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DYNAMICS OF TRUST, FAIRNESS, COGNITIVE APPRAISALS, AND WORK ENGAGEMENT IN ORGANIZATIONAL CHANGES:

DEVELOPMENT AND TEST OF
A THEORETICAL MODEL

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ACADEMIC DISSERTATION

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ABSTRACT

This dissertation examined employees' psychological experiences during organizational changes. While change frequently occurs in today's workplace, organizational changes bear a risk of adverse effects on employees' well-being and motivation. To improve employees' well-being, and thus also the success of change endeavors, it is essential to understand how different types of employees' experiences evolve by influencing each other during change events.

The first substudy of the dissertation presented a theoretical model. This model postulated key psychological processes that influence employees' work engagement during organizational changes, and their dynamic relationships.

The other two substudies provided a partial test of the model by utilizing a three-wave longitudinal survey data ($N = 623$) collected during the merger of City of Helsinki's departments of Social and Health Care Services. This data captured employees' experiences during 2012–2014 with one-year intervals; once before the merger and twice after the merger. The empirical substudies utilized longitudinal structural equation modeling as an analytical framework.

The results of the second substudy showed that employees' cognitive trust towards top management and favorable perceptions of merger process fairness were mainly reciprocally and positively related. While trust was associated with subsequent fairness perceptions throughout the merger, fairness was related to subsequent trust only during the first merger year. The findings suggest that subordinates trust towards leaders may not only be a product of favorable treatment as trust may also color fairness perceptions.

The third substudy demonstrated reciprocal relationships between employees' work engagement and cognitive appraisals of change. Employees' negative appraisals regarding the personal impact of the change, and increases in such appraisals, were related to decreases in engagement throughout the organizational merger process. Positive change appraisals, and increases in these appraisals, were associated with increases in work engagement only during the first year of the merger. For the opposite direction, high work engagement, and increases in engagement, were related to decreases in negative appraisals, and increases in positive appraisals throughout the merger. These results showed how work engagement accumulates over time especially by mitigating employees' negative change appraisals.

Taken together, this study revealed how employees' experiences, specifically trust and fairness, and work engagement and change appraisals, evolve via reinforcing reciprocal relationships throughout distinct phases of change events. These processes can result either in upward spirals that foster employees' well-being and adaptation or to loss spirals with the opposite effect. Organizational change scholars and practitioners would therefore benefit from attending to more dynamic and bi-directional processes in employee change experience.

TIIVISTELMÄ

Tämä väitöstutkimus tarkastelee työntekijöiden kokemuksia organisaatiomuutoksista. Organisaatiomuutoksia toteutetaan verrattain usein, ja merkittävissä työn muutoksissa riskinä on työntekijöiden hyvinvoinnin vaarantuminen. Työntekijöiden hyvinvoinnin ja sitä kautta myös organisaatiomuutosten onnistumisen edistämiseksi on tärkeää ymmärtää, miten työntekijöiden kokemukset kehittyvät ja vaikuttavat toisiinsa organisaatiomuutosten aikana.

Ensimmäisen osatutkimus esitteli teoreettisen mallin, joka käsittelee työntekijöiden työn imuun vaikuttavia tekijöitä organisaatiomuutoksissa. Työn imulla tarkoitetaan myönteistä työssä koettua tunne- ja motivaatiotilaa.

Väitöstyön kahdessa muussa osatutkimuksessa testattiin mallin kahta olettamaa. Kyseinen testaus perustui pitkittäiskyselyaineistoon ($N = 623$), joka kartoitti työntekijöiden kokemuksia Helsingin kaupungin sosiaali- ja terveysviraston fuusiosta vuosina 2012–2014. Aineisto kerättiin kolmena ajankohtana: noin kuukausi ennen fuusioitumista, vuosi fuusion jälkeen ja kaksi vuotta fuusion jälkeen. Aineisto analysoitiin tilastollisin menetelmin.

Toisen osatutkimuksen tulokset osoittivat, että työntekijöiden luottamus ylintä johtoa kohtaan ja myönteiset fuusioon liittyvät oikeudenmukaisuuskokemukset pääsääntöisesti vahvistivat toinen toisiaan fuusioprosessin aikana. Sen lisäksi, että myönteiset kokemukset fuusioprosessin oikeudenmukaisuudesta edistivät luottamusta, johtajiinsa luottavat työntekijät myös arvioivat fuusioprosessin oikeudenmukaisemmaksi.

Kolmannessa osatutkimuksessa havaittiin, että työn imu ja työntekijöiden pärjäämisarviot vahvistivat toinen toisiaan fuusion aikana. Mitä enemmän työntekijät arvioivat tulevien muutosten olevan itselleen myönteisiä ja uskoivat sopeutuvansa muutoksiin, ja mitä enemmän nämä odotukset vahvistuivat, sitä enemmän myös työn imu vahvistui fuusion ensimmäisen vuoden aikana. Vastaavat kielteiset odotukset olivat puolestaan yhteydessä työn imun heikentymiseen läpi fuusioprosessin. Ennen fuusiota ja sen aikana korkea työn imu ja työn imun vahvistuminen olivat yhteydessä kielteisten odotusten vähentymiseen ja myönteisten odotusten vahvistumiseen. Työn imun kokeminen ja sen yleistyminen ruokkivat myöhempää työn imua erityisesti vähentämällä työntekijöiden kielteisiä odotuksia muutosta kohtaan.

Väitöstutkimuksen perusteella työntekijöiden luottamus ja oikeudenmukaisuusarviot rakentuvat sekä työn imu ja pärjäämisarviot kehittyvät vahvistamalla toinen toisiaan organisaatiomuutosten eri vaiheissa. Nämä prosessit voivat joko johtaa työntekijöiden hyvinvointia ja sopeutumista edistävään tai näitä tekijöitä heikentävään kierteeseen. Organisaatiomuutosten tutkimuksessa ja toteuttamisessa olisikin tärkeää huomioida työntekijöiden muutoskokemuksien kehittymiseen liittyvät dynaamiset ja kaksisuuntaiset vaikutussuhteet.

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Helsinki, September 2018
Janne Kaltiainen

CONTENTS

LIST OF ORIGINAL PUBLICATIONS

This thesis is based on the following publications:

I   Kaltiainen, J., Lipponen, J., & Petrou, P. (2018). Dynamics of trust and fairness during organizational change: Implications for job crafting and work engagement. In M. Vakola & P. Petrou (Eds.), *Organizational change: Psychological effects and strategies for coping*, p. 90-101. Abingdon, Oxon: Routledge.

II   Kaltiainen, J., Lipponen, J., & Holtz, B. C. (2017). Dynamic interplay between merger process justice and cognitive trust in top management: A longitudinal study. *Journal of Applied Psychology,* 102(4), 636-647. doi:10.1037/apl0000180

III Kaltiainen, J., Lipponen, J., Fugate, M. & Vakola, M. Spiraling work engagement and change appraisals: A three-wave longitudinal study during organizational change. (Manuscript submitted for publication)

In the text, the publications are referred to by their Roman numerals. The original articles are reprinted here with the kind permission of the copyright holders Taylor and Francis Group (I) and American Psychological Association (II).

ABBREVIATIONS

CFI	Comparative fit index
LCSM	Latent change score modeling
RMSEA	Root mean square error of approximation
RQ	Research question
SRMR	Standardized root mean square residual
T1	Time 1
T2	Time 2
T3	Time 3
TLI	Tucker-Lewis index

1 INTRODUCTION

Organizational changes characterize today's working life. The number of organizational mergers and acquisitions is at an all-time high and organizations are restructured frequently (Deloitte, 2018; Eurofound, 2012, 2015; Sutela & Lehto, 2014; Thomson Reuters, 2017). Such changes are often initiated to improve organizational efficiency and achieve competitive advantages (Cartwright & Schoenberg, 2006; Marks, 1997; cf. Sorge & Van Witteloostuijn, 2004). However, a considerable number of organizational changes fail to achieve their strategic and operational goals (Cameron, 1994; Haleblian, Devers, McNamara, Carpenter, & Davison, 2009; King, Dalton, Daily, & Covin, 2004; Schoenberg, 2006; Smith, 2002; Tuch & O'Sullivan, 2007; cf. Hughes, 2011; Risberg & Meglio, 2012).

A plethora of research has suggested that organizational changes fall short especially because they fail to take into account the human factor, that is, employees' experiences, responses, and perspectives of the change events (e.g., DeVoge & Shiraki, 2000; Epstein, 2005; Gunkel, Schlaegel, Rossteutscher, & Wolff, 2015; Seo & Hill, 2005). While employees ultimately make or break the best-laid plans of change managers and leaders (e.g., Armenakis, Harris, & Mossholder, 1993; Bartunek, Rousseau, Rudolph, & DePalma, 2006; Fugate, 2012), organizational changes are often associated with detrimental effects on employees' psychological experiences. Such effects include reduced commitment, job satisfaction, and trust, and increases in uncertainty, threat perceptions, negative emotions, and turnover (Edwards, Lipponen, Edwards, & Hakonen, 2017; Fedor, Caldwell, & Herold, 2006; Fugate, Kinicki, & Scheck, 2002; Kiefer, 2005; Lines, Selart, Espedal, & Johansen, 2005; Morgan & Zeffane, 2003; Oreg, Michel, & By, 2013; Oreg, Vakola, & Armenakis, 2011; Paulsen et al., 2005; Rafferty & Restubog, 2010).

Failure to attend to these critical psychological effects does not only have adverse consequences for employees' well-being, but they are likely to disrupt the organizations' functioning. Such disturbances have detrimental downstream effects for those citizens, students, clients, patients, or customers who use and whom well-being is affected by the services of the changing organizations (Giessner, Horton, & Humborstad, 2016). Therefore, to improve the success of organizational change endeavors, and the well-being of the employees and those who use and consume the organizations' services, it is essential to study, understand, and manage employees' experiences and perceptions during change events.

The main aim of this dissertation is to advance the understanding concerning the dynamism in employees' psychological experiences and reactions during unfolding organizational change events. This aim is two-fold. First, the current study seeks to provide a theoretical framework of the key psychological

processes influencing employees' work engagement during organizational change and their dynamic relationships. Work engagement represents a positive affective-motivational state experienced while working (Schaufeli, Salanova, González-romá, & Bakker, 2002). As work engagement has been found to predict various crucial outcomes, such as performance, commitment, and well-being (e.g., Bailey, Madden, Alfes, & Fletcher, 2017), employees who are and stay engaged are a crucial part of successful organizational changes.

The first aim of the dissertation is addressed by developing a comprehensive theoretical model. This model focuses on the impact of employees' leader-related perceptions (i.e., trust and fairness) on change reactions and behaviors during change (i.e., cognitive appraisals and job crafting) and work engagement (Article I). Notably, the model elaborates the reciprocal nature of employees' trust and fairness perceptions across two levels of organizational leadership, and the dual-role of work engagement in organizational changes; as a consequence and as an antecedent of cognitive appraisals of the change event. The developed theoretical model complements and contributes to the existing theoretical understanding by synthesizing theorizing and findings from relatively separate domains of research, including organizational change, trust, fairness, cognitive appraisals, and work engagement (e.g., Fugate, 2013; Holtz, 2013; Van den Heuvel, Demerouti, Schaufeli, & Bakker, 2010).

As a second aim, the dissertation seeks to unravel the dynamics between employees' perceptions of leaders' characteristics (i.e., cognitive trust) and actions (i.e., fairness perceptions), and between employees' cognitive change reactions and work engagement during unfolding change events. Whereas the former focuses on employees' change experience regarding organizational leadership, the latter represent employees' cognitions and positive affective-motivational experiences in relation to one's work. This aim is addressed through an empirical examination that was conducted during a significant organizational change, an organizational merger. This investigation comprised two substudies that both utilized a three-wave longitudinal survey data (N = 623) collected across two years of the merger of the City of Helsinki's departments of Social and Health Care. These substudies test the following two propositions of the developed theoretical model (Articles II and III).

The first proposition of the theoretical model that is empirically tested focuses on reciprocal relationships between employees' cognitive trust in top management and fairness perceptions during an organizational merger (Article II). Whereas cognitive trust reflects employees' evaluations of top management's characteristics, fairness evaluations represent perceptions of top management's actions. The substudy addressed the following research questions: *are employees' fairness perceptions and cognitive trust towards top management reciprocally associated over time? Is the unidirectional relationship from employees' fairness perceptions to cognitive trust in top management stronger than vice versa?* In so doing, the substudy extends the current theoretical understanding concerning the relationships between trust and fairness perceptions. This is achieved by testing competing hypotheses drawn from

different theoretical perspectives: social exchange theory (Blau, 1964) which suggests that fairness perceptions are a result of trust-related perceptions, and confirmation bias perspective (Wason, 1960) positing that trust-related perceptions may influence fairness perceptions. By this, the study provides a new test of recent theorizing suggesting that trust and fairness are reciprocally related (Holtz, 2013), which challenges the commonly accepted notion of trust simply as an outcome of fairness perceptions. Furthermore, shedding light on how employees' trust evaluations and fairness perceptions evolve is important as they both have a notable impact on employees' change reactions, well-being, and motivation (e.g., Fugate, 2013; Oreg et al., 2011).

The second empirically tested proposition of the dissertation's theoretical model investigates reciprocal relationships between employees' cognitive appraisals of change and work engagement (Article III). In addition to extending the current understanding of how employees' negative (threat) and positive (challenge) cognitive change reactions affect work engagement, the substudy tested whether work engagement may also act as an antecedent of these same reactions. These reciprocal relationships are expected to result in spirals wherein changes in work engagement and appraisals reinforce each other across the merger. The substudy addressed the following research questions: *are employees' work engagement and changes in engagement reciprocally and over time associated with challenge and threat appraisals and changes in these appraisals? Is the relationship from work engagement to threat appraisal stronger than to challenge appraisal? Is the relationship from threat appraisal to work engagement stronger than from challenge appraisal?* As a theoretical contribution, the substudy extends a central supposition of the broaden-and-build theory (Fredrickson, 1998) by coupling it with crucial aspects of the cognitive appraisal theory (Lazarus & Folkman, 1984). Whereas broaden-and-build theory focuses on how positive affective states (e.g., work engagement) build over time through fostering positive cognitions or states of mind (e.g., finding positive meaning, hope, optimism; for a review, see Kiken & Fredrickson, 2017), this theorizing is expanded by examining associations between work engagement and both positive (i.e., challenge) and negative cognitions (i.e., threat; Lazarus & Folkman, 1984).

The current dissertation contributes to the research on organizational changes as follows. While previous research has provided substantial insights into employees' psychological reactions to change (for reviews, see Choi, 2011; Oreg et al., 2013; Oreg et al., 2011), it has focused on relatively simple, one-way relationships that do not capture the more complex dynamics of the psychological processes. For example, reciprocal relationships or feedback loops over time (i.e., bidirectional, two-way relationships) and changes in employee experience have often not been accounted for by researchers. By addressing these gaps, the present study helps to achieve a more complete understanding concerning the complexity of employees' change experiences and the causal relationships among related constructs during unfolding change events (Isabella, 1990; Mack, Nelson, & Quick, 1998; Oreg et al., 2011).

By examining the longitudinal processes of employees' psychological change experiences, the present study sheds light on the role of time in psychological experiences during unfolding demanding encounters (Aspinwall & Taylor, 1997; Folkman & Moskowitz, 2004; Hobfoll, 1989, 2011; Lazarus & Folkman, 1984; Schwarzer & Knoll, 2003). Therefore, the dissertation advances not only organizational change research but also the field of industrial and organizational psychology in general. As stated in a recent review on the topic:

> *[In future research] we must include a focus on time, and its relevance to process phenomena (i.e., moment-to-moment). It is time to focus more on time, emergence, and dynamic phenomena in our science. Time matters in all that we study. And even more in practice.*

> *(Salas, Kozlowski, & Chen, 2017, pp. 594-596; content in brackets added)*

This dissertation comprises a theoretical article (Article I), two empirical studies (Articles II and III), and the present summary. The structure of the summary is as follows. Chapters 2 and 3 present the background of the dissertation. Chapter 2 includes the review of existing literature about employees' psychological change experiences, definition of the focal constructs, and outline of the gaps in the reviewed literature. Chapter 3 focuses on the constructs examined empirically in the dissertation and therefore provides the theoretical background for reciprocal relationships between trust and fairness, as well as work engagement and cognitive appraisals. This chapter concludes with the presentation of the general aims of the dissertation. Chapter 4 introduces the developed theoretical model of the dissertation (Article I). This comprehensive model builds on the reviewed literature as presented in Chapters 2 and 3, and recent developments in other relevant domains of research as described in Chapter 4. Chapter 5 describes the empirical research questions, method, and main findings of the dissertation (Articles II and III). This chapter represents a partial test of the theoretical model. Lastly, Chapter 6 comprises the discussion of the dissertation, which elaborates the contributions to theory, research, and practice, together with discussing the limitations of the study and outlining future research directions.

2   CONCEPTUAL FRAMEWORK OF THE STUDY

This chapter presents a review of the previous literature regarding the psychological effects of organizational changes with an emphasis on the key concepts of this study: trust in leaders, fairness perceptions, cognitive appraisals, job crafting, and work engagement. While the main contribution of this dissertation focuses on unraveling the reciprocal and dynamic nature of employees' change experiences, the structure of the present chapter follows the commonly applied sequential approach. Sequential approach refers to research that examines unidirectional relationships among constructs categorized as antecedents, change reactions, and subsequent change consequences. The chapter concludes by discussing potential limitations of the sequential approach and proposing that investigating more complex (i.e., dynamic and reciprocal) models may provide new valuable insights regarding the direction of causality and how employee experience evolves during unfolding organizational change events. The present review builds on previous literature reviews and theoretical frameworks on the topic (Choi, 2011; Fugate, 2013; Mishra & Spreitzer, 1998; Oreg, Bartunek, Lee, & Do, 2018; Oreg et al., 2011; Rafferty, Jimmieson, & Armenakis, 2013; Rafferty, Jimmieson, & Restubog, 2013; Van den Heuvel et al., 2010). Before reviewing the existing literature in more detail, I discuss the chosen perspective of the present dissertation as well as define the terms employee and organizational change, as employed in the current study.

