither of the models identified other control variables as statistically significant (all $p > 0.05$) and did not show meaningful implications for perceptions of change appropriateness.

In conclusion, Hypothesis 4a (H4a) – which proposed that employees' perception of their leaders' change resistance is negatively related to their perception of appropriateness – is supported. Change resistance was an overall consistent and statistically significant negative predictor of employee appropriateness. In contrast, Hypotheses 1a, 2a and 3a were not supported. These proposed that employees' perception of their leaders' change acceptance (H1a), change proactivity (H2a), and change disengagement (H3a) would significantly predict perceptions of appropriateness. However, none of these leader affect-based responses were statistically significant predictors in the model.

4.3.2 Linear regression analysis: employee management support

Model fit

Model 1 and Model 2 were statistically significant, according to the ANOVA outputs (see Table 16), indicating that the independent variables collectively represented a significant predictor of employees' management support. The R^2 of Model 1 suggested that the variables explained 11.1% ($R^2 = .111$) of the variance of management support, which improved in Model 2 ($R^2 = .272$) (see Table 17). This was a significant increase of $\Delta R^2 = .161$, indicating that these leader-related predictors added an additional explanatory power of 16.1% to the model. Cohen (2013) indicates R^2 values around 0.13 represent medium effect sizes, while values above 0.26 represent large effects.

Table 16. ANOVA test perceived management support

	β (Model 1)	β (Model 2)
Sum of Squares		
Regression	10.139	24.792
Residual	81.084	66.431
Total	91.223	91.223
df		
Regression	6	10
Residual	143	139
Total	149	149
Mean Square		
Regression	1.690	2.479
Residual	0.567	0.478
F	2.980*	5.188**

$^{+}p < .10$, $*p < .05$, $**p < .01$

Individual predictors

In Model 2, only change proactivity (β = .265, p = .014) was a statistically significant positive predictor (see Table 17). A positive predictor means that leaders who proactively engaged with the change were more likely to be perceived by employees as providing strong management support throughout the process. Management support (AVE = 0.45) passed the adjusted criteria for convergent validity; however, its interpretation should be treated with caution due to its marginal value. The remaining independent variables were not statistically significant (all p > 0.05).

Table 17. Regression Coefficients from management support

Variables	β (Model 1)	β (Model 2)
Control Variables		
Gender	-.167^{+}	-.092
Gender of manager	.149^{+}	.074
Employee tenure	-.187^{+}	-.213*
Organization size	-.084	-.088
Employee age	-.006	-.021
Experience manager	.250*	.170*
Independent Variable		
Change acceptance		.177
Change proactivity		.265*
Change disengagement		.028
Change resistance		-.073
R^2	.111	.272
ΔR^2		.161

$^{+}p < .10$, $^{*}p < .05$, $^{**}p < .01$

Control variables

Several control variables were included in both regression models that predicted management support to account for demographic and organizational influences. In Model 1, which included only control variables, the experience of the manager was found to be significant and positive ($\beta = .250$, $p = .002$). This suggested that employees who viewed their managers as more experienced were more likely to feel supported during organizational change. This relationship remained significant in Model 2 ($\beta = .170$, $p = .027$) with leader affect-based responses added to the model, indicating the strong effect of perceived managerial experience. This meant that how long a manager had been in their role played an important part in how supported employees felt, regardless of how the manager emotionally responded during the change. Additionally, employee gender, gender of manager, and employee tenure were not significant but showed near-significant effects. Neither of the models identified other control variables as statistically significant (all $p > 0.05$) and did not show meaningful implications for perceptions of management support.

In conclusion, Hypothesis 2b (H2b) – which proposed that employees' perception of their leaders' change proactivity is positively related to their perception of management support – is supported. Change proactivity was an overall consistent and statistically significant positive predictor of employee-perceived management support. In contrast, Hypotheses 1b, 3b, and 4b were not supported. These proposed that employees' perception of their leaders' change acceptance (H1b), change disengagement (H3b), and change resistance (H4b) would significantly predict perceptions of perceived management support. However, none of these leader affect-based responses were statistically significant predictors in the model.

4.3.3 Linear regression analysis: employee change efficacy

Model fit

Model 1 and Model 2 were statistically significant, according to the ANOVA outputs (see Table 18), indicating that the independent variables collectively represent a significant predictor of employees' change efficacy. The R^2 of Model 1 suggested that the variables explained 8.9% (R^2 = .089) of the variance of change efficacy, which improved in Model 2 (R^2 = .201) (see Table 19). This was a significant increase of Δ R^2 = .112, indicating that these leader-related predictors added an additional explanatory power of 11.2% to the model. Cohen (2013) indicates R^2 values around 0.13 represent medium effect sizes, while values above 0.26 represent large effects.

Table 18. ANOVA test change efficacy

	β (Model 1)	*β* (Model 2)
Sum of Squares		
Regression	5.973	13.489
Residual	60.987	53.471
Total	66.960	66.960
df		
Regression	6	10
Residual	143	139
Total	149	149
Mean Square		
Regression	0.996	1.349
Residual	0.426	0.385
F	2.334*	3.507**

$^{+}p < .10$, $*p < .05$, $**p < .01$

Individual predictors

In Model 2, only change resistance (β = -.267, p = .008) was a statistically significant negative predictor (see Table 19). The negative standardized coefficients indicated that when employees perceived higher levels of leader resistance, they felt less confident in their ability to succeed during change. The remaining independent variables were not statistically significant (all p > 0.05).

Table 19. Regression Coefficients from change efficacy

Variables	*β* (Model 1)	*β* (Model 2)
Control Variables		
Gender	-.138	-.162^{+}
Gender of manager	.007	.046
Employee tenure	-.162	-.118
Organization size	-.104	-.163*
Employee age	.068	.011
Experience manager	.230*	.184*
Independent Variable		
Change acceptance		.001
Change proactivity		-.126
Change disengagement		-.141
Change resistance		-.267**
R^2	.089	.201
ΔR^2		.112

$^{+}p < .10$, $^{*}p < .05$, $^{**}p < .01$

Control variables

Several control variables were included in both regression models that predict the change efficacy of employees to account for demographic and organizational influences. In Model 1, which included only control variables, the experience of the manager was found to be significant and positive (β = .230, p = .005). This suggested that employees who perceived their manager to be more experienced feel more confident in their ability to implement change successfully. This relationship remained significant in Model 2 (β = .184, p = .022) with leader affect-based responses added to the model, indicating the strong effect of perceived managerial

experience. Neither of the models identified other control variables as statistically significant (all $p > 0.05$) and did not show meaningful implications for perceptions of change efficacy.

In conclusion, Hypothesis 4c (H4c) – which proposed that employees' perception of their leaders' change resistance is negatively related to their perception of change efficacy – is supported. Change resistance was an overall consistent and statistically significant negative predictor of employee change efficacy. In contrast, Hypotheses 1c, 2c, and 3c were not supported. These proposed that employees' perception of their leaders' change acceptance (H1c), change proactivity (H2c), and change disengagement (H3c) would significantly predict perceptions of employee change efficacy. However, none of these leader affect-based responses were statistically significant predictors in the model.

4.3.4 Linear regression analysis: employee personal valence

Model fit

Model 1 and Model 2 were statistically significant, according to the ANOVA outputs (see Table 20), indicating that the independent variables collectively represent a significant predictor of employees' personal valence. The R^2 of Model 1 suggested that the variables explained 8.9% ($R^2 = .089$) of the variance of personal valence, which improved in Model 2 ($R^2 = .282$) (see Table 21). This was a significant increase of $\Delta R^2 = .193$, indicating that these leader-related predictors added an additional explanatory power of 19.3% to the model. Cohen (2013) indicates R^2 values around 0.13 represent medium effect sizes, while values above 0.26 represent large effects.

Table 20. ANOVA test personal valence

	β (Model 1)	*β* (Model 2)
Sum of Squares		
Regression	11.804	37.367
Residual	120.478	94.915
Total	132.282	132.282
df		
Regression	6	10
Residual	143	139
Total	149	149
Mean Square		
Regression	1.967	3.737
Residual	0.843	0.683
F	2.335*	5.472**

$^{+}p < .10$, $*p < .05$, $**p < .01$

Individual predictors

In Model 2, change disengagement (β = -.339, p < .001) and change resistance (β = -.220, p = .021) were statistically significant negative predictors (see Table 21). The negative standardized coefficients suggested that employees who view their managers as resistant to or disengaged from the change process were less likely to view the change as personally beneficial. In contrast, change acceptance and change proactivity were non-significant (all p > 0.05).

Table 21. Regression Coefficients from personal valence

Variables	β (Model 1)	β (Model 2)
Control Variables		
Gender	-.036	-.073
Gender of manager	.012	.031
Employee tenure	-.021	.034
Organization size	-.050	-.113
Employee age	-.016	-.109
Experience manager	.298**	.251*
Independent Variable		
Change acceptance		-.133
Change proactivity		-.071
Change disengagement		-.339**
Change resistance		-.220*
R^2	.089	.282
ΔR^2		.193

$^{+}p < .10$, $*p < .05$, $**p < .01$

Control variables

Several control variables were included in both regression models that predict the personal valence of employees to account for demographic and organizational influences. In Model 1, which included only control variables, the experience of the manager was found to be significant and positive ($\beta = .298$, $p < .001$). This suggested that employees who perceived their manager to be more experienced were more likely to perceive the change as positively affecting them personally. This relationship remained significant in Model 2 ($\beta = .251$, $p = .001$) with leader affect-based responses added to the model, indicating the strong effect of perceived managerial experience. Neither of the models identified other control variables as statistically significant (all $p > 0.05$) and did not show meaningful implications for perceptions of personal valence.

In conclusion, Hypotheses 3d (H3d) and 4d (H4d) – which proposed that employees' perception of their leaders' change disengagement (H3d) and change resistance (H4d) are negatively related to their perception of employee personal valence – are supported. Change disengagement and change resistance were overall consistent and statistically significant

negative predictors of employee personal valence. In contrast, Hypotheses 1d and 2d were not supported. These proposed that employees' perception of their leaders' change acceptance (H1d) and change proactivity (H2d) would significantly predict perceptions of employee personal valence. However, none of these leader affect-based responses were statistically significant predictors in the model.

4.4 Moderation analyses

To assess whether employee openness to change moderated the relationship between perceived leader affect-based responses and employee change readiness outcomes, sixteen multiple regression models are conducted, one for each combination of independent variable (IV) and dependent variable (DV). The IVs consist of four types of affect-based leader responses: change acceptance, change proactivity, change disengagement, and change resistance. And the DVs consist of four components of employee change readiness: appropriateness, management support, change efficacy, and personal valence. Openness to change is analyzed as a moderator in all sixteen models.

