

HEC MONTRÉAL
École affiliée à l'Université de Montréal

**Organizational Transformations: Their Effects and How to Make
Sense of Their Complexity**

par
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Organizational Transformations: Their Effects and How to Make Sense of Their Complexity

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Résumé

Le changement organisationnel est un phénomène fréquent et essentiel à la survie des organisations. Nous savons que les réactions des employés représentent un élément central à la réussite du changement. Cependant, malgré des décennies de recherche sur le sujet, les réactions des employés face au changement restent difficiles à comprendre. Dans le but de clarifier ces processus, nous proposons trois articles avec des objectifs distincts.

Le premier article met en évidence l'impact négatif d'une restructuration organisationnelle sur les ressources psychologiques des employés. En utilisant une approche de différence de score latent et en nous basant sur la théorie de la conservation des ressources (COR), nous étudions comment une restructuration organisationnelle conduit à un épuisement des ressources. Nous analysons en particulier comment les initiatives de changement contribuent au développement de cet épuisement, dû à l'émergence d'un passage négatif de ressources (negative resource passageway) caractérisé par la fréquence, l'impact et l'étendue des changements. Le stress résultant de ce passage, connu sous le nom de saturation de changement, peut entraîner un épuisement émotionnel à long terme et accentuer les mécanismes d'adaptation inefficaces. Nous mettons également en évidence des ressources psychologiques qui aident les employés à faire face à une restructuration, en accordant une attention particulière à l'influence du capital psychologique. Notre modèle théorique est soutenu par une étude impliquant 347 répondants d'une organisation de santé.

Le deuxième article se consacre à l'exploration de différentes approches visant à accroître la volonté des équipes à changer (c-à-d., readiness to change) dans le but de réduire les effets négatifs des transformations organisationnelles. Nous mettons l'accent sur la manière dont les équipes peuvent développer efficacement une vision du changement et donner un sens à une transformation organisationnelle complexe. L'article soutient que la réflexivité de l'équipe est un facteur clé permettant aux membres de l'équipe de partager leurs interprétations des changements en cours, ce qui conduit finalement au développement d'une vision du changement. Nous soulignons l'importance de la réflexivité de l'équipe, particulièrement efficace pour les équipes ayant une longue expérience de travail ensemble et une diversité en termes d'ancienneté des membres. Nous avons réalisé une étude auprès de 70 équipes d'une organisation gouvernementale canadienne.

Dans notre troisième article, nous examinons l'impact de l'établissement d'une identité organisationnelle à la suite d'une période de restructuration organisationnelle. Nous étudions comment cette identité peut aider les employés à gérer un traumatisme, tel que la pandémie de Covid-19, et favoriser le développement du capital psychologique. Nous explorons spécifiquement le rôle protecteur de l'identification organisationnelle des travailleurs de la santé dans l'atténuation de l'impact psychologique des heures de travail prolongées pendant la première vague de l'épidémie de Covid-19. En intégrant la COR et la théorie de la croissance post-traumatique, nous soutenons que les employés qui s'identifient fortement à leur organisation sont plus susceptibles de maintenir des niveaux élevés de capital psychologique, même face à de longues heures de travail. Nous avons recueilli des données auprès de 272 répondants

employés dans une organisation de soins de santé. Deux questionnaires ont été distribués, le premier avant la pandémie et le second en août 2020. Il est important de noter que l'organisation avait subi des changements importants au cours des cinq années précédant la pandémie.

Ces trois articles contribuent à la littérature de plusieurs façons. Le premier article met en évidence le rôle significatif de la saturation liée au changement en tant que mécanisme épuisant les ressources des employés, en particulier pour ceux ayant des niveaux plus faibles de capital psychologique. Nous montrons qu'il y a un effet d'accumulation de saturation qui a un impact distinct sur les ressources des employés, ce qui illustre le cycle de déplétion des ressources de la théorie COR. Le deuxième article souligne l'importance des processus et des dynamiques d'équipe dans le contexte d'une transformation organisationnelle, en mettant l'accent sur la réflexivité de l'équipe comme processus central. De plus, l'article met en lumière l'influence de la diversité de l'ancienneté de l'équipe sur l'efficacité de la réflexivité de l'équipe dans la gestion du changement. Enfin, le dernier article montre le facteur protecteur de l'identité organisationnelle en période de crise. Lorsque les employés s'identifient à leur organisation, ils disposent de plus de ressources pour faire face aux événements défavorables, ce qui peut entraîner une croissance personnelle en termes de capital psychologique. Notre étude contribue également à la littérature sur le capital psychologique en mettant en évidence les facteurs qui favorisent son développement, un domaine qui n'a pas beaucoup été étudié dans les recherches précédentes.

Mots clés : Contexte transformationnel, saturation de changements, volonté à changer (readiness to change), théorie COR, capital psychologique, l'épuisement émotionnel, réflexivité, ancienneté d'équipe, vision de changement

Méthodes de recherche : Quantitatif, l'équation structurelle, différence de score latent

Abstract

Organizational changes are a frequent phenomenon and are essential for organizations' survival. We know that employees' reactions are at the heart of change successes. Despite decades of research on this topic, many scholars agree that we still have difficulty understanding how change recipients perceive, understand, and react to change. We seek to shed light on this process by proposing three manuscripts with distinct objectives.

The first article examines the negative impact of organizational restructuring on employees' psychological resources. Using a latent change approach and drawing upon the conservation of resources theory (COR), we investigate how organizational restructuring influences the emergence of a negative resource passage. Specifically, we examine how change initiatives, in terms of their frequency, impact, and extent, contribute to the development of this resource passage. The resulting strain, referred to as change fatigue, is believed to lead to heightened levels of emotional exhaustion both in the long term and by exacerbating ineffective coping mechanisms. Furthermore, we identify contextualized resources that help employees adapt to the various environmental demands associated with restructuring, focusing particularly on the moderating influence of psychological capital. Empirical support for our proposed dynamic model of resource depletion, incorporating moderated mediation, is provided through a time-lagged study involving 347 respondents from a healthcare organization.

In the second article, we explore ways of making teams more ready to change to diminish the negative effect of organizational transformations. The focus of this article

revolves around understanding how teams can effectively develop a team change vision and make sense of a complex organizational transformation. The article argues that team reflexivity is a key factor that enables team members to share their interpretations of the changes taking place, ultimately leading to the development of a team change vision. Furthermore, the article highlights that team reflexivity is particularly effective for teams with greater levels of team tenure and team tenure diversity, as it brings together different perspectives and experiences. We conducted a study using survey-based data from 70 teams in a Canadian governmental organization.

In our third article, we examine the impact of establishing a prominent organizational identity following a period of organizational restructuring. We delve into how this process can assist employees in managing trauma (i.e., Covid-19 pandemic) and even foster the development of psychological capital, which was identified as a vital resource for coping with change in our first article. More precisely, we explore the protective role of healthcare workers' organizational identification in mitigating the psychological impact of prolonged work hours during the initial wave of the Covid-19 outbreak. By integrating the Conservation of Resources (COR) theory and the post-traumatic growth theory, our argument revolves around the idea that employees who strongly identify with their organization are more likely to maintain higher levels of psychological capital, even in the face of long working hours. This, in turn, is associated with a decrease in emotional exhaustion. For our study, we gathered data from 272 respondents employed in a healthcare organization. A two-wave study was conducted, with the first questionnaire administered prior to the pandemic and the second in August 2020. Notably, the organization had undergone significant changes five years prior to

the pandemic. Through our findings, we demonstrate how cultivating a strong sense of identity can facilitate positive adaptation during times of crisis.

These three manuscripts have important implications. By delving into the psychological ramifications of organizational restructuring on employees, the first article highlights the significant role of change fatigue as a straining effect impacting employees' resources, particularly for individuals with lower levels of psychological capital. We show that there is an accumulation effect that has a distinct effect on employees' resource pool, which illustrates the COR's resource depletion cycle. The findings of the second article highlight the importance of team-based structures in the context of organizational transformation by showing that readiness to change exists at the team level. We emphasize the importance of team reflexivity as a central team process during organizational transformations. Additionally, the article sheds light on the influence of team tenure diversity on the effectiveness of team reflexivity in navigating change. Finally, the last article shows the protective factor of organizational identity in times of organizational crisis. When employees identify to their organization, they have more resources to deal with adverse events, which can lead to a personal growth in terms of their psychological capital. Our study also contributes to the literature on psychological capital by highlighting factors that give rise to its development, an area that has not received much attention in previous research.

Keywords: Change context, change fatigue, team readiness to change, COR theory, psychological resources, emotional exhaustion, team reflexivity, team tenure, change vision

Research methods: Quantitative, structural equation modelling, latent change score

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The fire that burns within us

To carry out a dream

Chasing new ambitions

Determined to succeed

To stretch beyond our limits

To blaze a brand new trail

Bold enough to conquer

Brave enough to fail”

- *Dream Theater*

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Avant-propos

Ce document présente ma thèse. Chaque article provient d'une étude de terrain différente et se trouve à un stade différent du processus de publication. Le premier article (*Understanding Employees' Resource Depletion Cycles in the Context of Organizational Restructuring: A Latent Change Approach*) a été soumis au *Journal of Occupational and Organizational Psychology*. Quant au deuxième article (*Ready to Change? The Role of Reflexivity, Change Vision, and Tenure in Work Teams*), il est actuellement en cours de révision auprès du *Journal of Applied Behavioral Science*. En ce qui concerne le troisième article (*Black Clouds and Silver Linings: Organizational Identification and Psychological Capital during Covid-19*), nous prévoyons de le soumettre pour le numéro spécial de *Frontiers in Psychology* sur la résilience des employés.

Foreword

This document presents my thesis. Each paper is from a different field study and is at a different stage of the publication process. The first paper (*Understanding Employees' Resource Depletion Cycles in the Context of Organizational Restructuring: A Latent Change Approach*) is submitted to the *Journal of Occupational and Organizational Psychology*. As for the second paper (*Ready to Change? The Role of Reflexivity, Change Vision, and Tenure in Work Teams*), it is currently in a revise and resubmit process with the *Journal of Applied Behavioral Science*. As for the third paper (*Black Clouds and Silver Linings: Organizational Identification and Psychological Capital during Covid-19*), we aim at submitting it for the special issue of *Frontiers in Psychology* on employees' resilience.

Introduction

In today's economy, organizations must change to survive (Barlette & Baillette, 2022; Harvey & Kudesia, 2023). Managers must therefore rely on one of their driving forces for organizational change capacity: their employees (Oreg et al., 2018; Newman et al., 2017; Blok et al., 2011). However, the intensity and the pace of change are threatening the sustainability of the very resource enabling organizations to adapt (Johnson, 2016; Cullen-Lester et al., 2019; Rafferty and Griffin, 2006; Herold et al., 2007). Indeed, it is known that during organizational change, employees face varying levels of stress and anxiety due to the uncertainty of what the future holds (Rafferty, 2022; Johnson, 2016; Yue & Walden, 2022).

More recently, scholars define this phenomenon as change fatigue—a perception that too much change is taking place (Bernerth et al., 2011). This perception is due to the temporal uncertainty of concurrent change initiatives that influences the experienced stress (Lazarus & Folkman, 1984; Bernerth et al., 2011). When change becomes an ongoing dynamic process rather than single discrete events, it is more difficult for employees to adapt adequately (Rafferty & Griffin, 2006; Johnson, 2016; Bernerth et al., 2011). As organizations undergo transformations, it becomes challenging for employees to synchronize their actions with the company's expectations (Bernerth et al., 2011), and even harder to identify themselves within an ever-changing entity (Elstak et al., 2015).

This increase of stress contributes to the escalating psychological health problems that Canadian organizations are facing, costing 6.3 billion dollars in direct and indirect costs (Mental Health Commission of Canada, 2016). A question thus emerges: how can

organizations maintain an adequate rhythm of change without harming the psychological well-being of their employees?

Despite existing literature, scholars and managers still struggle to understand how employees perceive and cope with change (Oreg et al., 2018; Cullen-Lester et al., 2019). This is due, among other things, to the difficulty of studying multiple changes (Cullen-Lester et al., 2019), and to overemphasizing the importance of individual reactions to change (Rafferty et al., 2013). In the following section, I will elaborate on these limits.

Limit #1: Measuring and Capturing the Dynamics of Simultaneous Changes

Scholars argue that existing organizational research tends to focus on isolated changes, leaving us with limited knowledge about how employees react and cope with multiple and simultaneous changes (Cullen-Lester et al., 2019; Johnson, 2016). This *traditional focus* overlooks the interconnectedness of various change initiatives and fails to capture the holistic experiences of employees (Cullen-Lester et al., 2019; Johnson, 2016; Bernerth et al., 2011). Scholars may also miss out on understanding the cumulative effects of simultaneous changes and the potential interactions between them (Ouedraogo & Ouakouak, 2020; Bernerth et al., 2011). In Pettigrew's seminal work (1985), he argues that:

“Theory and practice of change in organizations would continue to remain as circumscribed and ill developed as long as change is studied and thought about as episodes and projects separate from the ongoing processes of continuity and change of which those change projects are a part” (p. 26).

One type of organizational change that encompasses multiple and simultaneous change initiatives is organizational restructuring. It involves various strategic and operational adjustments aimed at enhancing efficiency, optimizing resources, and improving overall performance. However, recent reviews have shed light on the numerous challenges and considerations that must be addressed to fully comprehend the profound effect of these restructuring efforts on employees' psychological health and overall well-being.

For instance, de Jong et al. (2016) emphasize that previous reviews, such as the comprehensive study conducted by Bamberger et al. (2012), have struggled to identify conclusive evidence regarding the impact of organizational change on employees' mental health. This limitation stems from several factors, including the inadequacy of existing measurement tools to accurately capture the complex nature of organizational restructurings. Indeed, with the exception of certain studies (Rafferty & Griffin, 2006; Johnson, 2016; Herold et al., 2007; Caldwell et al., 2004), there is a limited number of research studies that utilize self-reported evaluations to measure the extent of restructuring employees undergo (Rafferty, 2022; de Jong et al., 2016). Having an employee-centric approach towards studying an organizational restructuring is important because researchers and organizations can gain valuable insights into how these changes affect individuals on a personal level. It allows for a more holistic understanding of the impact of restructurings, beyond just objective metrics or organizational outcomes.

Additionally, Bartunek and Woodman (2015) put forward key elements to consider regarding the measurement of change. Among other characteristics, *sequence*

refers to a temporal ordering of events (Amis et al., 2004). The authors argue that a sequence comprises different steps/stages of change, which may be or not linear and that can occur simultaneously. For instance, despite the fact that *change initiative A* may address an important discrepancy and could have benefits for employees, if it is not coherent with current change initiatives, recipients may not be inclined to adopt it. As such, managing complex, continuous, and simultaneous changes bring some considerations in terms of how we communicate, organize, and generate employees' engagement (Morin et al., 2016). It is therefore suggested that scholars should develop theory as to how we can build employees' readiness for the whole transformation process, rather than focusing on each initiative (Morin et al., 2016). As for *spacing*, it captures the speed of change. This can be directed towards the overall change process or the fluctuation of the speed throughout the different stages. Pace is important to overcome inertia (Amis et al., 2004), but can also be perceived as being excessive (Johnson, 2016; Rafferty & Griffin, 2006).

Finally, a crucial limitation in the organizational change literature lies in identifying the personal attributes that facilitate employees' effective coping and navigation through multiple changes (Rafferty, 2022; de Jong et al., 2016). Looking at employees' capacity to adapt to a single change initiative ignores the complex reality of contemporary organizations, which often experience multiple concurrent changes (Cullen-Lester et al., 2019). Disregarding important issues such as the cumulative impact, interaction and conflicts among change initiatives, and change fatigue can lead to an incomplete understanding of employees' coping mechanisms and hinder their overall adaptation process. Appraisal theory also suggests that employees appraise environmental

stimuli differently according to how each organizational event impact them, the frequency of events, and how they interact/combine to create a more important demand (Cullen-Lester et al., 2019). For instance, managing multiple changes requires employees to allocate their resources, such as time, energy, and attention, across different initiatives. This resource allocation can be challenging, as employees may need to juggle competing priorities, deadlines, and demands from various change. The ability to effectively make sense of this simultaneous change, manage and distribute resources becomes crucial in the adaptation process. Further research is therefore required to disentangle the complex interplay between personal attributes and the employees' capacity to effectively cope with and navigate organizational restructuring, shedding light on their significance and limitations in this context. Given these complexities, future research endeavors should focus on addressing these gaps and examining these critical aspects more comprehensively.

Limit #2: An Overemphasis on Individual Reaction to Change

Despite Lewin's field theory, which focuses on identifying groups' restraining forces, organizational behaviour scholars have mainly studied change at the individual level (Rafferty et al., 2013). Yet, many scholars recognize that change is a multilevel phenomenon (e.g., Caldwell et al., 2004, Rafferty et al., 2013; Harvey & Kudesia, 2023) and that additional studies are needed to better understand change recipients' reactions towards change. This is problematic because relationships holding at the individual-level of analysis does not necessarily hold at the team-level (Kozlowski & Klein, 2000; Rousseau, 1985). Consequently, we know very little about how teams respond to

organizational transformation and what enables them to be ready to change (Rafferty et al., 2013).

There have been some recent efforts to look at which factor drives teams during change. For instance, Harvey and Kudesia (2023) show that team leaders lacking mindful attention struggle to exhibit experimental behaviors when confronted with ambiguous goals, as they lack clear guidance and internal motivation to explore new information. In contrast, team leaders with high mindful attention are not hindered by ambiguous goals and their experimental behaviors positively influence their teams, reducing negative emotional responses to change. Given that teams are considered as the backbone of organizations' capacity to adapt (Harvey et al., 2022), scholars should shift their attention towards team-level studies to better understand how recipients collectively react to change (Rafferty et al., 2013; Bouckenoghe, 2010, 2019; Wee & Taylor, 2018).

One of the reasons why change scholars have overlooked the role of teams during organizational change is that the theoretical background is mainly embedded in cognitive psychology, which advocates an individualistic interpretative perspective of organizational events. For instance, Lazarus and Folkman's (1984) appraisal theory suggests that employees' reaction to change is the results of their unique interpretation of the change initiative according to their personal goals and their capacity to cope with the forthcoming change effort. However, it is surprising that the role of teams during organizational change has been largely overlooked by change scholars, despite team cognition being a prominent area within the team literature that could have been relevant in adapting to the study of organizational change. Looking at ways that teams forms

shared mental interpretations of change can enable practitioners and scholars to better understand how teams make sense of change and adapt accordingly.

A second reason why change scholars have neglected the role of teams during organizational change is that according to certain authors (e.g., Holt et al., 2007; Eby et al., 2000), change efforts rely fundamentally on individual action and should, therefore, be studied at the individual level. The successful implementation of a change initiative requires individuals to modify and/or abandon their previous behaviours at the benefits of new ones that must be maintained over time (Holt et al., 2007; George & Jones, 2001; Eby et al., 2000; Armenakis & Bedeian, 1999). While it is true that individual actions play a pivotal role in implementing change, it is essential to recognize that individuals are not isolated entities but are embedded within teams. The dynamics within teams, such as communication patterns, shared goals, and mutual support, greatly influence the overall change process and its outcomes (Rafferty et al., 2013; Wee & Taylor, 2018; Harvey and Kudesia, 2023). Therefore, understanding and harnessing the power of team processes becomes imperative in comprehending how teams collectively create an understanding of the change context, adapt, modify, and sustain new behaviors that are essential for successful change implementations.