The current study represents an examination of the psychological aspects of organizational changes (Cartwright, 2012; Choi, 2011; Oreg et al., 2013), specifically focusing on individuals' (i.e., employees') experience and responses to organizational change events. More generally, the current perspective falls under the sociocultural approach, which in addition to individual responses (as in the current study) typically includes investigation of organizational culture, knowledge management, power, and politics (Faulkner, Teerikangas, & Joseph, 2012). Studies in this domain have also been called as an examination of people factors (DeVoge & Shiraki, 2000) or the human side of organizational change (Buono & Bowditch, 1989; Seo & Hill, 2005). While other disciplines of organizational change research, such as strategic management and financial approaches have been dominant, during recent decades a growing body of research has focused on the psychological effects and employees' perspective of organizational changes (Cartwright, 2012; Oreg et al., 2013). By *organizational change research*, in this dissertation, I refer to research about employees' psychological experiences of organizational changes.

The importance of examining the psychological aspect of organizational changes is apparent for the following two reasons. First, organizational changes are often associated with detrimental effects on employees' well-being (Oreg et al., 2011; Rafferty & Restubog, 2010). Second, the human factor of

organizational change, such as how employees' respond and adjust to change events, is a crucial determinant for change success (e.g., Armenakis et al., 1993; King et al., 2004).

By *employee*, I refer to all organizational groups, including management and non-management employees, such as top and middle management, and supervisor- and employee-levels. This conceptualization differs from the concept of change recipient, which the literature examining psychological effects of organizational change has employed (e.g., Oreg et al., 2011; Vakola, 2016). The term change recipient typically refers to those organizational groups who have only limited or no influence on the change decision itself or how the changes are implemented. As the current study does not exclude any of the organizational groups, with the exception when examining others' perceptions of organizational leaders which excludes the leaders themselves, in the present summary, I use the concept of the employee.

By *organizational change*, I refer to changes that influence how an organization operates. Examples of such changes are merger and acquisitions, cultural changes (e.g.., developing customer-orientation), new IT systems and technology changes, process improvement, restructuring organizational groups or units, changes in organizational leadership, and deployment of new strategies (Eurofound, 2012; Smith, 2002; Sutela & Lehto, 2014).

The following subchapter presents the typology and focal constructs as utilized and identified in the existing literature of employees' psychological experiences during organizational changes. This presentation follows the conventional categorization of factors into antecedents, change reactions, and change consequences, respectively.

2.1 ANTECEDENTS OF CHANGE REACTIONS

2.1.1 DEFINITION AND TYPOLOGY

Existing literature has categorized the antecedents (i.e., predictors) of employees' psychological reactions into two categories: factors related to individual employee's personality, and the situation and context. Personal factors represent, for example, employees' coping styles, personal resources, change orientation, employability, needs, and demographic variables. Situational antecedents include a person's work environment (e.g., job design, organizational culture, and a supportive environment) and factors related to organizational leadership. (Fugate, 2013; Oreg et al., 2011.) While change management, in general, is considered to be a key determinant of organizational change success (By, Hughes, & Ford, 2016; Kavanagh & Ashkanasy, 2006; Kotter, 1996), this dissertation focuses specifically on employees' trust in leaders and leader-related fairness perceptions (Articles I and II) as they have a substantial impact on employees' change reactions, as described in the following.

2.1.2 TRUST IN LEADERS

Organizational scholars have conceptualized and measured trust variables in diverse ways (McEvily & Tortoriello, 2011; Schoorman, Mayer, & Davis, 2007). Therefore, before discussing the beneficial effects of trust, I first define the concept of trust, as utilized in the present summary.

Trust as a psychological state is defined as willingness or readiness to be vulnerable to the actions of another party (Mayer, Davis, & Schoorman, 1995; see also Rousseau, Sitkin, Burt, & Camerer, 1998) and is conceptually distinct from the affective and cognitive trust. Affective trust refers to emotional connections between the trustor (i.e., the one who trusts) and trustee (i.e., the target of trust), whereas cognitive trust refers to trustor's evaluation of the trustee's competence, responsibility, and reliability (McAllister, 1995). Therefore, affective trust represents relationship-based trust while cognitive trust refers to character-based trust, that is, evaluation of trustee's characteristics (Dirks & Ferrin, 2002). Mayer et al. (1995) elaborated the evaluations of trustee's characteristics by postulating three facets of trustworthiness evaluations—ability, integrity, and benevolence—as central building blocks for the psychological state of trust (see also Mayer & Davis, 1999). For the sake of brevity, in the present summary, I use *trust* as an overarching concept that encompasses work involving the psychological state of trust, cognitive and affective trust, and perceptions of trustworthiness. This is because past research has not always conceptually or operationally distinguished between the various trust-related constructs, which are also often strongly interconnected (Colquitt, Scott, & LePine, 2007).

Importantly, during times of uncertainty individuals are more mindful of their vulnerability and therefore pay particular attention to trust-related information (Dirks & Ferrin, 2002; Li, 2012). Thus, organizational changes are likely to accentuate the effects of trust in leaders on employees' well-being, motivation and other critical psychological experiences (Lines et al., 2005; Morgan & Zeffane, 2003). Relatedly, Fugate (2013) argued that trust in leaders mitigates employees' negative cognitive reactions to change events (i.e., threat) and cultivates similar positive reactions, that is appraising the change as a positive challenge (see also Mishra & Spreitzer, 1998). Accordingly, organizational change studies have found trust in leaders to be positively associated with commitment, performance, citizenship behavior, and negatively with turnover intentions (Neves & Caetano, 2006, 2009). Notably, in their review of organizational change research, Oreg et al. (2011) found that trust in management yielded strongest positive associations with employees' change reactions (e.g., acceptance of change, co-operation) in comparison to other examined antecedents. Studies conducted in other work settings have found trust in leaders to be positively related to various outcomes, such as employees' performance, organizational citizenship behavior, job satisfaction, belief in the given information, and organizational commitment (for reviews and meta-analyses, see Dirks, 2006; Dirks & Ferrin, 2001; Dirks & Ferrin, 2002; Fulmer & Gelfand, 2012).

2.1.3 FAIRNESS PERCEPTIONS

The development of organizational justice research has been characterized by four waves that have defined the focus of research and development of theory (Colquitt, Greenberg, & Zapata-Phelan, 2005).[1] The first wave focused on distributive justice, which refers to the fairness of outcome allocations (Adams, 1965). The subsequent procedural justice wave shifted the focus to the fairness of procedures (Leventhal, 1980; Thibaut & Walker, 1975) which was followed by attending to the fairness of interactions (Bies & Moag, 1986). Interactional justice was later separated into informational (i.e., accuracy and quality of explanations) and interpersonal (i.e., given respect and concern) subfacets (Greenberg, 1993). While organizational fairness scholars have often conceptualized fairness by the four subfacets (i.e., procedural, informational, interpersonal, distributive; see Colquitt, 2001), a view of a more holistic conceptualization of overall justice wherein the subfacets are integrated, has gained growing scholarly attention (e.g., Bobocel & Gosse, 2015; Brockner, Wiesenfeld, & Diekmann, 2009; Holtz & Harold, 2009). In accordance with the integrative wave, and as the facets of fairness are often highly correlated (Colquitt & Rodell, 2015; Colquitt & Shaw, 2005), for the sake of brevity, I use fairness perceptions in this dissertation as a comprehensive concept involving research examining both, the perceptions of specific facets of justice and overall justice.

Similarly to trust in leaders, fairness perceptions are expected to be particularly salient during uncertain times, and they help to alleviate feelings of insecurity and uncertainty (Lind, 2001; Van den Bos & Lind, 2002). Accordingly, organizational change studies have suggested that fairness helps to mitigate employees' perceptions of threat, uncertainty, cynicism, and turnover, while fostering change commitment, trust in leaders, and adjustment to change (Edwards et al., 2017; Fugate, 2013; Koivisto, Lipponen, & Platow, 2013; Melkonian, Monin, & Noorderhaven, 2011; Mishra & Spreitzer, 1998; Monin, Noorderhaven, Vaara, & Kroon, 2013; Oreg et al., 2011; Taylor, 2015). In addition, a substantial number of studies have demonstrated the benefits of favorable fairness perceptions in other work settings, as fairness is related to various outcomes such as higher job performance and citizenship behavior and lower counterproductive work behavior (for meta-analyses, see Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Colquitt et al., 2013; Rupp, Shao, Jones, & Liao, 2014). Therefore, leading in a fair manner represents an essential tool for managers to foster employees' well-being, adjustment, performance, and the organizational efficiency, particularly during turbulent times (see also Tyler & De Cremer, 2005).

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[1] In the present summary, the concepts of fairness and justice are employed interchangeably. While this decision follows the conventional use, it differs from a recently introduced alternative by Colquitt and Zipay (2015) as they differentiate facets of justice from holistic fairness perceptions.

2.2   CHANGE REACTIONS

2.2.1   DEFINITION AND TYPOLOGY

To illustrate the extensive range of constructs related to employees' change reactions, in their review Oreg et al. (2011) categorized employees' change reactions into affective, behavioral, and cognitive dimensions (see also Piderit, 2000). Affective change reactions reflect what employees' feel during and about the organizational changes. In their recent affect-based model of change recipients' reactions, Oreg et al. (2018) described how affective reactions vary in valence (i.e., negative-positive) and activation (i.e., high-low). By activation, the authors referred to affect-related levels of energy and readiness to take behavioral action because of the affective state. Examples of affective states characterized by low activation and negative valence were desperation, sadness, and helplessness. Conversely, affects such as excitement and enthusiasm represented affective states that are high in activation and positive in their valence.

Behavioral reactions to change are employees intended actions in response to change event. Examples of such behavioral reactions are employees' change involvement and support, commitment to change, and coping behaviors or strategies (for a review, see Oreg et al., 2011). As a proactive behavior that fosters psychological change consequences, scholars have recently investigated employees' job crafting behaviors (Petrou, Demerouti, & Schaufeli, 2015). Chapter 2.2.3 elaborates the role of job crafting in the context of organizational changes.

Cognitive change reactions refer to what employees think about the change, including concepts such as change beliefs and evaluation (for a review, see Oreg et al., 2011), change readiness (Armenakis et al., 1993; Rafferty, Jimmieson, & Armenakis, 2013), and sense-making (Bartunek et al., 2006). Oreg et al. (2011) categorized cognitive reactions into employees' evaluations of the value and meaning of the change event either for the organization in general or personally for themselves. As an example of the former are employees' perceptions whether the proposed changes are, in general, for the better (Wanberg & Banas, 2000). As an example of the latter, scholars have examined employees' change appraisals (Fugate, 2013; Mishra & Spreitzer, 1998). The following chapter focuses on change appraisals as they represent one of the key concepts in the present dissertation (see articles I and III).

2.2.2   COGNITIVE APPRAISALS OF CHANGE: NEGATIVE AND POSITIVE

Change appraisal refers to a cognitive process by which employees ascribe personal meaning to change events, such as whether a change is positive for them personally and provides potential future benefits (i.e., challenge appraisal), or whether the change is negative and may generate potential future losses (i.e.,

threat appraisal; Fugate, 2013; see also Bardi, Guerra, & Ramdeny, 2009). The study of change appraisals draws from the cognitive appraisal theory, also known as the transactional approach to stress or cognitive theory of stress, by Lazarus and Folkman (1984).

In the cognitive appraisal theory, Lazarus and Folkman (1984) emphasized that to understand why people react differently in similar situations, it is essential to examine individuals' subjective and cognitive appraisals of the demanding encounters (see also Lazarus, 1966). As stated by the authors:

> *Under comparable conditions ... one person responds with anger, another with depression, yet another with anxiety or guilt; and still others feel challenged rather than threatened.*
>
> *Lazarus & Folkman, 1984, p. 22-23*

The cognitive appraisals of demanding encounters can be negative (i.e., harm, threat) or positive (i.e., challenge). While *harm appraisal* refers to a retrospective evaluation of occurred harms for oneself because of the encounter, threat and challenge reflect individual's expectations regarding one's adjustment and the personal impact of the upcoming organizational change. Specifically, *threat appraisal* is characterized by anticipation of future losses or harm for oneself and low expectations regarding one's future adjustment, whereas *challenge appraisal* reflects positive expectations and potential future benefits, together with confidence to prevail in the face of demanding events. (Lazarus & Folkman, 1984; see also Bardi et al., 2009; Fugate, 2013.) Lazarus and Folkman therefore recognize the potential beneficial or positive consequences of stressful encounters as they may be appraised positively as challenges, which are associated with constructive coping efforts and actions (see also Levi, 1971; Selye, 1976).

Relatedly, threat and challenge should not be understood as opposite ends on a single continuum (i.e., mutually exclusive), but as separate yet interrelated dimensions of an individual's cognitive appraisals. Although threat and challenge appraisals are distinguished from one another, they can coincide. This is especially so because demanding encounters may include both positive and negative sides for oneself. (Lazarus & Folkman, 1984; see also Folkman & Lazarus, 1985; Roseman & Smith, 2001.) For instance:

> *A job promotion, for example, is likely to be appraised as holding the potential for gains in knowledge and skills, responsibility, recognition, and financial reward. At the same time, it entails the risk of the person being swamped by new demands and not performing as well as expected. Therefore, the promotion is likely to be appraised as both a challenge and a threat.*
>
> *Lazarus & Folkman, 1984, p. 33*

> *The takeover of one's employer by a larger corporation may, for instance, be appraised as an opportunity for a quick rise in the executive ranks, or it may be perceived as spelling a rash of job lay-offs.*
>
> Hobfoll, 1989, p. 519

Accordingly, research has shown that organizational change generates mixed (i.e., positive and negative) employee reactions to change (Fugate, 2013; Fugate, Kinicki, & Prussia, 2008; Fugate & Soenen, 2018; Piderit, 2000; Rafferty & Restubog, 2017). Nevertheless, existing research on employees' reactions to organizational changes has focused disproportionately on employees' negative reactions to change (e.g., threat, uncertainty, disruption) while excluding positive appraisals (Fugate, 2013). While organizational changes are often perceived as events with negative consequences for the employees (e.g., Fugate, Prussia, & Kinicki, 2012; Oreg et al., 2013; Rafferty & Griffin, 2006), this supposition may not hold true for all the employees and all the change events. For example, in the case of an acquisition where a larger corporation subsumes a smaller organization, employees from the smaller organization often face the threat of substantial layoffs and are, therefore, more likely to perceive the event negatively. However, in the so-called merger of equals or changes that are not characterized by substantial layoffs, it is reasonable to expect that employees may have (also) positive personal expectations regarding the upcoming change event. To capture the spectrum of employees' reactions more fully, it is essential to examine the dynamics of employees' negative and positive cognitive reactions to organizational change events.

Studies conducted in the context of organizational change have established the value of change appraisals by linking them to several important outcomes. Studies have found threat appraisal to be associated negatively with employees' coping and positive emotions, and positively with negative emotions, absenteeism, and quit intentions (Fugate, Harrison, & Kinicki, 2011; Fugate et al., 2008; Fugate et al., 2012). The few organizational change studies that have examined also challenge appraisals have found challenge to be more strongly related to perceptions of psychological contract violations (Rafferty & Restubog, 2017) and support towards change (Fugate & Soenen, 2018) than threat appraisals. Relatedly, Herold, Fedor, and Caldwell (2007) found that employees' change self-efficacy (i.e., beliefs about one's ability to meet and prevail in the face of situational demands) was positively associated with commitment to change. Taken together, employees' change-related appraisals provide important insights into the experience of change, as well as guidance on how to enhance employees' positive while mitigating negative reactions and outcomes (Fugate, 2013) thus warranting their examination in the present dissertation (see articles I and III).

2.2.3   JOB CRAFTING

Job crafting represents proactive behaviors and actions that employees' themselves take to improve their job characteristics to better meet their preferences (Tims, Bakker, & Derks, 2012). Job crafting therefore represents employees' endeavors to change their work, or as stated by Wrzesniewski and Dutton (2001), "job crafters create different jobs for themselves, within the context of defined jobs" (p. 180). In the context of organizational changes, job crafting represents behavioral strategies that employees may employ to foster positive work-related outcomes, such as their work engagement and adjustment to change (Petrou, Demerouti, & Schaufeli, 2015; Van den Heuvel et al., 2010). Such job crafting strategies in organizational change context include seeking challenges (e.g., taking up additional and motivating tasks), seeking resources (e.g., asking others for feedback and advice), or reducing demands (e.g., eliminating one's cognitive or emotional job demands; Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012)

In the utilized typology of antecedents, change reactions, and change consequences, job crafting is best described as a behavioral reaction. However, whereas other behavioral reactions to change, such as employees' support or resistance to change, refer to behaviors that aim at facilitating or hindering organizational change (e.g., Herscovitch & Meyer, 2002), job crafting behaviors rather target employees' own work and its boundaries.

Organizational change studies have shown job crafting to be predicted, for instance, by employees' perceptions of leadership behaviors (i.e., change communication; Petrou, Demerouti, & Schaufeli, 2018) and orientation towards the change (Petrou, Demerouti, & Schaufeli, 2015). Studies have also shown that factors related to personal dispositions or resources, such as individual motivational style (i.e., focus either on gains or losses), and job autonomy, predict job crafting (Petrou, Demerouti, & Häfner, 2015; Petrou et al., 2012; Petrou et al., 2018). In regard to the consequences of job crafting, studies have demonstrated that job crafting is positively related to various positive change consequences, such as employees' work engagement, adaptivity to change, task performance, and negatively associated with exhaustion (Petrou et al., 2012; Petrou, Demerouti, & Schaufeli, 2015; Petrou et al., 2018; Petrou, Demerouti, & Xanthopoulou, 2017). In the current study, the role of job crafting is postulated in the dissertation's theoretical model (see Article I; Chapter 4).

2.3   CHANGE CONSEQUENCES

2.3.1   DEFINITION AND TYPOLOGY

Oreg et al. (2011) categorized the psychological consequences of organizational changes into work-related and personal consequences. Examples of the critical work-related consequences, as identified in the literature, are employees' job

satisfaction, organizational commitment, and performance. Personal consequences include employees' well-being, health, emotions, perceptions of psychological contract violation, and withdrawal behaviors such as voluntary turnover and absenteeism. (Fugate et al., 2012; Mishra & Spreitzer, 1998; Oreg et al., 2018; Oreg et al., 2011; Rafferty, Jimmieson, & Restubog, 2013.)