Before calculating the interaction term (IV x openness), all predictor variables are mean-centered, following the standard steps in moderation analysis (Aiken et al., 1991). Control variables including employee gender, gender of the leader, experience of the leader, employee tenure, organizational size (log transformed), and age, are included and entered into Model 1. The independent variable is entered in Model 2. The moderator variable (openness to change) is entered in Model 3, and the interaction term (IV x openness to change) is included in Model 4.

4.4.1 Moderation analysis: perceived leader change acceptance and employee change efficacy

Model fit

The R^2 value in Model 1 shows that the control variables explained 8.9% of the variance in employee change efficacy (R^2 = .089). Model 2 shows minimal improvement (ΔR^2 = .002) which suggests that the inclusion of change acceptance alone does not improve the model. Model 3 significantly improved the fit (R^2 = .238) with a ΔR^2 = .146, indicating a moderate effect size (Cohen, 2013). Finally, Model 4 improved the explanatory power to 25.9% (R^2 =

.259), with an additional Δ R^2 = .021, reflecting the added value of the interaction effect in predicting change efficacy (see Table 22).

Table 22. Regression Coefficients from Moderated Multiple Regression

Variables	**Change efficacy**			
	β (Model 1)	*β* (Model 2)	*β* (Model 3)	*β* (Model 4)
Control Variables				
Gender	-.138	-.130	-.079	-.080
Gender of manager	.007	.004	.017	-.009
Employee tenure	-.162	-.170	-.006	-.055
Organizational size	-.104	-.104	-.161*	-.172*
Employee age	.068	.072	-.062	-.044
Experience manager	.230**	.219*	.132	.108
Independent Variable				
Change acceptance		.049	-.034	.012
Moderator Variable				
Openness to change			.431**	.425**
Product Term				
Change acceptance x Openness to change				.158*
R^2	.089	.091	.238	.259
ΔR^2		.002	.146	.021*

$^{+}p < .10$, $*p < .05$, $**p < .01$

In Model 1, which included only control variables, perceived managerial experience is significant and positive (β = .230, p = .005), indicating that employees who perceive their managers as having more experience tend to feel more confident in their ability to implement change successfully. This effect remained statistically significant in Model 2 (β = .219; p = .010). In Model 3, organizational size becomes significantly negative (β = -.161, p = .035) and openness to change shows a strong positive relationship with change efficacy (β = .421, p < .001). These effects remained the same in Model 4, where organizational size and openness to change were still significant. Additionally, in Model 4 the interaction term between change acceptance and openness to change was significant (β = .158, p = .048), indicating the existence of a moderation effect.

4.4.2 Moderation analysis: perceived leader change proactivity and employee change efficacy

Model fit

In the regression analysis testing for moderation by openness to change on the relationship between perceived leader change proactivity and employee change efficacy. The R^2 value in Model 1 shows that the control variables explained 8.9% of the variance in employee change efficacy (R^2 = .089). Model 2 shows no improvement (Δ R^2 = .002) which suggests that the inclusion of change proactivity alone did not improve the model. Model 3 significantly improved the fit (R^2 = .253) with a Δ R^2 = .164, indicating a moderate effect size (Cohen, 2013). Finally, Model 4 improved the explanatory power to 28.2% (R^2 = .282), with an additional Δ R^2 = .029, reflecting the added value of the interaction effect in predicting change efficacy (see Table 23).

Table 23. Regression Coefficients from Moderated Multiple Regression

Variables	**Change efficacy**			
	β (Model 1)	*β* (Model 2)	*β* (Model 3)	*β* (Model 4)
Control Variables				
Gender	-.138	-.138	-.093	-.103
Gender of manager	.007	.007	.052	.042
Employee tenure	-.162	-.162	.008	-.056
Organizational size	-.104	-.104	-.168*	-.174*
Employee age	.068	.068	-.061	-.038
Experience manager	.230*	.229*	.132+	.122
Independent Variable				
Change proactivity		.001	-.143+	-.090
Moderator Variable				
Openness to change			.472**	.489**
Product Term				
Change proactivity x Openness to change				.186*
R^2	.089	.089	.253	.282
Δ R^2		.000	.164**	.029*

+*p* < .10, **p* < .05, ***p* < .01

In Model 1, which included only control variables, perceived managerial experience is significant and positive (β = .230, p = .005), suggesting that employees whose managers were

perceived to have higher levels of experience, also feel more capable of managing the organizational change. This effect remained statistically significant in Model 2 (β = .229, p = .006). In Model 3, organizational size becomes significantly negative (β = -.168, p = .026) and openness to change shows a strong positive relationship with change efficacy (β = .472, p < .001). These effects remained the same in Model 4, where organizational size and openness to change were still significant. Additionally, in Model 4 the interaction term between change acceptance and openness to change was significant (β = .186, p = .020), indicating the existence of a moderation effect.

4.4.3 Moderation analysis: perceived leader change disengagement and employee personal valence

Model fit

In the regression analysis testing for moderation by openness to change on the relationship between perceived leader change disengagement and employee personal valence. The R^2 value in Model 1 showed that the control variables explained 8.9% of the variance in employee personal valence (R^2 = .089). Adding change disengagement to Model 2 provided significant improvements to the model (Δ R^2 = .141), an additional 14.1% exploratory power. In Model 3, adding openness to change raised the explained variance to 26.7% (R^2 = .267), which was a Δ R^2 = .037. This reflects a moderate effect size (Cohen, 2013). Additionally, Model 4 included the interaction term of change disengagement and openness to change, further increasing the explained variance to 29.8% (R^2 = .298), with a Δ R^2 = .031. This final model showed an improvement that was statistically significant (see Table 24).

Table 24. Regression Coefficients from Moderated Multiple Regression

Variables	Personal valence			
	β (Model 1)	*β* (Model 2)	*β* (Model 3)	*β* (Model 4)
Control Variables				
Gender	-.036	-.040	-.006	-.018
Gender of manager	.012	-.010	-.004	.019
Employee tenure	-.021	-.023	.053	.076
Organizational size	-.050	-.074	-.099	-.081
Employee age	-.016	-.075	-.131	-.134
Experience manager	.298**	.236*	.190*	.201*
Independent Variable				
Change disengagement		-.388**	-.336**	-.309**
Moderator Variable				
Openness to change			.219*	.190*
Product Term				
Change disengagement x Openness to change				.185*
R^2	.089	.230	.267	.298
ΔR^2		.141**	.037*	.031*

$^{+}p < .10$, $*p < .05$, $**p < .01$

In Model 1, which included only control variables, perceived managerial experience was significant and positive (β = .298, p < .001), suggesting that employees who perceived their managers as more experienced tend to have a more positive feeling of personal impact of organizational change. This effect remained statistically significant in Model 2 (β = .236, p = .002). Also, perceived leader change disengagement (β = -.388, p < .001) was a statistically significant negative predictor in Model 2. In Model 3, experience of the manager and change disengagement remained significant, and openness to change also appeared as a strong positive predictor (β = .219, p = .009), indicating that employees who were more open generally experienced higher personal valence. These effects remained the same in Model 4 where the experience of the manager, change disengagement, and openness to change were still significant. Additionally, the interaction term between change disengagement and openness to change in Model 4 was positive and significant (β = .185, p = .014), indicating the existence of a moderation effect.

4.4.4 Moderation analysis: perceived leader change resistance and employee personal valence

The last moderation analysis tested openness to change as a moderator of perceived leader change resistance and employee personal valence. The R^2 value in Model 1 showed that the control variables explained 8.9% of the variance in employee personal valence (R^2 = .089). Adding change resistance to Model 2 provided significant improvements to the model (ΔR^2 = .126), an additional 12.6% exploratory power. In Model 3, adding openness to change raised the explained variance to 25.0% (R^2 = .250), which was a ΔR^2 = .035; this reflected a moderate effect size (Cohen, 2013). Additionally, Model 4 included the interaction term of change resistance and openness to change, further increasing the explained variance to 29.1% (R^2 = .291), with a ΔR^2 = .042. This final model showed an improvement that was statistically significant (see Table 25).

Table 25. Regression Coefficients from Moderated Multiple Regression

Variables	**Personal valence**			
	β (Model 1)	*β* (Model 2)	*β* (Model 3)	*β* (Model 4)
Control Variables				
Gender	-.036	-.037	-.005	.003
Gender of manager	.012	.031	.032	.051
Employee tenure	-.021	.035	.101	.113
Organizational size	-.050	-.115	-.133^{+}	-.117
Employee age	-.016	-.079	-.132	-.171^{+}
Experience manager	.298**	.245*	.201*	.219*
Independent Variable				
Change resistance		-.370**	-.311**	-.151
Moderator Variable				
Openness to change			.214*	.253*
Product Term				
Change resistance x Openness to change				.258*
R^2	.089	.215	.250	.291
ΔR^2		.126**	.035*	.042*

$^{+}p < .10$, $^{*}p < .05$, $^{**}p < .01$

In Model 1, which included only control variables, perceived managerial experience was significant and positive (β = .298, p < .001), suggesting that employees who perceived their

managers as more experienced tended to have a more positive feeling of personal impact of organizational change. This effect remained statistically significant in Model 2 (β = .245, p = .002). Also, perceived leader change resistance (β = -.370, p < .001) was a statistically significant negative predictor in Model 2. In Model 3, experience of the manager and change resistance remained significant, and openness to change also appears as a strong positive predictor (β = .214, p = .012), indicating that employees who were more open generally experienced higher personal valence. In Model 4, the experience of the manager and openness to change remained significant, while change disengagement was not significant anymore. Additionally, the interaction term between change resistance and openness to change in Model 4 was positive and significant (β = .258, p = .005), indicating the existence of a moderation effect.

In conclusion, the following moderation hypotheses were supported: Hypothesis 5c (H5c), which proposed that employee openness to change moderates the relationship between perceived leaders' change acceptance and change efficacy, such that the positive relationships are stronger when employee openness to change is high than when it is low. Hypothesis 6c (H6c), which proposed that employee openness to change moderates the relationship between perceived leaders' change proactivity and change efficacy, such that the positive relationships are stronger when employee openness to change is high than when it is low. Hypothesis 7d (H7d), which proposed that employee openness to change moderates the relationship between perceived leaders' change disengagement and personal valence, such that the negative relationships are weaker when employee openness to change is high than when it is low. Hypothesis 8d (H8d), which proposed that employee openness to change moderates the relationship between perceived leaders' change resistance and personal valence, such that the negative relationships are weaker when employee openness to change is high than when it is low. In contrast, Hypotheses 5a, 5b, 5d, 6a, 6b, 6d, 7a, 7b, 7c, 8a, 8b, and 8c were not supported.