Armenakis et al. (1993) argue that the creation of readiness to change must extend beyond the individual level since change is a social phenomenon. Teams, for instance, represent a context that influences the course of action, the beliefs, and the attitudes of employees towards change (Rafferty et al., 2013). Through team processes— “members’ interdependent acts that convert inputs to outcomes through cognitive, verbal, and behavioural activities directed towards organizing task work to achieve collective goals”

(Marks et al., 2001:357)—change-related information is processed and interpreted. From these processes, not only does certain team change-related characteristics emerge (e.g., Harvey & Kudesia, 2023), but they should also influence individual level reactions as well (Marks et al., 2001; Cronin et al., 2011). In this sense, scholars stress the need for additional team-level studies, as well as more multilevel research (Rafferty et al., 2013). This was the subject of a recent call for paper in the *Journal of Organizational Behaviour*.

In sum, organizations have come to structure their activities and their adaptability capacities around teams (Harvey et al., 2022). It is therefore important for change scholars to adapt our theorization to include these team dynamics and identify how team processes influence their adaptation during organizational transformation. Article #2 will specifically address the issue by proposing an empirical study of team readiness to change.

Dissertation Contribution to These Limits

This thesis contributes in many ways to our understanding of the effects of change context on employees and how they can make sense of their complexity. I will first define the term organizational change. Then, I will summarize the three articles and their contributions to the organizational change and organizational behavior fields.

Definition of Change:

Change is a prominent phenomenon in organizations. Scholars from a variety of disciplines study this subject through different theoretical lens, which brings a great complexity when defining what is organizational change. Some scholars only consider radical episodic changes while others stress the importance of continuous incremental changes that, over time, translate into bigger organizational adaptation (Rafferty &

Griffin, 2008; Weick & Quinn, 1999). Episodic changes concerns those that are usually planned and discontinuous (Rafferty & Griffin, 2008; Weick & Quinn, 1999; Gersick, 1991). These changes usually arrive in response to an organizational disequilibrium, due to a major shift in the organizations' environment, or a decrease in the organizations' performance (Gersick, 1991). As for continuous change, they are perceived as being ongoing, emergent, and usually unplanned (Rafferty & Griffin, 2008). These changes are responses to day-to-day contingencies and emerge as a "solution" to unusual encounters. In sum, changes bring a transition to a new state whereas new ideas and practices are introduced (Yue & Walden, 2022). In this thesis, I acknowledge that both types of changes co-exist in organizations and are part of the complexity of this phenomenon (Cullen-Lester et al., 2019).

Article #1: Understanding Employees' Resource Depletion Cycles in the Context of Organizational Restructuring: A Latent Change Approach

The first article examines a latent change approach towards employees' resource depletion cycles during an organizational restructuring in Quebec's healthcare system. In 2015, the government of Quebec adopted a bill that modified the governance of the healthcare sector by creating integrated [university] health and social service centers for every region of the province. The goal of this reform was to simplify the access to healthcare services, to improve the quality and safety of care, and to increase the efficiency of the whole sector. Many new general managers of these integrated centers took the opportunity to introduce a cultural transformation in their organization (e.g., more collaborative culture). It is therefore an understatement to say that this governmental reform had radical impacts on healthcare organizations' structures, processes, and operations.

Drawing upon the Conservation of Resource (COR) theory, this article employs a latent change score to investigate the detrimental impact of change fatigue on emotional exhaustion. Specifically, it posits that organizational restructurings, characterized by its frequency, impact, and extent, establish a negative resource passageway that hinders employees' ability to invest in and benefit from resources. Consequently, organizational restructuring not only creates demands for employees but also creates a resource passageway that impairs their resource reservoir, limiting resource availability and investment opportunities.

Adopting a resource passageway perspective represents an important step in developing a comprehensive approach to understanding the effects of change on employees. Rather than focusing solely on specific change-related resources or demands, we argue that successful restructurings are characterized by a relatively available organizational resource market for employees, despite the turbulence caused by change. Additionally, our research contributes by demonstrating the distinct impact of accumulated change fatigue on employees' level of emotional exhaustion. It is not solely the fatigue level at a given moment that depletes one's resource pool but also the evolution of change fatigue. This aligns with the depletion cycle proposed by the COR theory (Halbesleben et al., 2014), suggesting that initial resource loss leads to subsequent experiences of loss. These findings are aligned with de Jong et al. (2016) effort of understanding the temporal dynamics of adaptation during organizational change. Rather than focusing on employees' well-being (e.g., job satisfaction), we focus on the evolution of the straining effect.

Our findings suggest that the relationship between the intensity of the organizational restructuring and change fatigue is not significant for employees with high psychological capital. Consequently, they experience reduced emotional exhaustion. These results align with the COR theory, which suggests that individuals with greater levels of contextualized psychological resources exhibit more adaptive self-regulation processes. As a result, they are better equipped to adapt to stressors and perceive a lower level of strain (Hobfoll et al., 2018; Chen et al., 2015).

This first article addresses various aspects of the first limitation highlighted in the introduction. Firstly, our research findings respond to Rafferty's (2022) and de Jong et al.'s (2016) request for additional factors that shed light on why some employees experience more stress during organizational restructuring compared to others. Moreover, we identify change fatigue as a significant mediator that elucidates the underlying mechanism leading to emotional exhaustion. Finally, in line with Bartunek and Woodman's (2015) critique, we also consider the impact of the pace of change rather than solely focusing on individual change events.

Article #2: Ready to Change? The Role of Reflexivity, Change Vision, and Tenure in Work Teams

In response to the first article showing the negative effects of multiple change on employees' resource pool, I then sought to find answers to the following questions: **how can we reduce the effect of change fatigue?** As previously discussed, organizations cannot simply reduce the pace of change without putting their survival at risk. The answer would therefore lie in the way that change recipients would understand and predict change.

As such, the second article addresses the problematic concerning teams' capacity to develop a change vision despite a complex context of an organizational transformation. This study took place in a Canadian governmental administration undergoing an organizational transformation. The goal of this transformation was both to digitize the organization and to flatten its structure. Practices such as the implementation of a matrix structure, establishment of coordination practices, and review of key performance indicators were planned during this transformation.

Drawing upon the Readiness to Change theory and Team Reflexivity, this article investigates the influence of tenure on the relationship between team reflexivity and the development of a change vision. The change vision serves as a comprehensive guiding framework for simultaneous change initiatives. Specifically, we examine how the tenure condition shapes the ability of team reflexivity to foster the formation of a change vision.

Our study positions team change vision as a cognitive antecedent to readiness for change. The findings indicate that when teams engage in team reflexivity, integrating various change initiatives into a cohesive sequence of events, they exhibit higher levels of readiness to embrace change. Moreover, we observe that team reflexivity is particularly effective for teams with longer tenure and greater tenure diversity.

This research contributes to the organizational change literature in three ways. First, it demonstrates that readiness to change exists at a team-level. These results confirm that change is a social phenomenon and that what happens at the team-level is important for successful change implementation. As such, we also answer the limit #2 (i.e., the need for team-level studies) by bringing empirical demonstrations and

theoretical propositions as to how teams may be more ready to change. As we previously discussed, team-level studies are still lacking in this literature, despite the role of team structures in organizations' capacity to process information and adapt to external change.

Second, by proposing change vision as a new cognitive antecedent of readiness to change, we hint on Bartunek and Woodman's (2015) concept of *sequence* capturing the temporal ordering of events. By demonstrating that change vision plays a central role in team readiness to change, I am emphasizing the importance of the overall sense and coherence of the different initiatives to establish how teams react to change. Identifying new mediators and antecedents leading to team readiness to change helps to develop our understanding of what is needed for teams to be ready to change.

Finally, by examining team reflexivity within the context of change, this study aims to provide valuable insights into the significance of team-level constructs in facilitating successful organizational transformations. The understanding of team reflexivity becomes particularly crucial in navigating the complexities of change processes, as it sheds light on how teams collectively adapt, learn, and develop new behaviors that are essential for change implementation. Moreover, the context of change provides a unique opportunity to explore the conditions under which team reflexivity leads to team readiness for change. By focusing on the interplay between team tenure and diversity, this study recognizes the contextual factors that can either amplify or impede the benefits of team reflexivity during change initiatives. It is important to note that the relationship between team reflexivity and positive team outcomes is not always straightforward, as highlighted in prior research (Moreland & McMinn, 2010; Wiedow & Konradt, 2011). Therefore, investigating team reflexivity in the context of change and

examining team tenure and diversity as crucial boundary conditions offer a novel and promising avenue for research.

The specific combination of high team tenure and high tenure diversity has been found to enhance the advantages derived from team reflexivity, suggesting that longer team tenure fosters cohesion and trust, while tenure diversity brings fresh perspectives and innovative ideas. Understanding how these factors interact and influence team dynamics and processes is crucial for optimizing team composition and maximizing team effectiveness during change efforts.

Article #3: Black Clouds and Silver Linings: Organizational Identification and Psychological Capital during Covid-19

Similar to the first research field, the third study took place in a healthcare organization following the adoption of Quebec's bill 10 in 2015. The goal of this research program was to address the challenges associated restructuring the healthcare sector and creating a salient identity following the fusion of ten other healthcare organizations. However, when the Covid-19 pandemic struck Quebec with full force, our study program underwent a slight deviation, yet it presented several captivating research opportunities. Promptly, we became intrigued by examining how the recently developed organizational identity, established within the last five years, could effectively support healthcare professionals in navigating through the challenges posed by the pandemic.

More precisely, we demonstrate that employees who identify highly to their organization and worked long hours during the first wave of the Covid-19 pandemic were capable of maintaining high levels of psychological capital, which reduced emotional exhaustion. Our research supports the notion that organizational identification plays a

pivotal role in influencing individuals' psychological experiences and responses within an organizational setting, particularly during periods of crisis. Through a strong sense of identification, employees cultivate a shared sense of purpose, belonging, and support, which, when coupled with the impact of a traumatic event like the Covid-19 pandemic, can facilitate the development of positive psychological resources such as resilience, optimism, self-efficacy, and hope (i.e., psychological capital) and foster potential psychological growth. This study also significantly contributes to the existing literature on psychological capital by illuminating a pathway for its development. In response to a recent review highlighting the necessity for a more comprehensive understanding of psychological capital's origins, extending beyond leadership alone (Loghman et al., 2023; Luthans & Youssef-Morgan, 2017), our research expands upon the COR theory and the post-traumatic growth literature, introducing novel perspectives to explore.

In addition, empirical research capturing employees' attitudes and behaviors before, during, and after a crisis is rare in organizational behavior due to the difficult access to organizations and their employees facing increasing levels of demands (Sommer et al., 2016). This enabled us to contextualize our data and consider the passage of time as an important factor both for the crisis's resolution and the resource investment strategies.

In Summary

Our first article demonstrates the profound influence of organizational restructuring on employees' emotional exhaustion. It also highlights the significant protective role of psychological capital in employees' ability to cope with the extensive transformation. In the second article, we illustrate that fostering reflexive teams

characterized by greater levels of tenure and tenure diversity enable them to develop a comprehensive change vision, thereby enhancing their readiness for change. Finally, our last article reveals that when this vision becomes salient for employees, and they are capable and willing to identify with their newly formed organization, it enables them to safeguard the invaluable resource that facilitates change— psychological capital — even during periods of organizational crisis. In the next sections, each article is presented.

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Chapitre 1
Understanding Employees' Resource Depletion Cycles in the
Context of Organizational Restructuring: A Latent Change
Approach

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Abstract

We adopt a latent change approach to understand how employees' psychological resources are affected during an organizational restructuring. Drawing on the conservation of resources theory (COR), we explore the impact of change initiatives in terms of their frequency, impact, and extent on the development of a negative resource passageway. The resulting strain effect, conceptualized as change fatigue, is posited to contribute to elevated levels of emotional exhaustion in two ways: the initial shock and the increase of change fatigue over time. Additionally, we identify contextualized resources that enable employees to adapt to the multiple environmental demands associated with restructuring, with a particular focus on the moderating effect of psychological capital. A time-lagged study involving 347 respondents from a healthcare organization provides empirical support for our proposed moderated-mediation dynamic model of resource depletion. This research enhances our understanding of the psychological consequences of organizational restructuring on employees, shedding light on the pivotal role played by change fatigue as a mechanism through which restructuring exerts strain on employees' resources, especially among individuals with lower levels of psychological capital. The findings underscore the importance of effectively managing change fatigue to alleviate the emotional exhaustion experienced by employees during restructuring processes.

Keywords: Resource depletion, Conservation of resources theory, Change fatigue, Emotional exhaustion, psychological capital, Organizational restructuring, Latent Change Score

1.1 Introduction

Recent analysis conducted by Rafferty (2022) has revealed a striking pattern: organizations undergo significant transformations every 4-5 years. Organizational restructurings significantly influence various aspects of organizational functioning, but also employees' well-being. For instance, studies by Bourbonnais et al. (2005), Greenglass and Burke (2000), Probst (2003), Geuskens et al. (2012), Ingelsrud (2014), and Jensen et al. (2018) demonstrate the detrimental effects of restructurings, including diminished satisfaction, compromised psychological well-being, general health issues, increased emotional exhaustion, and higher absenteeism. Addressing the evident negative on employees, further research is needed to delve into the underlying mechanisms and potential psychological resources that can mitigate the adverse effects during these transformative periods (Nel & Van Niekerk, 2023; Cullen-Lester et al., 2019; Oreg et al., 2018; De Jong et al., 2016).

This study builds upon the Conservation of Resources (COR) theory (Hobfoll et al., 2001; 2018) and Johnson's (2016) excessive change framework to examine the underlying process of resource loss cycles experienced by employees during organizational restructurings. Specifically, the study explores the impact of change fatigue—the perception that an excessive amount of change is occurring (Bernerth et al., 2011; Ouedraogo & Ouakouak, 2020)—on employees' levels of emotional exhaustion. We argue that change fatigue has two main effects on emotional exhaustion. First, over time, the straining effect of change fatigue can accelerate the depletion of employees' psychological resources, as outlined by the COR theory (Hobfoll, 2001). Second, in line with the second corollary of the COR theory, employees who struggle to cope with the

straining effect of change fatigue will experience a downstream impact on their available resources (Halbesleben et al., 2014; Hobfoll, 2001).

To prevent such depletion cycle from occurring, the COR theory suggests that psychological resources may play an important role. Building on previous work in the context of change (Avey et al., 2008), we suggest that employees' psychological capital (Luthans et al., 2004) can buffer the relationship between the intensity of the restructuring context and change fatigue. Psychological capital, defined as an individual's positive psychological capacities, can broaden employees' scope of action (Avey et al., 2008). According to the COR theory, employees with greater resources are better equipped to cope with demands, thereby reducing the straining effect of change fatigue even in the presence of organizational restructuring (see the theoretical model in Figure 1). This should explain why certain employees experience greater resource depletion (i.e., emotional exhaustion), while others are capable of coping with change.

[insert figure 1 here]

Our study took place in a Canadian healthcare organization that was undergoing a major restructuring. During their restructuring, this healthcare organization aimed at optimizing healthcare and social service delivery by consolidating multiple organizations under one umbrella. This transformation also involved streamlining bureaucratic processes and hierarchies to promote more effective decision-making and facilitate seamless collaboration among various healthcare and social services entities. The changes thus resulted in the creation of a new governance structure, major downsizing, and the emergence of a new integrated healthcare culture. We look at the beginning of

this major restructuring. We propose a moderated mediation model where the latent change of change fatigue mediates the relationship between the intensity of the organizational restructuring and emotional exhaustion; and where psychological capital moderates the relationship between the intensity of the organizational restructuring on change fatigue.

The present study offers several notable contributions that extend our knowledge in the field. Firstly, we shed light on the mediating role of change fatigue, revealing its contextualized straining effect as a more influential factor than the mere perception of restructuring intensity (i.e., resource passageway) in shaping employees' levels of emotional exhaustion. Our findings highlight the presence of two distinct effects: the enduring impact of change fatigue and its cumulative nature over time, both contributing to the depletion of resources (i.e., emotional exhaustion). This emphasis on the accumulation of loss cycles during organizational restructuring enhances our understanding of the impact on employees' psychological health. Secondly, we highlight the buffering effect of psychological capital, revealing that individuals with higher levels of this resource are less susceptible to experiencing change fatigue, thereby mitigating the occurrence of emotional exhaustion. Our nuanced exploration of psychological capital's protective role provides valuable insights into employees' adaptive coping mechanisms in the face of organizational restructuring. This understanding contributes to the advancement of our knowledge regarding the resource depletion process, while shedding light on the underlying mechanisms that influence the relationship between restructuring and employees' psychological health. Moreover, our study answers the call for exploring additional antecedents and moderators in the context of organizational restructuring

(Rafferty, 2022). By addressing this need, we acknowledge the complexity of the phenomenon and pave the way for future research to delve deeper into the factors shaping employees' psychological outcomes during organizational restructurings.

1.2 Theory and Hypotheses

1.2.1 Conservation of Resource Theory (COR)

The conservation of resource theory (COR) enables the study of stress-related topics in work settings (Hobfoll et al., 2018). Its core tenet posits that individuals are driven to acquire, maintain, develop, and safeguard resources that they deem valuable (Hobfoll, 2001). Resources are defined as “anything perceived by the individual to help attain his or her goals” (Halbesleben et al., 2014, p. 1338). According to Hobfoll (2001), individuals with greater resources are more likely to protect and/or gain resources than those with fewer resources (Corollary 1). Additionally, initial resource losses of resources lead to future losses (Corollary 2). This process is known as a resource loss cycle, which is supposed to gain in terms of intensity and momentum (Halbesleben et al., 2014).

1.2.1.1 Resource Passageways

Organizational context may constitute an important factor of employees' resource trajectories (Hobfoll et al., 2018). Threatening resource passageways in which employees invest resources can “detract, undermine, obstruct, or impoverish people's resources reservoirs” (Hobfoll, 2012, p. 229). These passageways lead to cumulative disadvantage, for they limit the access to opportunities of safe resource investments and limit the access to key resources at critical points in time (Sarandopoulos & Bordia, 2022). When employees perceive a threat of resource loss, actual resource loss, or a failure to acquire expected resources after investing in them, they experience stress (Hobfoll et al., 2018),

which can lead to emotional exhaustion overtime. Emotional exhaustion is a concept that encompasses the depletion of an individual's emotional resources, resulting in a state of emotional depletion (Maslach & Leiter, 2016). This concept originates from Maslach and Jackson's (1981) work and is the most central factors out of the three in the burnout process (Cropanzano et al., 2003).

In this study, we propose a theoretical and empirical model to capture the resource loss cycles of employees during an organizational restructuring. Specifically, we argue that the intensity of the restructuring context creates a negative resource passageway leading to higher levels of change fatigue, for employees with lower psychological capital. This is consistent with the first corollary of the COR theory, which suggests that those with lower resources are more vulnerable to resource loss and threats. In turn, change fatigue will be linked to higher levels of emotional exhaustion in two ways: the initial shock and the accumulation of fatigue over time. This aligns with the second corollary of the COR theory (Hobfoll et al., 2018) suggesting that with each iteration of the stress spiral, individuals have fewer resources to offset resource loss. These loss spirals thus gain in momentum as well as magnitude.

1.2.2 Organizational Restructuring as a Negative Resource Passageway

Organizational change can encompass a wide range of phenomena, such as downsizing, privatization, and mergers, which can have varying effects on employees' health and well-being (see Rafferty, 2022, for a review). Among the most profound transformational changes that pose the highest level of psychosocial risks are organizational restructurings (Mathisen et al., 2017; Jong et al., 2016). Restructurings entail significant changes to an organization's structure and operations, including layoffs

or changes to job responsibilities and structure. Many scholars stress the need for further clarification as to why and how restructurings affect employees' health (Nel & Nierkerk, 2023; Rafferty, 2022; Rafferty & Jimmieson, 2017; De Jong et al., 2016).

1.2.2.1 Characteristics of an organizational restructuring

To capture the extent to which an organization's transformational context is intense, Johnson (2016) put forth a three-component change context excessiveness conceptualization: change frequency, change extent and change impacts.