The following chapter focuses on work engagement, as it is one of the focal constructs of the current study (Articles I and II). I have chosen to present work engagement as part of the present chapter of change consequences, as prior organizational change research has examined work engagement as a psychological change consequence, that is, as an outcome of change reactions (e.g., Petrou et al., 2018). Furthermore, work engagement as a concept is related to other typical personal change consequences, such as employees' well-being and emotions (e.g., Oreg et al., 2011).

2.3.2 WORK ENGAGEMENT

Work engagement is defined as a fulfilling, positive, work-related affective-motivational state, which is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). Vigor refers to mental resiliency and high levels of energy while working. Dedication is characterized by a sense of enthusiasm, pride, significance and inspiration, and deep involvement in one's work. Absorption refers to an experience of being fully engrossed in one's work and concentrated. (Schaufeli, Bakker, & Salanova, 2006; Schaufeli et al., 2002.) Engaged individuals are motivated, and experience positive emotions such as happiness, joy, and enthusism while working (Bakker & Demerouti, 2008).

While work engagement shares similarities with the concept of 'flow' (i.e., being fully immersed, distortion of time, focused attention; Csikszentmihalyi, 1990), flow typically refers to short-term peak experiences whereas work engagement represents a more enduring and pervasive state of mind (Schaufeli et al., 2002). Despite work engagement being a relatively enduring state of mind, studies have shown that engagement also changes within individuals over time (Bakker, Albrecht, & Leiter, 2011; Christian, Garza, & Slaughter, 2011; Makikangas, Feldt, Kinnunen, & Tolvanen, 2012; Sonnentag, Dormann, & Demerouti, 2010). Work engagement therefore represents a malleable state that may be fostered by the organizations and individuals themselves (see Bakker & Leiter, 2010).

Studies have shown engagement to be associated with several organizational outcomes, such as higher employee performance, well-being, organizational commitment, and lower turnover intentions (for reviews and meta-analyses, see Bailey et al., 2017; Christian et al., 2011; Halbesleben, 2010). However, while work engagement has generated a considerable amount of research conducted in various work settings, less is known about work engagement in the context of organizational changes.

The few empirical studies that have examined work engagement during organizational change have positioned engagement solely as an outcome of employees' reactions to change. This research has found employees' job crafting and prevention focus (i.e., need for safety, sensitivity for losses) to predict work engagement (Petrou, Demerouti, & Häfner, 2015; Petrou et al., 2012; Petrou et al., 2018; Petrou, Demerouti, et al., 2017). While these few studies have examined antecedents of work engagement in the context of organizational change, to date studies have not investigated the potential beneficial effects of engagement during organizational change events.

2.4 LIMITATIONS IN EXISTING FRAMEWORKS AND RESEARCH

In this chapter, I argue that the majority of previous organizational change research has not sufficiently captured the inherently dynamic nature of employees' change-related experiences. By dynamic nature, I refer to reciprocal relationships (i.e., two-way, bidirectional, reverse causality) between constructs and the role of changes in employee experience during unfolding organizational change events. The following chapter outlines concerns regarding the limitations of previous research, together with providing means to overcome them.

2.4.1 IS IT ONLY A ONE-WAY STREET? A CRITICAL PERSPECTIVE ON UNIDIRECTIONAL RESEARCH

The existing research has predominantly applied a sequential perspective for investigating and understanding the employees' psychological experiences in the context of organizational change. While such research has provided essential knowledge regarding the means to enhance and improve desirable psychological outcomes through influencing the antecedent and process constructs, in the following I outline the limitations of focusing solely on one-way, sequential relationships.

First, unidirectional theoretical frameworks and research may provide an incomplete, or even potentially erroneous, picture regarding the direction of causality between specific constructs. For instance, in their review, Oreg et al. (2011) posited employees' self-efficacy (i.e., individuals' beliefs regarding their capability to succeed generally or during an organizational change) as a predictor of change reactions. Self-efficacy beliefs are therefore expected to act as antecedents of various change reactions and consequences, such as employees' job performance. However, recent research by Sitzmann and Yeo (2013) suggested that the story may not be as simple as this. In their meta-analysis, the authors found that "self-efficacy is primarily a product of past performance rather than the driving force affecting future performance" (Sitzmann & Yeo,

2013, p. 531). Also, they stated that "the reason there are performance differences between people with high and low self-efficacy is because those with high self-efficacy have been successful in the past" (Sitzmann & Yeo, 2013, p. 556). As illustrated by this example, reciprocal research may provide an increased understanding concerning the causality between constructs and thus have the potential to produce profound contributions to theory, research, and practice.

As a second limitation, sequential modeling by its nature is not apt for testing spiraling and accumulative processes that are expected to occur over time via reciprocal feedback loops. This represents a significant shortcoming, as several frameworks posit this dynamism as essential for understanding how individuals' well-being evolve. For instance, Fredrickson's broaden-and-build theory (1998, 2001) posits that through initiating changes in cognition, positive emotions elicit subsequent increases in positive emotions. Similarly, Hobfoll's conservation of resources theory (1989) emphasizes the primacy of resource loss; those who lose resources are prone to further losses, resulting in decreasing well-being and adjustment to demanding environments. To investigate such reinforcing processes, it is necessary to examine longitudinal reciprocal relationships.

However, while the notion of reciprocity has been on the sideline of organizational change literature, it has not been entirely absent. As an example, while Oreg et al. (2011) posited unidirectional relationships from antecedents to change reactions, and consequently to change consequences, they acknowledged the potential limitation of the sequential modeling:

> *Yet another possible elaboration of our proposed [unidirectional] path model may include reversed paths of influence, such that recipients' reactions influence some of the antecedent categories ... Given that change is dynamic and often continuous, such reciprocal paths of influence seem very likely. Thus, alongside the research that the [present] model may elicit, such additional sets of relationships should also be considered.*

> *Oreg et al., 2011, p. 515-516 (content in brackets added)*

Similarly, in their theoretical framework, Oreg et al. (2018) stated in a footnote that "for clarity of presentation, we discuss cognitive appraisals as antecedents of affect" (p.72). At the same time, the authors acknowledged that the actual influence between cognitions and affect is more dynamic; reciprocal and cyclical (see also Forgas, 2008; Lazarus, 1999). Taken together, while all models by nature represent a simplification of reality (e.g., Box, 1976), unidirectional models bear a risk of presenting overly parsimonious representations that do not capture the proposed dynamism in employees' change experiences.

While the examples reviewed above have focused on unidirectional relationships, the following two theoretical models emphasize the reciprocal nature of employee change experience. First, in their dynamic stress model,

Mack et al. (1998) proposed that employees' perceptions, stress responses, and behaviors reinforce each other over time through reciprocal relationships. These processes result either in upward spirals with overarching benefits for employees' adjustment and success of organizational change or in downward spirals with the opposite effects. Second, in addition to positing work engagement as a favorable outcome during organizational changes, Van den Heuvel et al. (2010) proposed that engagement also reciprocally influences individual's positive beliefs, such as self-efficacy and hope, during unfolding change events. However, neither of the two frameworks have received considerable empirical attention in organizational change research (for a partial cross-sectional examination, see Kohler, Munz, & Grawitch, 2006). Therefore, several of the theorized propositions of existing reciprocal frameworks remain to be tested.

Even though organizational changes, as dynamic processes, provide an especially suitable context to examine reciprocal relationships in employee experience, only a few studies have examined the proposed dynamism. Fugate et al. (2011) found support for synchronous (i.e., cross-sectional) reciprocal relationships between employees' future-related negative appraisals (i.e., threat) and negative emotions at the outset of an organizational change. Similarly, Smet, Vander Elst, Griep, and De Witte (2016) found reciprocal within-person relationships between organizational communication, rumors, and job insecurity. A study by Van den Heuvel, Demerouti, and Bakker (2014) demonstrated a positive reciprocal relationship over time between favorable perceptions of leader-member exchange and employees' personal resources. Finally, Morin et al. (2016) found that employees' psychological empowerment was reciprocally and positively associated with perceptions of provided change support.

The lack of reciprocal research in the organizational change research may be partly due to limitations in the utilized study designs. Specifically, a vast number of studies have been cross-sectional (Barends, Janssen, ten Have, & ten Have, 2013; Oreg et al., 2011; Vakola, 2016). As in cross-sectional designs the constructs are not examined at different time points, such studies are more limited in examining reciprocal models. Study designs that measure the same constructs at several time points provide an opportunity to test for reverse causality and reciprocal relationships by comparing alternative models (Farrell, 1994). Such alternative models to be compared can be, for example, a model where construct A predicts construct B, a model where B predicts A, and a model where A and B predict each other over time. Relatedly, having the presumed causes to precede the outcomes is a necessary, yet not sufficient, condition for testing causal relationships (e.g., Pearl, 2000). While this condition can be satisfied in longitudinal study designs, cross-sectional designs are more limited in their causal inferences. Taken together, reciprocal longitudinal studies are likely to provide new and essential knowledge regarding the expected directions of causality.

While organizational change research has predominantly applied sequential perspective, considerable theorizing and empirical research in other domains support more complex reciprocal relationships. Examples of such reciprocal relationships are those between counter-productivity and stress (Meier & Spector, 2013), organizational citizenship behavior and trust (Halbesleben & Wheeler, 2015), service climate and customer loyalty (Salanova, Agut, & Peiró, 2005), commitment and income (Gao-Urhahn, Biemann, & Jaros, 2016), resources and well-being (Hakanen, Peeters, & Perhoniemi, 2011), cognition and affect (Forgas, 2008; Lazarus, 1999), and between trust and fairness perceptions (Holtz, 2013). Similarly, in their recent review about individual's responses to demanding encounters, Bliese, Edwards, and Sonnentag (2017) stated that several frameworks "posit a cyclical relationship between stressors, coping, and well-being, so we see opportunities to test and refine theory by examining long-term, dynamic relationships" (p.11). Another example originates from justice research, where a recent review concluded that "evidence from longitudinal designs also suggests that constructs typically classified as 'reactions' can sometimes be antecedents of justice perceptions" (Fortin, Cojuharenco, Patient, & German, 2016, p. 49). Despite acknowledging the variegated and dynamic experience of organizational change and the development in other domains of research, organizational change research is dominated by simpler, one-way relationships that often are inconsistent with the dynamism and complexity of employee experience.

Figure 1 presents a summary of the literature review together with illustrating the sequential and dynamic approaches to examining employees' change experiences (Choi, 2011; Fugate, 2013; Mishra & Spreitzer, 1998; Oreg et al., 2018; Oreg et al., 2011; Rafferty, Jimmieson, & Restubog, 2013; Van den Heuvel et al., 2010). The aim of the figure is not to present a comprehensive account of the wide range of constructs investigated in previous research, but to illustrate key examples in each category.
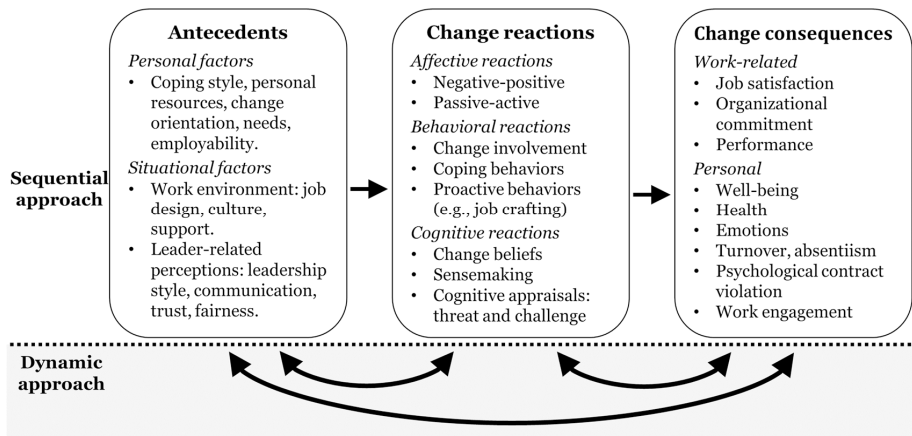
Figure 1 A summary of key antecedents, change reactions and consequences in the literature about psychological effects of organizational changes, and the approaches to examine their interrelationships. Variable lists are illustrative rather than comprehensive.

2.4.2   BEYOND SNAPSHOTS: THE ROLE OF CHANGES IN EMPLOYEE EXPERIENCE

Another considerable limitation in existing organizational change research is the lack of studies examining antecedents of changes in employee experience and how changes in one construct foster changes in another. By change in employee experience, I refer to within-person variability in psychological experiences during change events over time (i.e., fluctuations or change trajectories; see Pitariu & Ployhart, 2010).

As significant organizational changes often prompt uncertainty and employees perceive such changes as personally significant, these events are likely to produce and accentuate emotional, cognitive, and behavioral reactions. Put differently, organizational change events are likely to represent psychologically critical episodes that generate changes in psychological constructs, which in other environments may be more resistant to change (see Jansen, Shipp, & Michael, 2016; Lines et al., 2005; Morgan & Zeffane, 2003; Vandenberg & Self, 1993). It is therefore essential to examine the antecedents of changes in these reactions and recognize that the antecedents themselves may change over time during organizational change events (Edwards et al., 2017; Smet et al., 2016).

However, most of the prior research has examined only predictors of employees' reactions to change relative to one another, either at a certain time point or over time. Such studies capture only 'snapshots' of employee reactions and thus provide limited insights regarding the unfolding nature of psychological processes (Armenakis & Bedeian, 1999; Edwards et al., 2017; Fugate et al., 2011; Fugate et al., 2002; Mack et al., 1998; Pettigrew, Woodman, & Cameron, 2001). While recent organizational change studies have shifted in focus towards intraindividual changes (Edwards et al., 2017; Jansen et al.,

2016; Petrou et al., 2018; Smet et al., 2016; Sung et al., 2017), more studies are needed to unravel the antecedents and consequences of within-person changes in employee change experience.

Identifying the antecedents of within-person change trajectories is essential for increasing the knowledge regarding the means to improve (i.e., foster positive changes in) employee experience during unfolding change events (see Berry & Willoughby, 2017). Furthermore, most prior research has not examined the possibility that the predictors of employee reactions may also evolve and change over time (Edwards et al., 2017). Examination of such changes may elucidate the benefits of fostering increases, for instance, in employees' positive expectations during the organizational change event. The more that is known about changes in employees' experiences, the more informed researchers and employers are about the means to manage employee reactions during unfolding change events and thus improve the outcomes of organizational change endeavors.

Additionally, an examination of within-person changes often provides a more accurate and informative test of psychological theories. For instance, theories proposing spiraling processes, or upward cycles, typically posit that occurred changes in psychological constructs foster changes in other constructs, such as positivity fostering cognitive changes within an individual, which then cultivate subsequent changes in positivity (Fredrickson, 1998). Testing these processes by examining only differences between people do not fully capture the notions of most psychological theories (Berry & Willoughby, 2017; Curran & Bauer, 2011; Hamaker, Kuiper, & Grasman, 2015), such as spiraling processes.

Inherently, a prerequisite for examining a within-person variability and reciprocal relationships over time, is to track employee responses (i.e., measure the same constructs) across several time points. However, existing change research has predominantly either measured constructs only at one point of time (i.e., cross-sectional designs) or in the case of longitudinal studies, independent and dependent variables have rarely been measured at several time points (Edwards et al., 2017; Vakola, 2016).

Taken together, to illuminate the means and processes that foster employees' well-being, more comprehensive understanding of how employees' psychological reactions evolve through reinforcing reciprocal relationships is needed. In the empirical section this dissertation, these dynamics are examined with the focus on employees' trust and fairness perceptions, as well as work engagement and cognitive appraisals of change, which I elaborate further in the following chapter.

3 DYNAMICS IN EMPLOYEE CHANGE EXPERIENCE RELATED TO LEADERSHIP AND ONE'S WORK

This chapter describes literature regarding the dynamics of two specific dimensions of employee change experiences. The first subchapter presents literature concerning employees' evaluations and perceptions of the organizational leadership, namely relationships between trust and fairness perceptions. The second subchapter elaborates the dynamism between constructs that refer to employees' feelings and motivation (i.e., work engagement) and cognitions (i.e., cognitive change appraisals) regarding one's work. This literature review provides the backdrop for the empirical substudies of the dissertation (Articles II and III) and the respective specific sections of the dissertation's theoretical model (Article I). This chapter concludes by presenting the general aims of the dissertation.

3.1 RELATIONSHIP BETWEEN TRUST AND FAIRNESS PERCEPTIONS

3.1.1 FAIRNESS PERCEPTIONS AS ANTECEDENTS OF TRUST: SOCIAL EXCHANGE THEORY

Among the various theoretical frameworks that can be utilized to investigate fairness (i.e., justice) phenomena (see Blader & Tyler, 2005), social exchange theory (Blau, 1964) is widely used perspective for explaining how fairness influences the development of trust in interpersonal relationships (Colquitt & Rodell, 2011; Cropanzano & Mitchell, 2005; Stinglhamber, De Cremer, & Mercken, 2006). Social exchange theory is based on the idea of reciprocity between exchange partners: being treated favorably by an exchange partner creates an obligation to reciprocate in a similarly positive manner (Blau, 1964). These obligations can be reconciled through favorable behaviors, attitudes, or actions: if one supplies a benefit, the receiving party is expected to react in kind (Gergen, 1969). Successfully reciprocated exchanges foster trustworthiness and cognitive trust (i.e., evaluation of trustee's competence, responsibility, and reliability; McAllister, 1995) and gradually build trust between exchange partners over time (Blau, 1964; Cook, 2005; Molm, Takahashi, & Peterson, 2000).