4.5 Exploratory research

To further analyze the role of leader affect-based responses, multiple linear regression analyses were used to explore the relationships between employees' perceptions of their manager's emotional expressions (both positive and negative) relate to employee appropriateness, management support, change efficacy, and personal valence. These emotion variables were constructed into two scales: PositiveEmotions and NegativeEmotions, based on unvalidated

items from Q15 of the survey (see appendix A), but were based on literature. This section aimed to uncover potential patterns that might contribute to future research (Stebbins, 2001).

Reliability

To measure the internal consistency of negative emotions observed in managers during organizational change (items 1 – 6 of Q15: stress, anger, upset, despair, sadness, and helplessness), were evaluated using McDonald' omega (ω) and Cronbach's alpha (α) to assess the internal consistency. Results in Table 26 demonstrate that there was high internal consistency across these items. McDonald' omega (ω) showed a point estimate of 0.852, with a 95% confidence interval of 0.815 to 0.889. Cronbach's alpha (α) also showed a high estimate of 0.848 with a confidence interval of 0.806 to 0.883. These values suggested that the six items measured a consistent, reliable construct related to negative expressions of emotions.

Table 26. Reliability of the negative emotions

Estimate	McDonalds' ω	Cronbach's α
Point estimate	0.852	0.848
95% CI lower bound	0.815	0.806
95% CI upper bound	0.889	0.883

The internal consistency of the items measuring positive emotions in managers during the organizational change process (items 7 – 12 of Q15: excitement, elation, enthusiasm, calmness, relaxation, and contentment) was evaluated using McDonald' omega (ω) and Cronbach's alpha (α). The analysis showed acceptable reliability for the positive emotions scale (see Table 27) McDonald' omega (ω) was estimated at 0.791, with a 95% confidence interval of 0.740 to 0.842 and Cronbach's alpha (α) was estimated at 0.794, with a 95% confidence interval of 0.735 to 0.842. This suggested acceptable internal consistency within the items, indicating that the items together measured a consistent construct of positive emotional expressions. Although the estimates were slightly lower than observed from the negative emotions scale, these estimates remained above the acceptable threshold ($\alpha \geq 0.70$), supporting the use of this scale in further analyses (DeVellis & Thorpe, 2021).

Table 27. Reliability of the positive emotions

Estimate	McDonalds' ω	Cronbach's α
Point estimate	0.791	0.794
95% CI lower bound	0.740	0.735
95% CI upper bound	0.842	0.842

4.5.1 Linear regression analysis: emotional expressions and employee appropriateness

Model fit

Model 1 and Model 2 were statistically significant predictors of appropriateness, according to the ANOVA outputs (see Table 28). Indicating that the combined effect of the independent variables was significant in predicting appropriateness. The R^2 of Model 1 suggested that the variables explained 10.6% (R^2 = .106) of the variance of appropriateness, which improved in Model 2 (R^2 = .292) (see Table 29). This was a significant increase of ΔR^2 = .186, indicating that these leader-related predictors added an additional explanatory power of 18.6% to the model. Cohen (2013) indicates R^2 values around 0.13 represent medium effect sizes, while values above 0.26 represent large effects.

Table 28. ANOVA test emotional expressions and appropriateness

	β (Model 1)	*β* (Model 2)
Sum of Squares		
Regression	11.302	31.168
Residual	95.586	75.720
Total	106.888	106.888
df		
Regression	6	8
Residual	143	141
Total	149	149
Mean Square		
Regression	1.884	3.896
Residual	0.668	0.537
F	2.818*	7.255**

$^{+}p < .10$, $*p < .05$, $**p < .01$

Individual predictors

In Model 2, both positive emotions (β = .317, p < .001) and negative emotions (β = -.276, p < .001) were statistically significant predictors (see Table 29). A negative predictor meant that higher levels of perceived negative emotions expressed by leaders correspond with lower employee perceptions of change appropriateness. Positive emotions were a positive predictor, indicating that when employees perceived that their leaders expressed more positive emotions, they were more likely to view organizational change as appropriate.

Table 29. Regression Coefficients from appropriateness

Variables	*β* (Model 1)	*β* (Model 2)
Control Variables		
Gender	-.232*	-.184*
Gender of manager	.072	.050
Employee tenure	-.089	-.131
Organization size	-.109	-.100
Employee age	-.008	-.029
Experience manager	.236*	.101
Independent Variable		
Positive emotions		.317**
Negative emotions		-.276**
R^2	.106	.292
ΔR^2		.186**

+*p* < .10, **p* < .05, ***p* < .01

Control variables

Several control variables were included in the regression model that predicted the appropriateness of employees to account for demographic and organizational influences. In Model 1, which included only control variables, gender was found to be significant and negative (β = -.232, p = .008). This suggested that female employees were significantly less likely than their male employees to perceive the organizational change as appropriate. This effect continued in Model 2 (β = -.184, p = .020), indicating that even after accounting for leader emotional expressions, gender remained a strong predictor. Perceived managerial experience was also statistically significant in Model 1 (β = .236, p = .004). The positive standardized coefficients showed that employees perceived their change as more appropriate when they thought the manager had more experience in their manager role. Neither of the models

identified other control variables as statistically significant (all $p > 0.05$) and did not show meaningful implications for perceptions of change appropriateness.

4.5.2 Linear regression analysis: emotional expressions and employee management support

Model fit

Model 1 and Model 2 were statistically significant predictors of management support, according to the ANOVA outputs (see Table 30). Indicating that the combined effect of the independent variables was significant in predicting management support. The R^2 of Model 1 suggested that the variables explained 11.1% ($R^2 = .111$) of the variance of management support, which improved in Model 2 ($R^2 = .213$) (see Table 31). This was a significant increase of $\Delta R^2 = .102$, indicating that these leader-related predictors added an additional explanatory power of 10.2% to the model. Cohen (2013) indicates R^2 values around 0.13 represent medium effect sizes, while values above 0.26 represent large effects.

Table 30. ANOVA test emotional expressions and management support

	β (Model 1)	*β* (Model 2)
Sum of Squares		
Regression	10.139	19.468
Residual	81.084	71.755
Total	91.223	91.223
df		
Regression	6	8
Residual	143	141
Total	149	149
Mean Square		
Regression	1.690	2.434
Residual	0.567	0.509
F	2.980*	4.782**

$^{+}p < .10$, $*p < .05$, $**p < .01$

Individual predictors

In Model 2, positive emotions ($\beta = .326$, $p < .001$) were a statistically significant positive predictor (see Table 31). Positive emotions were a positive predictor, indicating that when employees perceived that their leaders expressed more positive emotions, they were more likely to feel supported by management during organizational change.

Table 31. Regression Coefficients from management support

Variables	β (Model 1)	β (Model 2)
Control Variables		
Gender	-.167	-.116
Gender of manager	.149	.123
Employee tenure	-.187	-.227*
Organization size	-.084	-.062
Employee age	-.006	.040
Experience manager	.250*	.182*
Independent Variable		
Positive emotions		.326**
Negative emotions		-.026
R^2	.111	.213
ΔR^2		.102**

$^{+}p < .10$, $*p < .05$, $**p < .01$

Control variables

Several control variables were included in the regression model that predicted the view on management support during organizational change, accounting for demographic and organizational influences. Management support (AVE = 0.45) passed the adjusted criteria for convergent validity; however, its interpretation should be treated with caution due to its marginal value. In Model 1, which included only control variables, the experience of the manager was found to be significant and positive (β = .250, p = .002). This suggested that employees who viewed their manager as more open experienced tended to feel more supported. This effect continued in Model 2 (β = .182, p = .024), indicating that even after accounting for leader emotional expressions, experience of the manager remained a strong predictor. Employee tenure was also statistically significant in Model 2 (β = -.227, p = .030), indicating that employees with longer tenure felt less supported. Neither of the models identified other control variables as statistically significant (all p > 0.05) and did not show meaningful implications for perceptions of management support.

4.5.3 Linear regression analysis: emotional expressions and employee change efficacy

Model fit

Model 1 and Model 2 were statistically significant predictors of change efficacy according to the ANOVA outputs (see Table 32). Indicating that the combined effect of the independent variables is significant in predicting change efficacy. The R^2 of Model 1 suggested that the variables explained 8.9% (R^2 = .089) of the variance of change efficacy, which slightly improved in Model 2 (R^2 = .130) (see Table 33). This was a significant increase of ΔR^2 = .041, indicating that these leader-related predictors added an additional explanatory power of 4.1% to the model. Cohen (2013) indicates R^2 values around 0.13 represent medium effect sizes, while values above 0.26 represent large effects.

Table 32. ANOVA test emotional expressions and change efficacy

	β (Model 1)	*β* (Model 2)
Sum of Squares		
Regression	5.973	8.705
Residual	60.987	58.255
Total	66.960	66.960
df		
Regression	6	8
Residual	143	141
Total	149	149
Mean Square		
Regression	0.996	1.088
Residual	0.426	0.413
F	2.334*	2.634*

$^{+}p < .10$, $*p < .05$, $**p < .01$

Individual predictors

In Model 2, negative emotions (β = -.210, p = .013) were a statistically significant negative predictor (see Table 33). Negative emotions were a negative predictor, indicating that when employees perceived that their leaders expressed more negative emotions, they were less likely to feel confident in their own ability to navigate organizational change as successful.

Table 33. Regression Coefficients from change efficacy

Variables	β (Model 1)	β (Model 2)
Control Variables		
Gender	-.138	-.137
Gender of manager	.007	.009
Employee tenure	-.162	-.166
Organization size	-.104	-.115
Employee age	.068	.063
Experience manager	.230*	.170*
Independent Variable		
Positive emotions		.010
Negative emotions		-.210*
R^2	.089	.130
ΔR^2		.041*

$^{+}p < .10$, $*p < .05$, $**p < .01$

Control variables

Several control variables were included in the regression model that predicted the view on change efficacy during organizational change, accounting for demographic and organizational influences. In Model 1, which included only control variables, the experience of the manager was found to be significant and positive (β = .230, p = .005). This suggested that employees who viewed their manager as more experienced tended to feel more confident in their own ability to implement and adapt to organizational change. This effect continued in Model 2 (β = .170, p = .045), indicating that even after accounting for leader emotional expressions, experience of the manager remained a strong predictor. Neither of the models identified other control variables as statistically significant (all p > 0.05) and did not show meaningful implications for perceptions of change efficacy.