The organizational restructuring process typically involves a series of changes, rather than a single transformational event. Each of these changes represents a significant disruption to the status quo within the organization. As such, the frequency of change is a prominent characteristic of organizational restructuring (Rafferty, 2022; Rafferty & Griffin, 2006). Employees experiencing frequent change need to adapt constantly to new organizational demands. It therefore becomes difficult to identify the period during which extra resources must be invested to overcome the period of turbulence (Herold et al., 2007). Hence, as the change frequency increases, employees will most likely fail to sustain such investment and fail to meet the change-related demands.

Another distinguishing feature of an organizational restructuring is the extent to which it fundamentally alters an organization's characteristics such as its values, processes, strategy, and structure. Such radical transformation can have a more significant impact on employees' psychological health compared to less extensive changes (Mathisen et al., 2017; Bamberger et al., 2012). It can disrupt current resource investments made by employees, leading to a lesser return on investment of resources

(i.e., productivity, efficiency, informal social networks) than expected. Such perturbations in employees' resource investments are known to contribute to resource depletion (Hobfoll, 2001).

Finally, organizational restructuring brings a large amount of novelty and potential chaos—the change impact (Herscovitch & Meyer, 2002)—that can have a significant shocking effect on employees (Rafferty & Griffin, 2006). For example, changes to reporting structures, job roles, and responsibilities can significantly alter the way that things were done previously. As the impact of change increases, employees will perceive a declining match between their available resources and the external demands. They will therefore need to invest time and energy to learn new skills and new procedures, in order to adapt to the restructuring.

Altogether, it is evident that organizational restructuring is a complex process that leads to the formation of a negative resource passageway conceptualized as the intensity of the organizational restructuring. Characterized by frequent changes, radical alterations (i.e., change extent), and a high degree of novelty (i.e., change impact), we argue that the intensity of the organizational restructuring will significantly impact employees' psychological well-being and resource trajectories. The continuous disruptions and demands imposed by restructuring can ultimately lead to emotional exhaustion. We thus propose:

H1: The intensity of the organizational restructuring is positively related to emotional exhaustion.

1.2.3 The Mediating Role of Change Fatigue

Change fatigue is a psychological state that results from the perception of repeated exposure of too much change (Bernerth et al., 2011). As individuals are exposed to too many changes at once, they struggle to keep up and adapt to the new demands on their time and energy (Bernerth et al., 2011). Over time, this sustained pressure on employees' coping resources combined with an absence of a period of recovery can lead to higher levels of change fatigue (Ouedraogo & Ouakouak, 2020). The paradox of organizational change therefore lies in the fact that employees must adapt to new circumstances, while also requiring a certain level of stability (Ouedraogo & Ouakouak, 2020; Huy, 2022; Bernerth et al., 2011). Stable organizations provide a foundation for both resource acquisition and transaction (Hobfoll, 2011). The preservation of the organizational status quo allows employees to foresee the consequences of resource investment and minimize uncertainty and ambiguity in their work environment (Johnson, 2016; Rafferty & Griffin, 2006).

Emotional exhaustion and change fatigue are two distinct, but related concepts. While emotional exhaustion refers to a state of emotional resource depletion and the resulting mental drain, change fatigue specifically relates to the strain brought by constant or significant organizational changes. This being said, the strain triggered by ongoing or excessive changes can contribute to emotional exhaustion over time (Bernerth et al., 2011). Continuous demands for change hinder employees' ability to disengage from their adaptation mechanisms and replenish their resources (Demerouti et al., 2004; Hornung et al., 2013). When change initiatives are frequent, extensive, and impactful, employees not only lack the stability and order necessary to recover from these demands

but also have fewer resources to cope with additional challenges (Ouedraogo & Ouakouak, 2020).

Consequently, experiencing change fatigue gradually depletes employees' resource pool, leading to heightened levels of emotional exhaustion (Bernerth et al., 2011; Ouedraogo & Ouakouak, 2020). By recognizing this relationship, organizations can better understand the impact of change fatigue on employees' emotional states and proactively address both the root causes of change fatigue and the subsequent emotional exhaustion that may arise. Therefore, we propose the following:

H2a: Change fatigue mediates the positive relationship between the intensity of the organizational restructuring and emotional exhaustion.

1.2.4 The Evolution of Change Fatigue

Adaptation—positive or negative—to new environmental conditions requires an investment of resources and exerts stress on employees (Halbesleben et al., 2014; McEwen, 2006). Even though such adaptation provokes a shift in employees' resources, the extent to which it will affect their well-being depends on the effectiveness of their coping strategies (Halbesleben et al., 2014), and their available resources (Hobfoll et al., 2018). According to the fourth principal of COR theory, when individuals' resources are overstretched, they will adopt irrational defensive mechanisms to preserve themselves and their remaining resources (Hobfoll, 2001). Some of these suboptimal defence mechanisms (e.g., passive aggression, denial, dissociation, acting out) lead to partial or inadequate responses towards environmental demands, which in turn will increase the straining effect on employees' resource pools (Halbesleben et al., 2014).

To capture straining effects related to suboptimal coping strategies, it becomes imperative to build on a latent change approach, and to take into consideration the evolution of the straining effect. We argue that as change fatigue increases, or is maintained over time, resources will tend to deplete to a point where individuals no longer have the resources to predict, understand and control the demands from the organizational change context (e.g., Wright & Hobfoll, 2004). In coherence with COR theory, we argue that this increase of the change fatigue effect will have its own distinct effect on employees' level of emotional exhaustion. We thus hypothesize:

H2b: The latent change of change fatigue will mediate the positive relationship between the intensity of the organizational restructuring and emotional exhaustion.

1.2.5 The Moderating Effect of Psychological Capital

Levels of change fatigue may differ from one employee to another in the same organization. Indeed, each employee has different levels of resources that may be mobilized to cope with organizational change. Psychological capital has emerged in recent years as an individual resource bundle stimulating positive behavioral outcomes at work and employees' well-being (e.g., Avey et al., 2010; Roche et al., 2014). Luthans et al. (2007) define psychological capital as an "individual's positive psychological state of development that is characterized by (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering towards goals, and when necessary, redirecting paths to goals (hope) in order to succeed; and (4)

when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success” (p. 3).

The role of psychological capital has not been extensively studied in an organizational change context (e.g., Avey et al., 2008; Kirrane et al., 2017). Nevertheless, it holds a significant potential to be explored since positive emotions were seen as being beneficial during organizational change (Avey et al., 2008). According to the broaden-and-build theory (Fredrickson, 2001), individuals holding positive emotions broaden their thought-action possibilities. Physiological responses towards stressors will be attenuated due to greater proactive planning skills and psychological buffers providing stability in the reactions of employees facing change (McEwen, 2006).

In the light of COR theory, these thought-action possibilities refer to different opportunities to invest resources adequately. As argued by Hobfoll (2001), individuals with a greater resource pool are less vulnerable to a fluctuation of resources (Hobfoll, 2001). Therefore, even if individuals perceive higher organizational change-context intensity, they could still allocate their resources and adapt to this context in a way that limits the emotional strain. On the contrary, individuals with lower psychological capital should not be able to maintain positive emotions. This would potentially reduce their thought-action possibilities, therefore rendering them more vulnerable to the emotional straining effects of change fatigue.

H3: Psychological capital will moderate the relationship between the intensity of the organizational restructuring and change fatigue, in a way where the positive

relationship between the intensity of the organizational restructuring and change fatigue will be weaker when psychological capital is high.

1.2.6 The Influence of Poor Change Management History

Work from Bordia et al. (2011) shows that poor change management history beliefs (PCMHB) are an important factor to consider while studying organizational change. The authors argue that the organizational history of change management persists in the collective human consciousness (Pettigrew et al., 2001, p. 700), exerting significant influence on the acceptance and experience stress of future changes. Consequently, inadequate change management practices not only harm the current change implementation but also have adverse consequences for subsequent change initiatives (Bordia et al., 2011).

We argue that, in accordance with the COR theory, PCMHB can also capture the perception of employees' past resource loss due to organizational change management. According to the second corollary, initial resource losses lead to future resources losses (Hobfoll, 1989). Consequently, we would expect that employees with greater PCMHB may perceive greater excessiveness in the resource passageway and have lower levels of psychological capital. Additionally, according to the second corollary, individuals with fewer resources are more likely to experience resource loss. Consequently, we may expect that employees with greater PCMHB would experience greater change fatigue. To solely capture the resource depletion due to the organizational restructuring observed in this study, we propose to include PCMHB as an important control variable.

1.3 Methods

1.3.1 Procedures and Participants

This study takes place in a healthcare organization in a Canadian province. The creation of Integrated Health and Social Services University Centre (IHSSUC) represents a monumental transformation in the way that healthcare services are delivered and managed. The establishment of IHSSUC was a response to the need for a more integrated and efficient healthcare system that could effectively address the complex needs of the population. By amalgamating various healthcare institutions, including hospitals, long-term care facilities, and community health centers, into a single entity, IHSSUC aimed to streamline service delivery, enhance coordination among different healthcare providers, and optimize resource allocation.

Using a time-lagged design, two questionnaires were distributed in a Canadian health care organization undergoing a major restructuring. Both data collections were separated by a four-month period to reduce common method variance (Podsakoff et al., 2003). We proceeded to a stratified sampling approach to randomly select 10% of the organization while respecting the representability of two characteristics in our population: professional occupation and working sites. 1252 personnel members were selected and personally invited to respond to our questionnaires by their manager. All participants were identified with a personal ID to combine their answers. They were informed of the total confidentiality of their answers and all subsequent ethical research standards, as well as the fact that we would remove their ID from our data after T2 collection. At Time 1, we received 742 completed questionnaires (59%). As for Time 2, we matched a total of

347 surveys with Time 1 (47.70% with T1; 28.27% with total). Of these participants, most were women (73%, 75%) with an average age of 43 and 44 years old.

We tested for nonresponse bias in comparing the T2 sample with the total population of the organization. Following Goodman and Blum's (1996) procedure, a multiple logistic regression on the 742 participants at T1 was tested in trying to predict the experimental mortality rate at T2. All our study's variables at T1 were used as estimates. We did not find any significant relationships. Therefore, we can argue that nonresponse rates were seemingly random and should not have any significant impact on our following interpretations.

1.3.2 Measures

Intensity of the organizational restructuring. At Time 1, a 9-item 7-point scale measured change intensity context in three subcomponents as validated in Johnson (2016). Change frequency was measured using Rafferty and Griffin (2006) three-item scale ($\alpha=.80$) (e.g., "It feels like change is always happening"). As for change impact ($\alpha=.85$), we used Herold et al. (2007) three-item scale (e.g., "Large-scale changes are significantly changing your unit's goal"). Finally, change extent ($\alpha=.91$) using Caldwell et al.' (2004) three-item scale ("This specific change involves changes in the work unit's processes and procedures"). The full scale comprising these subcomponents showed internal consistency ($\alpha=.87$).

Psychological capital. At Time 1, we used Luthans et al.'s (2007) 12-item 6-point psychological capital scale. We modelled a second order factor and loaded the four sub-components of the original scale on to it (i.e., self-efficacy, optimism, hope, and resilience). The overall scale internal consistency indices were satisfactory ($\alpha=.85$).

Change Fatigue. At Time 1 and Time 2, change fatigue was measured using a 4-item 7-point scale developed by the authors (see annexe 1 for the full list of items and structure analysis) and inspired by Bernerth et al., (2011). The internal consistency for this scale was $\alpha=.92$ at T1 and $\alpha=.94$ at T2. An EFA for each time of measure were conducted to preliminary investigate the construct validity of this newly composed scale. Only one factor was obtained for both times of measure (eigenvalue: 3.23 and 3.35) and it represents 81,28% and 83.85% of explained variance. All items' estimates are strongly related to the component (.87 to .94).

Emotional exhaustion. At Time 2, emotional exhaustion was measured using a 7-item 7-point scale as used by Maslach and Jackson (1981). Examples of this scale are: “*I feel emotionally drained from my work*”, and “*I feel used up at the end of the workday*”. Its internal consistency is satisfactory at $\alpha=.91$.

1.3.2.1 Control variables

Poor change management history (PCMH). At Time 1, we used Bordia et al.'s (2011)' 3-item 7-point scale (.73) to measure poor change management history. Examples of this scale are: “*Past change initiatives have failed to achieve their intended purpose*”. PCMH is a way to control the potential diversity in the participants' recent experience of a change straining effect on psychological resources. We anticipate that this measure will be significantly related to the participants' psychological resources at T1 (psychological capital), their level of change fatigue at T1 and T2, as well as their level of emotional exhaustion at T2.

Gender. Since the employees in health care services in Canada are majorly women, and that some jobs are more woman-dominated than men, we decided to control for gender.

Age. We controlled for age considering that the sampled organization has experienced many transformations in the past two decades. In consequence, older employees should have experienced more change episodes.

1.3.3 Analytic Procedures

SEM techniques using AMOS 28 were used to perform hypothesis testing. Each variable was modelled as a latent of first level, at the exception of psychological capital and change intensity which were modelled as second-order factors. Mediation (H2a, H2b) and moderated mediation (H4) modelling implied testing for indirect effects following Preacher and Hayes (2008) methods with bootstrap techniques (5000 samples, 95%CI). To test for intra-individual difference as hypothesized in H2b, we modelled a latent difference score following McArdle and Hamagami's (2001) approach. It allowed us to capture the individual variation between T1 and T2 in a latent variable.

1.4 Results

Means, standard deviations, internal consistency indices and bivariate correlation are shown in table 2. It is noteworthy that our study's focal variables are significantly correlated with each other but for change intensity context and psychological capital. Moreover, control variables show significant relationships. Women report experiencing a poorer change management history ($r = .15, p <.01$), while older participants are less prone to report emotional exhaustion ($r = -.16, p <.01$). Poor change management history

is as predicted significantly correlated with the intensity of the organizational restructuring ($r = .50, p < .01$), psychological capital ($r = -.18, p < .01$), change fatigue at T1 ($r = .37, p < .01$) and at T2 ($r = .32, p < .01$), as well as with emotional exhaustion ($r = .26, p < .01$).

[insert table 2 about here]

1.4.1 Measurement Model

Measurement invariance. We proceeded to a nested model comparison to test measurement equivalence based on Widaman's et al. (2010). Results provided evidence for strong metric and configural invariance of the change fatigue scale. Variation in the model fit between the configurational, the week factorial invariance, and the strong factorial invariance models respected the established thresholds (Byrne & Stewart, 2006; Cheung & Rensvold, 2002). In addition, both CFA of change fatigue T1 and T2 showed similar results ($\chi^2 = 3.69$ and 2.69 $df = 8$ and 8 , CFI = 1.00 and 1.00, TLI = 1.00 and 1.00, RMSEA = .049 and 0.031 SRMR = .008 and .006), thus providing evidence towards structural and metric invariance.

Confirmatory factor analysis. To assess the structural validation of our study's variables, we proceed to a CFA analysis. This model includes a second-order latent factor of the *intensity of the organizational restructuring*, comprising change frequency, impact, and extent, and psychological capital, parcelled in its sub-components, as well as PCMH, change fatigue at T1 and T2 (invariant) and emotional exhaustion as first-order factors modelled over their respective items. All factors were allowed to covariate, and all were modelled in a formative design. This model fits our data satisfactorily: $\chi^2 = 1108.42$, $df = 675$, CFI = .95, TLI = .95, RMSEA = .04, SRMR = .06.

[insert table 1 about here]

Convergent and discriminant validity. Based on Fornell and Larcker (1981) and Hair et al. (2014) guidelines, convergent validity was observed in assessing average variance extracted (AVE) and composite reliability (CR) for each factor. All AVE indices are higher than .50 but for PCMH at .36, and CR are higher than .70. Discriminant validity required that AVE indices are higher than their respective maximum shared variance (MSV). All comparisons showed evidence toward discriminant validity.

1.4.2 Hypotheses Test

Our first hypothesis states that higher levels of the intensity of the organizational restructuring will lead to higher levels of emotional exhaustion (H1). We tested this hypothesis by modelling the intensity of the organizational restructuring, emotional exhaustion, as well as the predicted path leading from the first to the other. Our control variables (gender, age, and PCMH) are also modelled and allowed to covary and predict all variables in the model ($\chi^2 = 372.62$, $df = 177$, CFI = .95, TLI = .94, RMSEA = .06, SRMR = .06). We observed that PCMH covaried with the intensity of the organizational restructuring ($\sigma = 1.019$, $SE = .14$, $p < .01$). Results show a significant relationship between the intensity of the organizational restructuring and emotional exhaustion as predicted ($\beta = .30$, $p < .01$). These results provide support for H1.

In our second hypothesis, we stated that change fatigue at T1 (H2a) and its intra-individual variation between T1 and T2 (H2b) will mediate the relationship between the intensity of the organizational restructuring and emotional exhaustion ($\chi^2 = 602.18$, $df = 350$, CFI = .96, TLI = .96, RMSEA = .05, SRMR = .05). Results show that the intensity of the organizational restructuring is positively related to change fatigue ($\beta = .28$, $p < .01$),

and change fatigue is positively predicting emotional exhaustion ($\beta = .80, p < .01$) while the intensity of the organizational restructuring is rendered non-significant with emotional exhaustion. The indirect effect of the intensity of the organizational restructuring on emotional exhaustion is significant ($\gamma = .42, LLCI = .26, ULCI = .63$). These results show support for H2a.

Regarding H2b, following McArdle and Hamagami (2001) methods, we modelled a latent change score (LCS) representing intra-individual differences in change fatigue between both times of measure (LCS change fatigue). LCS change fatigue was allowed to act as second mediator between the intensity of the organizational restructuring and emotional exhaustion, as well as being predicted by all control variables. The results (see table 3) showed that LCS change fatigue is positively related to the intensity of the organizational restructuring ($\beta = .42, p < .01$) and to emotional exhaustion ($\beta = .57, p < .01$). The indirect effect of the intensity of the organizational restructuring on emotional exhaustion through LCS of change fatigue is significant ($\gamma = .29, LLCI = .10, ULCI = .49, p < .01$). The indirect effect combining both mediators is also significant ($\gamma = .50, LLCI = .20, ULCI = .58, p < .01$). These results show support for H2b.

Finally, we hypothesized that psychological will moderate the relationship between the intensity of the organizational restructuring and change fatigue at Time 1 (H3). In the preceding model, we added psychological capital as a second-order latent variable, allowing for regression paths toward change fatigue, LCS change fatigue, and emotional exhaustion. We also modelled its interaction effect with the intensity of the organizational restructuring and allowing for its regressive paths toward change fatigue and LCS change fatigue ($\chi^2 = 1721.21, df = 1034, CFI = .93, TLI = .92, RMSEA = .04$,

SRMR = .06). As we predicted in H3, psychological capital moderates the relationship between the intensity of the organizational restructuring and change fatigue ($\beta = -.19$, $p < .01$). The single slope analysis with the bootstrap (5000 samples) analysis with a 95% confidence interval suggests that when psychological capital is low (-1 SD), the relationship between the intensity of the organizational restructuring and change fatigue is significant and positive (estimate: .59, LLCI = .25, ULCI = 1.02, $p < .01$). As for the slope for employees with high psychological capital (+1 SD), it is non-significant. Additionally, we computed the indirect effect of the moderation term through saturation T1. Results show that the indirect effect is significant and negative ($\gamma = -.20$, LLCI = -.43, ULCI = -.05, $p < .01$). Overall, these results support H3.

[insert table 3 about here]

[insert figure 2 about here]

1.4.3 Supplementary Analysis

To add precision to our analysis, we proceeded to several supplementary analyses. We modelled an alternate model where psychological capital moderates the relationship between change fatigue and emotional exhaustion. The results showed that the relationship was not significant. This supports our theorization that psychological capital serves to diminish the straining effect of organizational restructuring.