While there are myriad possible social exchange commodities, such as love, status, information, goods, money, and services (Foa & Foa, 1980), several authors have suggested that fair procedures are particularly crucial for cultivating positive exchange relationships (Blader & Tyler, 2005; Colquitt & Zipay, 2015; Cropanzano & Rupp, 2008; Dirks & Ferrin, 2002; Lewicki, Wiethoff, &

Tomlinson, 2005; Moorman & Byrne, 2005; Organ, 1990). Applied to the context of the dissertation, when employees perceive that they are being treated fairly by the leaders of an organization, they are expected to reciprocate with positive evaluations and perceive their leaders as trustworthy.

The positive relationship between justice and trust has been established in a plethora of studies summarized in multiple meta-analytic reviews (Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Colquitt et al., 2013; Dirks & Ferrin, 2002; Rupp et al., 2014). For example, a meta-analysis by Dirks and Ferrin (2002) found that cognitive trust was positively related to procedural (*r*= .66) and interactional justice (*r*= .64). More recently, the results of Colquitt et al.'s (2013) meta-analysis covering studies over the last decade, suggested that trust in organization was positively related to procedural (*r*= .56), informational (*r*= .51), and interpersonal (*r*= .68) justice related to various types of organizational events (e.g., organizational change, a selection decision, a performance evaluation).

Although the relationship from justice to trust has been investigated and established in several cross-sectional studies (Colquitt et al., 2013), there has been a relative dearth of research designed to investigate the direction of causality between these two factors. As a notable exception, Colquitt and Rodell (2011) conducted a two-wave study and found that employees' perceptions of supervisors' procedural and interpersonal justice, predicted some aspects of subsequent supervisor trustworthiness (e.g., integrity) but, surprisingly, did not predict competence-based evaluations. Aside from their findings, cross-sectional studies have found fairness perceptions to be positively related to cognitive trust (Colquitt, LePine, Piccolo, Zapata, & Rich, 2012; Yang, Mossholder, & Peng, 2009).

Drawing from social exchange theory (Blau, 1964) and extant empirical research (Colquitt et al., 2013), in the current dissertation I posit that leaders' (e.g., top management team, immediate supervisors) use of fair treatment will result in successful and beneficial social exchange, and therefore lead employees to have trust in leaders. In contrast, unfair treatment, indicating a disadvantageous exchange relationship for employees, will lead to lower levels of trust.

3.1.2 TRUST AS AN ANTECEDENT OF FAIRNESS PERCEPTIONS: CONFIRMATION BIAS

Although the view that fairness perceptions shape trust is theoretically grounded (Blau, 1964), the direction of the relationship between fairness and trust has not received sufficient scrutiny. As elaborately stated by Colquitt and Rodell (2011), "The literature seems to be marked by the deceptively uncontroversial notion that justice leads to trust" (p. 1202). Importantly, more recent arguments and theorizing suggest that trust may reflect an important antecedent of justice perceptions (Celani, Deutsch-Salamon, & Singh, 2008;

Holtz, 2013; Lewicki et al., 2005). In the following, I present the theoretical rationale for how trust may affect individuals' perceptions of justice.

Impressions of an entity affect how their actions are perceived. For instance, Dirks and Ferrin (2001) suggested that the more a person trusts the other party, the more likely the person responds favorably to the other party's actions and perceive the underlying motivations to be benign. Similarly, Shapiro and Kirkman (2001) theorized that trust-related expectations tend to bias individuals towards favorable perceptions of justice. Holtz's (2013) trust primacy model argues that trustworthiness evaluations shape people's subsequent perceptions of justice. This phenomenon has its basis in cognitive processing and shortcuts.

Of particular relevance to understanding how impressions of an entity can color subsequent perceptions is the cognitive fallacy of confirmation bias (Holtz, 2013; Kramer, 2009; Shapiro & Kirkman, 2001). Confirmation bias represents people's fundamental tendency to seek information consistent with their current beliefs or theories, and to avoid falsifying instances and discredit contradictory observations (Evans, 1989; Fiske & Taylor, 1991; Nickerson, 1998; Nissbett & Ross, 1980; Snyder & Swann, 1978; Stangor & Ford, 1992; Wason, 1960). As a result, assessments and beliefs are also generally resistant to change (Hovland, Janis, & Kelley, 1953; Luchins, 1942). Contradictory new information that could undermine and change one's beliefs might instead confirm or push the original belief to an even greater extreme (Fiske & Taylor, 1991). In other words, people tend to see what they expect to see, and so one's beliefs can become self-perpetuating (Snyder & Swann, 1978; Stangor & Ford, 1992). Accordingly, in their meta-analysis, Hart et al. (2009) found that people prefer information that verifies their prior assessments and beliefs.

Drawing from the aforementioned research, trust is expected to color fairness perceptions in a manner consistent with principles of confirmation bias (Holtz, 2013; Shapiro & Kirkman, 2001). A person who believes a trustee is not trustworthy and unreliable is likely to evaluate the fairness of the trustee negatively (e.g., inadequate explanations, capricious decisions) because such evaluations would validate the trustor's expectations of unreliableness. As stated by Gambetta (1988), "distrust may become the source of its own evidence" (p. 234). Similar self-perpetuating effects are expected for high trust, which is expected to foster positive fairness perceptions.

As presented in the previous subchapter, meta-analyses suggest that trust is positively and strongly correlated with justice perceptions (Colquitt et al., 2013; Dirks & Ferrin, 2002; Rupp et al., 2014). However, the previous research, from which the meta-analytical estimates have been drawn from, has predominantly applied cross-sectional study designs, which are very limited regarding causal inferences (i.e., whether justice is more likely to be an antecedent of trust or vice versa). In the literature review, four studies were identified which provide more information regarding the over time relationships, or causality, between trust and fairness perceptions. The study by Colquitt and Rodell (2011) found that evaluation of a supervisor's integrity

predicted subsequent procedural, distributive, interpersonal, and informational fairness perceptions, while competence-based evaluation, surprisingly, did not. Aside from their findings, the results of three experimental studies by Holtz (2015) suggested that pre-event trustworthiness evaluations had positive effects on post-event justice perceptions. Similarly, two longitudinal survey studies have found support for trust having positive associations over time with overall fairness perceptions (Holtz & Harold, 2009) and the four subfacets of justice; distributive, procedural, informational, and interpersonal justice (Holtz & Hu, 2017).

In light of the presented theoretical notions and research findings, in the present dissertation, I posit trust to color perceptions in a manner consistent with confirmation bias; the more an employee trusts the organization's leaders, the more likely the employee is to perceive leaders' actions to be fair. As an example of such actions is the implementation of an organizational change. Conversely, low trust is expected to be associated with low perceptions of fairness.

3.1.3 RECIPROCAL RELATIONSHIPS BETWEEN TRUST AND FAIRNESS PERCEPTIONS: TRUST PRIMACY MODEL

Holtz's trust primacy model (2013) proposes a reciprocal feedback loop between trust and fairness perceptions. Evaluations of an entity's characteristics, such as cognitive trust, are expected to shape fairness evaluations of events, that is, perceptions of an entity's actions at a particular occasion. These fairness perceptions, in turn, affect subsequent trust-related evaluations. The basic argument for the primacy of trust and reciprocal relationships is threefold.

First, the capability to draw quick inferences of others' characteristics and intentions has been vital for humans' survival, so it represents an important cognitive ability with origins in the human evolutionary history (see Cosmides & Tooby, 1992; Todorov, 2011). As people form trust-related evaluations quickly, they precede perceptions of the trustees' (i.e., the target of trust) actions. Second, as presented in the previous chapter, these formed impressions of the trustee are likely to prime how people perceive and evaluate their actions (e.g., fairness perceptions) in a manner of confirmation bias (Wason, 1960). Third, based on the social exchange theory (Blau, 1964), people are likely to trust those who are perceived to act in a fair manner (see Chapter 3.1.1). Therefore, the fairness perceptions feedback to a subsequent re-evaluation of trust (Holtz, 2013). Similarly, Lewicki et al. (2005) proposed trust and justice as co-developing psychological constructs that influence each other over time.

While there are theoretical reasons to expect reciprocal relations between trust and fairness constructs, researchers have not thoroughly examined this proposition. A study by Colquitt and Rodell (2011) represents the only test of reciprocal relations between justice and trust constructs. In this two-wave

study, the authors found positive cross-lagged and reciprocal relationships between employee evaluations of their supervisor's integrity and interpersonal justice. Conversely, the reciprocal relations between procedural, informational, and interactional justice perceptions and evaluations of supervisors' competence and reliability (i.e., trust-related constructs), were not significant in their study. However, the study by Colquitt and Rodell (2011) did not involve a specific focal event (i.e., justice perceptions were assessed relative to past experiences, generally) that necessitates a high degree of competence for supervisors to handle fairly. In contrast, contexts that are typically associated with high uncertainty, such as significant organizational changes, are likely to increase the salience of trust and fairness perceptions with the potential to amplify their effects (Dirks & Ferrin, 2002; Van den Bos & Lind, 2002).

Drawing from the trust primacy model (Holtz, 2013) and related theoretical perspectives (Blau, 1964; Wason, 1960), in the current study, I posit that fairness perceptions and trust in organization's leaders have positive reciprocal relationships over time. These relationships are proposed in the theoretical model of the dissertation (Article I) and tested in one of the dissertation's empirical substudies (Article II).

3.2 RELATIONSHIP BETWEEN COGNITIVE CHANGE APPRAISALS AND WORK ENGAGEMENT

3.2.1 COGNITIVE APPRAISALS AS ANTECEDENTS OF WORK ENGAGEMENT: COGNITIVE APPRAISAL THEORY

Organizational changes are typically events that bring forth uncertainty and bear crucial personal meaning for the employees. Change events are therefore expected to generate cognitive processes by which employees evaluate the potential personal impact of the upcoming changes, such as to what extent the event is appraised as a threat and a positive challenge (Lazarus & Folkman, 1984). As presented previously (see Chapter 2.2.2), the cognitive appraisal theory (Lazarus & Folkman, 1984) posits that these individual's future-related cognitive appraisals of demanding encounters play a central role in shaping and determining affective states and behavioral reactions. For example, those who do not believe that they are able to cope with the organizational change event, and expect negative implications for oneself (i.e., appraise the event as a threat), are also expected to experience adverse emotional and motivational responses (Fugate, 2013). As work engagement represents an affective-motivational state (Schaufeli et al., 2002), it is therefore reasonable to expect that negative appraisals (e.g., threat) have a negative impact on work engagement, while the opposite holds true for positive appraisals (i.e., challenge; see also Fugate, 2013). While existing research has not tested supposition, prior findings in work engagement research provide preliminary support.

A set of studies have shown that individuals' positive beliefs, such as optimism, hope, and self-efficacy, are positively related to work engagement (for meta-analysis and reviews, see Bailey et al., 2017; Halbesleben, 2010). These findings are consistent with a recent meta-analysis of intervention studies, which showed that increases in such positive psychological states led to increases in work engagement (Knight, Patterson, & Dawson, 2017).

3.2.2 WORK ENGAGEMENT AS AN ANTECEDENT OF COGNITIVE APPRAISALS: ENGAGEMENT AS A PSYCHOLOGICAL RESOURCE

One of the key concepts in coping literature is individual's resources, which have been typically perceived to act as reserves of energy and strength in the face of demanding events. Such resources help individuals to cope, adjust, and appraise events in a positive rather than in a negative manner and enhance their well-being. (Aspinwall, 1998; Hobfoll, 1989; Lazarus & Folkman, 1984; Pearlin & Schooler, 1978.) Before elaborating the positive impact of resources further, I define the concept of resources. Here I draw from the work of Lazarus and Folkman (1984), Hobfoll (1989), and Aspinwall (1998), as their work represents the central theoretical frameworks in coping and stress literature.

Resources that are likely to be beneficial for individuals' adjustment include physical and material resources (e.g., money, goods), conditions (e.g., employment), and various skills such as problem-solving and social skills (Lazarus & Folkman, 1984; Hobfoll, 1989). As the present study focuses on employees' psychological experiences of organizational changes, the primary interest of the study lies within the category of psychological resources, also known as personal resources (Hobfoll, 1989).

Lazarus and Folkman (1984) refer to concepts such as health, energy, and well-being as psychological resources. Elaborating the taxonomy of resources further, Hobfoll (1989, 2002) listed psychological resources to include individual's efficacy beliefs, mastery, self-esteem, motivation, sense of commitment, endurance, and feelings of being successful. Aspinwall (1998) argued that positive mood and affective state have a beneficial role in self-regulation processes and therefore act as psychological resources.

A critical beneficial effect of psychological resources is that they influence whether a person perceives a stressful event either as a challenge or as a threat (Lazarus & Folkman, 1984; Roseman & Smith, 2001). To elaborate, if a person perceives that the demands are exceeding the resources one has, he or she is more likely to have low expectations regarding the personal outcome of the event and one's adjustment to it, and thus perceive the encounter as a threat. Conversely, if a person perceives to have sufficient resources to cope and adjust to a stressful environment, he or she is more likely to have positive expectations regarding the event and perceive it positively as a challenge. (Lazarus & Folkman, 1984.)

As work engagement reflects a relatively enduring positive state of mind characterized by high levels of energy, motivation, resiliency, and positive emotions such as happiness, joy, pride, and enthusiasm (Schaufeli et al., 2002), in the present dissertation, I argue that work engagement can act in a manner of a psychological resource. Therefore, engagement may help employees to adapt during demanding events (see also Avey, Wernsing, & Luthans, 2008; Fredrickson & Joiner, 2002), for example by having a beneficial impact on challenge and threat appraisals. Accordingly, scholars have proposed that being immersed in one's work and experiencing it as fulfilling increases positive expectations and adjustment to stressful situations (Hobfoll, 2011; Van den Heuvel et al., 2010). As elaborately stated by Hobfoll (2011), "it is engagement that may keep people 'in the game'" (p. 132).

While existing studies have not tested the proposition of work engagement having beneficial effects during organizational change, prior findings provide preliminary support for this supposition. Accordingly, several studies have shown that high work engagement provides increased well-being and general positive expectations (for reviews and meta-analyses, see Bailey et al., 2017; Halbesleben, 2010). However, a study by Barbier, Hansez, Chmiel, and Demerouti (2013) did not find work engagement to be associated with subsequent changes in optimism. Aside from their study, several findings are consistent with the present argument of being immersed in one's work and experiencing high levels of motivation and energy while working can act as a valuable psychological resource (Hakanen, Perhoniemi, & Toppinen-Tanner, 2008; Llorens, Schaufeli, Bakker, & Salanova, 2007; Salanova, Bakker, & Llorens, 2006).

3.2.3 SPIRALING WORK ENGAGEMENT AND COGNITIVE APPRAISALS: BROADEN-AND-BUILD THEORY

Fredrickson's (1998, 2001) broaden-and-build theory provides further theorizing, not only for the benefits of a positive state of mind in the moment, but also for its cumulative (build) effects through broadened cognitions. The broaden-effect of positivity is based on the notion that positivity expands people's cognition, thought-action repertoires, and modes of thinking. For instance, joy creates an urge to play and become involved, pride is associated with envisioning future achievements thus fostering positive expectations, and interest creates an urge to explore and immerse oneself in novel situations (Fredrickson, 2001, 2013). As positivity fosters creativity in decision-making, the generation of new action ideas, and greater perspective-taking, positive emotional experiences broaden the boundaries of awareness and make people have "greater sensitivity to future time horizons" (Fredrickson, 2013, p. 18).

Accordingly, studies have found that when in a positive state, people are more likely to find positive personal meaning in demanding situations (Fredrickson, 2000, 2001; Fredrickson & Joiner, 2002). Studies have also shown that happy individuals appraise the same events more positively than

unhappy individuals (Lyubomirsky, 2001; Lyubomirsky & Tucker, 1998), and positive affect has been associated with perceptions of perceived gains during organizational change (Bartunek et al., 2006). Similarly, Chang (2017) found that positive mood was positively related to perceiving problems as solvable, and negatively to perceiving problems as unsolvable.

Importantly, the benefits of positive affective state expand beyond the moment and have been shown to build subsequent well-being, enduring resources, and positivity (the build effect; Fredrickson, 2001, 2013). This build effect implies that by initiating changes in cognitions, such as fostering positive appraisals of demanding events, work engagement (i.e., work-related positive affective-motivational state) is expected to elicit subsequent increases in work engagement (see Fredrickson, 2001; Salanova, Schaufeli, Xanthopoulou, & Bakker, 2010). Accordingly, Van den Heuvel et al., (2010) proposed that work engagement may not only be fostered through positive future-related expectations, such as hope and optimism, but it may also enhance hope and optimism during organizational changes.

Similarly, positive cognitions (e.g., challenge) can have lasting effects by fostering subsequent positive future reactions and over time create upward spirals or "positive trajectories of growth" (Fredrickson, 2013, p. 24). In the context of organizational changes, studies have found positive appraisals to be associated with several beneficial outcomes, such as change championing (Fugate & Soenen, 2018) and reduced perceptions of psychological contract violations (Rafferty & Restubog, 2017). Therefore, positivity is expected to elicit subsequent positivity throughout change events.

An additional benefit posited in the broaden-and-build theory is that positive affect helps to prevent and mitigate adverse reactions (Fredrickson, Mancuso, Branigan, & Tugade, 2000). This protective effect is supported by a number of studies, such as positive affect buffering against stress and its negative consequences (Blevins, Sagui, & Bennett, 2017; Pressman & Cohen, 2005), depression (Fredrickson, Tugade, Waugh, & Larkin, 2003; Riskind, Kleiman, & Schafer, 2013), and positive affect resulting in more constructive coping strategies and behaviors (Folkman & Moskowitz, 2000; Lyubomirsky & Tucker, 1998). Reducing negative cognitions should be particularly beneficial in the context of change, given that adverse reactions, such as perceptions of threats, narrow and limit cognitions and behavioral reactions (Fugate, 2013; Fugate et al., 2012; Staw, Sandelands, & Dutton, 1981; Tomaka, Blascovich, Kelsey, & Leitten, 1993).