4.5.4 Linear regression analysis: emotional expressions and employee personal valence

Model fit

Model 1 and Model 2 were statistically significant predictors of personal valence according to the ANOVA outputs (see Table 34). Indicating that the combined effect of the independent variables was significant in predicting personal valence. The R^2 of Model 1 suggested that the variables explained 8.9% (R^2 = .089) of the variance of personal valence, which improved in Model 2 (R^2 = .293) (see Table 35). This was a significant increase of ΔR^2 = .204, indicating

that these leader-related predictors added an additional explanatory power of 20.4% to the model. Cohen (2013) indicates R^2 values around 0.13 represent medium effect sizes, while values above 0.26 represent large effects.

Table 34. ANOVA test emotional expressions and personal valence

	β (Model 1)	*β* (Model 2)
Sum of Squares		
Regression	11.804	38.727
Residual	120.478	93.555
Total	132.282	132.282
df		
Regression	6	8
Residual	143	141
Total	149	149
Mean Square		
Regression	1.967	4.841
Residual	0.843	0.664
F	2.335*	7.296**

$^{+}p < .10$, $*p < .05$, $**p < .01$

Individual predictors

In Model 2, negative emotions ($\beta = -.454$, $p < .001$) were a statistically significant negative predictor (see Table 35). Negative emotions were a negative predictor, indicating that when employees perceived that their leaders expressed more negative emotions, they were less likely to feel that organizational change would result in personal benefits.

Table 35. Regression Coefficients from personal valence

Variables	β (Model 1)	β (Model 2)
Control Variables		
Gender	-.036	-.027
Gender of manager	.012	.010
Employee tenure	-.021	-.036
Organization size	-.050	-.068
Employee age	-.016	-.019
Experience manager	.298**	.158*
Independent Variable		
Positive emotions		.079
Negative emotions		-.454**
R^2	.089	.293
ΔR^2		.204**

$^{+}p < .10$, $*p < .05$, $**p < .01$

Control variables

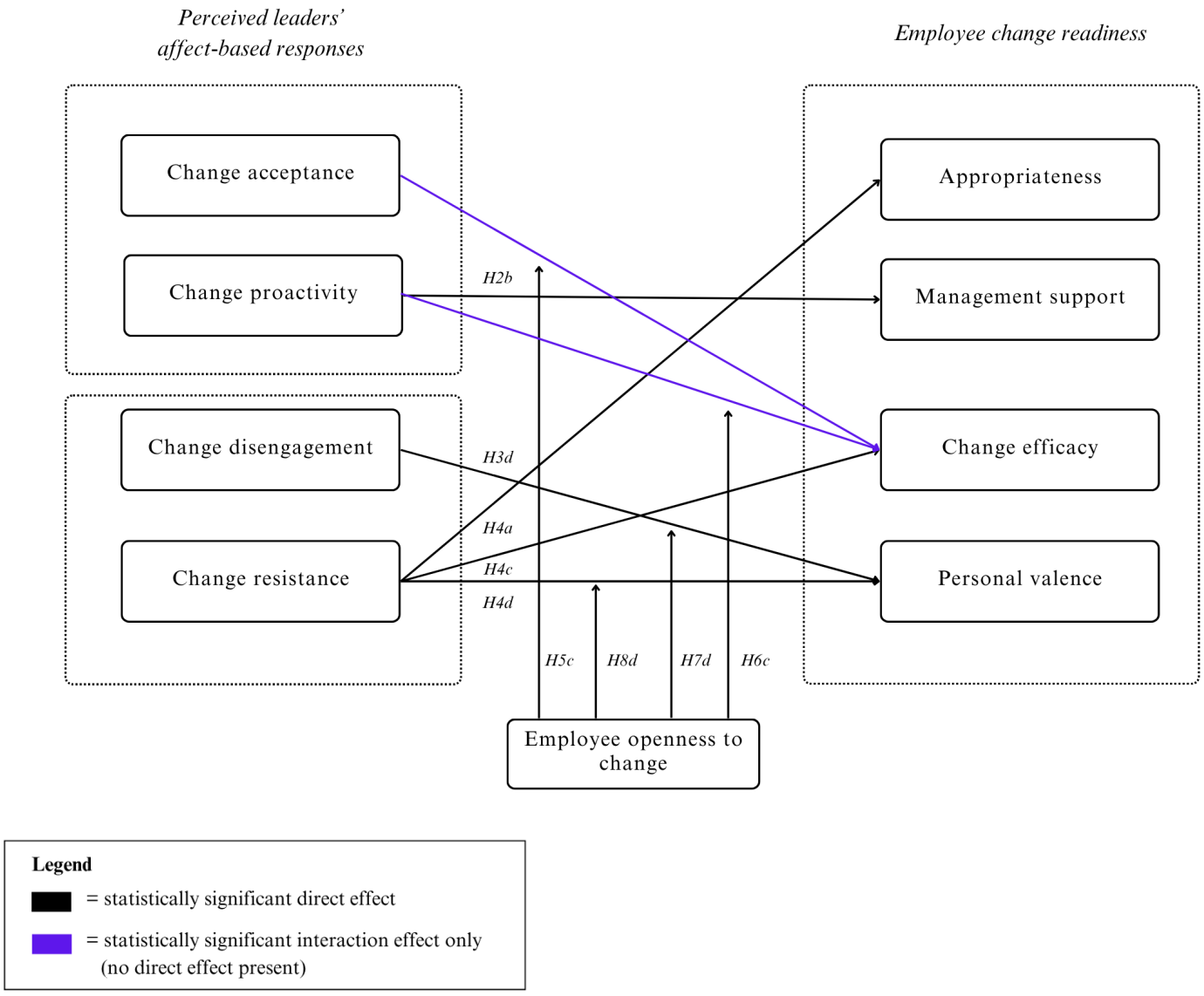
Several control variables were included in the regression model that predicted the view on personal valence during organizational change, accounting for demographic and organizational influences. In Model 1, which included only control variables, the experience of the manager was found to be strongly significant and positive ($\beta = .298$, $p < .001$). This suggested that employees who viewed their manager as more experienced tended to perceive greater personal benefits from the organizational change. This effect continued in Model 2 ($\beta = .158$, $p = .038$), indicating that even after accounting for leader emotional expressions, experience of the manager remained a strong predictor. Neither of the models identified other control variables as statistically significant (all $p > 0.05$) and did not show meaningful implications for perceptions of change efficacy.

In conclusion, all exploratory analyses showed that the perceived emotional expressions of leaders contributed significantly to employee evaluations of organizational change. Specifically, positive emotions were consistently associated with high levels of appropriateness and management support. Negative emotions were associated with lower levels of change efficacy and personal valence.

4.6 Summary of results

Figure 3 gives a visual overview of the main findings from the hypothesis testing. The model illustrates how the perceived leaders' affect-based responses relate to the four dimensions of employee change readiness. Bold arrows represent statistically significant direct effects, as well as statistically significant moderation effects by employee openness to change. Interestingly, the purple arrow between change acceptance and change efficacy reflects a unique finding. While the direct relationship between change acceptance and change efficacy is not statistically significant, a significant interaction effect suggests that the influence of change acceptance on change efficacy depends on the level of employee openness to change. The same pattern is observed for change proactivity and change efficacy, indicating that the effect of proactive leader behavior on employee change efficacy is shaped by how open the employee is to change.

Figure 3. Overview of the main findings



In addition to the primary predictors, the control variables indicated meaningful effects on a number of outcomes. A key finding is the perceived experience of the manager, which is both consistent and significant as a predictor across all four dimensions of change readiness. Employees who perceived their manager as having more experience also have stronger assumptions about the appropriateness of change, stronger perceptions of management support, higher change efficacy, and higher personal valence of change. Moreover, gender and organizational size affect perceived appropriateness, as women and employees from larger organizations have lower appropriateness perceptions.

The moderation analyses analyzed whether employee openness to change served as a moderator of the perceived leader affect-based responses and employee change readiness. Across the sixteen models, there are some consistent patterns. First, the perceived experience of the manager is consistently significant across all four moderation models, where the models resulted in significant results. In all four models, employees who rated their managers with higher perceived managerial experience reported significantly higher change efficacy or personal valence compared to employees who rated their managers lower on perceived managerial experience. Importantly, this relationship remained significant after including the leader affect-based responses, the openness to change moderator, and those interaction terms across all four moderations models, demonstrating the importance of managerial experience as an effect across all models. Moreover, organizational size served as a significant negative predictor in the models predicting employee change efficacy, suggesting that employees in larger organizations tend to have less confidence in their ability to create change. Other control variables, namely employee age, employee tenure, employee gender, and gender of the manager, are not significant across models and did not significantly influence the outcome variables.

Finally, exploratory analyses examine perceived emotional expressions of leaders. Positive emotions, such as enthusiasm and calmness, are related to increased employee appropriateness and management support. While negative emotions, such as stress and anger, are significantly linked to lower employee change efficacy and personal valence.

H5. Discussion

Chapter 5 discusses the main results of the study in relation to existing literature and theoretical frameworks. Theoretical and practical implications are explained with potential limitations of the study and directions for future research are proposed.

5.1. Main findings

This study focuses on the analyses of perceived leaders' affect-based responses to assess employee change readiness by organizational changes. Specifically, four types of leader behaviors are analyzed: 1) whether change acceptance positively influences employees' perceptions of readiness (H1), 2) whether change proactivity positively influences employee perceptions of change readiness (H2), 3) whether change disengagement negatively influences employee perceptions of change readiness (H3), and 4) whether change resistance negatively influences employee perceptions of change readiness (H4). In addition, the moderating effect of openness to change is analyzed in these relationships (H5-H8).