Additionally, we tested our theorized model without PCMHB as a control variable. All relationships remain significant. However, due to high correlation among other core variables in the model, we decided to keep PCMHB in the model.

Finally, we also looked at the indirect effect of psychological capital on emotional exhaustion through the LCS of change fatigue ($\gamma = -.23$, LLCI = -.44, ULCI = -.06, $p <$

.01) and change fatigue T1($\gamma = -.29$, LLCI = $-.59$, ULCI = $.05$, $p < .01$). These results support our theoretical argument that psychological resources, such as psychological capital, reduces straining effects of stressors and leads to lower depletion than those with fewer psychological capital.

1.5 Discussion

In this article, we focus on a resource perspective to explain how and why employees may experience resource depletion during an organizational restructuring. We find that the effect of the intensity of the organizational restructuring (frequency, impact, and extent) on emotional exhaustion was explained by not only higher levels of change fatigue, but also the increase of fatigue levels in time which exerted its own distinct straining effect on employees' resource pool. As the intensity of the organizational restructuring increases, employees will have more difficulty investing resources to protect, retain and acquire additional resources to cope with change-related demands. Consequently, employees will experience higher levels of emotional exhaustion. This is especially true for employees with lower levels of psychological resources (i.e., psychological capital).

1.5.1 Theoretical Contributions

Several theoretical contributions can be drawn from our study. Our first contribution focuses on the mediating role of change fatigue. The findings indicate that the strain caused by change fatigue has a greater influence on employees' emotional exhaustion levels compared to their perception of the intensity of an organizational restructuring. More precisely, using our LCS method, we identified two distinct effects

that contribute to resource depletion during organizational change. Firstly, we found evidence of a lasting effect of change fatigue, where unresolved strain leads to increased emotional exhaustion. This occurs because employees must invest additional effort in regulating their emotions and meeting job and change demands. Secondly, we observed that change fatigue tends to increase over time, which further depletes employees' resources. Insufficient resources may hinder effective coping processes, resulting in an inability to recover resources and adapt with organizational demands.

Change fatigue experienced at the initial time point (T1) has a greater impact on resource depletion than the change in change fatigue between T1 and T2. This suggests that persistent strain has a stronger and prolonged effect on employees' resource pool compared to newer sources of strain. This perspective adds to the existing knowledge on the burnout process and expands the theoretical understanding of the mechanisms underlying the relationship between organizational restructuring and employee well-being. These findings address the call to explore additional antecedents of employee health and well-being during or after organizational restructuring (Nel & Van Niekerk, 2023; Rafferty, 2022; Cullen-Lester et al., 2019). This finding addresses the call by Rafferty (2022) to explore additional antecedents of employee health and well-being during or after organizational change. It highlights the need to move beyond solely examining the occurrence of change events and instead consider the subjective experience of employees in terms of the intensity and accumulation of change demands.

Our second contribution stems from the buffering effect of psychological capital. We provide evidence that, despite the presence and the perception of high intensity of the organizational restructuring, employees with high levels of psychological capital do not

experience change fatigue, which in turn, reduces emotional exhaustion. This is in line with the COR theory, which suggests that individuals with higher levels of contextualized psychological resources have more adaptive self-regulation processes leading to an adequate adaptation towards a stressor, and a perception of a lower level of the straining effect (Hobfoll et al., 2018; Chen et al., 2015). Moreover, psychological capital enables employees to broaden their scope of action and possibilities regarding resource investment towards coping with the intensity of the organizational restructuring.

The supplementary analysis adds precision to our understanding of the circumstances under which employees use their psychological capital to effectively navigate organizational restructuring. Our research suggests that psychological capital primarily acts as a protective factor in the relationship between the stressor and its straining effect, rather than in the relationship between the straining effect and the state of depletion. This nuanced understanding sheds light on the specific mechanisms through which psychological capital influences employees' ability to cope with organizational changes and underscores the significance of fostering psychological resources in promoting their resilience and adaptation during periods of restructuring. Overall, these findings also answer Rafferty's (2022) call for research on organizational restructuring, specifically regarding the investigation of moderators that explain why certain employees experience greater levels of emotional exhaustion than others.

1.5.2 Practical Contributions

Our findings encourage organizations to develop more targeted interventions and strategies to mitigate the negative effects of change fatigue and support employees' health during periods of organizational restructuring. Due to the environmental pressure, organizations

may find adopting new managerial and technological trends appealing. However, neglecting employees' capacity to change may have overall detrimental effects on organizations' productivity due to the increase of emotional exhaustion, that is usually linked to higher intention to quit (Bernerth et al., 2011). Thus, it would be important for organization to prioritize which changes that are essential for the survival of the organization, while also trying to create an overarching sense regrouping different organizational change initiatives (Morin et al., 2016). This way would enable employees to perceive less intensity of the organizational restructuring, as the different initiatives would be integrated as steps of an overarching organizational change objective. Creating sense is a way to order and reduce ambiguity of the numerous simultaneous changes in an organization (Morin et al., 2016).

This study also demonstrates the importance for managers to monitor the evolution of strain experienced by employees during organizational change, rather than only considering their current level of strain. Experiencing change fatigue during an organizational restructuring, to a certain extent, is expected as change disrupts routines and requires investment of a significant amount of resources. However, if employees' levels of change fatigue increase or even are maintained overtime, this would have significant effects on their health and well-being.

1.5.3 Limitation and Future Research

Despite our efforts towards designing a rigour empirical design for this study, certain limits are to be discussed. First, regardless of the empirical validation of our model, the measures were mainly self-reported. Such results are thus subject to common method variance bias. However, our time-lagged research design allows us to partially

control for such bias, and thus be confident about our results. In addition, our study takes place in a single organization of the health care industry. Thereby, our results could be illustrating a specific context of our research field. However, this organization is composed of multiple distinct sites where different types of professions are present. Thereby, we believe that our results hold some potential for generalization. It would be interesting for future studies to replicate this model in different types of organizations and industries. Our study does not take into consideration personality traits that can explain individual differences during organizational restructuring. For instance, Oreg (2003) developed a change resistance personality trait that could have been an important control variable. Finally, such design and methods limit the attribution of causality between the different studied variables. We thus call for future longitudinal studies to illustrate more into details of the dynamic process of resource depletion.

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Table 1. *Confirmative Factor Analysis - Comparison of Alternative Models*

Models	χ^2	d.f	CFI	TLI	RMSEA	SRMR	$\Delta \chi^2$
5-Factor model	1927.30	572	.96	.95	.042	.06	
4-Factor model (IOR-Fatigue)	1004.45	575	.95	.94	.05	.08	922.85**
4-Factor model (Fatigue-Emox)	1769.35	576	.86	.84	.08	.08	157.95**
1 Variable	262.08	582	.75	.73	.10	.11	693.78**

Notes: * = p .05; ** = p .01; IOR: *Intensity of the organizational restructuring*; Emox : *Emotional exhaustion*. 4-Factor model (IOR-Fatigue) consists of a model where the *Intensity of the organizational restructuring* and *Change Fatigue* are modelled under the same latent factor; 4-Factor model (Fatigue-Emox) consists of a model where the *Change Fatigue* and *Emotional Exhaustion* are modelled under the same latent factor

Table 2. Means, Standard Deviations, and Bivariate Correlations

Variables	M	SD	1	2	3	4	5	6	7	8
1. Gender	1.75	.43								
2. Age	44.53	10.45	-.09							
3. PCMHB	4.54	1.29	.03	-.02	(.73)					
4. Intensity of the organizational restructuring	4.60	1.22	.07	-.03	.51**	(.87)				
5. Psychological capital	4.56	.68	-.20**	.12*	-.18**	-.13*	(.85)			
6. Change fatigue	3.94	1.62	.15**	-.01	.37**	.39**	-.26**	(.92)		
7. Change fatigue (T2)	3.95	1.58	.10	0.2	.32**	.43**	-.26**	.60**	(.94)	
8. Emotional exhaustion (T2)	3.5	1.47	.02	-.15**	.26**	.30**	-.32**	.48**	.67**	(.91)

Notes: n = 347; **: $p \leq .01$; *: $p \leq .05$; PCMHB = Poor change management history beliefs. Measures are at Time 1 if not indicated otherwise.

Table 3. SEM Standardized Results Regression Analyses

Variables	Change Fatigue (T1)		LCS Change Fatigue		Emotional Exhaustion (T2)	
	β	Zscore	β	Zscore	β	Zscore
Controls						
<i>Gender</i>	.11*	2.27	-.01	-0.18	-.12**	-2.96
<i>Age</i>	.03	0.62	.07	1.35	-.14**	-3.54
<i>PCMHB</i>	.19†	1.85	-.17†	-1.64	-.03	-0.42
Principal effects						
<i>Intensity of the organizational restructuring</i>	.34**	3.20	.46**	3.87	-.02	-0.26
<i>Change fatigue</i>			-.64**	-9.09	.72**	10.31
<i>LCS Change fatigue</i>					.52**	8.81
<i>Psychological capital</i>	-.17**	-2.73	-.19**	-2.83	-.21**	-3.76
Interaction effect						
<i>Intensity of the organizational restructuring x Psychological capital</i>	-.19**	-3.00	-.06	-0.98		
Adj. R ²	.34		.33		.59	

Notes: All betas are standardized; n = 347; ** p ≤ ,01; * p ≤ ,05, † < 0.10 ; SE : standard error; LCS : Latent change score

Figure 1. Theoretical Model

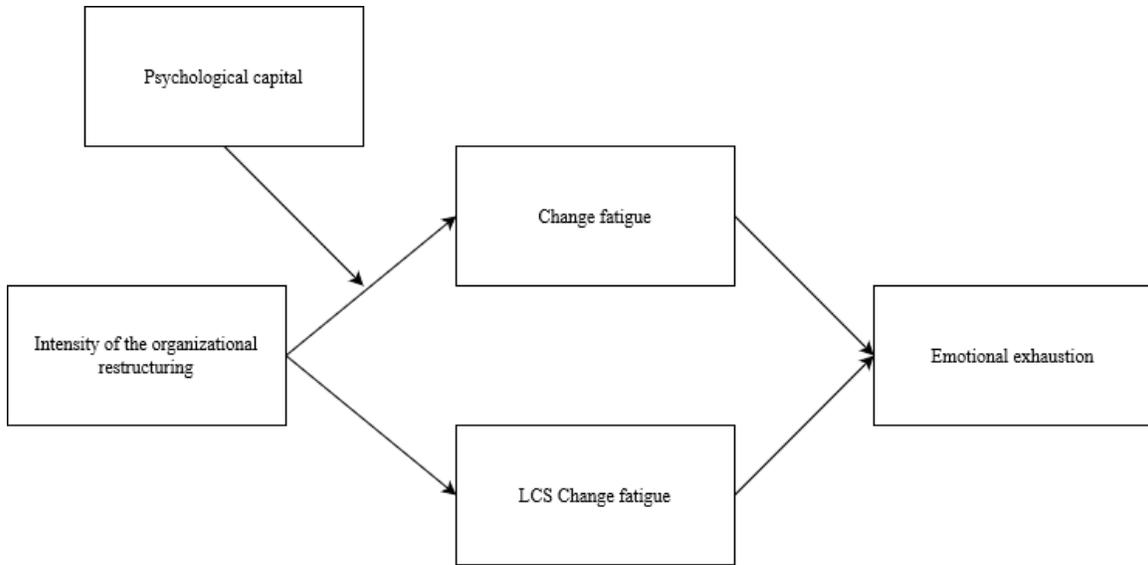
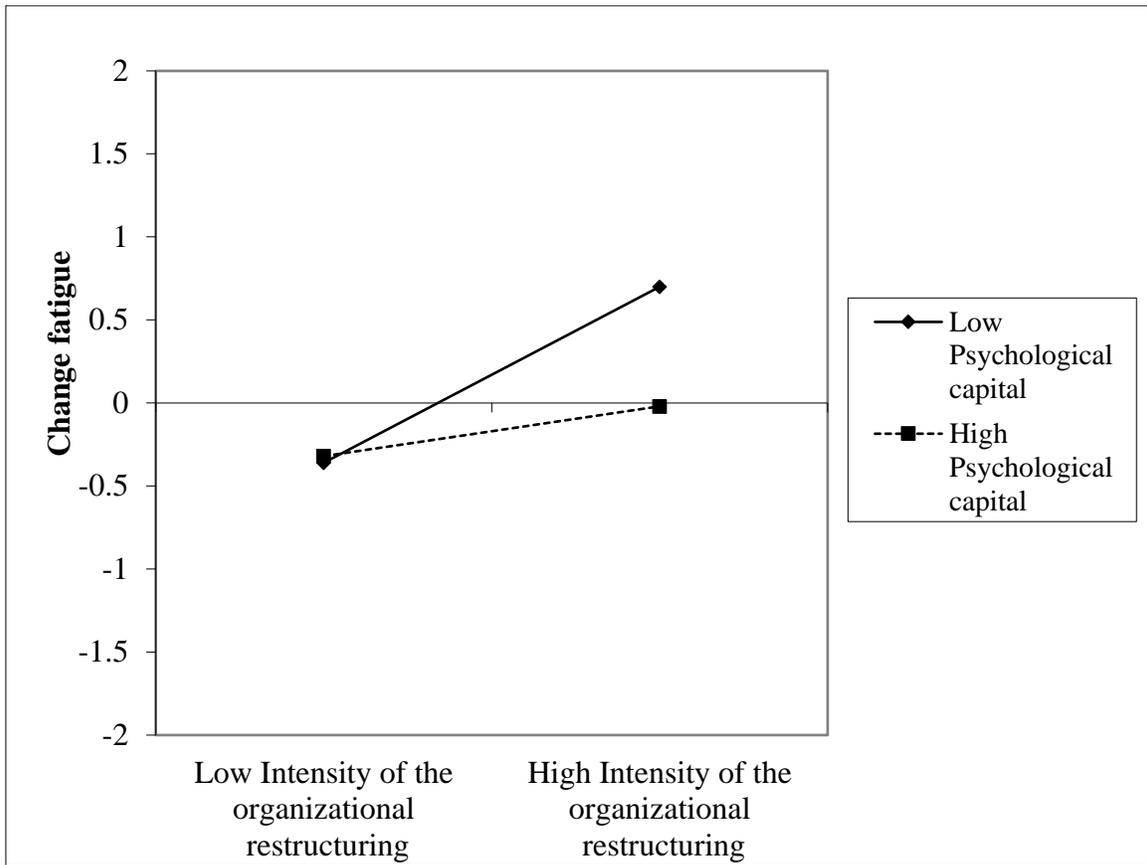


Figure 2. *Interaction Plot Between Psychological Capital and the Intensity of the Organizational Restructuring*



Notes: the slope for high psychological capital is non-significant

Annexe 1. Change Fatigue Scale's Factor Analysis Results

Change Fatigue Items	T1 factor estimates	T2 factor estimates	Explained variance (T1; T2)	Alpha (T1; T2)
I feel saturated by the intensity of change in my organization	.90	.91	81%; 84%	.92; .94
I feel that I'm completely exceeded par the intensity of change in my organization	.93	.95		
The pressure related to change is more and more hard to bear	.93	.93		
I feel I can't tolerate more changes at the moment	.85	.88		

Chapitre 2

Ready to Change? The Role of Reflexivity, Change Vision, and Tenure in Work Teams

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We have no conflicts of interests to disclose.

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Abstract

How can teams make sense of a complex organizational transformation and be ready to change? These questions must be addressed as organizations turn towards team-based structures to become more reactive. During organizational transformations, we argue team reflexivity enables team members to share interpretations of changes, leading to the development of team change vision—the overarching sense of direction for simultaneous change initiatives. We further argue that team reflexivity is more effective for teams with greater team tenure diversity and additive team tenure. We tested and found support for our theory using time-lagged, survey-based data from 70 teams at a Canadian governmental organization. Overall, our study contributes to team readiness to change literature by identifying team reflexivity as a central information-processing activity enabling teams to develop a team change vision during an organizational transformation and by clarifying the effect of team tenure on such activity.

Keywords: Team readiness to change, Team Change Vision, Team reflexivity, Additive team tenure, Team tenure diversity

2.1 Introduction

Organizations rely on work teams to adapt over time (Harvey et al., 2022; Mathieu et al., 2019). Unlike larger organizational units like departments or divisions, work teams are said to be more ready to change and to address complex situations quickly (Maynard et al., 2015). This is in part because teams can more easily develop a shared change vision that aligns with concurrent organizational changes (Harvey & Kudesia, 2023). They do so by engaging in processes enabling members to discuss and ponder over environmental cues, such as team reflexivity (Tesler et al., 2018; Konradt et al., 2016; Schippers et al., 2014). However, the composition of a team can significantly influence its capacity for reflexivity, either facilitating or hindering the realization of the benefits associated with reflective practices (Bresman, 2013; Edmondson et al., 2001; Edmondson & Harvey, 2018; Leblanc et al., 2022).

Team tenure is often thought to impact team reflexivity (Katz, 1982; Katz & Allen, 1982), although its influence is not always straightforward (Gonzalez-Mulé et al., 2020; Harvey et al., 2022). While past research has looked at the role of the additive model (i.e., the average time of members spent within the team) on team reflexivity (e.g., Chen et al., 2018), little attention has been given to both additive and dispersion models of team tenure (i.e., the dispersion of tenure within the team) (Gonzalez-Mulé et al., 2020). Building upon prior research on team adaptation (Burke et al., 2006; Randall et al., 2011; Maynard et al., 2015) and team readiness to change (Armenakis et al., 1993; Rafferty et al., 2013), this study aims to explore the role of team reflexivity and team tenure in facilitating the development of a change vision and, in turn, enhancing teams' readiness for change (see figure 1). We hypothesize that teams with greater additive

tenure are better equipped to develop a change vision due to accumulated shared experience. However, such teams may face challenges in breaking habitual routines (Bresman, 2013; Edmondson et al., 2001). Introducing greater tenure diversity can mitigate this by promoting discussions and external viewpoints.

To investigate this, we conducted empirical research utilizing data from 70 teams (comprising 304 individuals) undergoing a major transformation within a Canadian governmental administration. Our findings demonstrate that reflexivity leads to the development of a change vision particularly in teams with greater additive tenure and tenure diversity.

[insert figure 1 about here]

Our study makes three key contributions. First, our study clarifies the role of additive team tenure and team tenure diversity in the process of creating a change vision. We address the question why and when team tenure provides the foundation for teams to reap the benefits of team reflexivity. Second, we introduce the concept of change vision. Building on previous work on team vision, we develop theory on change vision specifically, in line with the increasing complexity and the intensity of organizational change today (Johnson, 2016; Morin et al., 2016). Finally, our study adds to the burgeoning view of collective attitudes towards change (Harvey & Kudesia, 2023; Bouckenoghe et al., 2019), which complements the larger body of research that has considered them only as an individual phenomenon (e.g., Eby et al., 2000; Holt et al., 2007). By doing so, we also broaden the nomological network of team reflexivity that has

been at the center of research on change and innovation in organizations over the past two decades (Harvey et al., 2022).

2.2 Theory and Hypotheses

Teams are crucial components of organizations, as they have the potential to accomplish goals that surpass members' individual abilities (Harvey et al., 2022; Mathieu et al., 2019). A key factor that underlies effective teams is the presence of a shared vision (Hackman, 2011; Hackman & Wageman, 2005) or the "shared idea of a valued outcome which provides the motivation for the team's work" (West & Unsworth, 1998, p. 5). The emergence of such team vision can be brought by managers (e.g., Chai et al., 2017), but can also be co-developed by team members (Zhang et al., 2012; Pearce & Ensley, 2004; West & Unsworth, 1998). In this study, we delve deeper into the concept of team vision and its application to team readiness to change, contributing valuable insights to the existing literature.