By applying the broaden-and-build theory, several researchers have found work engagement, as a positive affective-motivational state, to be positively and reciprocally related with various positive cognitions or dispositions, such as hope and optimism (for reviews, see Bailey et al., 2017; Salanova et al., 2010). As previously presented, prior findings provide preliminary support for unidirectional relationships, either from work engagement to cognitive appraisals, or vice versa. Further support is provided by reciprocal studies, which

have found work engagement to be reciprocally and over time related to efficacy-beliefs (Llorens et al., 2007), personal initiative (Hakanen et al., 2008), active coping style (Weigl et al., 2010), job satisfaction (Guglielmi et al., 2016), and hope and optimism (Reis, Hoppe, & Schröder, 2015; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009).

To reiterate, the empirical research (e.g., Bailey et al., 2017; Halbesleben, 2010; Salanova et al., 2010) and theorizing support reciprocal relationships between cognitive appraisals and work engagement. First, according to the cognitive appraisal literature (Fugate, 2013; Lazarus & Folkman, 1984; Roseman & Smith, 2001), appraisals of demanding events are critical determinants of an individual's affective and motivational states. Regarding the reverse relationship, work engagement may represent a reserve of energy and strength and, therefore, influence cognitive appraisals in a manner consistent with psychological resources (Aspinwall, 1998; Hobfoll, 1989; Lazarus & Folkman, 1984). Furthermore, work engagement, as a positive affective state that is associated with happiness, joy, and enthusiasm while working, is expected to broaden individual's cognitions. Consequently, these broadened cognitions build subsequent engagement through reciprocal relationships in accordance with the broaden-and-build theory (Fredrickson, 1998, 2013). Therefore, in the present study, I postulate that employees' work engagement and cognitive appraisals of organizational change (i.e., threat and challenge) are reciprocally related over time. These reciprocal associations are expected to result in spirals wherein changes in work engagement and appraisals reinforce each other during organizational change events. In addition to postulating these relationships in the developed theoretical model of the dissertation (Article I), these relationships are empirically tested in the current dissertation (Article III).

3.3 GENERAL AIMS

The main aim of this dissertation is to shed light on the dynamism in employees' psychological experiences and reactions as they unfold during organizational change events. The examination of cyclical relationships provides a more comprehensive picture regarding the dynamics and interrelationships of evolving employee experience. This produces new knowledge regarding the means to foster employees' work-related well-being and motivation during turbulent times.

The theoretical aim of this dissertation is to provide a theoretical framework of the key psychological processes influencing employees' work engagement during organizational change and their dynamic relationships. This aim is addressed in Article I (see Chapter 4). In so doing, this substudy provides a new theoretical understanding of how employees' well-being and motivation may be fostered during organizational change events. This is achieved by synthesizing theoretical perspectives and empirical findings from various fields of

research including trust, fairness, cognitive appraisals, job crafting, and work engagement.

The empirical section of the dissertation (Articles II and III) represents a partial test of the developed theoretical model in the context of an organizational merger. Here the aim is to illuminate the dynamics (a) between employees' perceptions of leaders' characteristics and actions and (b) between cognitive change reactions and work engagement during unfolding change events. The first empirical substudy examines reciprocal relationships between employees' evaluations of their leader's characteristics (cognitive trust) and actions (fairness perceptions; Article II). By this, the substudy provides a new test of recent theorizing suggesting that trust and fairness are reciprocally related (Holtz, 2013), which challenges and extends the notion that trust is solely an outcome of favorable perceptions of fair treatment, as typically argued based on the social exchange theory (Blau, 1964).

The second empirical substudy examines reciprocal relationships between employees' positive affective-motivational state of mind experienced in a person's work (i.e., work engagement) and evaluations of the personal impact of upcoming organizational change event (i.e., cognitive change appraisals; threat and challenge) and their changes (Article III). The study seeks to extend the understanding of how work-related positivity (i.e., work engagement) may accumulate over time through both fostering positive (i.e., challenge) and mitigating negative cognitions (i.e., threat). Examination of both negative and positive cognitions contributes to broaden-and-build theory (Fredrickson, 2001) and work engagement research. These domains of research have primarily focused on how positivity, such as engagement at work, builds over time by fostering positive cognitions or states of mind, thus sidelining the role of negative cognitions. Empirical research questions, together with their respective examination, are presented in Chapter 5.

4 THEORETICAL MODEL (ARTICLE I)

This chapter presents the developed and comprehensive theoretical model of the dissertation. This model addresses the theoretical aim by providing a framework of the critical psychological processes influencing employees' work engagement during organizational changes and their dynamic relationships. The theoretical model is presented in Figure 2 together with defining those sections of the model that are examined empirically in the current study (for the rationale concerning the empirically examined sections, see Chapter 5).
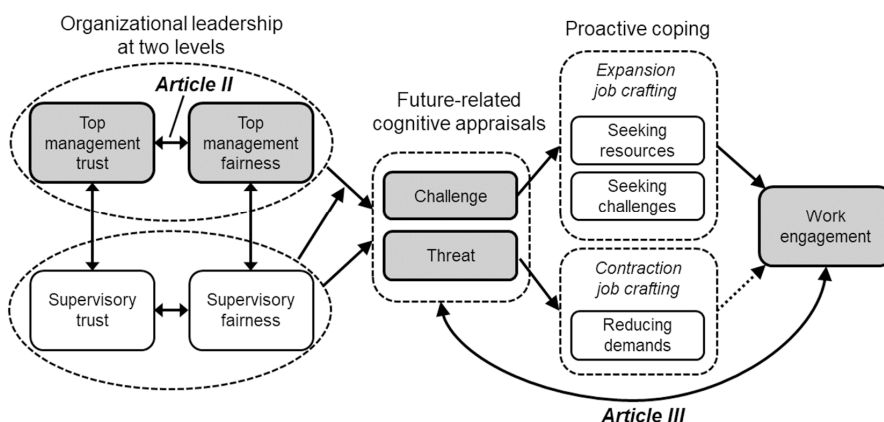
Figure 2 The overview of the developed theoretical model of dynamics of trust and fairness and their implications for employees' cognitive appraisals, job crafting, and work engagement during organizational change. Highlighted constructs represent those sections of the model that are examined empirically in the dissertation in Articles II and III. Adapted from Kaltiainen, Lipponen, and Petrou (2018) with the kind permission of the Taylor and Francis Group.

Notably, the developed theoretical model synthesizes several aspects of the literature that have been reviewed thus far in the present summary. The model builds on existing organizational change research (Chapter 2), literature about reciprocal relationships between trust and fairness (Chapter 3.1) and work engagement and cognitive appraisals (Chapter 3.2). Also, the model couples this knowledge together with recent developments in other domains of research and posits the following three additional suppositions. First, trust and fairness perceptions are expected to transfer between different targets of organizational leadership. Second, the model posits that cognitive appraisals impact employees' job crafting behaviors. Third, the model describes how job crafting

dimensions are expected to impact employees' work engagement.[2] In the following, I provide an overview of the model (for a more detailed description of the model, see Article I).

First, as previously elaborated in Chapter 3, employees' trust and fairness perceptions are posited to have positive reciprocal relationships. This notion draws particularly from recent advances in the fields of trust and justice research (Holtz, 2013).

Second, trust and fairness perceptions are expected to influence each other between different levels of organizational leadership. For instance, if employees' trust their supervisors or perceive their actions as fair, this will shape positively also their trust and fairness perceptions regarding the top management, and vice versa (see Blader & Tyler, 2003; Holtz & Harold, 2009; Lipponen, Steffens, & Holtz, 2018; Wo, Ambrose, & Schminke, 2015). Such transfers or generalization of perceptions from one referent to another are especially likely to occur across entities that are structurally tied together and resemble each other (see Sluss & Ashforth, 2008), such as organizational leaders.

Third, as noted previously, trust towards leaders (see Chapter 2.1.2) and perceiving their actions as fair (see Chapter 2.1.3) mitigate employees' negative (threat) appraisals and foster positive (challenge) appraisals of organizational changes (Fugate, 2013; Mishra & Spreitzer, 1998; Van Dam, Oreg, & Schyns, 2008; see also Dirks & Ferrin, 2002; Lind, 2001). Furthermore, the relationship from top management fairness and trust to change appraisals is likely stronger when also the supervisor is trusted and perceived. This notion builds on the found interaction between different sources of fairness information (Koivisto et al., 2013; Luo, 2007).

Fourth, cognitive appraisals have been argued and shown to influence behaviors during demanding encounters (Fugate, 2013; Fugate et al., 2011; Fugate et al., 2012; Lazarus & Folkman, 1984; Rafferty & Restubog, 2017; Roseman & Smith, 2001; Skinner & Brewer, 2002). Building on this research, challenge appraisal is posited to be positively related to seeking resource and challenges, whereas threat appraisal is expected to have a positive association with behaviors aiming at reducing demands. In the context of organizational change, job crafting represents employees' proactive behaviors that help employees to adapt and sustain their work engagement (Petrou et al., 2012; see Chapter 2.2.3).

Fifth, dimensions of job crafting behaviors are expected to have differing impact on employees' work engagement (e.g., Petrou, Bakker, & Van den Heuvel, 2017). Particularly, seeking resources and challenges, which reflect expansive dimensions of job crafting, have been shown to be positively related to

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[2] These three suppositions were not elaborated in the literature review section (Chapters 2 and 3), as this review focused primarily on the empirically examined propositions of the model. This decision concerning the structure of the dissertation was made to achieve adequate coherence and focus in the literature review section.

work engagement, whereas reducing demands have been unrelated, or negatively related, to engagement (for a review, see Demerouti, 2014). The latter may be because reducing demands is a form of employee withdrawal that focuses on reducing one's scope of work, which eliminates challenges and experiences of mastery (e.g., Petrou et al., 2018). Therefore, reducing work-related demands is likely an unsuccessful strategy for employees to adjust to organizational changes. However, a recent study by Mäkikangas (2018) suggested that employees' use of other job crafting strategies may mitigate the detrimental effects of reducing demands on work engagement.

Finally, the model posits direct and reciprocal effects between work engagement and appraisals, as previously elaborated in Chapter 4. Taken together, by synthesizing existing theoretical and empirical literature from relatively separate fields of organizational change, leadership, trust, justice, cognitive appraisals, and work engagement, the developed model complements and contributes to existing literature on the topic.

Before reviewing the empirical findings of the dissertation, it is worth noting that the model and the related empirical substudies (see Figure 2) facilitated and informed each other during the writing process of the present dissertation. Put differently, the developed model in part builds on the empirical findings of the dissertation (Articles II and III) in addition to synthesizing other relevant research on the topic. As the model provides the backdrop for the empirical substudies in the current research, for structural soundness and economy of the presentation, in the present summary the theoretical model (Chapter 4) is introduced before the empirical substudies and their findings (Chapter 5).

5   EMPIRICAL SECTION

This chapter addresses the aims to increase the understanding concerning the dynamics between (a) employees' perceptions of leaders' characteristics and actions and (b) between cognitive change reactions and work engagement during unfolding change events. These aims are addressed in the two following empirical substudies, which provide a partial examination of the developed theoretical model (see Chapter 4; Article I).

The first empirical substudy (Article II), examines the reciprocal relationships between employees' cognitive trust in top management (i.e., evaluation of leaders' characteristics) and fairness perceptions (i.e., evaluation of leaders' actions). The second empirical study (Article III), investigates reciprocal relationships between cognitive appraisals of change (i.e., cognitive change reactions) and work engagement and their within-person changes.

While the theoretical model (Figure 2) posits several avenues for empirical investigation, the sections as described above were chosen for the following reasons. First, the empirically examined propositions were selected based on their contributions to theory, research, and practice. The examined relationships represent heretofore understudied sections of the theoretical model and provide new insights about the reciprocal relationships and direction of causality between trust and justice (see Chapter 3.1) and work engagement and cognitive change appraisals (see Chapter 3.2). In addition to contributing to the respective fields of research (e.g., trust, justice, work engagement, and cognitive appraisals), the examined reciprocal relationships unravel the dynamics in employee change experience and thus contribute to organizational change research in general.

Second, the complexity of the model hinders the possibility to test all the posited relationships in a single empirical study. For example, estimating models with strongly interrelated predictor constructs (e.g., trust and justice perceptions at two levels of organizational leadership as antecedents of change appraisals) would bear a risk of multicollinearity, which undermines the validity of the statistical conclusions. Therefore, rather than testing the comprehensive theoretical model in a single empirical study, the two empirical studies focus on two specific aspects of the model; reciprocal and over time relationships between trust and fairness (Article II), and work engagement and cognitive appraisals (Article III).

Finally, the data employed in the present dissertation does not provide the opportunity to examine the role of job crafting, as this aspect of the model was not measured in the utilized survey data. This is because the literature concerning the importance of employees' job crafting behaviors during organizational change is relatively recent (Petrou et al., 2012; Petrou et al., 2015), while the first round of data were collected in late 2012. The theoretical model of the dissertation was not completed before the data collection but rather, the model

and the related empirical substudies informed and facilitated each other during the progress of the present dissertation. Furthermore, one of the aims of the model was also to postulate relationships for future research to test empirically. Thus, postulating the role of job crafting behaviors in the model, while not examining this aspect empirically in the current dissertation, aligns with this aim. In the following, I present the empirical research questions, the method applied to answer them, and the main results, in that respective order.

5.1 RESEARCH QUESTIONS

The first empirical substudy of the dissertation (Article II) set out to examine the dynamics and reinforcing relationships in employees' leader-related perceptions during an unfolding organizational merger. By examining employees' cognitive trust in top management and fairness perceptions of the merger process, the following two research questions (RQ) were addressed in Article II.

First, it was asked: are employees' fairness perceptions and cognitive trust towards top management reciprocally associated over time? (RQ1). Relatedly, on the basis of the social exchange theory, it was hypothesized that fairness perceptions are positively related to subsequent cognitive trust in top management while controlling prior trust (Hypothesis 1). Thus, the more fairly the employees' perceived to be treated, the higher the cognitive trust towards top management. Conversely, building on confirmation bias literature, the inverse unidirectional relationship was hypothesized; cognitive trust in top management is positively related to subsequent merger process fairness perceptions, controlling prior fairness perceptions (Hypothesis 2). Therefore, the higher the cognitive trust in top management, the more favorable the perceptions of fairness. Finally, by combining the two unidirectional hypotheses, and drawing from recent advances in trust research, it was expected that the merger process fairness perceptions and cognitive trust in top management have positive reciprocal relations over time, as posited in the trust primacy model (Hypothesis 3).

In addition to the hypothesized relationships, the second research question (RQ2) addressed the comparison between the theorized relationships from fairness to trust, and vice versa: is the unidirectional relationship from employees' fairness perceptions to cognitive trust in top management stronger than vice versa?

The second empirical substudy (Article III) focused on interrelationships and changes in employees' positive and negative cognitive appraisals and positivity towards one's work during an organizational merger process. By examining employees' future-oriented cognitive appraisals of change (threat and challenge) and work engagement (i.e., work-related positivity), the following three research questions were addressed in Article III.

First, it was asked: are employees' work engagement and changes in engagement reciprocally and over time associated with challenge and threat appraisals and changes in these appraisals? (RQ3). Building on the cognitive appraisal theory (Lazarus & Folkman, 1984), the literature on psychological resources (Hobfoll, 1989; Lazarus & Folkman, 1984), and the broaden-and-build theory (Fredrickson, 1998, 2001), the following related longitudinal hypotheses were posited. The hypotheses predicted spirals and accumulation of work engagement through engagement fostering changes in cognitive appraisals (Hypotheses 4 and 5), and spirals of cognitive appraisals through appraisals fostering changes in work engagement (Hypotheses 6 and 7), as elaborated in the following.

Regarding the work engagement spirals (i.e., engagement→ challenge/threat→engagement), in Hypothesis 4a, it was expected that initial work engagement, and its changes, are positively related to challenge appraisal changes during the first measured time span of the organizational merger. Hypothesis 4b predicted that across the subsequent merger time span, challenge appraisal and its changes are positively related to work engagement changes. In Hypothesis 5a, it was posited that initial work engagement and its changes are negatively related to threat appraisal changes during the first measured time span of the organizational merger. Hypothesis 5b predicted that across the subsequent merger time span, threat appraisal and its changes are negatively related to work engagement changes.

Concerning the spirals of cognitive appraisals (i.e., challenge/threat→engagement→challenge/threat), in Hypothesis 6a, it was expected that the initial challenge appraisal and increases in challenge would be found to be positively associated with increases in work engagement. Hypothesis 6b predicted that during subsequent merger time span, work engagement and its changes are positively related to changes in challenge appraisal. In Hypothesis 7a, initial threat appraisal and changes in threat were to be negatively related to changes in work engagement. In Hypothesis 7b, work engagement and its changes were predicted to be negatively related to changes in threat across subsequent merger time span.

To examine whether the effect of cognitive broadening is best understood as work engagement fostering positive or mitigating negative cognitions, the following research question was asked: is the relationship from work engagement to threat appraisal stronger than to challenge appraisal? (RQ4). To compare the effect of positive and negative cognitive change appraisals on work engagement, it was asked: is the relationship from threat appraisal to work engagement stronger than from challenge appraisals? (RQ5). The following describes the applied empirical method to answer the research questions and test the hypotheses.

5.2 METHOD

5.2.1 STUDY CONTEXT AND PARTICIPANTS

The empirical section of this dissertation (articles II and III) examined a three-wave longitudinal survey data (N = 623) of employees' self-reported experiences and perceptions across two years of an organizational merger (for the timeline, see Figure 3). The one-year time lag was chosen as it coincided with the completion of the major change initiatives and provided sufficient time for the occurrence of within-person changes in the focal constructs (e.g., Fortin et al., 2016; Seppälä et al., 2015). This field study took place in the context of a merger between two civil service organizations in Finland, the Social Services and Health Care departments of the City of Helsinki. The merger affected approximately 15,000 employees. The data utilized in the present dissertation was collected together with researchers Jukka Lipponen, Marko Hakonen, and Olli-Jaakko Kupiainen as part of a larger research project (see Hakonen, Lipponen, Kaltiainen, & Kupiainen, 2015).