Hypotheses 1a – 1d, which suggest how employees' perceptions of their leaders change acceptance would positively predict their perceptions of appropriateness (H1a), management support (H1b), change efficacy (H1c), and personal valence (H1d), are not supported. Regression analyses show that there is no significant relationship between perceived change acceptance and any of the four dimensions of employee change readiness (all $p > 0.05$). These findings suggest that only perceiving a leader as emotionally accepting a change initiative does not ensure that employees consider the change to be appropriate, supported, achievable, or beneficial on a personal level. These findings are in contrast with earlier research, indicating that a leader' acceptance of change will reduce uncertainty and improve alignment (Armenakis et al., 1993; Herold et al., 2008). One possible reason for this discrepancy is the definition of "acceptance". In previous research acceptance is often defined more broadly, such as including not only emotional support but also behavioral expressions such as clear communication, consistent action, and visible leadership (Lines, 2004; Rafferty & Griffin, 2006). In contrast, in this study acceptance is defined as a type of affect-based response of acceptance, and when employees are not also given observable support behaviors, they may have interpreted the affect-based responses as passive (Van Kleef et al., 2009). The non-significant finding for change efficacy (H1c) suggests that acceptance does not improve employees' belief in their

ability to implement change. According to Bandura's (1997) self-efficacy theory, confidence is built through demonstration and direct support. This means that employees feel a sense of self-efficacy not only when a leader demonstrates affect-based responses to the change but also when they are able to directly observe the leader take action, guidance, and direct involvement. If a leader only expresses acceptance without showing how to navigate the change or providing practical help, employees may not feel empowered or capable themselves (Bandura, 1997). Another study also highlights that leaders who combine emotional expression with visible actions are more successful in improving employees' change commitment and change efficacy (Fugate et al., 2008).

Hypothesis 2b is supported, showing a positive relationship between perceived leader change proactivity and employee perceptions of management support ($\beta = .265$, $p = .014$). These findings are consistent with previous research that identified that proactive leadership, which includes starting communication, visibly engaging in the change process, and foreseeing problems, is perceived by employees as a form of managerial involvement and support (Herold et al., 2008; Yukl, 2022). It is possible that a proactive attitude reflects not only emotional support but also often involves observable and supportive behaviors, such as taking initiative, providing direction, and removing obstacles, that foster perceptions of management support (Rafferty & Griffin, 2006). The perception of management support may be related not only to the leaders' affect-based response toward change, but also to the actions that follow from that attitude. In contrast, Hypotheses 2a, 2c, and 2d are not supported. Specifically, regression analysis shows no significant relationships between change proactivity and perceptions of appropriateness, change efficacy, or personal valence (all $p > 0.05$). These findings contrast with earlier research, which highlights the influence of proactive leadership. For example, Herold et al. (2008) found that proactive leader behavior contributes to the perceived appropriateness of change. It suggests that communication that is early and transparent helps employees understand the reasoning behind change initiatives. While proactive leaders may support engagement by showing active involvement, this behavior may not be enough to improve employees' belief in their own ability to apply the change with active support or problem solving (Avey et al., 2008).

Hypothesis 3d is supported, showing a negative relationship between perceived leader change disengagement and employee perceptions of personal valence ($\beta = -.339$, $p < .001$). This suggests that when employees see their leader as emotionally disengaged in the change process,

they are less likely to believe the change is personally beneficial. This finding is consistent with prior research that suggests leaders' emotional commitment influences how employees assess the value and relevance of the change on an individual level (Vakola, 2013; van Dam & Oreg, 2007). Disengaged leaders may unintentionally suggest that the change is not important or that employees should deal with the change without help from the managers, thereby reducing the perceived chance of personal benefit (Rafferty & Griffin, 2006). However, Hypotheses 3a, 3b, and 3c are not supported. Specifically, regression analysis shows no significant relationships between change disengagement and perceptions of appropriateness, management support, and change efficacy (all $p > 0.05$). These results contrast with earlier research, which indicates that emotional disengagement reduces employee trust in the change initiative and weakens perceptions of leader support (Giangreco & Peccei, 2005). While previous research suggests that passive leaders or emotionally disengaged leaders are perceived as providing little support or clarity (Vakola et al., 2004), this study did not detect these expected negative outcomes. One potential explanation is that, as passive behavior, it may be less visible or less emotionally stimulating than active resistance. As Oreg (2006) argues, unclear leader behavior may create uncertainty, which can prevent employees from clearly linking disengagement to specific negative judgments about change competence or support. In that case, employees do not have signs to trigger either positive or negative interpretations about the visibly disengaged leaders' role in the change process (Oreg, 2006). Regarding H3c, the lack of a significant effect on change efficacy may be explained by the passive character of leader change disengagement. When leaders become emotionally disengaged, they do not provide much support or encouragement. This limits employees' sense of clarity and motivation (Rafferty & Griffin, 2006).

Hypotheses 4a, 4c, and 4d are supported, showing that perceived leader change resistance is negatively associated with employee perceptions of appropriateness ($\beta = -.282$, $p = .004$), change efficacy ($\beta = -.267$, $p = .008$), and personal valence ($\beta = -.220$, $p = .021$). These findings indicate that when employees perceive their leaders as change resistant, they are more likely to perceive the change as inappropriate, ineffective, and personally unbeneficial. These results are consistent with earlier research indicating that emotionally resistant leader behavior reduces trust in the change initiative and indicates a lack of organizational alignment (Giangreco & Peccei, 2005; Oreg, 2006). The negative effect of change resistance on appropriateness (H4a) is consistent with previous research, suggesting that when leaders show resistance, it creates uncertainty toward the legitimacy or strategic reasoning of a change (Herold et al., 2008). When

leaders express visible resistance, employees may interpret this as the change lacking support or is being ineffectively managed (Lines, 2004). In contrast, Hypothesis 4b is not supported. The regression analysis shows no significant relationship between perceived leader resistance and perceptions of management support ($p > 0.05$). Although the finding is inconsistent with earlier research (Vakola et al., 2004; Wanberg & Banas, 2000), indicating that resistant leaders often weaken support systems, it may reflect differences in context, measurement, or sample characteristics. Given the measurement issue, including a weaker measurement quality of the management support scale, it is possible that this contributed to the non-significant results, suggesting that this finding should be interpreted with caution and explored further in future research.

Hypotheses 5c, 6c, 7d, and 8d are supported, suggesting that openness to change significantly moderates the relationship between specific leader affect-based responses and employee readiness dimensions. These findings show that individual differences in openness to change influence how employees interpret and respond to their leaders' emotional responses during organizational change. Hypothesis 5c is supported, showing that openness to change has a positive interaction effect on the relationship between perceived leader change acceptance and employee change efficacy ($\beta = .425$, $p < .001$). Although the relationship between change acceptance and change efficacy is not significant, the interaction effect indicates employee change efficacy only occurs when employees show higher levels of openness to change. This suggests that employees who are more likely to be open to change interpret emotionally supportive leader expressions as motivating, which improves their confidence in managing the change process. This finding aligns with previous research that found openness to change to be a key factor in interpreting unclear or affective expressions during change (Wanberg & Banas, 2000). Employees who are more open are generally more flexible and adaptable, which makes them more responsive to positive leadership expressions and more likely to accept them as motivational (Judge et al., 1999). Hypothesis 6c is also supported, showing that openness to change improves the relationship between leader change proactivity and change efficacy ($\beta = .186$, $p = .020$). When proactive leader behaviors are received by employees with high openness to change, these behaviors improve personal feelings of competence and readiness. The interaction effect indicates that proactive behavior tends to improve change efficacy more when an employee is open to change and willing to engage with change. More importantly, Hypotheses 7d and 8d are supported, suggesting that openness to change moderates the negative relationship between perceived leader change disengagement (H7d: $\beta = .185$, $p = .014$) and

change resistance (H8d: $\beta = .258$, $p = .005$) on personal valence. The results indicate that while emotionally negative leader behaviors can reduce perceptions of personal benefit, it is slightly weaker for those employees who are more open to change. This supports the arguments by Oreg (2006) and Vakola et al. (2013) that openness to change helps employees manage negative emotional signals from leaders by allowing them to reframe these signs more positively or stay focused on long-term goals. These results support the importance of individual traits in moderating the effects of leader affect-based responses.

As shown in Figure 3, openness to change does not moderate all leader-employee relationships positively or negatively. The remaining moderation hypotheses are not supported: 5a, 5b, 5d, 6a, 6b, 6d, 7a-c, and 8a-c. These non-significant results suggest that openness to change may only add to or minimize leader expressions when the underlying outcome is especially personal (change efficacy and personal valence) and not structural (appropriateness and management support). This is consistent with the arguments that traits such as openness to change influence how individuals perceive and process emotionally meaningful and personally relevant information (Judge et al., 1999) and are likely to have a weaker relationship to the perceptions that relate to more shared organizational judgments (Oreg, 2006).

Exploratory analyses provide additional support that perceived emotional expressions from leaders' impact employee change readiness. The hypotheses focused on affect-based responses, whereas the exploratory analyses used two wider emotion categories, positive and negative emotional expressions, to determine their predictive value. The results indicate that positive emotions expressed by leaders (e.g. enthusiasm, calmness) are significant positive predictors of appropriateness ($\beta = .317$, $p < .001$) and management support ($\beta = .326$, $p < .001$). In contrast, negative emotions (e.g. anger, helplessness) significantly reduce perceptions of appropriateness ($\beta = -.276$, $p < .001$), change efficacy ($\beta = -.210$, $p = .013$), and personal valence ($\beta = -.454$, $p < .001$). These results are consistent with the EASI model (Van Kleef et al., 2009), which proposes that emotional expressions are social signs that affect other interpretations and responses. The results provide further support for the negativity bias (Baumeister et al., 2001), showing that negative leader emotions may be more influential, particularly in decreasing employees confidence and perceived benefit from the change, than positive signals are in improving them. Additionally, control variables such as the experience of the manager appeared to be a consistent predictor across outcomes, suggesting that employees will be more likely to respond positively to change when they perceive their leader as competent and experienced.

5.2 Theoretical implications

This study extends the theoretical understanding of employee change readiness by highlighting how employees perceive and interpret their leaders' affect-based responses during organizational change. This study focused on the perspective of the employee, how they interpret their leaders' affect-based responses to change, instead of asking leaders for personal evaluations or observable actions. Therefore, these findings demonstrate the influence of socially constructed perceptions of leader emotions on employee change readiness.

Validation of existing theories

These results provide empirical support for multiple existing theoretical models. First, they provide support for the Emotions as Social Information (EASI) model (Van Kleef et al., 2009), which suggests that emotional expressions by leaders serve as social signs that shape employee behavior. While leaders may show positive affect-based responses, their impact appears less consistent than the stronger influence of negative responses like change disengagement and change resistance. While the effect of positive emotions is present, these are limited and tend to be improved among employees with higher levels of openness to change. In contrast, a leader' negative emotional expression had strong, direct negative relationships with change readiness dimensions, including appropriateness, change efficacy, and personal valence (Armenakis et al., 1993; Holt et al., 2007).