Readiness to change is defined as "members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes" (Armenakis et al., 1993, p. 681). This concept sets it apart from other team dynamics like team plasticity and team evolution. Team plasticity involves the team's capacity to be flexible and adapt under pressure, responding to current contingencies while safeguarding long-term success (Abrantes et al., 2022). It primarily focuses on the team's ability to be adaptable in the face of challenges and uncertainty, rather than the shared attitude towards change, as seen in readiness to change. On the other hand, team evolution (Morgan et al., 1993) centers on the development of team dynamics, such as cohesion, trust, and performance, over time.

Though it includes some aspects of adjustment to environmental demands, it does not specifically address the overall attitude of a team towards change initiatives.

Readiness to change is widely acknowledged as one of the key factors in organizational transformations (Chênevert et al., 2019). We posit that readiness to change emerges within teams through the cognitive and affective processes of team members, which are subsequently shared through information processing and social interactions (see Waller et al., 2016). Hence, we propose a composition model of emergence, suggesting that readiness to change exhibits isomorphism and identical properties across levels (Kozlowski & Klein, 2000). Consequently, it retains the same meaning as at the individual level but is manifested at the team level. While affective, motivational, and cognitive factors are inherently interconnected, it is still beneficial and meaningful to concentrate on a specific factor to enhance clarity and facilitate in-depth discussions (Dalgleish, 2000). Therefore, in this study, we solely concentrate on team change vision as a cognitive rather than including other emotional factors that may play a role in the emergence of team readiness to change.

Team change vision refers to the collective understanding of the overall direction for concurrent change initiatives. Similar to other team mental models, team change vision originates from employees' cognition but materializes as a collective phenomenon (Kozlowski & Klein, 2000; Mohammed et al., 2010). It therefore classifies as a cognitive team emergent state, which captures “properties of the team that are typically dynamic in nature and vary as a function of team context, inputs, processes, and outcomes” (Marks et al., 2001, p. 357). As employees interact within a team, they share interpretations and discuss environmental cues, which can lead to the formation of a shared view about the

organization's overarching direction in the context of change initiatives (Kozlowski and Klein, 2000). Therefore, we propose that team change vision emerges through a composition model process and is isomorph across levels. Generating a team change vision is crucial because it will most likely foster a sense of ownership among team members. When teams actively participate in creating a change vision, they feel more invested in its success and are motivated to contribute their best efforts towards its realization. Unlike an organizational vision that might feel distant and detached, a team change vision contextualizes the change efforts within the specific challenges, objectives, and opportunities faced by the team.

In the next section, we look at team reflexivity as a key team process enabling the emergence of a team change vision. Furthermore, we look at the effect of additive team tenure and team tenure diversity on the effectiveness of team reflexivity on generating such team change vision.

2.2.1 The Mediating Effect of Team Change Vision

Creating a team change vision can be challenging during organizational transformation. Frequent and impactful change initiatives can lead to uncertainty, causing doubt about future events and misunderstandings of cause-and-effect relationships in the environment (Johnson, 2016; Bordia et al., 2004). To tackle this ambiguity and gain a better understanding of complex contexts, teams may adopt solutions like team reflexivity to create a team change vision.

Team reflexivity refers to “the extent to which team members collectively reflect upon the team’s objectives, strategies, and processes, as well as their wider organizations

and environments, and adapt them accordingly” (West, 2000, p.3). It differs from other team processes such as team monitoring and debriefing. Debriefing is "a type of work meeting in which people discuss, interpret, and endeavour to learn from a recent event during which they collaborated" (Allen et al., 2018, p. 505), making it more of a team intervention than a team process. On the other hand, team monitoring captures the “observation of the activities and performance of other team members during a task” (Dickinson & McIntyre, 1997, p. 25). It is therefore more concerned with tracking performance indicators and evaluation, rather than focusing on fostering open communication and reflection within teams to gain insights into their goals and process to reach them.

Scholars emphasize the importance of team reflexivity in creating shared mental models (e.g., Konradt et al., 2016; Rosen et al., 2011; Burke et al., 2006), such as a team change vision. Through open communication and dialogue, reflexive teams integrate multiple perspectives, leading to a better understanding of complex contexts (Konradt et al., 2016; West, 2000; De Jong & Elfring, 2010). Notably, highly reflexive teams refrain from hastily reaching a consensus, potentially resulting in a more comprehensive and less muddled understanding of the environment (Rafferty et al., 2013; Schippers et al., 2014). Open communication allows members to share their perspective and insights on how different change initiatives may impact teams’ objectives (Konradt et al., 2016; West, 2000; De Jong & Elfring, 2010). In the context of organizational change, we expect this process to enable teams to better understand the interdependencies between different change initiatives, creating a broader vision of change.

Having a team change vision can serve as a motivational force for team members to be ready to change, as it provides clarity of purpose, a sense of belonging, and inspiring commitment towards goal achievement (West & Unsworth, 1998). A shared understanding of objectives facilitates greater efficiency in pursuing the team's goals (Konradt et al., 2016; West & Unsworth, 1998), instilling confidence in their attainability through collective collaboration. Teams are then more capable collectively to identify the discrepancy between the current situation and the desired state, which is closely linked to readiness for change (Rafferty & Minbashian, 2019). Developing a team change vision answers critical questions about what, why, and how the changes will occur, clarifying the rationale and enhancing the legitimacy for change (Armenakis et al., 1993; Rafferty & Minbashian, 2019). Additionally, a team change vision allows members to anticipate the team's requirements, offer support, reinforce implicit communication, and coordinate actions, all of which increase readiness for change (Chênevert et al., 2019; Hu & Liden, 2011). We therefore propose that:

H1: Team change vision mediates the relationship between team reflexivity and team readiness to change, such that highly reflexive teams will develop higher levels of team change vision that will enhance their readiness to change.

2.2.2 The Moderating Effects of the Additive Team Tenure and Team Tenure Diversity

Scholars consider team tenure as an important composition factor, since the accumulation of shared experience between team members can influence the way that they process and negotiate the meaning of information (Gonzalez-Mulé et al., 2020; Gersick, 1991). Nonetheless, results throughout the literature have been conflicting due to scholars measuring and conceptualizing team tenure differently (Gonzalez-Mulé et al.,

2020). Certain scholars use the additive tenure model, which focuses on the “average amount of time that team members have spent in a given job, team, or organizational role, which conveys the relevant knowledge and skills that exist within the team” (Gonzales-Mulé et al., 2020, p.154). Conversely, others utilize the dispersion model, capturing the “variance of individuals’ time in [...] teams (Gonzales-Mulé et al., 2020, p.154). To develop a more thorough understanding of how team tenure impacts team reflexivity, we argue that we must consider both models.

2.2.2.1 Teams with High Additive Tenure

Teams with higher additive tenure demonstrate elevated contextualized knowledge and skills that can positively influence their ability to achieve goals (Chen et al., 2018). They have a greater pool of information and accurate shared mental models on which they can build upon to reflect on their changing environment and develop a team change vision. However, depending on the level of team tenure diversity, we argue that this accumulation of shared experiences can nuance the beneficial effects of team reflexivity. We build on the ecological and cognitive models of variation, selection, and retention, as well as the cybernetic principle of requisite variety, emphasizing the positive impacts of fostering heterogeneity in information resources within a team (Harrison and Klein, 2007). By embracing diversity of attributes like tenure, teams can access a more abundant supply of ideas, unique approaches, and knowledge, ultimately leading to enhanced creativity, and better decision-making quality, which can complement the positive aspect of having high additive tenure (Harrison and Klein, 2007).

On one hand, teams with low tenure diversity can be more exposed to the emergence of habitual routines, which tend to emerge when the same set of individuals

spend significant time working together (e.g., Burke et al., 2006; Edmondson et al., 2001; Gersick & Hackman, 1990). More precisely, habitual routines develop when “a group repeatedly exhibits a functionally similar pattern of behavior in a given stimulus situation without explicitly selecting it over alternative ways of behaving” (Gersick & Hackman, 1990:69). This can create issues for teams trying to process new change-related information and develop team change vision. Not only can longer-tenured team members thwart information processing to maintain the status quo (Caldwell et al., 2009), but they also tend to ignore information that falls outside of their usual scope of work (Kuyper et al., 2018; van Ginkel et al., 2009). When a lot is already “known”, team members may be less inclined in bringing on new information during reflexive activities that can support the integration of changes within the team. Consequently, we would expect that the effect of team reflexivity on team vision will be lesser for experienced teams with low tenure diversity.

On the other hand, when teams have greater levels of tenure diversity, they have access to a broader cognitive and behavioral repertoire that can contribute to teams’ processes and goal achievement (Gonzalez-Mulé et al., 2020). This diversity may lead to enhanced information exchange during team reflexivity (Gonzalez-Mulé et al., 2020). This is due to an increase of teams’ cognitive resource base used during information-processing activities, leading to greater exchange of information, knowledge, integration, and debate of perspective among members (Joshi & Roh, 2009). This diversity in members’ tenure should lead to the introduction of new ways of thinking that pushes teams to think beyond the previous established boundaries and routines (Gonzalez-Mulé et al., 2020). It is the combination of well-experienced members that have a good

understanding of the teams' context and the introduction of new members with new ways of thinking and the diversity of knowledge pools that can contribute to team reflexivity leading to the development of greater levels of team change vision.

2.2.2.2 Teams with Low Additive Tenure

As for teams with lower additive tenure, the effect of team reflexivity may not be as clear. Despite the absence of experiences, successes, and failures on which members can reflect upon on their changing environment, team reflexivity can still enable members to learn faster and help them work better collectively (Konradt et al., 2016). It remains an adequate way to process, share, analyze, and act upon change-related environmental cues (Schippers et al., 2014).

However, in the condition of higher team diversity, the instability combined with the lack of shared experience can inhibit the positive effect of reflexivity on developing a team change vision. Stability in membership is suggested to be necessary to develop collective emergent states and team processes that drive effective team performance (Salas et al., 2017; Marks et al., 2001; van der Vegt et al., 2010). When team members know little about their context, their tasks, and their objectives, it may be more difficult to establish efficient team processes, enabling them to adapt to changing environments (van der Vegt et al., 2010). As such, we would expect that the positive effect of team reflexivity on team change vision be lessened.

H2: The interaction between additive team tenure and team tenure diversity will moderate the relationship between team reflexivity and team change vision, in a

way that if both additive team tenure and team tenure diversity are high, the relationship will be stronger.

2.3 Methods

This study was conducted in a Canadian governmental administration where administrative teams, IT teams, and service teams were undergoing major organizational transformation. Employees mainly work in teams to develop financial solutions to contribute to the population's financial security based on data processing, statistical, and actuary activities. We adopt Hackman and Wageman's (2005) definition, which suggests that teams are composed of two or more employees, with common goals and a certain degree of interdependence to achieve them. We considered employees as members of a team if they were listed under the specified team and if they were a member of the organization (consultants and external employees were excluded). Each team has its own manager, goals as well as broader organizational objectives, necessitating team member's collaboration and inter-team coordination.

The organization had launched a major organizational transformation six months before our study, which included multiple change initiatives (i.e., implementation of a matrix structure, establishment of best coordination practices, review of key performance indicators). The overarching goal of the transformation was to encourage boundary-spanning activities between departments and optimize customer services. The organization allowed us to pursue our research agenda by collecting data through two surveys separated by one year in exchange for an anonymized report that outlined the trends found in their organization. The report was provided at the end of data collection

and included recommendations based on the current state of the literature in change management.

For the first wave, surveys were distributed to 569 employees (98 teams) using their corporate email address provided by the human resources department. The first page of the survey informed the participants about research ethics and response confidentiality. Once per week for three weeks, participants were reminded to complete the survey voluntarily. We received 449 (78.91%) valid and completed surveys. For the second wave, the same distribution techniques were used. Surveys were distributed one year later to the 449 employees. We received 304 (67.71%) valid, paired, and completed surveys. Using email addresses and official internal organizational charts, we regrouped all participants in their respective teams. We lost 28 teams due to a lack of response rates (i.e., less than 40%). Our final sample is composed of 70 (71%) teams with a within-team response rate of 40% to 100% (mean = 70%), average size of 6.44 (SD = 3.03).

2.3.1 Measures

All measures were taken on a 7-point Likert scale (1: *strongly disagree*; 7: *strongly agree*) except for additive team tenure and team tenure diversity. All respondents were instructed to respond to the items in relation to their work team as part of their function. Because employees may belong to more than one team in matrix structures, their managers identified which teams they had to answer the survey for. The change initiatives were also defined, and examples were provided in the prompt of those scales.

(T1) *Team reflexivity*. We used De Jong and Elfring's (2010) scale of reflexivity. Derived from Schippers et al. (2007), this scale captures whether teams reflect on their

process and objectives. Samples for this scale are “In this team we often review the feasibility of our objectives”, and “In this team we regularly discuss whether we are working effectively together” ($\alpha = .94$).

(T1) *Team change vision*. We needed a scale to assess the perception of the team concerning teams’ understanding of simultaneous change initiatives. We composed a 4-item scale inspired by Harvey’s (2002) *organizational context and understanding the change* sub dimensions of his checklist for change and Anderson and West (1998) team vision scale. Initially, we had generated 9 items for this study. We then asked three managers to rate and comment on the items knowing the scale’s targeted concept. Five items were removed based on their comments and were then tested in a pilot study. Items for this scale are “*The change initiatives lead us in a clear direction*”, “*The change initiatives follow one another at a pace that creates meaning*”, “*The change initiatives are at odds with each other*” (reverse-scored), and “*Every change contributes to the same overarching goal*” ($\alpha = .90$). We performed a confirmatory factor analysis of the scale for this study. Our results support the overall fit of this scale ($\chi^2 = 2.67$; $df = 2$; CFI = 1.00; TLI = .99, RMSEA = .07; SRMR = .02).

(T1) *Additive Team tenure*. Additive team tenure was assessed using multiple choice of six months of tenure range brackets (except for the first bracket of 0-3 months and the last bracket of 34 months and more). As the organization just underwent a fusion between two entities, all of the teams that participated in this study were formed within three years of this study. This limits the possible outliers in our data. Participants were asked to indicate how long they were assigned to their team specifically. To assess team tenure, we then aggregated the answers.

(T1) *Team tenure diversity*. The standard deviation of team members' team tenure was also assessed by aggregating the team tenure measure with the standard deviation instead of the mean. This enables us to consider the dispersion between the tenure of team members and differentiates teams that have been working together for the same average of time from those who have not.

Outcome variable

(T2) *Team Readiness to Change*. We adapted Rafferty et al.'s (2019) scale of individual-level readiness to change and shifted the referent "I" to "We" (Chan, 1998). Participants were asked to give their answers in relation to their team. Sample items are "We are ready for these organizational changes" and "We would consider ourselves open to these changes" ($\alpha = .92$).

Control variable

Team size. Team size was added to our model as a control variable since previous research has demonstrated that it has negative relation with certain team outcomes related to change (Schippers et al., 2015).

2.3.2 Measurement Model

2.3.2.1 Confirmatory factor analysis.

We performed a CFA to verify and confirm the validity and distinctiveness of our measures. We modelled our three latent variables, each observed through their respective items while allowing covariation between latent variables. The goodness-of-fit indices suggested a satisfactory structure ($\chi^2 = 63,05$; $df = 42$; CFI = 1.00; TLI = 1.00, RMSEA = .016; SRMR = .051). All items loaded significantly with their respective latent variable (min = .71, max = .96). We subsequently proceeded to alternative model comparisons (see Table 1). Considering the possible theoretical crossover between team readiness to

change, reflexivity, and team change vision, we tested different 3-factor models where items of these variables were regrouped under the same latent factor. Finally, we also tested a one-factor model that linked all items of every variable of this study under the same latent factor. All fit indices and chi-square difference test show that our model provides the best fit for the data.

[insert table 1 about here]

2.3.2.2 Data Aggregation

Since we consider team-level constructs, we assessed data aggregation indices. To demonstrate sufficient within-group and between-group heterogeneity, we computed the $r_{wg(j)}$, ICC (1), and ICC (2) for each variable (Chen & Bliese, 2002). Adopting LeBreton and Senter's (2008) cut-off criteria, we obtained a strong agreement for team reflexivity ($r_{wg(j)} = .71$, $SD = .32$), team change vision ($r_{wg(j)} = .77$, $SD = .23$) and team readiness to change ($r_{wg(j)} = .86$, $SD = .17$). All ICC (1) scores were > 0 , and the associated One-Way ANOVA analyses were all significant at $p < .05$. As for the ICC (2), we obtained .43 for team change vision, .34 for team reflexivity, and .36 for team change readiness. Although the suggested cut-off of ICC (2) is suggested at .60 by Glick (1985), more recent studies argue this is an arbitrary criterion (LeBreton & Senter, 2008). ICC (2) index is influenced by the number of raters (employees) per group. Therefore, according to Siangchokyoo and Klinger (2021), a value of greater than .25 is still acceptable when the $r_{wg(j)}$ is high and when the ICC (1) and its F-test results have met the criterion. We therefore proceeded to aggregate our data.

2.3.2.3 *Convergent and discriminant validity.*

To assess construct validity, we first computed the average variance extracted (AVE) and the composite reliability (CR). Results show that all AVE indices were higher than .50, and CR indices were higher than .70, thus demonstrating convergent validity. We then computed the maximum shared variance (MSV) for each latent factor of the model (Fornell & Larcker, 1981). Since all factors' AVE indices were higher than their respective MSV, we can confirm the factors' discriminant validity as well.

2.3.3 *Analytic Procedure*

We proceeded to the analysis of our data using structural equation modelling techniques (SEM) with the Lavaan V.06-8 package in R (Rosseel, 2012). A mediation and a bootstrap analysis (95% CI; 5,000 samples) was produced to test the mediation effect of team change vision (Hypothesis 2), and to report the indirect effect of the three-way interaction. As for the moderation analysis, we proceeded to the double mean-centered technique (Lin et al., 2010) to create a latent factor with the product of the team reflexivity items, additive team tenure, and the team tenure diversity. Following an EFA analysis of the team reflexivity scale, we took the top three variables for the moderation latent variables to free some degrees of freedom and reduce collinearity. We then proceeded to a simple slope analysis using the probe3wayMC function of the semTools R package (Schoemann & Jorgensen, 2021).

2.4 Results

[insert table 2 about here]

Means, standard deviations, and bivariate correlations for all variables are presented in Table 2. With our theoretical two-way moderated mediation model (χ^2

=308.27; $df = 240$; CFI = .96; TLI = .95; RMSEA = .064; SRMR= .062), we first hypothesised that *team change vision* mediated the relationship between *team reflexivity* and *team readiness to change*. *Team reflexivity* has a positive relationship with *team change vision* ($\beta = .65$, $p < 0.01$) and *team change vision* also had a positive relationship with *team readiness to change* ($\beta = .58$, $p < 0.01$). Despite there being no correlation between *team reflexivity* and *team readiness to change*, our results demonstrate a significant indirect effect ($\gamma = .373$, LLCI = .105; ULCI = .608; $p < 0.01$). Other than *team tenure diversity* ($\beta = -.33$, $p < 0.01$), no other control variable had a significant relationship with *team readiness to change*. As for *team change vision*, none of the control variables had a significant effect. Hypothesis 1 is thus supported.