11/2011: Decision to merge

11-12/2012: Data collection, Time 1*

1/2013: The merger came into effect

10/2013: Data collection, Time 2

11-12/2014: Data collection, Time 3

I — II — III

Phase I: Preparation and planning (13 months):
- *Planning of the new organizational structure*
- *Personnel participated in the planning process in committees, seminars, and intranet discussion forums*
- *Introduction of the new organizational structure (i.e., the integration of services provided by the two per-merge organizations and new service regulations).*

Phase II: Main changes (approx. 6 months)
- *Implementation of the new organizational structure and integration of services*
- *The main changes for the personnel (i.e., job description, location in the organization) took place.*

Phase II: Minor changes (continuous)
- *Smaller changes and adjustments in the lower-level organizational structure (i.e., integration of services continues, planning, testing, and implementation of new operating models).*

* At Time 1, data collection ended at 12th of December, 2012

Figure 3 The timeline for the data collection and merger process examined in empirical substudies, articles II and III. Adapted from Kaltiainen, Lipponen, and Holtz (2017) with the kind permission of the American Psychological Association.

At the end of November in 2011, the Helsinki city council decided to merge the two previously separate organizations. As the politicians made this decision, the organizations' top management did not have control over the decision concerning the merger, yet they were responsible for its planning and implementation. One of the main aims of the merger was to establish more efficient and fluent care pathways, especially for the patients requiring both social and health care services. The merger also aimed for more unified and customer- and patient-oriented services.

The merger-decision was followed by an intense, one-year period of planning. When the timetable for the merger was set in November of 2011, it was acknowledged that the selected merger strategy and composition of the new organization would lead to major changes regarding the operation, culture, and leadership of both organizations (Deloitte, 2011). The consulting group Deloitte (2011) provided planning services to the city council and emphasized the importance of allocating sufficient time and resources for the development and implementation of the new merged organization. Considering the size of the restructuring process, the merger was carried out rather swiftly.

The official merger date was between the first and second measurement time points. During this time interval, the eleven divisions of the two pre-merger organizations were combined into six divisions in the new merged organization. In the merged organization, approximately 54% of the employees were from the previous Social Services department, and 46% were from the department of Health Care. The Finnish Day Care Services, comprised of approximately 5,500 employees and previously part of the department of Social Services, was separated to the department of Early Childhood Education, which was not part of the newly merged organization. During the merger, there were no substantial layoffs as only 49 employees were not given a position in the merged organization. The number of personnel changes and resignations remained roughly the same after the merger in 2013 and 2014, while the number of retirements in 2013, of 290 employees, more than doubled in comparison to the number of retirements in 2012.

Before the first survey, employees were informed that a merger would occur, but no job-specific plans or changes were known. However, employees were informed that layoffs would not occur. Their change appraisals (threat and challenge) therefore related to the changes in the nature and description of their jobs. The Time 2 survey was after the implementation of the major merger-related changes for employees, such as combining eleven divisions from the pre-merger organizations into six divisions. The third and final survey (Time 3) captured the later phase of the post-merger process, which was characterized by more minor changes (see Figure 3).

The invitation to participate in the study was sent via email by the organization, followed by two reminder emails. Participants were guaranteed anonymity in the invitation letter and at the beginning of survey instructions, together with emphasizing that only the members of the research group have

access to participants' survey responses. Employees were permitted to participate in the study during working hours. Before designing the questionnaire, the research team interviewed ten employees to familiarize themselves with the organization and piloted the questionnaires with three to five employees before each data collection. The research project was granted permissions by the Social Services and Health Care Division of the City of Helsinki (decision number HEL 2012-007075) and by the participating organizations. According to the guidelines of the University of Helsinki Ethical Review Board, the study did not require an ethical statement or approval from the institutional review board. This was because, for instance, the study did not deviate from the principle of informed consent, nor exposed participants to strong stimuli.

The population size was roughly 15,000 across the duration of the data collection, and about 25% of the population ($N = 3679$) responded to the Time 1 survey. Of those respondents, 1181 (32%) participated at Time 2. Finally, 623 (53%) of those respondents participated at Time 3. The participants who responded at several time points were matched by using an identifier code, which the participants themselves generated on each survey. At Time 1, the average participant was 47.5 years old with between 13 to 15 years of tenure with their organization. Most of the participants were female (87%), had the equivalent of a bachelor's degree or higher (57%), and held an employee-level position in the organization (76%), with other positions being a supervisor (17%), middle management (7%), and top management ($n = 1$). The respondent on the top management team was excluded from the dataset utilized in Article II as the substudy examined employees' perceptions concerning the top management.

To investigate whether participant attrition over time led to non-random sampling, it was examined whether the probability of remaining in the sample could be predicted by the hypothesized variables from prior time points, as recommended by Goodman and Blum (1996). These analyses did not indicate that the main findings would be affected by the potential non-random sampling due to participant attrition (for detailed description and results, see Articles II and III).

The organizational merger in question was chosen as the study context as it represented a significant organizational change event characterized by phases with differing amount of contextual changes, therefore providing a suitable, and particularly interesting, context to examine the focal constructs of the study. First, in uncertain environments, individuals become particularly attentive to information used for trust and fairness judgments, which makes such evaluations particularly salient (Dirks & Ferrin, 2002; Li, 2012; Lind, 2001; Van den Bos & Lind, 2002). Similarly, investigating the potential effects of psychological resources (e.g., work engagement) necessitated a context in which individuals utilize these resources, such as a demanding event requiring adaptation and adjustment (e.g., Hobfoll, 1989; Lazarus & Folkman, 1984). Finally, examining cognitive event-specific appraisals (threat and challenge) necessitated an event that individuals are likely to perceive as personally

meaningful and consequently appraise it as threatening or challenging (Lazarus & Folkman, 1984).

5.2.2 MEASURES

This subchapter describes the focal measures and control variables used in the empirical substudies of the dissertation, together with the rationale for utilizing these measures. Article II investigated cognitive trust and fairness perceptions, whereas Article III examined work engagement and cognitive appraisals. The measures were presented to the participants in Finnish by utilizing the back-translation method and existing translations, such as for the work engagement measurement (Hakanen, 2009).

5.2.2.1 *Cognitive trust in top management*

Cognitive trust in the top management was measured by using four items adapted from Mayer and Davis (1999), that tapped into the competence and reliability evaluation of the top management. Example items included, "Top management is very capable of performing its job" and "Top management is well qualified." The full list of items is shown in Table 2 in Article II.

The set of items was introduced by the following instructions: "The following statements concern the top management of [the organization]. By top management, we refer to the head of the [organization] and heads of divisions." The head of the organization and heads of divisions were chosen as the referent because these people formed the top management team who made the major decisions concerning the planning and implementation of the merger. In the instruction, the organization was replaced by the employees' current organization at the time of responding to the survey. Therefore, at Time 1, before the merger, the measure captured participant's cognitive trust in the top management of the pre-merge organization. Measures after the merger, at Time 2 and Time 3, captured employees' cognitive trust in the top management of the new, merged organization. Before the merger, the top management team for the two merging organizations consisted of eight and six persons, respectively. The top management team of the merged organization consisted of 7 persons.[3] Cognitive trust was measured on a 5-point scale (1 = *strongly disagree*, …, 5 = *strongly agree*).

Cognitive trust was examined in the study because based on organizational change research (e.g., Lines et al., 2005; Tyler & De Cremer, 2005), it was reasoned that the complexity involved in the planning and implementing a large-scale merger should make concerns regarding the competence of the responsible decision-makers (i.e., the top management team) particularly salient in

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[3] The strong relationships within the cognitive trust measurement across time and the established measurement invariance over time (see Article II; Chapters 5.2.4 and 5.3.1) suggested that employees did not view the top management team as a fundamentally different entity at different time points, despite the personnel changes in the top management team.

the minds of the affected employees. Furthermore, rank and file employees in such large organization would not likely have direct contact or opportunity to have close interpersonal interactions with the top management team overseeing the merger process and thus develop affective trust (McAllister, 1995).

5.2.2.2 *Fairness perceptions of the merger process*

The target of employees' fairness perceptions, as examined in Article II, was the merger process event. The measurement included six items from Moorman (1991) and Mansour-Cole and Scott (1998) altogether. Example items included "the rules and procedures have been applied consistently across people and situations," "feedback and information have been provided regarding the impacts of decisions," and "employees have been treated with dignity during the founding process." For a full list of items, see Table 2 in Article II.

Participants were given the following instructions preceding the set of items, "The following statements address your views on the procedures and decision-making in general [during the past year] related to the foundation process of department of Social and Health Care Services)." The content in brackets was included at T2 and T3 time points. As the top management team was responsible for the major decisions concerning the planning and implementation of the merger (i.e., how the merger process was carried out), the utilized measurement represent employees' evaluations of the top management's actions (for a similar approach, see Tyler & DeCremer, 2005). Process fairness perceptions were measured on a 5-point scale (1 = *strongly disagree, …,* 5 = *strongly agree*).

The measured process fairness perceptions combined aspects of procedural, informational, and interpersonal justice facets, thus excluding distributive justice, and was defined as "people's perceptions of how fairly they are treated in the course of interacting with another party" (Brockner et al., 2009, p. 183). Thus, the applied measurement does not segregate employees' fairness perceptions into four separate subfacets in terms of procedural, information, interpersonal, distributive justice (Colquitt, 2001), but instead follows the theorizing that employees consider fairness issues in a more holistic sense (Ambrose & Schminke, 2009; Greenberg, 2001; Shapiro & Kirkman, 2001). Accordingly, several justice scholars have suggested moving towards integration of justice dimensions as they are often highly correlated, and especially when there are no theoretical grounds to expect unique effects across justice facets (Ambrose & Arnaud, 2005; Bobocel & Gosse, 2015; Brockner et al., 2009; Colquitt et al., 2005; Colquitt & Rodell, 2015; Colquitt & Shaw, 2005; Holtz, 2013; Holtz & Harold, 2009; Lind & Tyler, 1988). Because such a theoretical rationale does not exist regarding the relationships between specific facets of fairness perceptions and cognitive trust, the measurement in Article II focuses on aggregate perceptions of the formal procedures, explanations, and interpersonal treatment, or perceived process fairness of an organizational merger.

Additionally, process fairness represented a suitable measurement for the study as it excludes the distributive justice facet. Examination of distributive justice was not suitable in the current study because fairness perceptions were investigated throughout the merger, including the planning stage at Time 1, a time when employees did not have the necessary information regarding the eventual outcomes of the merger process.

5.2.2.3 Work engagement

Work engagement was measured in Article III by using a nine-item version of the Utrecht Work Engagement Scale, tapping into vigor, dedication, and absorption dimensions (Schaufeli et al., 2006). The items were assessed on a 7-point scale (1 = *Never*, 2 = *Few times a year*, 3 = *Once a month*, 4 = *Few times a month*, 5 = *Once a week*, 6 = *Few times a week*, 7 = *Daily*). Example items included "at my work, I feel bursting with energy," "I am enthusiastic about my job," "I feel happy when I am working intensely," and "I am proud of the work that I do." The full list of items is presented in Table II in Article III. The measurement has presented discriminate validity from various related concepts (for a review, see Schaufeli & Bakker, 2010) such as job engagement (Byrne, Peters, & Weston, 2016).

5.2.2.4 Cognitive change appraisals: threat and challenge

The measured cognitive appraisals of change focused on employees' anticipation of their adjustment and personal outcomes regarding the upcoming changes (Fugate, 2013; Lazarus & Folkman, 1984). Threat and challenge appraisals were both measured with three items adapted from Bardi et al. (2009). Example items included "many things could go wrong for me as a result of the changes" (threat) and "I believe that the changes have potential benefits" (challenge).[4] For a full list of items, see Table 2 in Article III.

While the instructions preceding the set of items at Time 1 and Time 2 referred to participants' expectations regarding the future merger-related changes, at Time 3 the instructions did not refer to changes specific to the merger event. This decision was based on discussions with the organization's representatives, who suggested that at Time 3 the employees might not see the upcoming changes, such as continuing integration of services and implementation of new operating models, specifically related to the merger process. The items were measured on a 5-point scale (1 = *Strongly disagree*, ..., 5 = *Strongly agree*).

In the choice for measurement for change appraisals, the measurement by Bardi et al. (2009) was utilized as it did not include items tapping into affective states (Skinner & Brewer, 1999). This reinforced a conceptual distinction from

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[4] For other studies applying the threat scale developed by Bardi et al., (2009), see Koivisto et al. (2013) and Edwards et al. (2017).

work engagement, which reflects an affective state. Furthermore, the utilized measurement tapped into an individual's future-related cognitive appraisals (threat and challenge), which excludes appraisal of occurred harms (Lazarus & Folkman, 1984). Harm appraisal was excluded from this study as appraisals were investigated at all three time points, including the merger planning stage (Time 1) when the employees did not yet have sufficient information regarding the possible merger-related harms. This was because the main changes in the organizations and employees' work took place after Time 1 (Figure 3).

5.2.2.5 Control variables

In both empirical substudies (Articles II and III), the self-reported outcome favorability of the changes (1 = *mostly negative*, …, 7 = *mostly positive*) was controlled for because the favorability of the occurred changes may affect future-related appraisals (Lazarus & Folkman, 1984) and have been shown to influence the level of trust towards authorities (Brockner, Siegel, Daly, Tyler, & Martin, 1997). Outcome favorability was measured after the outcomes were known to employees, that is at Time 2 and Time 3. The following instructions preceded the item: "When you think about all the changes that the founding of the department of Social Services and Health Care has brought about, how would you characterize the changes which have taken place thus far in your own work? Choose the alternative that best describes your opinion." A single-item measure of outcome favorability was chosen as reflecting the scales applied by prior studies measuring outcome favorability (Brockner et al., 1997; Rodell & Colquitt, 2009), outcome favorability was not expected to be a broad or heterogeneous construct requiring several items to be measured reliably.

In Articles II and III, participants' pre-merger organization (0 = *Social Services department*, 1 = *Health Care department*) was controlled for as a merger can be experienced and perceived differently depending to which merging organization an employee belongs to (e.g., Giessner, Ullrich, & Van Dick, 2012). In Article II, participant's position in the organization (0 = *employee*, 1 =*supervisor or middle manager*) was controlled for as the higher-level employees could have a different viewpoint on the merger process and the top management team. Furthermore, research has shown that justice perceptions vary as a function of the hierarchical level in the organization (Schminke, Cropanzano, & Rupp, 2002). Furthermore, also age was controlled for in Article II as prior studies have shown that trustworthiness (Sutter & Kocher, 2007) and justice perceptions (Janssen, 2004) may vary as a function of age. In Article III, gender was controlled for as it has been found to be associated with appraisals (Kohler et al., 2006; Matud, 2004), and tenure because one's relationship with

the organization can have an impact on appraisals of organizational change (Lazarus & Folkman, 1984).[5]

5.2.3   ANALYTICAL FRAMEWORK

Longitudinal structural equation modeling with latent factors was applied by using Mplus version 7.2 software (Muthén & Muthén, 2012). Structural equation modeling provided a suitable framework for the current study because it enabled simultaneous examination of reciprocal and over time relationships amongst several constructs, application of most recent approaches to modeling within-person changes, and testing for the differences in the estimated relationships (Farrell, 1994; Little, 2013; McArdle, 2009; Pitariu & Ployhart, 2010).

In both articles, covariance among the items' residuals over time was estimated as recommended for longitudinal structural equation modeling (Little, 2013; Ployhart & Vandenberg, 2010). Models were estimated using the maximum likelihood estimation with robust standard errors as it has been shown to be robust against non-normality (Muthén & Muthén, 2012), which was present in some of the indicators (e.g., work engagement). Missing values were handled with the maximum likelihood estimation in Mplus, which estimates missing values by utilizing all the observations in the data without imputing estimates for the missing data (Muthén & Muthén, 2012). Maximum likelihood estimation is dependent on the assumption that the data are missing at random (e.g., Schafer & Graham, 2002). Even if the assumption of missing at random would be incorrect, the impact on the estimates should only be minor (Collins, Schafer, & Kam, 2001; Graham, 2009).

Model comparison analyses were conducted using the Satorra-Bentler scaled chi-square difference test (Satorra & Bentler, 2001). Furthermore, in both empirical substudies, confirmatory factor analyses and tests of measurement invariance over time were utilized (see Chapter 5.2.4).

In Article II, longitudinal autoregressive cross-lagged panel modeling was applied (Campbell, 1963) to test for time-lagged reciprocal relationships between cognitive trust and fairness perceptions. Altogether four alternative models were estimated and compared. However, the applied analytical framework, cross-lagged panel model, has since received criticism for producing estimates that do not sufficiently separate within-person and between-person effects (e.g., Berry & Willoughby, 2017; Hamaker et al., 2015). For this reason, the model presented in Article II is re-analyzed in the current summary by using latent change score modeling (see Chapter 5.3.1), which is described in the

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[5] The hypothesized models in both empirical substudies were re-analyzed without the control variables to assess their impact on the hypothesized relationships (e.g., Becker et al., 2016). As the models excluding control variables resulted in the same main conclusions, except for hypothesized relationships being somewhat stronger in the model without control variables, these findings suggested that the empirical results did not depend on the inclusion of control variables.

following. Control variables were regressed on all latent variables to achieve full control of covariate influences (Little, 2013).

In Article III, latent change score modeling (LCSM; Ferrer, Balluerka, & Widaman, 2008; McArdle & Hamagami, 2001) was applied to investigate within-person changes and longitudinal relationships between work engagement and cognitive appraisals. In LCSM, latent change score is construed by regressing latent Time 2 variable on its corresponding Time 1 variable with a fixed coefficient of 1, by fixing the residuals of this regression with a zero variance, and regressing change score on Time 2 variable with a fixed path of 1. By this, the latent change score captures the within-person changes across the two subsequent time points and is free of measurement error (McArdle, 2009). Importantly, LCSM enables to model the predictive relations from prior levels and within-individual changes of the antecedent variable to within-individual changes in the outcome variable across two time spans such as from Time 1 to Time 2, and from Time 2 to Time 3 (McArdle, 2009). In LCSM, previously occurred changes become part of and are expressed in later change scores. By this, the processes which occurred during the first time span within a given variable, in part through the influence of the antecedent variable, carry over and have an impact on how variables change across the second time span. Estimation of these paths enabled an examination of the dynamic process, in which work engagement and cognitive appraisals are expected to foster each other, that carries over and impacts subsequent changes in these constructs (Henk & Castro-Schilo, 2016; McArdle, 2009; Selig & Preacher, 2009). In Article III, the control variables were regressed on all latent change score variables as they represented the key outcome variables in the model.