Second, the findings validate the underlying theoretical framework that conceptualizes change readiness as both cognitive and emotional. Prior research highlighted both the cognitive and emotional dimensions of change readiness (Bouckenooghe, 2010; Rafferty et al., 2013). This study supports that the emotional expressions of leaders, when perceived as genuine, directly impact the emotional components of change readiness in terms of motivation (personal valence) and confidence (change efficacy). Third, the results provide strong validation for Oreg et al.'s (2018) theoretical circumplex of change recipients' responses to change and underlying core affect, which defines responses as multi-dimensional, involving cognitive, emotional, and behavioral elements, all situated within a broader social context. This study supports that leader affect-based responses, as perceived by employees, can influence a diverse range of change-related outcomes, including appropriateness, perceptions of management support, change efficacy and personal valence. The study findings of a strong negative effect of perceived leader change disengagement and change resistance on employee change readiness further support

Oreg et al.'s (2024) extension of the model. Which highlights the influence of social and emotional signs, particularly from leaders, on shaping employee reaction during organizational change (Oreg et al., 2024).

Extensions of theoretical models

Apart from validation, this study also offers theoretical extensions. First, it defines openness to change as a moderating variable, which has generally been an underexplored role in previous models, where openness to change is typically defined as a direct predictor or mediator to change readiness (Rafferty & Griffin, 2006; Wanberg & Banas, 2000). However, this study shows that openness to change can also affect employees' responses to the emotional behavior of their leaders. For example, employees who are more open to change respond more positively to their leaders' change acceptance or change proactivity, and less negatively to their leader's disengagement and resistance toward change. This supports the idea that openness to change influences how individuals interpret and respond to emotional signs from others (Oreg et al., 2018; Oreg et al., 2024). Therefore, employee openness to change acts more like a filter through which employees interpret leader behavior rather than being a direct cause of how they respond (Oreg et al., 2018; Oreg et al., 2024). This perspective also aligns with the change readiness model proposed by Armenakis et al. (1993), which highlights both the message and the sender in shaping employee readiness beliefs. Openness to change influences the extent to which employees perceive a leader's emotional sign as reliable and motivating (Armenakis et al., 1993). For example, an open employee may interpret a leader' optimism as genuine encouragement, while a less open employee may view the same behavior with doubt. Thus, openness to change influences how individuals interpret signals, which then influences their own readiness beliefs (Oreg, 2006; Oreg & Berson, 2011).

Second, this study expands traditional leadership theories (Bass, 2006; Herold et al., 2008) by indicating that leaders are not just external influencers who manage and initiate change but are also emotional individuals whose affect-based responses shape employees cognitive and emotional perceptions of change (Menges & Kilduff, 2015; Van Kleef et al., 2009). By focusing on leaders' affect-based responses, it goes beyond the traditional focus of leaders' observable behaviors, such as communicating a strategic vision or distributing resources, to highlight the leaders' emotional state when leading a change initiative. The study extends Affective Events Theory (AET) by showing how leaders' emotional expressions serve as significant affective events that shape how employees interpret and respond to change (Weiss & Cropanzano, 1996).

AET suggests that workplace events trigger emotional reactions that impact employees' attitudes and behaviors. In this context, leaders' affect-based responses serve as emotional signs that employees use to interpret the change context. By focusing on the role of leader affect, this study further develops AET and highlights the importance of emotional alignment between leader behavior, how they feel, and what they express (Weiss & Cropanzano, 1996). This alignment influences not only individual emotional responses but also broader change-related perceptions, such as readiness (Dasborough & Ashkanasy, 2002). Additionally, this study adds to the theoretical literature of change readiness by analyzing its multiple dimensions. The findings show that leader affect-based responses relate differently to various individual dimensions of change readiness. For example, change disengagement and change resistance by leaders are consistently associated with lower perceptions of appropriateness, change efficacy, or personal valence among employees, while change proactivity is more strongly linked to management support. These differences suggest that readiness is not a unified construct but consists of multiple cognitive and affective evaluations (Armenakis et al., 1993; Holt et al., 2007). This highlights the importance of addressing each dimension individually, both in theory and in practice, rather than treating readiness as a uniform outcome.

Third, the results provide insights into the unequal roles of emotions, specifically that leaders negative affect-based responses, such as change disengagement and change resistance, have stronger effects than positive expressions like change acceptance and change proactivity. This supports the idea of negativity bias in both social and organizational research, indicates that negative signs tend to trigger stronger emotional reactions and are more influential in individuals' attention and judgment compared to positive ones (Baumeister et al., 2001). Finally, the consistent significance of several control variables, particularly the experience of the manager and organizational size, highlights the importance of situational and contextual factors in how employees perceive leader affect-based responses. The strong effect of these control variables suggests that leader affect-based responses are not experienced independently but are shaped by the broader organizational context (Morgeson et al., 2010; Oreg et al., 2024). This points to the need for theoretical models of change readiness and leadership to integrate contextual factors. It also appears that individual employee characteristics, particularly openness to change, play a role in shaping how a leader's affect-based responses are perceived and processed.

However, it is important to approach these theoretical implications with caution. Two of the scales, change disengagement and management support have weaker measurement quality with reliability scores and AVE that did not achieve recommended thresholds. These measurement limitations suggest that some relationships may have been underestimated or misrepresented and therefore any theoretical conclusions made based on these constructs should be interpreted with caution and require further validation in future research (Hair Jr et al., 2010).

5.3 Practical implications

In addition to its theoretical contributions, this study offers practical implications for organizational managers, HR professionals, and change managers. Since employee change readiness plays an important role in the success and speed of an organizational transformation, leaders must be aware that their affect-based responses to change, and the way in which employees may interpret them, will influence the success of the change process (Holt et al., 2007; Oreg et al., 2024; Rafferty & Griffin, 2006).

An important implication of this study is that leaders emotionally negative responses, such as change disengagement and change resistance, have a more consistent effect on reducing employees' perception of appropriateness, change efficacy, and personal valence. This highlights the importance and need for emotional awareness and regulation in leadership. Organizations should highlight the importance of emotional intelligence training and coaching leaders, focusing on how to manage and express affect-based responses in the change process. Leaders should avoid expressing frustration, disengagement, or resistance because employees may interpret them as signs that the change lacks support or is ineffectively managed (Giangreco & Peccei, 2005; Van Kleef et al., 2009). In contrast, while positive leader behaviors linked with change acceptance and change proactivity are perceived as supportive, this study indicated that their effect can be limited unless they are combined with visible action or are interpreted by employees as genuine or motivating. This suggests that emotional expression alone is insufficient. It is important for leaders to balance positive expressions with clear communication, strategic direction, and active engagement in the change process (Herold et al., 2008; Lines, 2004). For example, a leader could instead of simply showing enthusiasm, lead an interactive Q&A session or implement feedback loops to illustrate commitment and availability to the change (Carreno, 2024; Herold et al., 2008).

The results also suggest that openness to change moderates the relationship between leader affect-based responses and employee change readiness, with four of the sixteen tested interaction effects found to be statistically significant. Openness to change moderated the negative impact of perceived leader change disengagement and change resistance on employee personal valence, indicating that the impact of leaders' affect-based responses on employee outcomes depends on the employees' level of openness to change. This suggests that in periods of visible leader resistance or emotional disengagement, organizations should offer additional support to employees who score low on openness to change, because they may be more vulnerable to disengagement themselves (Judge et al., 1999; Wanberg & Banas, 2000). Tailored communication and emphasis on the importance of the change may help protect their perception of involvement and motivation (Armenakis & Harris, 2002).

Similarly, the positive effects of leader change acceptance and change proactivity on employee change efficacy are stronger when employees are more open to change, indicating that employees who are more open to change tend to feel more confident in adapting when their leader shows support or enthusiasm for the change. In this context, matching leader energy with employees' individual traits may be essential (Herold et al., 2008). Managers simply need to identify change openness in their employees and adapt their level of involvement, such as recognizing proactive behaviors or celebrating early wins when employees are positively responsive to maintain their engagement (Oreg & Berson, 2011; Rafferty & Griffin, 2006).

These findings highlight that a leader's emotional behavior is not experienced uniformly across employees but rather depends on individual differences (Oreg et al., 2018; Wanberg & Banas, 2000). This highlights the importance of implementing more personalized change management strategies. Although personalized strategies may not be feasible on a large-scale transformation, the literature indicates that it is both possible and effective to personalize change communication and support based on employee attributes, such as openness or resistance traits (Oreg & Berson, 2011; Rafferty & Griffin, 2006). Targeted strategies, such as segmented messaging or differentiated leadership behaviors, have been shown to increase engagement and decrease resistance, making personalization a realistic and beneficial component in structural change programs (Caldwell, 2003). Employees who have higher levels of openness to change are better prepared to benefit from positive leaders' signals and are less demotivated by negative signals. Therefore, organizations may want to assess openness to change as a trait when hiring or during performance assessments and include this trait in leadership development and change

readiness planning (Judge et al., 1999; Wanberg & Banas, 2000). Change readiness evaluations, surveys, and personality assessments can help customize change communications and support according to individual employee needs.

Furthermore, the exploratory findings indicate that emotional expression, either positive or negative, used by leaders may also play a significant role in readiness outcomes, particularly in perceived management support and appropriateness of change. Organizations should create emotionally supportive environments. This includes recognizing and rewarding leaders who show emotional leadership by expressing optimism, stability, and transparency, particularly during periods of uncertainty (Humphrey et al., 2008; Rafferty & Griffin, 2006). Finally, change management frameworks should change to highlight affect-based responses over simply procedural steps. Organizational change models like Kotter's (1996) and Lewin's (1947) could be made even stronger by adding a focus on affect-based responses and their interpretation by employees (Kotter, 1996; Lewin, 1947). By combining affective leadership with the structural change process, organizations can help individuals make sense of change initiatives in ways that improve their confidence, clarity, and motivation to adapt (Kiefer, 2005).

5.4 Limitations and future research

While this study provides important insights into the relationship between perceived leader affect-based responses and employee change readiness, several limitations should be highlighted. These limitations also present opportunities for future research to build on and extend current findings.

First, using a non-random, convenient sample limits the generalizability of the results. The sample includes a range of employees from different industries and organizational characteristics; it may not fully represent the broader employee population. Convenience sampling increases accessibility but limits the ability to draw broader conclusions about the population since the sample may differ from the general population (Acharya et al., 2013; Golzar et al., 2022). As such, the increase of diverse sampling approaches, categorized by sector, role, or industry, to strengthen external validity should be prioritized in future research.

Second, a cross-sectional design is used in this study, which reflects perceptions at a single point in time. Although a cross-sectional design can determine associations between variables,

it limits the ability to claim causality or assess how perceptions of leader emotional expressions and change readiness develop across different stages of the change process (Rindfleisch et al., 2008). Longitudinal design studies could more effectively capture the dynamic relationship between leader affect-based responses and employee change readiness, particularly in organizational change processes that develop over time (Rafferty et al., 2013).