[insert table 3 about here]

Hypothesis 2 posited that the interaction between *additive team tenure* and *team tenure diversity* moderates the relationship between *team reflexivity* and *team change vision*, such that *team reflexivity* has a greater positive effect on *team change vision* when *additive team tenure* is high and when *team tenure diversity* is also high. The coefficient of the moderation was significant ($\beta = .46$, $p < .01$), while also controlling for all other possible terms of interaction. To provide a better understanding of the moderation effect of *team tenure* on *team change vision*, we performed a single slope analysis. These analyses will provide details of how different levels of *additive team tenure* and *team tenure diversity* will affect the relationship between *team reflexivity* and *team change vision*. We thus considered two standardized levels of *additive team tenure* and *team tenure diversity*: 1 SD over and below the mean of *team tenure* and *team tenure diversity* (see Table 4). Results demonstrate that *team reflexivity* has a positive and significant

effect on *team change vision* for teams with high *additive team tenure* and high *team tenure diversity* ($\beta = 1.224$, $SE = 0.26$, Z value = 4.648, $p < .01$), for teams with low *additive team tenure* and low *team tenure diversity* ($\beta = .653$, $SE = .26$, Z value = 2.471, $p < .01$), and for *high additive tenure* and *team tenure diversity* ($\beta = .46$, $SE = .22$, Z value = 2.064, $p < .01$). Team reflexivity has no significant effects for teams with low *additive team tenure* and high *team tenure diversity*. These results support hypothesis 2.

[insert table 4 about here]

[insert figure 2 about here]

We therefore proceeded to the moderate mediation analysis to demonstrate the indirect effect on team readiness to change. At first glance, our results demonstrated a significant indirect effect of the double interaction term (*additive team tenure* x *team tenure diversity* x *team reflexivity*) on *team readiness to change* through *team change vision* ($\gamma = .27$, $p < 0.05$). However, following the bootstrap analysis with 5000 samples, the indirect effect includes zero ($\gamma = .27$, $LLCI = -.048$; $ULCI = .413$; $p = 0.12$). We thus propose that our data potentially indicates a pattern that necessitates a larger sample size in order to adequately capture it.

2.5 Discussion

We aimed to understand how teams become ready to change through the development of a team change vision and how team tenure influences these processes. We found that team reflexivity was most effective in teams with greater additive tenure and with high tenure diversity for developing team change vision, and that team change vision enables the influence of team reflexivity on team readiness to change. Our study

has implications for both theory and practice as well as limitations that open avenues for future research.

2.5.1 Theoretical implications

By conceptualizing and testing team change vision, our study expands important work on team vision (West & Unsworth, 1998; Anderson & West, 1998). Team change vision, we argue, is more tightly connected to readiness to change than team vision. Team vision relates to how the team contributes to organizational goals and therefore has a clear *raison d'être*, whereas team change vision relates to how the team finds meaning into the many changes the organization is going through. The former gives a sense of purpose and focuses on current values and beliefs, whereas the latter focuses on the evolution of these beliefs and values. Team vision is anchored on what the organization is, whereas the team change vision is anchored on what the organization will be. Team vision and team change vision are both important to maintain but may have different implications for decision-making and resource allocation within a team. While team change vision can increase readiness to change, a strong team vision may narrow the team's focus on current goals and priorities, thus making teams more impervious to changes in their environment. As such, future research could explore both team vision and team change vision to understand their effect on different team dynamics and processes. For instance, scholars can investigate the *too much of a good thing* effect of team vision on teams' sense of complacency, which could inhibit the emergence of team readiness to change.

Secondly, our study furthers understanding of tenure in teams, and more specifically on team reflexivity. Research has suggested that team reflexivity does not always lead to positive outcomes (Moreland & McMinn, 2010). By accounting for the

team context, our study contributes to this literature by combining the effects of additive team tenure and team tenure diversity. We are able to highlight the importance of having both high additive team tenure and team tenure diversity in developing a team change vision. These results suggest that having a mix of experienced and less-experienced team members within a tenured team can enhance the benefits of team reflexivity in developing a team change vision. In addition, our study also shows that having a lower additive tenure team and with high tenure diversity inhibits the positive effect of team reflexivity on team change vision. This could be due to the constant pressure to relearn procedures, adapt to teams' dynamics, and coordinate with each other, which takes time and reduces efficiency (Edmondson et al., 2000).

However, our findings highlight that without team reflexivity, teams tend to generate lower team change vision, especially when dealing with high tenure diversity and high additive tenure. The potential conflicts arising from diverse levels of experience within the team might hinder effective communication and collaboration. This is coherent with the social categorization perspective, where similarities and differences between members of a team form a basis for subgroups (in-group versus outgroup), which can create conflict when it is not well managed (Turner, 2010; Harisson & Klein, 2007). We can expect that without a systematic process of discussion and reflection, we could expect that higher tenured members may take more space and get more attention of other team members. This emphasizes the importance of implementing a structured process like team reflexivity to facilitate systematic discussions, allowing all team members to voice their opinions, share their perspectives, and engage in reflection. Team reflexivity serves as a valuable mechanism to bridge the gap between experienced and less experienced

team members, fostering an environment where knowledge and insights can be exchanged freely. As a result, team members are more likely to feel comfortable contributing their ideas and viewpoints, leading to the development of a more comprehensive team change vision.

Combining the effects of additive team tenure and team tenure diversity is a promising avenue of research and can provide a more nuanced understanding of how these factors interact to influence team dynamics and team processes. For instance, greater additive tenure can contribute to increased cohesion and trust, while tenure diversity can bring fresh perspectives and innovative ideas to the team. Moreover, team tenure and tenure diversity can impact the level of knowledge transfer and knowledge sharing within the team, which can have implications for the team's performance and productivity. Therefore, understanding these factors can help organizations optimize team composition and even potentially optimize team effectiveness. Additional research is needed to understand how both of these concepts can impact other aspects of team functioning, such as trust, psychological safety, and collaboration among members.

Lastly, our study extends team reflexivity's nomological network, which has mainly focused on emergent cognitive states and performance-related outcomes (Rosen et al., 2011). Our results suggest that team reflexivity can also influence the emergence of attitudinal outcomes, such as team readiness to change. We therefore answer the call to better understand the impact of reflexivity on teams' emergent dynamics (Konradt et al., 2016). In addition, identifying readiness to change as an emergent attitudinal state that is oriented towards what is going in the team environment complement other emergent

affective states such as psychological safety and social cohesion related to learning and adaptation (Harvey et al., 2019).

Our study also contributes to the literature by providing an empirical demonstration for readiness to change as a team emergent state. Team-level studies are still lacking in the change management literature, despite the role of teams in organizations' capacity to adapt (Mathieu et al., 2019; Harvey et al. 2022). Considering the influence that teams as social context can have on individual employees' behavior (Salancik & Pfeffer, 1978), showing that readiness to change exists at the team level provides additional impetus to account for team-based structures in the context of organizational transformation. Future research should consider how other team processes relate to team readiness to change. Namely, action processes such as coordination may help to sustain the level of readiness to change over time (Rafferty, et al., 2013; Armenakis et al., 1993). Team readiness to change provides ground for both change and team scholars to join forces and forge ahead to help develop more resilient organizations.

2.5.2 Practical Implications

First, the finding that team readiness to change exists at the team level has practical implications for managers. They should focus on team-based interventions, understand team dynamics, and develop customized change strategies, rather than focusing solely on individuals within the team. Managers must recognize the significance of team efforts and celebrate achievements throughout the change process to foster a positive attitude towards change at the team level. Managers could also organize team-building workshops that promote cohesion and collaboration among team members. These workshops can help create a team level readiness to change. It is also crucial for

managers to facilitate open discussions and reflection within the team, providing a safe space for team members to express their concerns and opinions about the upcoming changes.

Our study positions reflexivity as a process that can help teams make sense of multiple changes. While managers may apprehend the effect of team members reflecting together in times of complex organizational transformation, our study shows that they should welcome that opportunity. In fact, they may consider team-based interventions that stimulate reflexivity in their team. For instance, managers may organize workshops to identify synergy between different change initiatives and link these change initiatives to the organizational strategy. A following workshop may concentrate on how these change initiatives affect their tasks and team goals. These types of workshops are intrinsically linked to reflexivity, as they require a systematic reflection on complex matters, while also being driven by discussion-based processes, which differs from simply transferring information about changes.

Additionally, our advocate the mixing of newcomers and more experienced employees offer a valuable tool for organizations seeking to embrace transformation and progress. Rather than viewing tenure diversity as a potential source of conflict or misunderstanding, the emphasis on the presence of reflexivity in diverse teams encourages a shift in perspective. Practitioners can highlight how diverse teams bring together a range of experiences, skills, and perspectives, which can be harnessed collectively to drive change. Not only does this approach harness the fresh perspectives and ideas brought by newcomers, but it also leverages the wisdom and experience of

established employees, resulting in a synergistic effect that surpasses the impact of working solely with newcomers or more tenured members.

Second, we demonstrate the importance of generating a team change vision that integrates the different change initiatives. This implication suggests that top managing teams and decision makers should further plan change projects with an integrative perspective and emphasize the potential synergy among these initiatives. Organizational communication should also regroup change initiatives that seek a common goal in a way that helps teams make sense of them. Our results clearly demonstrate that when teams perceive the overarching vision of changes, they are more likely to be more ready to change.

Finally, management can leverage some of the insights that our study offers in their organizational design decisions. Particularly, although team-based structures can be more responsive to changes (Mathieu et al., 2019), we show that some of them may also be more inert than others because of the longer tenure of their members. Staffing decisions during organizational transformations can therefore become key to enabling more work teams to reap the full benefits of processes such as reflexivity. More precisely, we can imagine how adding new members to teams with greater additive tenure may increase the variety of knowledge, experiences, and abilities that will contribute to reflecting in different ways, while also benefitting from the accumulated experience. In the case of lower-tenured teams, managers should be careful before adding new members, for it may destabilize routines that are not yet well-established. Managers may also monitor team discussions and encourage members to discuss cues and information

that is not already shared and well known, especially in higher additive tenure teams with lower diversity.

2.5.3 Limitations and Future Studies

Our study is not without limitations. First, team reflexivity and team change vision were measured concurrently. Despite our statistical analyses suggesting that these constructs are distinct, and that common method bias did not impact on our hypothesis testing, the correlation between both variables remains high. Second, since our study is cross lagged, we cannot confirm with certainty the directionality of our model, neither can we confirm the causal relationship between the measured factors. Future longitudinal studies are needed.

Third, our results suggest that team change vision plays a central role in team readiness to change. Future studies may be required to explore if this new construct explains additional variance, controlling for the cognitive antecedents of the readiness to change framework (e.g., change discrepancy, change appropriateness, change self-efficacy, principal support, change valence). Since team change vision aims at the overarching vision that integrates different change initiatives, and that readiness to change antecedents are change initiative-specific, we believe that our new construct may act as an important antecedent. This being said, it opens up new avenues of research in the readiness to change framework.

Furthermore, it is important to acknowledge that gaining a comprehensive understanding of team readiness to change may require future studies to take into account cognitive, identification-related, and emotional factors, as well as explore potential interplays among these elements. The literature on team emergent states exhibits a greater inclination towards investigating the emotional dimension, and it would be beneficial to

delve deeper into this aspect, aligning with recent recommendations in the field of organizational change literature (e.g., Oreg et al., 2018; Rafferty et al., 2013).

An essential area for further research would involve exploring the impact of team tenure diversity and additive team tenure on various learning activities, such as vicarious learning, contextual learning, and experimental learning. Harvey et al. (2022; 2023) have categorized different team learning activities based on their orientation (exploitation versus exploration) and the locus of activity (external versus internal learning). Reflexive learning, for example, falls under the internal exploitation category, focusing on integrating diverse perspectives within the team to address changing conditions and enhance processes and strategies (Harvey et al., 2022; West et al., 2000).

However, other forms of learning, such as contextual and vicarious learning, take place outside the team context. In such cases, the significance of having higher team tenure diversity may not be as pronounced, as teams are already exposed to multiple external sources of knowledge that differ from their internal knowledge. To fully understand the interaction's implications, it is necessary for future research to investigate whether this relationship applies to all types of team learning.

Another promising avenue for future research would involve comparing our double interaction findings in various types of teams, such as task teams, problem-solving teams, and scientific teams. For instance, our findings may be interesting for temporary teams, since they suggest that introducing reflexivity at the team's inception (with low additive tenure and low tenure diversity) can help foster a vision for team change. However, a potential challenge arises when members join or leave the team in its early stages, as this may affect the effectiveness of team reflexivity in generating a cohesive

team change vision (specifically, the low additive tenure, high tenure diversity slope). Other types of teams place different levels of value on experience (i.e., tenure), which may potentially impact team dynamics during reflexivity. Nevertheless, it is important to note that further research is required to validate these hypotheses.

Finally, this study did not take in consideration the temporal dynamic of team reflexivity. Indeed, team reflexivity is viewed as a transition process occurring in between two performance episodes (Konradt et al., 2016). Therefore, teams reflect on previous performance episodes to adapt for future ones. To capture the temporal dynamic effect on team readiness to change and affective commitment to change, scholars can adopt a longitudinal approach and track the different episodes of the reflexive cycle. Similarly, the absence of longitudinal data limits our understanding of the importance of the temporal dynamics in the emergence of team readiness to change. Readiness to change may also vary through time depending on the available resources, the workload, and the course of previous change initiatives (Stevens, 2013). Future studies may use longitudinal design to identify how reflexivity affects team readiness to change overtime, while also capturing its possible fluctuation.

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Table 1. *Confirmative Factor Analysis - Comparison of Alternative Models*

Models	χ^2	d.f	CFI	TLI	RMSEA	SRMR	$\Delta \chi^2$
3-Factor model	63.05	42	1.00	1.00	.016	.051	
2-Factor model (readiness to change—reflexivity)	366.77	64	.61	.52	.260	.273	***
2-Factor model (readiness to change—team change vision)	203.41	64	.82	.78	.176	.171	***
3-Factor model (reflexivity—team change vision)	213.46	64	.81	.76	.183	.180	***
1-Factor model	484.77	65	.45	.34	.304	.270	***

Notes. * = $p < .05$; ** = $p < .01$; 2-factor model (readiness to change—reflexivity): consists of a model where the team readiness to change and team reflexivity were modelled under the same latent factor; 2-factor model (readiness to change—team change vision): consists of a model where the team readiness to change and team change vision were modelled under the same latent factor; 2-factor model (reflexivity— team change vision): consists of a model where the team reflexivity and team change vision were modelled under the same latent factor.

Table 2. Means, Standard Deviations, and Bivariate Correlations

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Team size (T1)	6.44	3.03	--					
2. Additive team tenure (T1)	5.23 ^a	1.22	-.11	--				
3. Team tenure diversity (T1)	1.57	.85	.30*	-.33*	--			
4. Team reflexivity (T1)	4.69	.80	-.26*	.07	-.05	(.94)		
5. Team change vision (T1)	4.27	.76	-.16	-.23	.09	.50**	(.90)	
6. Team readiness to change (T2)	4.97	.64	-.30*	-.18	-.26*	.20	.55**	(.92)

Notes: N=70; * $p < 0,05$; ** $p < 0,01$ (two-tailed); a: This corresponds to a mean of two years of team tenure.

Table 3. SEM Standardized Results of the Full Model

Variables	Team change vision			Team readiness to change		
	β	Z value	p.(> z)	β	Z value	p.(> z)
<i>Control variable</i>						
Team size	-.03	-.23	.82	-.16	-1.57	.12
<i>Principal effects</i>						
Team reflexivity	.65	5.00	.00	-.07	-.50	.62
Additive team tenure	-.15	-1.08	.28	-.06	-.49	.62
Team tenure diversity	.12	.98	.33	-.33	2.87	.00
Team change vision				.58	4.36	.00
<i>Interactions</i>						
Additive team tenure x Team reflexivity	.27	1.48	.14			
Team tenure diversity x Team reflexivity	.08	.64	.52			
Team tenure diversity x Additive team tenure	.03	.19	.84			
Team reflexivity x Additive team tenure x Team tenure diversity	.46	2.47	.01			
	R^2		.43			.54

Note. N= 70 teams. All betas presented are standardized.

Table 4. *Conditional Effects of Team Reflexivity on Team Change Vision*

Test of the Conditional Effects with two Moderators					
Moderator 1	Moderator 2	Estimate	SE	z	P value
Low additive team tenure (-1 SD)	Low team tenure diversity (-1 SD)	.65	.264	2.471	.01
Low additive team tenure (-1 SD)	High team tenure diversity (+1 SD)	.25	.235	1.05	.29
High additive team tenure (+1SD)	Low team tenure diversity (-1 SD)	.46	.220	2.06	.04
High additive team tenure (+1SD)	High team tenure diversity (+1 SD)	1.22	.263	4.648	.00

Note. N= 70 teams.

Figure 1. *Theoretical Model*

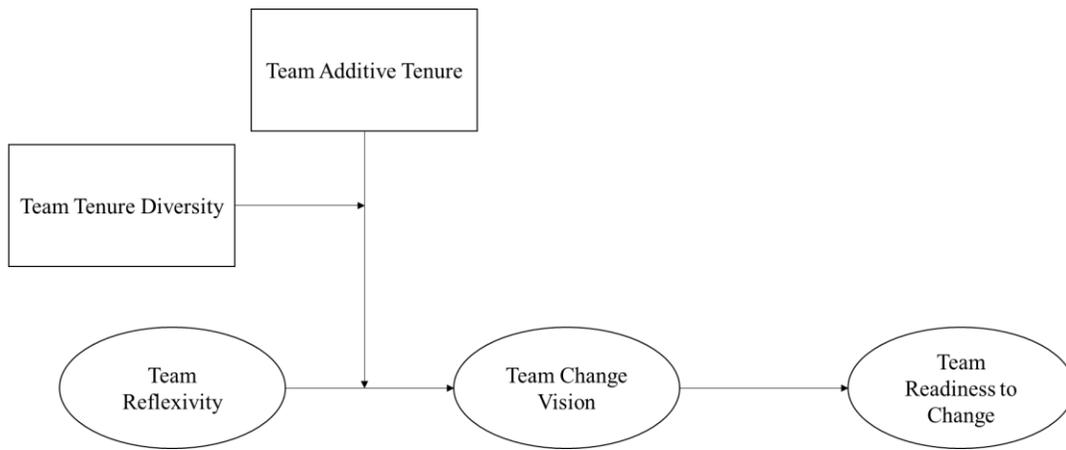
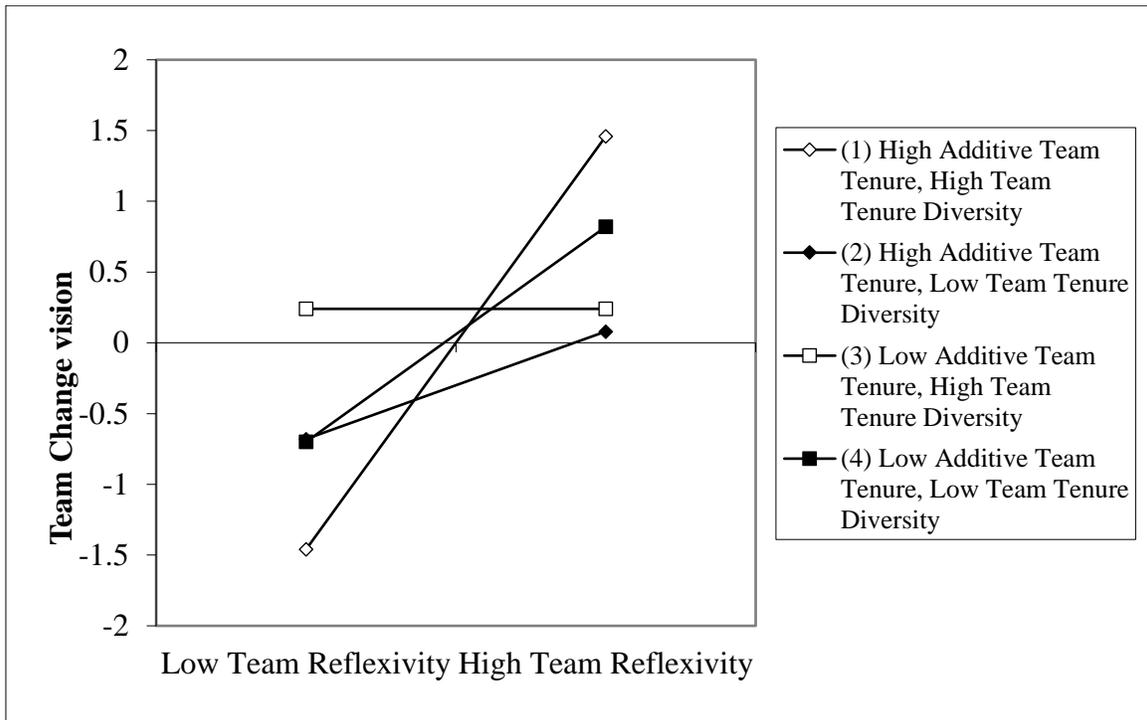


Figure 2. *Three-way interaction Plot Between Additive Model, Team Reflexivity and Team Tenure Diversity Predicting Team Change Vision*



Chapitre 3 Black Clouds and Silver Linings: Organizational Identification and Psychological Capital during Covid-19

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Abstract

The present study examined the moderating effect of organizational identification on the relationship between worked hours during the first wave of Covid-19 (WHC-19) pandemic and psychological capital (PsyCap). A total of 272 employees (care givers and non-care givers) in Canada were surveyed 1 year before the Covid-19 pandemic, and after the first wave. The findings showed a positive relationship between worked hours and PsyCap for employees who highly identify to their organization. In turn, PsyCap was negatively related to emotional exhaustion. On the other hand, the relation between hours worked during the first wave of Covid-19 and psychological capital was non-significant for those with lower organizational identification. The current study contributes to a better understanding of why certain employees were able to thrive during adversity, while others weren't. Implications for PsyCap, organizational identification, and post-traumatic growth (PTG) are discussed.