5.2.4   PRELIMINARY DATA ANALYSES

The descriptive statistics (e.g., means, standard deviation, correlations) and factor loadings are presented in the individual articles (see Tables 1 and 2 in Articles II and III). The following section reiterates the means and standard deviations of the latent change scores of work engagement and cognitive appraisals (threat and challenge) in Article III. This is because these estimates provide information concerning the direction and extent of within-person changes (means), and also the differences between persons in these changes (standard deviations), which the study seeks to explain.

During the first merger year, from Time 1 (pre-merger) and Time 2 (post-merger), on average employees' threat appraisal increased ($M = .23$, $p < .001$, $SD = .91$), challenge appraisal decreased ($M = -.19$, $p < .001$, $SD = .88$), and work engagement decreased ($M = -.21$, $p < .001$, $SD = .89$). Across subsequent post-merger year, from Time 2 to Time 3, the average changes in the focal constructs were not statistically significant (see Table 3 in Article III). These mean estimates suggested that on average, during the first time span characterized by major merger-related changes (see Figure 3), there was negative development in all of the three focal constructs, while such changes in the constructs

de-escalated across subsequent merger year. The standard deviations indicated between-person variability in the within-individual changes, which supported examination of antecedents of the latent change scores.

The hypothesized factor structures of both studies fit the data well (for detailed information of the model fit indices, see Articles II and III). To further test the factor structure, several alternative measurement models were examined by confirmatory factor analyses and model comparison tests utilizing the Satorra-Bentler scaled chi-square difference test. These results supported the hypothesized measurement models in both articles (for detailed results, see articles II and III).

Before testing for the hypothesized relations, measurement invariance over time was analyzed. These analyses inform whether participants interpret the measures are differently at different time points, which could explain some of the over time variance in the latent constructs (Little, 2013; Ployhart & Vandenberg, 2010; Vandenberg & Lance, 2000). Measurement invariance analysis therefore indicates whether the possible changes in the latent constructs are due to actual changes in these constructs, or due to measurement issues. In both articles, partial strong measurement invariance over time, which refers to equal factor loadings and item intercepts over time except a few freely estimated parameters, was established (for detailed results, see Articles II and III). Thus, the examined latent constructs presented sufficient indication of measurement invariance over time (Byrne, 2012; Little, 2013).

5.3 MAIN FINDINGS

5.3.1 RECIPROCAL RELATIONSHIPS BETWEEN TRUST AND FAIRNESS PERCEPTIONS (ARTICLE II)

Article II investigated the relationship between trust and fairness perceptions. This study addressed Research Questions 1 and 2 and Hypotheses 1, 2, and 3. The first research question (RQ1), "are employees' fairness perceptions and cognitive trust towards top management reciprocally associated over time?", and the related hypotheses, were examined by applying model comparison analyses and autoregressive cross-lagged panel model.

In the model comparison analysis, four alternative models were compared by conducting the Satorra-Bentler scaled chi-square difference tests. Model 1 represented a stability model, where only autoregressive paths over time among process justice and cognitive trust variables were estimated. In Model 2, in addition to autoregressive paths, process justice predicted subsequent cognitive trust. In Model 3, in addition to autoregressive paths, cognitive trust predicted process justice over time. Model 4 represented a combination of the previous three models, thus including the autoregressive paths, and the cross-lagged relations between process justice and cognitive trust. The resulting fit indices indicated that the models estimating over time relations either from

process justice to subsequent cognitive trust (Model 2), or the opposite direction (Model 3), provided a better fit to the data than a model that only estimated autoregressive paths among cognitive trust and process justice (Model 1; for detailed results, see Table 4 in Article II). However, the reciprocal model (Model 4) provided the best fit to the data, with fit indices of $\chi^2(527) = 852.43$, $p < .001$, CFI = .97, TLI = .97, RMSEA = .03, SRMR = .08. The conducted Satorra-Bentler scale corrected chi-square difference tests provided further support for the reciprocal model providing the best fit to the data as Model 4 also represented statistically significantly improved fit in comparison to other examined models, Models 1-3. The chi-square difference results were: in comparison to Model 1, $\Delta\chi^2(4) = 86.64$, $p < .001$, in comparison to Model 2, $\Delta\chi^2(2) = 43.14$, $p < .001$, and in comparison to Model 3, $\Delta\chi^2(2) = 24.69$, $p < .001$. The path estimates of the reciprocal model (Model 4) are presented in Figure 4.

$\chi^2(527)=852.43$, $p < .001$, CFI = .97, TLI = .97, RMSEA = .03, SRMS = .08
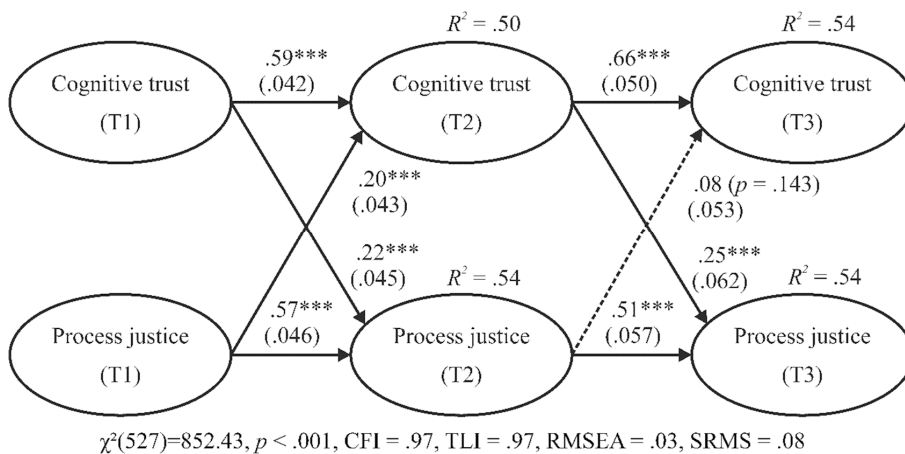
Figure 4 The cross-lagged relationships over time between employees' cognitive trust in top management and perceptions of merger process fairness (the reciprocal model, Model 4). $N = 622$. T1 = Time 1; T2 = Time 2; T3 = Time 3. Completely standardized maximum likelihood robust parameter estimates are reported. Standard deviations are presented in parentheses. Excluded from the figure for clarity are paths from covariates (pre-merger organization, position in the organization, age, outcome favorability), latent factors' items, and within-time covariances among latent variables. Adapted from Kaltiainen et al. (2017) with the kind permission of the American Psychological Association.
*** $p < .001$

In the second step, the path estimates of the reciprocal model were examined, as this model provided the best fit to the data. The results of the reciprocal model (see Figure 4) showed that the perceptions of merger process justice at Time 1 was positively related to subsequent cognitive trust at Time 2. However, the relationship between process justice at Time 2 and subsequent cognitive trust at Time 3 was not statistically significant. Therefore, Hypothesis 1 received partial support. The results also indicated that cognitive trust was positively and over time associated with process justice perceptions across both

measured time intervals, from Time 1 to Time 2 and from Time 2 to Time 3. Thus, Hypothesis 2 received full support. In addition, the results provided partial support for reciprocal relationships between trust and justice perceptions as expected in Hypothesis 3. Specifically, the trust→ justice→ trust relationship was not supported as the relationship between justice at Time 2 and cognitive trust at Time 3 was not statistically significant, whereas the justice→ trust→ justice reciprocal relationship received support.

To answer the second research question (RQ2), "is the unidirectional relationship from employees' fairness perceptions to cognitive trust in top management stronger than vice versa?", the over time path estimates between trust and fairness perceptions were tested for statistically significant differences. In these analyses, the freely estimated hypothesized reciprocal model was compared to a model where specific path estimates were set equal. These model comparison results indicated that the path coefficients over the first time interval, that is, process justice (T1) to cognitive trust (T2) and cognitive trust (T1) to process justice (T2), were not statistically significantly different from each other, $\Delta\chi^2(1) = 0.80$, $p = .778$. The difference between the cross-lagged path estimates over the second time interval, (T2→T3) was marginally statistically significant, $\Delta\chi^2(1) = 3.23$, $p = .072$. These results indicated slightly, however not statistically significantly, stronger support for Hypothesis 2 of cognitive trust being positively related to subsequent process justice than for Hypothesis 1 of the opposite relationship (i.e., from justice to trust). Similarly, the model with paths estimated from cognitive trust to process justice (Model 3) had a slightly better model fit than a model with paths estimated from process justice to cognitive trust (Model 2; see Article I for detailed results). Therefore, the unidirectional relationship from employees' fairness perceptions to cognitive trust in top management was slightly less robust, than the opposite relationship.

As an additional analysis in the present summary, the hypothesized reciprocal model (see Figure 4) was re-analyzed by applying an alternative analytical method, latent change score modeling (LCSM; Mcardle & Hamagami, 2001). This analysis was conducted because since completing the empirical substudy in question (Article II), the applied autoregressive cross-lagged panel model has been criticized for not segregating within-person changes from between-person differences and thus producing estimates that may be difficult to interpret (e.g., Berry & Willoughby, 2017; Hamaker et al., 2015). The main difference between the analytical techniques is that in the autoregressive cross-lagged panel model, the outcome variable is modeled by regressing prior level (i.e., score) of the construct on its subsequent level, which does not sufficiently capture the within-person fluctuations in these constructs over time. Conversely, in LCSM, the outcomes model the within-person changes in the constructs (see Chapter 5.2.3). Therefore, LCSM provides a framework to examine whether the antecedent variable explains between-person differences in the within-person changes in the outcome variable (Henk & Castro-Schilo, 2016; McArdle, 2009).

The conducted latent change score analysis yielded near-identical path estimates between trust and fairness perceptions in comparison to the results shown in Figure 4, therefore providing further support for the main conclusions of the study. First, the post-hoc latent change score model resulted in a good fit with the data, $\chi^2(527) = 913.85$, $p < .001$, CFI= .968, TLI= .964 RMSEA= .034, SRMR= .081. The standardized path estimates of the model suggested that the initial level of cognitive trust at Time 1 was positively related to within-person changes in fairness perceptions from Time 1 to Time 2 ($\beta = .24$, $SE = .048$, $p < .001$) and similarly from fairness at Time 1 to cognitive trust changes from Time 1 to Time 2 ($\beta = .23$, $SE = .047$, $p < .001$). Across the subsequent merger phase, cognitive trust at Time 2 was positively related to subsequent changes in fairness from Time 2 to Time 3 ($\beta = .30$, $SE = .074$, $p < .001$), while the opposite relationships from fairness at Time 2 to changes in cognitive trust from Time 2 to Time 3 was not found ($\beta = .10$, $SE = .063$, $p = .112$).

5.3.2 RECIPROCAL WITHIN-PERSON DYNAMICS BETWEEN WORK ENGAGEMENT AND CHANGE APPRAISALS (ARTICLE III)

Article III examined the relationships between employees' cognitive appraisals of organizational change and work engagement, and changes in these constructs. This investigation addressed Research Questions 3, 4, and 5, and Hypotheses 4, 5, 6, and 7.

To address the third research question (RQ3), "are employees' work engagement and changes in engagement reciprocally and over time associated with challenge and threat appraisals and changes in these appraisals?", and its related hypotheses, two latent change score models were estimated. The first model provided a test for spirals of work engagement (Hypotheses 4 and 5; Figure 5a) and the second model tested spirals of challenge and threat appraisals (Hypotheses 6 and 7; Figure 5b).

(a)

$R^2 = .37$

ΔChallenge (T1-T2) — 1.0 — Challenge (T2) — ΔChallenge (T2-T3)

$R^2 = .36$

.18** (.053)

.42*** (.047)

−.05 (.071; p = .452)

.05 (.117; p = .683)

Work engagement (T1) — ΔWork engagement (T1-T2) — 1.0 — Work engagement (T2) — ΔWork engagement (T2-T3)

−.12* (.054)

−.39*** (.056)

−.29*** (.073)

−.41*** (.111)

$R^2 = .39$

ΔThreat (T1-T2) — 1.0 — Threat (T2) — ΔThreat (T2-T3)
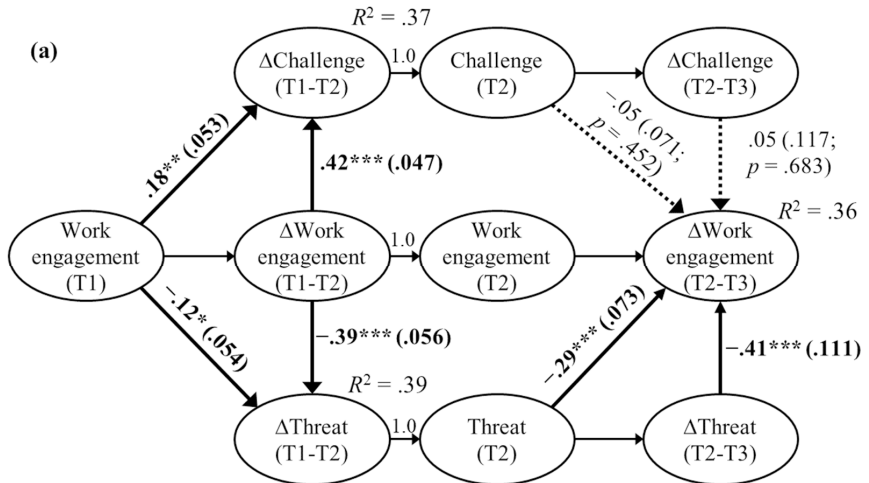
$\chi^2(1112) = 2049.30, p < .001$, CFI= .957, TLI= .952, RMSEA= .037, SRMR= .059

(b)

$R^2 = .42$

Challenge (T1) — ΔChallenge (T1-T2) — 1.0 — Challenge (T2) — ΔChallenge (T2-T3)

.20** (.066)

.30*** (.069)

.17** (.051)

.30*** (.051)

$R^2 = .36$

ΔWork engagement (T1-T2) — 1.0 — Work engagement (T2) — ΔWork engagement (T2-T3)

−.24*** (.067)

−.25** (.078)

−.24*** (.053)

−.37*** (.046)

$R^2 = .47$

Threat (T1) — ΔThreat (T1-T2) — 1.0 — Threat (T2) — ΔThreat (T2-T3)
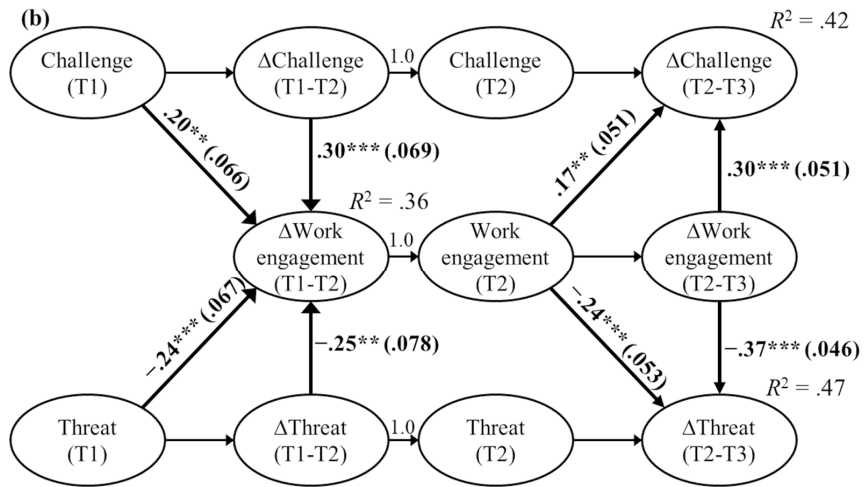
$\chi^2(1112) = 2031.69, p < .001$, CFI= .957, TLI= .953, RMSEA= .036, SRMR= .053

Figure 5 Reciprocal relationships between work engagement and challenge and threat appraisal levels and changes throughout the merger process. $N = 623$. T1 = Time 1; T2 = Time 2; T3 = Time 3. Standardized path estimates with standard deviations in the parentheses are presented. Symbol Δ indicates a latent change score. Paths marked with "1.0" are fixed to 1.0. For clarity, excluded from the figure are control variables (pre-merger organization, gender, tenure, change outcome favorability), Time 1 levels of the dependent latent change scores between Time 1 and Time 2, latent factors' items, autoregressive paths among latent change score variables, and within-time covariances among latent variables. More detailed description of the estimated models is presented in Article III.
$* p < .05; ** p < .01; *** p < .001$.

Concerning work engagement spirals, the first model showed that levels of work engagement at Time 1 and changes in engagement from Time 1 to Time 2 were positively related to changes in challenge appraisal from Time 1 to Time 2 (see Figure 5a). This finding provided support for Hypothesis 4a. However, the relationships from levels of challenge appraisal at Time 2, and changes in challenge from Time 2 to Time 3, to work engagement changes from Time 2 to Time 3 (i.e., the feedback loop) were not statistically significant. Thus, Hypothesis 4b was not supported. Regarding Hypothesis 5, the negative relationships from work engagement levels and changes to threat appraisal changes from Time 1 to Time 2 were found (Hypothesis 5a), together with the negative relationships from threat appraisals levels and changes to work engagement changes across Time 2 and Time 3 (Hypothesis 5b; see Figure 5a). Therefore, Hypotheses 5a and 5b received support. These findings indicated that employees with higher initial levels of work engagement, and subsequent increases, tended to have more increases on challenge appraisals and fewer increases on threat appraisals during the first merger year. Across the second merger year, those with lower threat appraisals, and who experienced decreases in threat, experienced more increases in work engagement.

In the second model, spirals of challenge and threat appraisals (Hypotheses 6 and 7) were tested. As shown in Figure 5b, challenge appraisal levels and changes were positively related to work engagement changes from Time 1 to Time 2 (Hypothesis 6a), and work engagement levels and changes were positively related to challenge appraisal changes from Time 2 to Time 3 (Hypothesis 6b). These results provided support for Hypotheses 6a and 6b. Concerning Hypothesis 7, threat and changes in threat were negatively related to work engagement changes across Time 1 to Time 2 (Hypothesis 7a), and work engagement levels and changes were negatively related to threat appraisal changes from Time 2 to Time 3 (Hypothesis 7b). These findings supported Hypotheses 7a and 7b. The found relationships of cognitive appraisal spirals (Figure 5b) indicated that the more employees appraised the upcoming change as a challenge and the less as a threat, and the more their challenge increased, and threat decreased, the more work engagement increased across the first merger year. Furthermore, the higher an employees' work engagement was at Time 2 and the more it increased, the more the threat appraisal decreased, and challenge appraisal increased between Time 2 and Time 3.