Another important limitation is that the study relies only on employees' personal views of their leaders' affect-based responses to change, without also collecting input from the leaders themselves to verify or compare these perspectives. While this is consistent with social-cognitive theories of leadership, in which follower perceptions are key drivers of behavior (Lord et al., 1984; Van Kleef et al., 2009), it also presents potential biases. For example, employees may misinterpret their leaders' behavior or interpret them through their own emotional lens, leading to biased perceptions of leader behavior (Ashkanasy & Humphrey, 2011). Although this may present concerns about bias, prior research indicates that what matters most is how leaders' affect-based responses are perceived. Employees respond to what they feel and see, and these perceptions shape their attitudes and behavior during change (Giæver & Smollan, 2015; Van Kleef et al., 2009). Even if a leader is not intending to show resistance or support, if employees interpret those emotional signs, these still shape the change process outcome. Future research could include multi-source data, such as paired leader-employee perceptions or observations of actual behavior to validate findings.

Another limitation is related to the quality of some measurement scales. Specifically, the constructs of change disengagement and management support produce reliability scores and AVE values below accepted thresholds (Cronbach's alpha < 0.70; AVE < 0.50), indicating poor internal consistency and convergent validity (DeVellis & Thorpe, 2021; Hair Jr et al., 2010). These measurement limitations raise the potential that certain relationships involving these constructs may have been minimized or biased. One possible explanation for these weak measurement indicators could lie in the translation of survey items. It is possible that some of the original meanings of the items are unintentionally changed during the translation process, which may have made it more challenging for the items to precisely and consistently measure their intended construct. Accordingly, the translation may have played a role in the low factor loadings and the quality of the AVE values, consequently weakening the overall validity of the measurement model. Therefore, any theoretical conclusion made based on these variables in

this research should be interpreted with caution and further analyzed in future studies using refined or alternative measures.

Last, the sample is sufficient in detecting effects, but there are several results that approached almost significance but did not reach the standard threshold, which indicates that the study may have lacked enough power to detect smaller but theoretically significant effects (Cohen, 2013). Future studies would likely benefit from larger and more balanced sample sizes to increase the statistical power.

Future research

Several important areas have been identified for future research based on the findings and limitations of this study. First, replicating this study with a larger and more statistically balanced sample would increase the reliability and external validity of these findings, especially in the case of relationships that approached almost significance (Faber & Fonseca, 2014). Second, future research should continue to analyze openness to change as a moderator. Openness to change has been often considered as a direct predictor or mediator of change readiness (Rafferty & Griffin, 2006; Wanberg & Banas, 2000), while this study shows a moderating effect. Further research could analyze how openness to change interacts with other traits, such as emotional intelligence or trust in leaders, to impact how leader affect-based responses are perceived. Third, extending this research into different cultural and organizational contexts may also lead to insights. Because affect-based responses are related to cultural norms (Hofstede, 2001), applying the model to different countries or industries may clarify if these results are consistent across different contexts. Longitudinal designs would also be useful to identify how leader affect-based responses and employee change readiness develop over time, across different stages of organizational change (Rafferty et al., 2013). Finally, this study only relied on the employees' perceptions of their leaders' affect-based responses. This approach is consistent with social-cognitive theories highlighting the role of follower interpretation (Lord et al., 1984; Van Kleef et al., 2009). However, future research can add leaders' own perspective on their affect-based responses. Comparing employees' perceptions with how leaders themselves describe their affect-based responses may improve the understanding of emotional alignment and how it creates change readiness.

H6. Conclusion

This study addresses the following research question: "*to what extent do employees' perceptions of leaders' affect-based responses influence employee readiness for change during organizational transformations?".*

The findings show that perceived leader affect-based responses, especially negative responses including change disengagement and change resistance significantly predict lower employee change readiness. These affect-based responses are strongly correlated with lower perceived change appropriateness, change efficacy, and personal valence. Positive responses, such as change acceptance and change proactivity, show weaker and more inconsistent effects. More importantly, the study shows that employees' openness to change affects these relationships, particularly by improving the effects of positive responses and reducing the effects of negative responses.

Another key finding is that the relationships between leaders' change acceptance and change efficacy only exist when employees express a high level of openness to change, indicating a significant moderating effect. Similarly, a comparable moderation effect is found for leader change proactivity and employee change efficacy; this relationship is also only significant among employees with high openness to change. This suggests that employee traits, such as openness to change, serve as a cognitive filter when perceiving and processing a leader's affect-based responses. Openness to change does not directly shape the leaders' signals, it influences the employees cognitive and emotionally process these signs, ultimately shaping employee change readiness (Oreg, 2006; Rafferty et al., 2013).

However, it is important to consider that not all the constructs, in particular, change disengagement and management support, meet all the recommended measurement criteria for internal consistency and convergent validity. Thus, any results drawn from these constructs must be interpreted with caution. While the observed patterns are theoretically consistent and supported by previous research, further studies using improved measurement tools are needed to confirm the reliability of these effects (Hair Jr et al., 2010). The findings indicate that leaders' affect-based responses to change, particularly as perceived by employees, play a meaningful role in shaping their readiness for change.

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Appendix A. Questionnaire

Text to distribute the survey

Hi there! Did you go through a company change in the last 24 months? Maybe a shift in IT system, or a switch to remote work?

I'm doing research for my thesis at the University of Twente on how managers affect based response (behavior) influence employees' readiness to deal with changes at work.

→ Are you 18 years +
→ Currently employed in an organization in the Netherlands
→ Have a direct manager
→ Experienced change in the last 24 months?

Perfect, we need your input! It takes **less than 10 minutes,** and your responses are 100% anonymous and securely stored by the University of Twente.

Many others have already joined; will you be next?
Please share this with colleagues and friends who fit these criteria.

[insert survey link]

If you have any questions or comments, feel free to contact me at: c.s.rook@student.utwente.nl
Thank you very much for your time and contribution!

Welcome!

So great that you're taking part in this research on managers and workplace change! Your help is super valuable. Thanks to you, we'll get a better understanding of how managers' behavior influences how employees deal with change at work.

Informed consent

Before you begin, please read the following information carefully.

Purpose of the study: in this study, we look at how employees experience their manager's behavior during changes at work and how that shapes their own willingness to embrace change. With your help, we can better understand how managers can support change in the workplace.

What participation involves:

You will answer a few questions about:

- Your attitude toward organizational change you have experienced
- Your perception of your leaders' behavior during change
- Some demographic questions

The survey takes less than 10 minutes to complete

Eligibility: to participate in this study, you must be at least 18 years old.

Voluntary participation: your participation is entirely voluntary; you may stop at any time without any consequences.

Risks and burdens: there are no anticipated risks or discomforts associated with your participation. No deception is involved.

Confidentially: your responses are completely anonymous and will be used only for research purposes. All data will be securely stored in the University of Twente's database and analyzed as a group, so no one can be personally identified.

If you have any questions, feel free to contact me at: c.s.rook@student.utwente.nl

Q0 By clicking “I Agree”, you confirm that: you have read and understood the provided information. And you voluntarily consent to participate in this study. If you do not agree, you may exit the survey.

- ○ I agree (1)
- ○ I do not agree (2)

Let’s get started... I’d like to ask you to **think of a specific organizational change you’ve experienced in the past 24 months**. This could be something you’re currently going through or something that took place within the last two years. Organizational change refers to something that shifts within an organization such as the way of working, its structure, strategy, or culture. It should be a change that affects your work or role. For example, having to use a new IT system or switching from working in the office to working from home.

Do you have a specific change in mind?

Whenever you see the phrase “**the change**” in the questionnaire, think of the specific change you’re thinking of right now. When you see the phrase “**my manager**” in the questionnaire, think of your direct manager, the person who supervises your daily tasks. This type of manager is also called a functional manager.

Q1 Which change are you thinking of? Please describe the organizational change you have in mind below

_____

_____

_____

Q2 The organizational change you have in mind is

- ○ Completed (1)
- ○ Ongoing for a while (2)
- ○ It has just started (3)

Q3 What is the gender of your manager?

- ○ Male (1)
- ○ Female (2)

Q4 How many years have you and your manager known each other?

_____

_____

Q5 How much experience does your manager have in their role as a manager?

- ○ No experience (1)
- ○ Limited experience (2)
- ○ Some experience (3)
- ○ A lot of experience (4)

Change readiness

Please indicate to what extent you agree with the following statements about "the change" (the one you are thinking of right now) on a scale from 1 (strongly disagree) to 5 (strongly agree):

Q6 **Factor 1: Appropriateness**

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I think the organization will benefit from the change (1)	○	○	○	○	○
It doesn't make much sense for us to initiate the change (R) (2)	○	○	○	○	○
There are legitimate reasons for us to make the change (3)	○	○	○	○	○
The change will improve our organization's overall efficiency (4)	○	○	○	○	○
There are number of rational reasons for the change to be made (5)	○	○	○	○	○
In the long term, I feel it will be worthwhile for me if the organization adopts the change (6)	○	○	○	○	○
The change makes my job easier (7)	○	○	○	○	○
When the change is implemented, I don't believe there is anything for me to gain (R) (8)	○	○	○	○	○
The time we are spending on the change should be spent on something else (R) (9)	○	○	○	○	○
The change matches the priorities of our organization (10)	○	○	○	○	○

Q7 **Factor 2: Management support**

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Our senior managers have encouraged all of us to embrace the change (1)	○	○	○	○	○
Our organization's top decisions makers have put all their support behind the change efforts (2)	○	○	○	○	○
Every senior manager has stressed the importance of the change (3)	○	○	○	○	○
This organization's most senior manager is committed to the change (4)	○	○	○	○	○
I think we are spending a lot of time on the change when the senior managers don't even want it implemented (R) (5)	○	○	○	○	○
Management has sent a clear signal this organization is going to change (6)	○	○	○	○	○

Q8 **Factor 3: Change efficacy**

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I do not anticipate any problems adjusting to the work I will have when the change is adopted (1)	○	○	○	○	○
There are some tasks that will be required when we change that I don't think I can do well (R) (2)	○	○	○	○	○
When we implement the change, I feel I can handle it with ease (3)	○	○	○	○	○
I have the skills that are needed to make the change work (4)	○	○	○	○	○
When I say my mind to it, I can learn everything that will be required when the change is adopted (5)	○	○	○	○	○
My past experiences make me confident that I will be able to perform successfully after the change is made (6)	○	○	○	○	○

Q9 **Factor 4: Personal valence**

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I am worried I will lose some of my status in the organization when the change is implemented (R) (1)	○	○	○	○	○
The change will disrupt many of the personal relationships I have developed (R) (2)	○	○	○	○	○
My future in this job will be limited because of the change (R) (3)	○	○	○	○	○

Openness to change

The following statements are about how open you are in general to organizational changes.