Keywords: Post-traumatic growth, psychological capital, organizational identification, Covid-19

3.1 Introduction

Healthcare is a challenging sector characterized by limited resources and high demands, which increases the risk of burnout among workers (Adriaenssens et al., 2015; Dewa et al., 2014). In the past years, this adversity has reached its peak, notably with the emergence of a worldwide pandemic. Covid-19 has generated unprecedented pressure on healthcare workers, requiring them to work long hours and to navigate complex situations (Sheraton et al., 2020). As a result, healthcare workers have experienced heightened levels of emotional stress and distress, while also facing exceedingly high workload, and this due to the increased number of patients or the administrative ambiguity surrounding the pandemic (Mong and Noguchi, 2022; Cabarkapa et al., 2020). Many scholars therefore agree that the pandemic is a traumatic event for healthcare workers (Banerjee, 2020; Ornell et al., 2020; Shigemura et al., 2020; Seçer et al., 2020).

However, as recently highlighted by diverse authors (Bardoel & Drago, 2021; Britt et al., 2016), facing adversity is not exclusively associated with negative outcomes for individuals' psychological resources. When confronted with disruption in their work environment, employees can also maintain and protect their current resources, or even develop new ones. This can occur through post-traumatic growth (PTG)—the experience of positive changes as a result of a major crisis (Tedeschi et al., 2015). In turn, PTG may strengthen their psychological resources following the exposure to a trauma.

In this study, to capture this phenomenon, we focus on the growth of psychological capital (PsyCap) (Luthans et al., 2007), encompassing four positive psychological resources (i.e., self-efficacy, optimism, hope, resilience). Building on the conservation of resource theory (COR) (Hobfoll et al., 1989), we argue that PsyCap plays

a significant role in the coping mechanisms deployed by employees during times of adversity (Singh et al., 2023; Meseguer de Pedro et al., 2021), thus reducing their level of emotional exhaustion after facing trauma (Li et al., 2015; Tang et al., 2023).

It therefore becomes crucial to identify factors that facilitate the protection and the development of PsyCap in adverse context such as the Covid-19. Organizational identification, defined as the degree to which individuals feel a strong connection and sense of belonging to their organization (Ashforth et al., 2008), may serve as a promising avenue given that it can positively impact employees' health and well-being (Giorgio et al., 2023; Steffens et al., 2017; Greenaway et al., 2015). We argue that organizational identification can provide a social support and a sensemaking mechanism to reconstruct events (Greenaway et al., 2015); two important mechanisms facilitating PTG (Tedeschi et al., 2015). Thus, given the unique context of the pandemic in which our study was conducted, exploring the relationship between WHC-19, organizational identification, and PsyCap, posited as antecedents of healthcare workers' emotional exhaustion, appears to be particularly relevant (see figure 1).

This study took place in a Canadian healthcare organization during the first wave of the Covid-19 pandemic. A total of 272 healthcare workers (i.e., caregivers and non-caregivers) answered a total of two surveys, one pre-pandemic (i.e., a baseline) and one in August 2020 to capture the aftermath of the first wave of Covid-19 on healthcare workers' psychological health. Additionally, objective data such as the number of hours worked during the first three months of the pandemic were gathered by the human resource management department. Our results show that healthcare workers who

identified highly with their organization could maintain higher levels of PsyCap, which was negatively related to their level of emotional exhaustion.

[insert figure 1 about here]

Our study also contributes to the organizational identification literature by showing its protective effect during adversarial times. This is in line with recent efforts of linking organizational identification to employees' health and well-being (e.g., De Giorgio et al., 2023; Steffens et al., 2017; Greenaway et al., 2015). Our study also contributes to the literature on PsyCap by highlighting factors that give rise to its development, an area that has not received much attention in previous research (Loghman et al., 2023; Sarandopoulos and Bordia, 2022). Finally, this research adds nuance to the literature focusing on the effects of worked hours on employees' psychological health and well-being, by showing that the context in which they occur significantly matters.

3.2 Theory and Hypotheses

3.2.1 Worked Hours During Covid-19 and Employees' PsyCap

Long working hours are known to take a toll on employees' physical and psychological health (Christian and Ellis 2011; Fritz and Sonnentag, 2006), especially during Covid-19 especially in these conditions (Cabarkapa et al., 2020). However, as highlighted by Ganster et al. (2018) in a recent critical review, the effect of worked hours on employees' health and well-being is far more complex. Research on post-traumatic growth (PTG) suggests that healthcare employees may also experience personal growth following a traumatic event (Luo et al., 2022). More precisely, PTG refers to the "to positive psychological change experienced as a result of the struggle with highly

challenging life circumstances” (Tedeschi & Calhoun, 2004, p.1). The level of exposure to an adverse and traumatic event (i.e., the time spent), as well as an individual's ability to reconstruct and find meaning in the events, plays a significant role in determining the extent to which they may experience PTG (Tedeschi et al., 2007). As such, PTG is not a result of the event itself, but a result of how people experience with the traumatic event (Henson et al., 2021).

In this study, we focus on a higher sense of personal strength in the form of PsyCap, which refers to “an individual’s positive psychological state of development that is characterized by: (1) having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success.” (Luthans, et al., 2007, p. 3). We argue that exposure to Covid-19 created a conducive environment for PTG in the form of the development of PsyCap among healthcare workers (Greenberg et al., 2020). The challenging work conditions they faced forced them to confront and utilize various dimensions of PsyCap. As they navigated the pandemic, healthcare workers were compelled to adopt innovative approaches in managing and delivering patient care, reflecting the sub-dimensions of confidence and hope within PsyCap (Bozdağ and Ergün, 2021; Chevens et al., 2019). Some healthcare professionals were able to maintain an optimistic mindset and recover from the initial wave of the pandemic (Bozdağ and Ergün, 2021; Greenberg et al., 2020). This resilience demonstrated during the intense work hours endured by healthcare workers may have

acted as a catalyst for PTG, particularly in fostering higher levels of PsyCap. This suggests that the demanding circumstances of the pandemic presented opportunities for healthcare workers to grow and develop psychologically, despite the trauma.

3.2.2 The Protective Effect of Organizational Identification

Not all employees may have the same capability to bounce back and experience PTG. According to the COR theory suggests that sub-goals and protective factors can explain the disparity in the fluctuation of employees' resource caravans (Halbesleben et al., 2014). Thus, identifying such protective factors appears to be central in our understanding of how employees adapted or experienced PTG following the first wave of the pandemic.

Social identity and self-categorization theories argue that employees' conception of their self is not only a function of personal characteristics, but also of their membership of social groups (Mael & Ashforth, 1992;1989; Tajfel & Turner, 1986). These memberships influence employees' perception of environmental cues and guide their attitude and behavior (Chen et al., 2013). The more employees identify to a group (i.e., perceive their membership as being salient for their self-concept), the more they behave in a consistent manner with the group's objectives (Tajfel & Turner, 1986). Organizational identification, a specific kind of social identity, refers to the extent to which individuals perceive themselves as one with, or belonging to, an organization (Mael & Ashforth, 1992). It captures the psychological tie between an organization and an employee when he/she adopts its defining characteristics, values, and goals to his/her self-concept (Wiesenfeld et al., 1999; Chen et al., 2013; Dutton et al., 1994; Ashforth et al., 2008; Chen et al., 2017).

Experiencing a sense of belonging to their organization can be particularly beneficial during times of crisis and trauma (Kalkman, 2020; Henson et al., 2021). Crises are characterized by difficult conditions during which employees must make sense of what is occurring and act accordingly (Kalkman, 2020). When employees strongly identify with their organization, they can build upon a foundation of shared values, identified objectives, and collective beliefs to comprehend the circumstances and derive an overall meaning and purpose (Tedeschi & Calhoun, 2007). This collective purpose provides social support and drives employees to positively adapt to adversity, despite a possible absence of an individual understanding (Henson et al., 2021; Kalkman, 2020).

The salience of a strong organizational identification during times of adversity appears to be especially critical when the organization pursues goals aligned with a prosocial mission (Curtin et al., 2022; Cheavens et al., 2019). Indeed, recent research has shown that prosocial organizational goals tend to generate behavioral persistence, which is positively related to numerous positive outcomes, such as motivation, positive affect, and significant efforts to achieve these goals (Cheavens et al., 2019). In the healthcare context, prosocial goals hold significant motivational power because they address the inherent need for purpose and meaning in the lives of these dedicated professionals (Grant, 2008). They encourage employees to achieve organizational objectives that at first glance did not seem attainable, and this, in turn, strengthen employees' sense of self-efficacy, optimism, resilience, and hope (Cheavens et al., 2019; Grant, 2008).

In sum, during times of crisis, a strong organizational identification enables employees to find meaning and purpose within their resource investment (i.e., work hours). Self-fulfillment and growth can be achieved through investing time in a way that

is perceived as valuable and meaningful for the employees (Ganster et al., 2018). Therefore, we argue that:

H1: Organizational identification moderates the relationship between WHC-19 and PsyCap such that the relationship is stronger when identification is high.

3.2.3 The Role of PsyCap on Emotional Exhaustion

As stated in the COR theory, individuals with more resources are more likely to experience resource gain, while those with fewer resources are prone to resource loss (Halbesleben et al., 2014). Moreover, the second corollary of this theory suggests that an initial resource loss can lead to further future losses (Halbesleben et al., 2014). Research has shown that PsyCap enables employees to effectively cope with workplace challenges and setbacks, thus reducing the likelihood of emotional exhaustion (Avey et al., 2011; Avey et al., 2010; Roche et al., 2014). Indeed, employees with positive psychological resources have been found not only to cope with adversity, but also to expand their thought-action possibilities (Fredrickson, 2001). This expansion results in a greater repertoire of options and of new pathways available to employees confronted with challenges (Cheavens et al., 2019). Building on these findings, we expect that employees with greater psychological resources will experience less resource loss and, consequently, lower levels of emotional exhaustion. Therefore, we argue that:

H2: The indirect effect of worked hours during Covid-19 (WHC-19) on emotional exhaustion through PsyCap is moderated by employees' organizational identification, such that the indirect effect is stronger when identification is high and weaker when identification is low.

3.3 Methods

3.3.1 Sample and procedures

Our research took place during the first wave of the Covid-19 pandemic, in an integrated health and social service organization located in Canada. These integrated health organizations were created in 2015, as part of a larger restructuring of the healthcare system in the province of Quebec. They oversee planning, organizing, coordinating, and evaluating health and social services for the population of a given territory. As for all health systems in the world, the Covid-19 pandemic had a tremendous impact on the healthcare sector in Canada, constituting significant challenges and major requests for adaptations for the healthcare workers. Hence, the Canadian healthcare system, known for its universal healthcare coverage, faced unprecedented pressures during the pandemic. Hospitals and healthcare facilities across the country experienced a surge in patients requiring care for Covid-19, leading to a significant stretch of both their resources and their work capacity. Healthcare workers, including doctors, nurses, and support staff, found themselves on the frontlines, working tirelessly to maintain delivery of quality care to patients while also risking being exposed to the virus.

This study is part of an ongoing and extensive research project in collaboration with a prominent healthcare organization in the province. Regarding the timeline, we collected data one year before the Covid-19 outbreak in the country (T1). At T1, a total of 2191 surveys were sent out, out of which 1265 (58%) were completed. These completed surveys formed the population for the second survey (T2), which was distributed in August 2020. In total, we received responses from 316 participants, with 272 (21.5%) completing the survey and providing consent to link their HR data with their survey

responses. Table 1 presents our final sample. We tested for nonresponse bias with Goodman and Blum's (1996) procedure. Our findings suggest that the nonresponse rate was due to random factors and should not have an impact on our following analysis.

[insert table 1 about here]

3.3.2 Measures

WHC-19 (worked hours during the first wave of Covid-19). The human resource department of the healthcare organization provided us with the number of hours worked during the first wave of the Covid-19 pandemic for every participant of our study. We removed all participants who had not worked. The scope of hours worked included in this study went from 3.5 to 727.25 hours, with an average of 397.78 hours (S.D.=101.65). The distribution is considered normal according to Sposito et al (1983).

Psychological Capital (T2). PsyCap was assessed using the 12-item scale developed by Luthans, Youssef, and Avolio (2007). The scale measures four dimensions of PsyCap, namely self-efficacy, hope, optimism, and resilience. Participants were asked to rate their agreement with each statement on a 7-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Its internal consistency is satisfactory ($\alpha=.86$).

Organizational identification (T1). To capture the extent to which healthcare employees identify to their organizational, we used van Prooijen's (2009) 3-item scale. A sample item is "At this moment, I want to do my best for [name of the organization]" ($\alpha=.86$).

Emotional exhaustion (T2). Emotional exhaustion was assessed using a 7-item 7-point scale from Maslach and Jackson (2005). Examples of this scale include: "I experience emotional depletion due to my work" and "I feel completely depleted at the conclusion of the workday" ($\alpha=.92$).

3.3.2.1 Control variables

Worked hours from December to February. Controlling for pre-pandemic worked hours helps ensure that the observed effects on emotional exhaustion are specifically related to the changes in worked hours during the Covid-19 pandemic. In addition, it is reasonable to expect that individuals who typically worked long hours would also tend to work a lot during the pandemic, as their work patterns and dedication to their profession are likely to remain consistent.

Baseline for PsyCap. We used the same scale as in T2 with a 6-point Linkert scale. Controlling for a baseline PsyCap enables us to establish individuals' initial levels of psychological resources before the Covid-19 pandemic. By accounting for baseline PsyCap, we isolate the unique impact of worked hours during the pandemic on emotional exhaustion, while controlling for individuals' pre-existing psychological resources and avoiding potential confounding effects. Its internal consistency is satisfactory ($\alpha=.85$).

Baseline for emotional exhaustion. We used the same scale as in T2 with a 6-point Linkert scale. Controlling for a baseline level of emotional exhaustion establishes healthcare workers' initial levels of emotional exhaustion before the Covid-19 pandemic. We were able to better assess the specific impact of worked hours during the pandemic

on the changes in emotional exhaustion, while minimizing the influence of pre-existing emotional exhaustion levels. Its internal consistency is satisfactory ($\alpha=.91$)

Job status. We created a dummy variable for job status (1= full time; 0= part time). Job status within the healthcare system can vary widely, with different roles and responsibilities. It enabled us to account for potential differences in work demands, decision-making authority, and exposure to stressful situations that may influence emotional exhaustion independently of work hours.

Care givers vs non-care givers. We created a dummy variable (0= non-care givers; 1= care giver) to account for differences in responsibilities and differential demands that may have impacted healthcare workers' emotional exhaustion independently of worked hours.

Absence due to Covid-19 infection. HR department provided us with the number of days that employees were absent due to Covid-19 infection. Absence due to Covid-19 infection directly lowered the amount of worked hours a healthcare employee could do. In addition, individuals who were infected may have experienced physical symptoms, emotional distress, and prolonged recovery periods, which could have contributed to higher levels of emotional exhaustion (especially when this type of infection was new).

Gender. We controlled for gender using a dichotomous variable (0= male; 1 = female) since many studies showed a correlation between female workers in healthcare and emotional exhaustion, especially during Covid-19 (Cabarkapa et al., 2020; Brady et al., 2021).

Tenure. HR department provided us with the objective tenure of each employee in terms of days. By controlling for tenure, we were able to mitigate the confounding effects of experience, professional development, and organizational knowledge that may have influenced emotional exhaustion independently of the worked hours during the Covid-19 pandemic.

Stress related to Covid-19. We used 4 items to assess the extent to which the Covid-19 was a stressful event for them. Employees may present individual differences that explained their level of tolerance towards a worldwide pandemic (e.g., having loved ones at risk of contracting the virus, being a hypochondriac), which could have impacted their level of emotional exhaustion, regardless of the worked hours during the pandemic. Sample items are: “The COVID-19 health crisis affects my personal life” and “The COVID-19 health crisis makes me anxious” ($\alpha = .89$).

3.4 Results

Means, standard deviations, and correlation coefficients are presented for all measures in Table 2.

[insert table 2 about here]

3.4.1 Confirmatory factor analysis (CFA)

We conducted a CFA analysis, incorporating the control variable *Tolerance to Covid-19*, to evaluate the fit and validity of our theoretical framework. We included covariances between items of the PsyCap latent variables that corresponded to the different sub-dimensions. We observed some discrepancies in the fit of the first item of the emotional exhaustion scale, prompting us to address the structural concerns by

introducing a covariance between the first item and both the second and last items of the scale. The theorized four-factor model was compared to three other alternative models. First, a three-factor model whereas *Tolerance to Covid-19* (T2) and *emotional exhaustion* (T2) were modelled under one latent factor. Second, a three-factor model whereas *Tolerance to Covid-19* (T2) and *PsyCap* (T2) were modelled under one latent factor. Finally, a model whereas all items were modelled under one latent factor. Our findings indicate that our proposed four-factor model (X^2 : 584.71; d.f.: 276; TLI: .91; CFI: .93; RMSEA: .06; SRMR: .08) outperforms other models, as demonstrated in Table 3.

[insert table 3 about here]

3.4.2 Hypotheses Testing

Analyses were conducted using the Process macro (Hayes, 2013) with a bootstrap of 5000 samples with a 95% confidence level and hierarchical regression in SPSS v.29. Results are presented in Table 4. For Model 1, we used a hierarchical regression to isolate the effects of all control variables on our different outcomes. Model 2 and Model 3 utilized moderation mediation analysis (PROCESS Model 7), with Model 2 comprising solely the theorized variables and Model 3 incorporating both control variables and theorized variables.

[insert table 4 about here]

Hypothesis 1 suggested that *organizational identification* moderates the relationship between *work hours* and *PsyCap*. Results show that the interaction term is significantly related to *PsyCap* ($\beta=.11$, LLCI: .02 ULCI: .21; $p < .05$). Additionally, there is a direct effect of *Work hours* on *PsyCap* ($\beta=.19$, LLCI: .07 ULCI: .31; $p < .01$).