To what extent do you agree with the following statements on a scale from 1 (strongly disagree) to 5 (strongly agree)?

You are doing great, almost halfway through!

Q10 **Openness to change**

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I would consider myself to be "open" to changes to my work role (1)	○	○	○	○	○
Right now, I am somewhat resistant to changes in my work (R) (2)	○	○	○	○	○
I am looking forward to the implementation of changes in my work role (3)	○	○	○	○	○
I am quite reluctant to consider changing the way I now do my work (R) (4)	○	○	○	○	○
From my perspective, the implementation of changes in my work will be for the better (5)	○	○	○	○	○

Managers behavior

Keep thinking about the organizational change you've had in mind throughout the survey. Now we'd like to ask you a few questions about **your direct manager**.

When you see the phrase "my manager" in the questionnaire, think of your direct manager, the person who supervises your daily tasks. This type of manager is also called a functional manager.

To what extent do you agree with the following statements on a scale from 1 (never) to 5 (always)? **You are already over halfway; great that you are still with us!**

Q11 **Change acceptance**

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
My manager readily accepts the change as it is (1)	○	○	○	○	○
My manager is fully cooperative with the current plan for the change (2)	○	○	○	○	○
My manager takes on whatever role is necessary as part of the change (3)	○	○	○	○	○

Q12 **Change proactivity**

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
My manager is actively supportive of the change (1)	○	○	○	○	○
My manager actively helps to move the change forward (2)	○	○	○	○	○
My manager is proactive in efforts to implements the change (3)	○	○	○	○	○

Q13 **Change disengagement**

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
My manager keeps opposition to the change to themselves (1)	○	○	○	○	○
My manager tends to delay or hesitate in implementing the change (2)	○	○	○	○	○
My manager disengages from anything that has to do with the change (3)	○	○	○	○	○

Q14 **Change resistance**

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
My manager is active in resisting the change (1)	○	○	○	○	○
My manager actively tries to prevent the change (2)	○	○	○	○	○
My manager actively tries to alter or slow down the change (3)	○	○	○	○	○

Q15 **To what extent do you recognize the following emotions in your manager during the change?**

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
Stress (1)	○	○	○	○	○
Anger (2)	○	○	○	○	○
Upset (3)	○	○	○	○	○
Despair (4)	○	○	○	○	○
Sadness (5)	○	○	○	○	○
Helplessness (6)	○	○	○	○	○
Excitement (7)	○	○	○	○	○
Elation (8)	○	○	○	○	○
Enthusiasm (9)	○	○	○	○	○
Calmness (10)	○	○	○	○	○
Relaxation (11)	○	○	○	○	○
Contentment (12)	○	○	○	○	○

Personal information

You are almost there, just a few short questions about yourself and your work situation.

Q16 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Prefer not to say (3)

Q17 How old are you?

_____

_____

Q18 How many years do you work for the organization?

_____

_____

Q19 How many people work in your organization?

_____

_____

The end of the survey

Thank you for taking the time to complete this survey. Your insights are valuable in helping us understand how manager behavior influences employee readiness during organizational change. We appreciate your participation. **Thank you for your time and contribution!**

If you are interested in the results of this study, please feel free to contact me at c.s.rook@student.utwente.nl

---

Q20 Do you have any further comments or recommendations? Please share them below

_____

_____

_____

Appendix B. Results

Table 5. *Correlation matrix*

Variables	*App.*	*ManSup.*	*ChanEf.*	*PersV.*	*OpenCh.*	*Accept.*	*Proac.*	*Diseng.*	*Resit.*
Appropriateness	1.000								
Management support	0.569**	1.000							
Change efficacy	0.438**	0.266*	1.000						
Personal valence	0.434**	0.234*	0.393**	1.000					
Openness to change	0.510**	0.307**	0.438**	0.333**	1.000				
Change acceptance	0.348**	0.383**	0.096	0.085	0.225*	1.000			
Change proactivity	0.329**	0.405**	0.029	0.063	0.315**	0.686**	1.000		
Change disengagement	-0.299*	-0.199*	-0.260*	-0.408**	-0.289**	-0.424**	-0.417**	1.000	
Change resistance	-0.324**	-0.184*	-0.328**	0.381**	-0.359**	-0.281**	-0.249*	0.609**	1.000

$^{+}p < .10$, *p < .05, **p < .01

0.10 – 0.29 (small), 0.30 – 0.49 (moderate), ≥ 0.50 (strong)

Table 8. Factor loadings

Factor	*Indicator*	*Estimate*	*Std. Error.*	*z-value*	*P*
Appropriateness	Appropriateness_1	0.874	0.080	10.979	< .001
	Appropriateness_2	0.673	0.089	7.530	< .001
	Appropriateness_8	0.621	0.086	7.206	< .001
	Appropriateness_9	0.781	0.087	8.950	< .001
	Appropriateness_4	0.969	0.080	12.063	< .001
	Appropriateness_6	0.898	0.078	11.471	< .001
	Appropriateness_7	0.803	0.095	8.417	< .001
	Appropriateness_10	0.690	0.079	8.764	< .001
	Appropriateness_3	0.562	0.068	8.327	< .001
	Appropriateness_5	0.455	0.073	6.219	< .001
Management support	Management_sup_3	0.674	0.086	7.818	< .001
	Management_sup_2	0.784	0.083	9.461	< .001
	Management_sup_4	0.562	0.073	7.674	< .001
	Management_sup_1	0.607	0.086	7.086	< .001
	Management_sup_5	0.558	0.094	5.908	< .001
	Management_sup_6	0.449	0.088	5.112	< .001
Change efficacy	Change_efficacy_2	0.548	0.093	5.877	< .001
	Change_efficacy_4	0.558	0.062	9.062	< .001

	Change_efficacy_3	0.667	0.072	9.280	< .001
	Change_efficacy_5	0.506	0.064	7.871	< .001
	Change_efficacy_1	0.492	0.094	5.217	< .001
	Change_efficacy_6	0.373	0.066	5.669	< .001
Personal valence	Personal_valence_1	0.777	0.079	9.810	< .001
	Personal_valence_2	0.932	0.086	10.898	< .001
	Personal_valence_3	0.833	0.088	9.495	< .001
Openness to change	Open_to_change_2	0.616	0.076	8.132	< .001
	Open_to_change_3	0.874	0.074	11.799	< .001
	Open_to_change_5	0.400	0.077	5.203	< .001
	Open_to_change_4	0.792	0.072	11.027	< .001
	Open_to_change_1	0.243	0.071	3.416	< .001
Change acceptance	Change_acceptance_1	0.479	0.058	8.206	< .001
	Change_acceptance_2	0.650	0.065	10.011	< .001
	Change_acceptance_3	0.681	0.082	8.359	< .001
Change proactivity	Change_proactivity_1	0.760	0.069	10.942	< .001
	Change_proactivity_2	0.831	0.068	12.271	< .001
	Change_proactivity_3	0.848	0.071	11.971	< .001
Change disengagement	Change_disengagement_1	0.263	0.112	2.346	0.019
	Change_disengagement_2	0.586	0.081	7.271	< .001
	Change_disengagement_3	0.685	0.094	7.318	< .001
Change resistance	Change_resistance_1	0.731	0.060	12.165	< .001
	Change_resistance_2	0.755	0.053	14.142	< .001
	Change_resistance_3	0.831	0.059	14.054	< .001

Table 9. Initial average variance extracted (AVE)

Factor	*AVE*
Appropriateness	0.462
Management support	0.352
Change efficacy	0.338
Personal valence	0.594
Openness to change	0.454
Change acceptance	0.523
Change proactivity	0.683
Change disengagement	0.241

Change resistance	0.779

Table 11. Factor covariances

		Estimate	*Std. Error.*	*z-value*	*P*
Appropriateness	Management support	0.691	0.063	11.034	< .001
Appropriateness	Change efficacy	0.504	0.079	6.348	< .001
Appropriateness	Personal valence	0.484	0.078	6.216	< .001
Appropriateness	Openness to change	0.432	0.081	5.317	< .001
Appropriateness	Change acceptance	0.391	0.086	4.524	< .001
Appropriateness	Change proactivity	0.338	0.084	4.012	< .001
Appropriateness	Change disengagement	-0.313	0.109	-2.877	0.004
Appropriateness	Change resistance	-0.335	0.081	-4.124	< .001
Management support	Change efficacy	0.353	0.098	3.596	< .001
Management support	Personal valence	0.289	0.098	2.948	0.003
Management support	Openness to change	0.282	0.097	2.907	0.004
Management support	Change acceptance	0.487	0.092	5.288	< .001
Management support	Change proactivity	0.490	0.082	5.998	< .001
Management support	Change disengagement	-0.286	0.121	-2.358	0.018
Management support	Change resistance	-0.219	0.096	-2.272	0.023
Change efficacy	Personal valence	0.464	0.087	5.329	< .001
Change efficacy	Openness to change	0.451	0.087	5.209	< .001
Change efficacy	Change acceptance	0.102	0.105	0.971	0.331
Change efficacy	Change proactivity	0.020	0.100	0.202	0.840
Change efficacy	Change disengagement	-0.366	0.116	-3.163	0.002
Change efficacy	Change resistance	-0.367	0.086	-4.255	< .001
Personal valence	Openness to change	0.316	0.093	3.400	< .001
Personal valence	Change acceptance	0.133	0.102	1.309	0.191
Personal valence	Change proactivity	0.050	0.100	0.497	0.619
Personal valence	Change disengagement	-0.615	0.097	-6.330	< .001
Personal valence	Change resistance	-0.430	0.080	-5.364	< .001
Openness to change	Change acceptance	0.252	0.096	2.625	0.009
Openness to change	Change proactivity	0.329	0.087	3.769	< .001
Openness to change	Change disengagement	-0.382	0.110	-3.472	< .001
Openness to change	Change resistance	-0.392	0.081	-4.832	0.019
Change acceptance	Change proactivity	0.807	0.058	13.958	< .001
Change acceptance	Change disengagement	-0.629	0.101	-6.218	< .001

Change acceptance	Change resistance	-0.351	0.087	-4.020	< .001
Change proactivity	Change disengagement	-0.563	0.101	-5.584	< .001
Change proactivity	Change resistance	-0.260	0.087	-2.990	0.003
Change disengagement	Change resistance	0.833	0.076	10.950	< .001