Furthermore, we tested conditional effects of PsyCap at different values of organizational identification. Results indicated that the effect was significant at mean ($\beta=.19$, LLCI: .07 ULCI: .31; $p < .01$) and high (+1 SD) ($\beta=.30$, LLCI: .16 ULCI: .46; $p < .01$) levels of organizational identification. However, at a low level (-1 SD), the effect of work hours on PsyCap is non-significant ($\beta=.07$, LLCI: -.09 ULCI: .24; $p=.35$). Thus, hypothesis 1 is supported. Figure 2 illustrates the moderation.

[insert figure 2 about here]

Hypothesis 2 suggested that the moderation effect will have a negative indirect effect on emotional exhaustion through PsyCap. Results first show that PsyCap has a negative and significant relationship with emotional exhaustion ($\beta=-.24$, LLCI: -.35 ULCI: -.13; $p < .01$). As for the indirect effects, results show that at a low level of organizational identification, the indirect effect is non-significant (indirect effect=-.02, BootSE =.03, LLCI: -.09 ULCI: .02). On the other hand, when identification is at the mean (indirect effect=-.05, BootSE =.02, LLCI: -.10 ULCI: -.01) or high level (indirect effect=-.07, BootSE =.03, LLCI: -.13 ULCI: -.03), the indirect effects are negative and significant. Thus, our results support hypothesis 2.

3.5 Discussion

This study builds on the COR theory to advance our understanding of the adversarial conditions under which employees were able to enhance their PsyCap and reduce their emotional exhaustion, in the context of the first WHC-19. Based on our research design, our findings indicate that employees with higher organizational identification who worked more hours during the first wave of Covid-19 were linked to

higher PsyCap. In turn, PsyCap was related to lower levels of emotional exhaustion. In sum, our results support the hypotheses formulated and this have several theoretical and practical implications.

3.5.1 Theoretical Implication

This study has several theoretical implications. First, our findings enrich understandings of how and why certain employees were capable of bouncing back from adversity and experience post-traumatic growth in terms of PsyCap during the Covid-19 pandemic. Our findings support the argument that organizational identification serves as a crucial factor in shaping individuals' psychological experiences and responses within the organizational context, and specifically during times of crisis. By identifying strongly with their organization, employees may develop a sense of shared purpose, belongingness, and support. This in turn, combined with the exposure to a traumatic event such as the Covid-19, can foster potential psychological growth in terms of positive psychological resources such as resilience, optimism, self-efficacy, and hope (i.e., PsyCap). By emphasizing the role of organizational identification as a moderator in the relationship between WHC-19 and employees' PsyCap, our study contributes to a deeper understanding of the underlying mechanisms and boundary conditions that influence employees' psychological health during challenging times.

Additionally, past research that was interested in the relationship between work hours and organizational identification has concluded that identified employee were more likely to work additional hours, which can impoverish their psychological health (Conroy et al., 2017; Steffens et al., 2017; Ng and Feldman, 2008). Brieger et al. (2021) showed that organizational identification was linked to work addiction, which is also known to be

positively related to emotional exhaustion. As such, scholars were stressing that there might be a “too much of a good thing effect” of organizational identification. However, our findings shed light on the unique role of organizational identification as a protective factor against the detrimental effects of working long hours during the Covid-19. Contrary to the potential negative impact of increased working hours on employee health, we discovered that higher levels of organizational identification acted as a mitigating factor, buffering the adverse consequences typically associated with extended work hours. By aligning oneself with the goals, values, and identity of the organization, employees can tap into a sense of belonging and commitment that buffers against the negative impacts of adversity. This, in turn, facilitates the nurturing of PsyCap, as individuals draw upon their internal resources of self-efficacy, hope, optimism, and resilience to navigate and thrive in challenging circumstances. Consequently, our study identifies organizational identification as a salient factor which enhances the employees’ capacity to bounce beyond when facing adversity.

Second, organizational identification theory offers a valuable enrichment of the COR theory by emphasizing the importance of the psychological state underlying the investment of resources in times of crisis. Our results suggest that it is not merely the investment of resources (e.g., the worked hours during the first wave of Covid-19) that determines outcomes, but rather the psychological state in which individuals engage in these resource investments.

As previously stated, organizational identification theory suggests that when individuals strongly identify with their organization, they develop a sense of shared

identity, purpose, and belongingness, which influences their attitudes, behaviors, and resource allocation within the organizational context. Drawing on this theory, we can argue that individuals who identify strongly with their organization are more likely to approach resource investments with a positive psychological state and higher motivation. This positive state can nurture their active engagement in acquiring, developing, and preserving resources even in dire circumstances. Through the lens of the COR theory, this positive psychological state driven by organizational identification can create a self-reinforcing cycle of resource gain, even when trauma is experienced. Consequently, this investment of resources can lead to greater resource accumulation, such as increased PsyCap.

Furthermore, organizational identification can play a vital role in avoiding resource loss and preventing emotional exhaustion. When individuals identify strongly with their organization, they are more likely to feel supported, connected, and valued within their work environment. This sense of belongingness and support can act as a protective factor, buffering the negative impact of resource depletion and work-related stressors. Employees with high levels of organizational identification may be more resilient in the face of challenges, better equipped to manage their emotional responses, and more likely to seek resources and support when needed. As a result, they are less susceptible to emotional exhaustion, which can have a heavy toll on one's psychological and mental health.

Finally, this study also makes an important contribution to the PsyCap literature by shedding light on a pathway towards its development. In light of a recent review that

emphasizes the need for a deeper understanding of PsyCap's antecedents, particularly beyond the realm of leadership (Loghman et al., 2023; Luthans & Youssef-Morgan, 2017), our research builds upon the COR theory and the post-traumatic growth literature to highlight new avenues to consider. Thus, these two theories provide a robust conceptual framework to explore the process by which employees can cultivate their PsyCap. We propose that employees do so through their experience of adversarial context, and this especially when supported by protective factors like organizational identification. This is consistent with the COR theory's principles and corollaries suggesting that people must invest resources to gain resources and that individuals with more resources are more inclined to resource gain. By exploring this novel perspective, we contribute to the current knowledge regarding the organizational factors contributing to the development of employees' PsyCap.

3.5.2 Practical Implications

In terms of the practical implications of our study, we would like to emphasize that it is crucial for healthcare organizations not to create distressing work conditions with the aim of fostering growth among their employees. Instead, considering the inherent challenges already present in healthcare work (Adriaenssens et al., 2015; Dewa et al., 2014), providing resources to healthcare workers, including both caregivers and non-caregivers, is of utmost importance. Healthcare organizations, as frontline actors of major events, need to acknowledge that crises will continue to occur and prepare contingency plans regarding their communications accordingly. Failure to provide information and other resources can have severe consequences for healthcare workers and even healthcare systems. Therefore, proactive measures must be taken to strengthen

employees' organizational identification and PsyCap to reduce emotional exhaustion. For instance, healthcare organizations can implement employee well-being programs that focus on fostering a strong sense of organizational identification. These programs could include initiatives such as team-building exercises, recognition programs, and opportunities for professional growth, all aimed at strengthening employees' connection to their organization. In addition to proactive measures, providing debriefing sessions with care teams after a crisis or traumatic situation, could prove to enable PTG by making sense out of the event (Tedeschi & Calhoun, 2007; Henson et al., 2021; Kalkman, 2020).

3.5.3 Limitations and Futur Research

This research is not without limits. First, although we mobilize the PTG framework, our model does not identify the underlying mechanism through which employees experience PTG. Future research should include additional mediators. Additionally, PTG is usually measured after a trauma is fully over. Our study looks at potential growth after a first episode of Covid-19. Future studies may be needed to examine if this growth is permanent or short-lived. This could contribute to the theorization of the PTG. Second, despite our nonresponse bias analysis, our small sample size limits our capacity to generalize this phenomenon. Since it comes from a single organization, other contextualized factors could have explained our theorized model. Third, we do not consider other targets of identification in this study. Many scholars (e.g., Ashfort & Johnson, 2001; van Knippenberg & van Schie, 2000) would suggest that more proximal target such as the workgroup would have stronger effects. However, a recent meta-analysis (Steffens et al., 2017) demonstrates that the strength of the workgroup and organizational identification were comparable in terms of magnitude ($r=.21$). We still

suggest that future studies include other targets of identification and test interaction among them to bring precision to the identification-employees' health and well-being relationship. Finally, other variables such as personality traits could have explained a part of the variance of the PsyCap following the first wave of Covid-19. For instance, the I-ADAPT inventory (Ployhart and Bliese, 2006) could have been an additional control variable.

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Table 1. Sample Description

Variables	Frequency Sample (n)	Percentage Sample (%)
Gender		
<i>Male</i>	48	17.6%
<i>Woman</i>	224	82.4%
Jobs		
<i>Manager, top management, middle management, coordinator</i>	36	13.28%
<i>Healthcare technicians and professionals, pharmacists, clinical biochemists, physicists</i>	92	33.82%
<i>Paratechnical personnel, auxiliary services and trade</i>	10	3.68%
<i>Administrative personnel, administrative technicians and professionals and non- unionizable personnel</i>	62	22.79%
<i>Nursing care and cardiopulmonary personnel</i>	54	19.85%
<i>Others</i>	18	6.62%
Employment Status		
<i>Regular or permanent full-time</i>	228	83.82%
<i>Full-time temporary</i>	7	2.57%
<i>Part-time, regular or permanent</i>	34	12.5%
<i>Part-time, temporary or occasional</i>	3	1,10%

Notes : n=272

Table 2. Means, Standard Deviations, and Bivariate Correlations

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender	--	--	--												
2. Tenure ¹	14.41	8.85	-.03	--											
3. Job status ¹	.86	.34	-.10	.13*	--										
4. Care giver ¹	.53	.50	.18**	-.01	-.07	--									
5. Worked Hours Dec – Feb ¹	329.94	66.54	-.13*	.07	.26**	.02	--								
6. WHC-19 ¹	397.78	101.65	-.14*	.06	.24**	-.13*	.34**	--							
7. Absence due to Covid-19 ¹	2.79	12.70	-.06	-.04	.03	.15*	.01	-.23**	--						
9. Stress related to Covid-19	4.71	1.42	.00	-.08	.11	.08	.01	-.19**	.07	(.89)					
10. PsyCap (T1)	4.71	.62	-.08	.03	-.01	.05	.06	.04	.03	-.03	(.85)				
11. PsyCap (T2)	5.54	.80	-.07	.05	.02	.01	-.03	.19**	.00	-.14*	.44**	(.86)			
12. Organizational identification (T1)	4.07	1.19	.03	-.01	.09	-.01	.05	.11	.03	-.10	.32**	.16**	(.86)		
13. Emotional Exhaustion (T1)	3.32	1.11	.00	.03	.09	-.04	-.03	-.01	-.08	.22**	-.33**	-.18**	-.32**	(.91)	
14. Emotional Exhaustion (T2)	3.77	1.41	.08	.10	.10	-.03	.00	-.16**	-.01	.44**	-.16*	-.33*	-.16*	.45**	(.92)

Notes: n = 272; **: p ≤ .01; *: p ≤ .05; ¹: objective data

Table 3. Model comparison

Model	X ²	DF	TLI	CFI	RMSEA	SRMR	$\Delta \chi^2$
4 factor model	584.71	276	.91	.93	.06	.08	
3 factor model (Emotional exhaustion-stress related to Covid-19)	1088.99	279	.78	.81	.10	.10	**
3 factor model (PsyCap – stress related to Covid-19)	855.73	279	.84	.86	.07	.15	**
3 factor model (PsyCap-Org. ID)	1063.98	279	.78	.81	.10	.10	**
1 factor model	1754.75	282	.60	.65	.14	.14	**

Note. n=272; * = p .05; ** = p .01; Org. ID: *Organizational identification*; 3-Factor model (Emotional exhaustion-stress related to Covid-19) consists of a model where *emotional exhaustion* and *stress related to Covid-19* are modelled under the same latent factor; 3-Factor model (PsyCap – stress related to Covid-19) where *PsyCap* and *stress related to Covid-19* are modelled under the same latent factor; 3-Factor model (PsyCap – Org. ID) where *PsyCap* and *organizational identification* are modelled under the same latent factor

Table 4. Standardized Path Analysis Results

	PsyCap (T2)			Emotional exhaustion (T2)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Control Variables						
<i>Gender</i>	-.04		-.08	.24		.20
<i>Tenure</i>	0.2		.03	-.07		-.06
<i>Care giver</i>	.01		.03	-.06		-.13
<i>Job status</i>	.04		.04	.04		.19
<i>PsyCap (T1)</i>	.44**		.44**	-.01		.10
<i>Emotional exhaustion (T1)</i>	-.01		-.02	.37**		.36**
<i>Absence due to Covid-19</i>	-.01		.04	.00		-.02
<i>Hours worked-Dec-Fev</i>	-.07		-.12*	.02		.02
<i>Stress related to Covid-19</i>	-.13*		-.08	.36**		.31**
Principal Effect						
<i>WHC-19</i>		.17**	.19**		-.10	-.08
<i>Organizational ID</i>		.13*	-.02			
<i>PsyCap (T2)</i>					-.31**	-.24**
Interaction effect						
<i>WHC-19 x Organizational identification</i>		.11*	.12*			
R²	.20	.07	.27	.32	.12	.40

Notes: n = 272; ** p ≤ ,01; * p ≤ ,05; WHC-19: Worked hours during the first wave of Covid-19 (March 2020 to may 2020); Hours Worked-Dec-Fev : worked hours during December 2019 and February 2020

Figure 1. *Theoretical model*

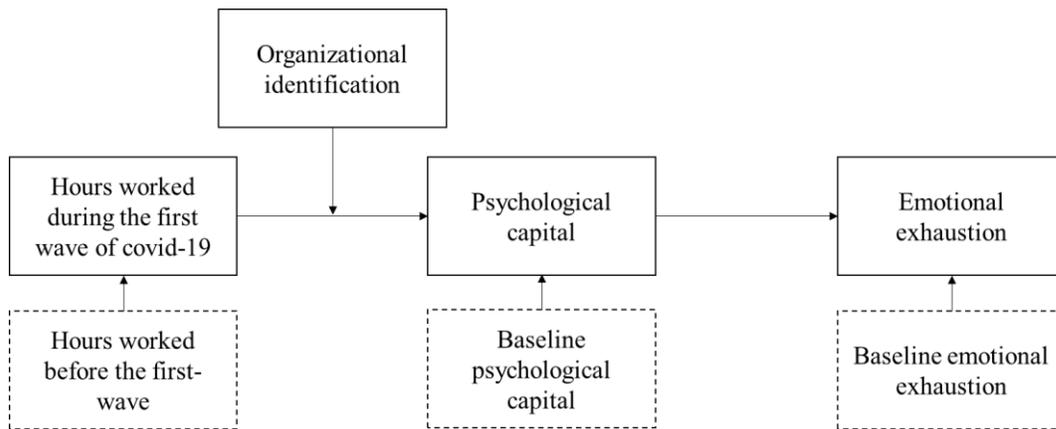
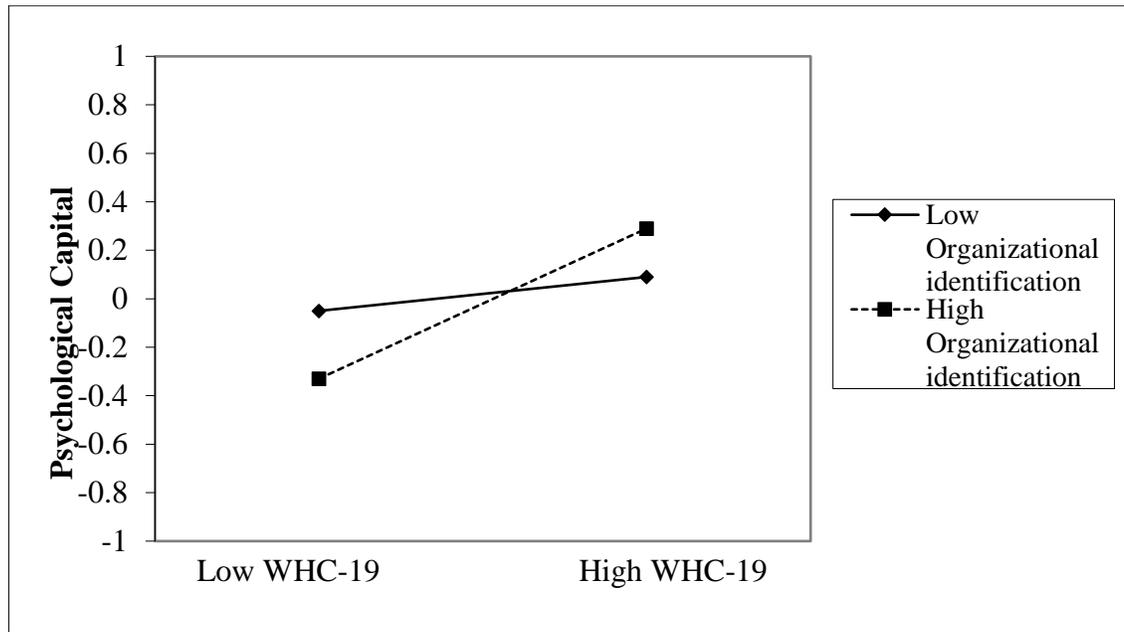


Figure 2. Interaction Plot Between Worked Hours During First Wave Covid-19 and Organizational Identification predicting Psychological Capital



Notes: WHC-19: worked hours during Covid-19

Conclusion

This thesis is centred around two important limits: measuring and capturing the dynamics of simultaneous changes and the need of team-level studies. Because of these limits, managers and scholars still struggle to understand how change recipients react to change. These three articles address, to a certain extent, these limits. Article #1 (*Understanding Employees' Resource Depletion Cycles in the Context of Organizational Restructuring: A Latent Change Approach*) proposes a theorization that captures the effect of change context on employees' resource pool. It therefore proposes to move away from studying one change initiative and consider a more holistic approach of studying change. Article #2 (*Ready to Change? The Role of Reflexivity, Change Vision, and Tenure in Work Teams*) propose a team-level study to show how and in what context team reflexivity enables them to process complex information and leads to team readiness to change. This is possible through the development of a change vision, a cognitive context-specific antecedent, capturing the sequence of multiple change initiatives. Finally, the article #3 (*Black Clouds and Silver Linings: Organizational Identification and Psychological Capital during Covid-19*) demonstrates that when an organization is capable of fostering a clear identity following a restructuring, and that employee identify to this new entity, it can provide a protective factor to employees' psychological resources in context of a crisis.

Future research

In the introduction of this thesis, I elaborated on many limits and gaps that are present in the organizational change literature. As much as this thesis aims at answering

these gaps, it would be ambitious to think that it can be done with three manuscripts. As such, here are some of the following research avenues that I would like to take going forward.

Firstly, I would like to address the lack of multilevel theorization and investigate the crossover dynamics during organizational change. Adopting a Conservation of Resources (COR) theory perspective can provide valuable insights into the social mechanisms leading to positive and negative emotional contamination during change. Conducting studies that examine the interpersonal transmission process of emotions and psychological resources with a crossover effects perspective can lead to better understanding of the adaptation process.

Secondly, an important area for future research is the clarification and unification of different literatures that address similar constructs as team readiness to change, such as team adaptability and team resilience. While all three concepts are relevant in the context of organizational change, they have often been studied independently, resulting in fragmented knowledge. By clarifying the conceptual boundaries and overlaps, I can establish a common understanding and terminology. This will facilitate the development of measurement tools that capture the multidimensional nature of adaptation to organizational change, incorporating elements of adaptability, resilience, and other relevant factors.

Finally, I would like to develop an upcoming stream of the change literature that seeks to blend construal level theory, psychological distances, and change constructs (e.g., change ambiguity, change readiness, change fatigue). I believe that this stream of

research has the potential to hint on how individuals or managers make sense of simultaneous change initiatives, how they can identify similitudes and synergy between initiatives, and how they allocate resources towards different challenges due to organizational transformation.