Taken together, these findings provided support for the hypothesized reciprocal relationships between work engagement and cognitive appraisals of change (threat and challenge) and their within-person changes. As sole exceptions, relationships from challenge appraisal Time 2 levels and Time 2 to Time 3 changes to changes in work engagement from Time 2 to Time 3 were not found.

To answer the research questions whether the relationship (a) from work engagement to threat appraisal was stronger than to challenge appraisal (RQ4), (b) from threat appraisal to work engagement was stronger than from

challenge appraisals (RQ5), a set of model comparison analyses were conducted based on the estimated models shown in Figure 5. In these analyses, the chi-square value of the constrained model, where the examined paths were set equal, was compared to a model where the paths were estimated freely. Before conducting the model comparison tests, challenge appraisal scales were reverse coded to enable examination of differences in the strength of path estimates, as setting paths with opposite signs equal would not have achieved this.

These tests suggested that the relationships from engagement to threat and challenge did not differ because the chi-square values of the constrained models (equal paths from engagement to threat and challenge) and unconstrained models (freely estimated paths) were not statistically significantly different from each other either during Time 1 to Time 2, $\Delta\chi^2(2) = .07$, $p = .963$, nor from Time 2 to Time 3, $\Delta\chi^2(2) = 1.18$, $p = .554$. These results indicated that work engagement equally mitigated threat and fostered challenge appraisals across the merger. Regarding the opposite direction, the model comparison analyses showed that the differences from threat and challenge to work engagement were not statistically significant across Time 1 to Time 2, $\Delta\chi^2(2) = .24$, $p = .885$. These findings suggested that threat mitigated, and challenge fostered work engagement equally during major merger-related phases (i.e., from Time 1 to Time 2). However, across Time 2 to Time 3, threat appraisal was more strongly related to engagement changes than challenge appraisal, $\Delta\chi^2(2) = 6.63$, $p = .036$. Therefore, during more minor merger-related contextual changes in the merged organization (see Figure 3), appraisal of threat emerged as a more robust predictor of work engagement than challenge appraisal.

6 DISCUSSION

This dissertation provided a theoretical framework and empirical support for a dynamic perspective on employee experience of organizational changes. Through examining the reciprocal relationships, the present study provided a more comprehensive picture regarding the interrelationships and development in employee experience and produced knowledge regarding the means and processes that foster employees' well-being and motivation in demanding environments.

The theoretical aim of the dissertation was addressed by the developed holistic and comprehensive model regarding dynamics in employee experience of organizational changes, with the focus on trust, fairness, cognitive appraisals, job crafting behaviors, and work engagement (Article I). Two reciprocal relationships, as postulated in the theoretical model, were tested empirically in the context of an organizational merger. First, positive reciprocal relationships between employees' cognitive trust towards top management and perceptions of merger process fairness were found (Article II). Second empirical substudy provided support for reciprocal relationships between work engagement and cognitive appraisals of change (threat and challenge; Article III). These two empirical substudies illuminated the dynamics between employees' perceptions of leaders' characteristics and actions (Article II) and between cognitive change reactions and work engagement during unfolding change events (Article III). Before discussing the developed theoretical model, the empirical findings of the dissertation are discussed.

6.1 DISCUSSION OF THE EMPIRICAL FINDINGS

6.1.1 RECIPROCITY IN EMPLOYEE CHANGE EXPERIENCE

The empirical findings mainly provided support for reciprocal relationships over time between constructs with noted significance in the context of organizational change; employees' fairness perceptions and trust (Article II) and change appraisals and work engagement (Article III). These findings from an organizational merger suggest that organizational change research would benefit from advancing beyond the focus on sequential, one-way relationships among constructs related to employee change experience. Furthermore, the found relationships contributed to theory and research in the domains of organizational change, management, trust, fairness, work engagement, and cognitive appraisal research, as elaborated in the following.

In Article II, employees' perceptions of merger process fairness and cognitive trust in top management were found to be reciprocally and positively related over time across pre-merger and first post-merger measurement time

points (i.e., from Time 1 to Time 2). However, during the post-merger phase (i.e., from Time 2 to Time 3), only cognitive trust was found to be related to subsequent fairness perceptions, but not vice versa (see Figure 4). The relationship from trust to subsequent fairness was slightly, but not statistically significantly, more robust than the relationship from fairness to subsequent trust. While organizational change literature has conceptualized and studied trust and fairness as critical antecedents of various employee change reactions and consequences, this study elaborated the dynamic interplay between these two constructs. This scrutinization increased the understanding concerning the relationships between trust and fairness, which have been shown to bear vital importance for employees' well-being, psychological change reactions and various organizational outcomes (see Chapters 2.1.2 and 2.1.3).

As a theoretical contribution, the found reciprocal relationships between trust and fairness challenge the widely held theoretical assumptions regarding the direction of causality between fairness perceptions and trust. Conventionally, building on social exchange theory (Blau, 1964), or fairness heuristic theory (Lind, 2001), trust has been posited solely as an outcome of favorable perceptions of justice (Colquitt & Rodell, 2011). While the findings provided partial support for the relationship from fairness to trust, notably the results showed that trust may also influence fairness perceptions in accordance to confirmation bias (Wason, 1960; see also Dirks & Ferrin, 2001; Holtz, 2013). By this, the results provide support for recent theoretical advances suggesting that evaluations of an entity's competence and reliability affect fairness perceptions of events involving the entity, which consequently shape subsequent evaluations of entity's trust-related characteristics (Holtz, 2013, 2015; Lewicki et al., 2005). Furthermore, the study answers calls to examine temporal aspects of justice judgements and trust (Fortin et al., 2016; Jones & Skarlicki, 2013; Li, 2012) and contributes to a recent paradigm shift where researchers are encouraged to investigate the antecedents of justice perceptions (Brockner, Wiesenfeld, Siegel, Bobocel, & Liu, 2015).

In Article III, employees' work engagement, and its increases, were found to be related to decreases in threat appraisals and increases in challenge appraisal across both merger time spans (i.e., from Time 1 to Time 2, and from Time 2 to Time 3; see Figure 5). The converse relationship from appraisals to work engagement was partly supported. Threat and increases in threat were related to decreases in work engagement across both measured time spans. However, challenge, and increases in challenge, were related to work engagement increases only across Time 1 to Time 2, while challenge-engagement relationship was not found across Time 2 to Time 3 (see Figure 5). These findings suggest that the relationships from work engagement to challenge appraisal was more robust than vice versa, while threat and engagement were reciprocally related throughout the merger process.

As the first study to examine the relationship between work engagement and cognitive appraisals, the reciprocal findings provide new insights not only regarding the cognitive determinants of work engagement, but also for the

benefits of engagement during organizational change. While existing theorizing has posited work engagement as an antecedent of cognitions during organizational changes (Van den Heuvel et al., 2010), this supposition has not been previously tested (see Chapters 2.3.2 and 3.2.2). Interestingly, the present findings suggest that work engagement is a somewhat stronger predictor of cognitive appraisals (i.e., a change reaction) than vice versa. Therefore, work engagement should also be understood as an antecedent of change reactions, such as the examined cognitive appraisals, and not only as a consequence of cognitive reactions to change. Examining work engagement solely as an outcome may lead to a limited understanding concerning the role of employees' work-related affective and motivational states during demanding events. The found engagement-appraisal relationship supported the proposition of work engagement as a psychological resource with beneficial adaptational effects (see Aspinwall, 1998; Hobfoll, 1989; Lazarus & Folkman, 1984).

As a theoretical contribution, the dissertation extends and challenges the central notions of the broaden-and-build theory, which has formulated how spirals of positivity are achieved through positivity (e.g., positive affect) fostering positive cognitions such as finding positive personal meaning during demanding events (Fredrickson et al., 2013). A similar focus applies to existing work engagement research that has in its examination of engagement spirals focused on positive cognitions or dispositions, such as hope and optimism (Bailey et al., 2017) thus sidelining the potential role of negative cognitions. Therefore, less is known whether the accumulation of positivity (e.g., work engagement) over time is best understood as positivity fostering positive cognitions or mitigating negative cognitions. By synthesizing the central notions of the broaden-and-build theory (i.e., positivity building over time through broadened cognitions) and cognitive appraisal theory (i.e., demanding events can be cognitively appraised both negatively and positively), the study contributed to the broaden-and-build and work engagement research.

Notably, the results concerning work engagement spirals (see Figure 5a) suggested that the protective quality of positivity, that is engagement mitigating threat, may be a more suitable explanation for how positivity begets subsequent positivity during organizational changes. This was because while work engagement was equally related to threat and challenge appraisal across Time 1 and Time 2, threat appraisal emerged as a statistically significantly stronger predictor of subsequent work engagement changes than challenge appraisals levels (see Chapter 5.3.2). Although Fredrickson and colleagues (2003) contended that "finding positive meaning may be the most powerful leverage point for cultivating positive emotions during crisis" (2003, p. 374), the current findings indicated that helping employees not to ascribe negative personal meaning to change events may be even more critical for cultivating work-related positivity during organizational change. Furthermore, given that positivity spirals are inherently longitudinal processes, and for this reason challenging to test in laboratory studies, the current longitudinal three-wave

field study provides a new and valuable test for the broaden-and-build theory in organizational contexts (Vacharkulksemsuk & Fredrickson, 2013).

Taken together, the primary implication of the found reciprocal relationships is that the research examining work engagement and connections between trust and fairness in demanding contexts needs to advance beyond focusing on unidirectional relationships. Similar suggestions apply to organizational change research, which has predominantly examined sequential, one-way relationships. For example, the found results indicated that it would be inaccurate to assume that employees' work engagement is only an outcome of change-related appraisals and not vice versa. This assumption would lead researchers to focus on study designs that test work engagement only as an outcome of employees' reactions to change, thus measuring engagement only after cognitive appraisals in longitudinal study designs, which may result in limited knowledge. A similar notion applies to the relationship between trust and fairness. In contrast to conventional wisdom that has posited trust as a gradually building outcome of favorable fairness perceptions, the findings of the dissertation suggest that trust may also influence how employees perceive to be treated by the organizational leaders.

6.1.2 DIFFERENCES IN THE RELATIONSHIPS DURING ORGANIZATIONAL CHANGE

By examining employees change experiences across three phases of an organizational merger, from pre- to post-merger stages, this study contributes to the current and limited understanding of how psychological experiences and reactions unfold throughout organizational change processes. Both empirical substudies found differences in the relationships across different time spans of the merger process. While fairness perceptions were related to trust, and challenge appraisals to work engagement during the first year of the merger (T1-T2), these relationships were not statistically significant across the subsequent merger year (T2-T3; see Figures 4 and 5). However, the present study (Article II) provides only preliminary support for the difference in the over time path estimates from fairness to trust, as a model comparison analysis indicated that these estimated did not differ statistically significantly across the two time spans, $\Delta\chi^2(1) = 2.18$, $p = .140$. Conversely, for the path estimates from challenge appraisal to work engagement, the analysis indicated that the differences in the paths across the two time spans were also statistically significantly different, $\Delta\chi^2(2) = 8.70$, $p = .013$.

The examined merger context provides a potential explanation for the differences in the relationships. Whereas the first merger year was characterized by major merger-related changes for the employees (e.g., the actualization of the merger, integration of services), the subsequent year was associated with more minor ongoing contextual changes in the merged organization (e.g., a continuation of integration at a smaller scale; Figure 3). Taken together with

the current findings (Figures 4 and 5), albeit preliminary concerning the fairness-trust relationships, the results suggest that the beneficial effects of fairness perceptions on trust in leaders, and from positive cognitive change reactions (challenge) to positive affective and motivational state (work engagement) are accentuated during significant organizational changes.

Interestingly, according to the uncertainty management theory (Van den Bos, 2001), fairness perceptions are especially relevant in the case of significant changes in a person's environment. This suggested that especially during substantial changes, employees' perceptions of how they are treated (i.e., fairness perceptions) act as a cue or signal of top management's trust-related characteristics (i.e., cognitive trust). Similarly, previous research has found that the relative importance of justice perceptions can change over time. These findings have indicated that process justice perceptions have stronger effects on employee attitudes (Ambrose & Cropanzano, 2003) and intentions (Maertz, Mosley, Bauer, Posthuma, & Campion, 2004) before, or soon after, a person knows the outcome of a decision process.

The finding of challenge appraisals being more strongly related to work engagement during the time of more substantial changes in the organization, aligns with the notion that positive expectations are especially important during uncertain times (Hobfoll, 1989). Relatedly, the results also showed that threat was a more robust predictor of work engagement than challenge appraisal during the subsequent merger year (see Chapter 5.3.2). This finding is in accordance with the notions that individuals are more sensitive to potential loss than gain (Kahneman & Tversky, 1979) and that negative event perceptions have stronger effects than positive (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Rozin & Royzman, 2001). These propositions have received support in the few related studies that have simultaneously examined individuals' positive and negative appraisals. Studies have shown negative appraisals to be stronger predictors of emotions (Skinner & Brewer, 2002) and job dissatisfaction and turnover intentions (Webster, Beehr, & Love, 2011). However, other studies have suggested that challenge appraisals are more strongly related to positive outcomes (e.g., positive affect, life satisfaction) while negative appraisals are associated primarily with adverse outcomes, such as negative affect, anger, anxiety (Bardi et al., 2009; Searle & Auton, 2015). Notably, unlike the reviewed research, this study examined positive and negative future-related appraisals as antecedents across distinct phases of a demanding event. As the findings showed that the effects of positive appraisals were stronger during times of substantial contextual changes, this dissertation advances the knowledge regarding the conditions of the beneficial psychological effects of positive expectations.

As the empirical substudies of the dissertation examined a significant organizational change event, they provide an interesting point of comparison to prior research conducted in work settings that are not undergoing particular change endeavors. The findings in Article II showed a relationship from cognitive trust to subsequent employees' fairness perceptions throughout the

merger process. This finding contrast with a study by Colquitt and Rodell (2011), who did not find relationships from employees' evaluation of supervisor's competence to subsequent process fairness perceptions (e.g., procedural, interpersonal or the informational facets of justice). This difference is perhaps due to differences between the contexts of the study by Colquitt and Rodell (2011) and the current research. Specifically, in the study by Colquitt and Rodell, participants across various organizations recalled their fairness perceptions and evaluations of competence and reliability (i.e., cognitive trust) concerning their supervisor generally across different allocation decisions they had experienced. Therefore, justice perceptions and cognitive trust were probably not as salient as there was no significant organizational event for the leaders to manage (Dirks & Ferrin, 2002; Li, 2012; Tyler & DeCremer, 2005). In contrast, the current study examined evaluations and perceptions throughout a significant organizational change event, which requires a great deal of competence on the part of the top management to be successfully navigated. Therefore, the employees' perceptions of the management's competence and reliability should be particularly salient and relevant given the complexity of the event in question. Furthermore, as previously mentioned, the same contextual issue should amplify the effect of justice perceptions, especially during the time of substantial changes taking place, in accordance with the uncertainty management theory (Van den Bos, 2001). This difference, in the results between the Article II and the study by Colquitt and Rodell (2011), highlights the importance of investigating the relationships between trust and justice perceptions in various contexts, such as during significant organizational changes.

Similarly, Article III represents one of the rare studies that examines work engagement in the context of organizational change. By this, the study answer calls to examine employees' engagement during major organizational change events (Teerikangas & Välikangas, 2015). The studied change context provided an interesting point of comparison to previous relevant research. The finding that work engagement was related to increases in challenge appraisals (Article III) appears to contradict the findings by Barbier et al. (2013) as the authors did not find a relationship from work engagement to subsequent changes in employees' optimism. This difference may be due to the following two reasons. First, the study by Barbier et al. (2013) was conducted in a work environment that was not undergoing any particular organizational change event. The contextual difference between the studies suggests that the beneficial effects of engagement on employees' cognitions are more likely found during demanding events. This aligns with the notion of psychological resources having accentuated effects during uncertain times (e.g., Hobfoll, 1989). Second, event-specific cognitive appraisals, as examined in the current study, are likely more malleable than psychological predispositions (e.g., optimism). Such predispositions reflect individuals' more general beliefs that are potentially more stable

in comparison to cognitive appraisals that focus on a specific event, which unfold and develop over time (Folkman & Lazarus, 1985; Lazarus & Folkman, 1984).

6.1.3   CHANGES IN EMPLOYEE EXPERIENCE

In Article III, the aim was to unravel the dynamic employee experience of change, not only by testing reciprocal relationships across the merger process, but also by examining the role of intraindividual changes in the studied constructs; work engagement, and cognitive appraisals of change. Notable, the majority of organizational change research has examined differences among a set of people. Such studies have found, for example, that those who positively appraise the change event, are more likely to support the change than those who do not appraise the event positively (Fugate & Soenen, 2018). While acknowledging the importance of such findings, these studies do not account for changes in employee experience. Importantly, such changes have been shown to occur and have an impact on psychological reactions and outcomes during organizational change events (Edwards et al., 2017; Fugate et al., 2002; Jansen et al., 2016; Smet et al., 2016; Sung et al., 2017).

The main results of Article III (see Figure 5) indicated that the relationships from within-person changes in the antecedent variables to changes in outcome variables (i.e., change-to-change) were stronger than the relationships from antecedent variable levels (i.e., level-to-change). Further analyses revealed that engagement changes were more robust predictors of cognitive appraisal changes than prior levels of work engagement. The models with constrained path estimates (i.e., change-to-change and level-to-change paths set equal) resulted in statistically significantly worse model fit (p-values ranging between $p = .001$ and $p < .001$). Concerning appraisal-engagement relationships, changes in challenge appraisal indicated marginally statistically significantly stronger relationship to engagement across Time 1 to Time 2 than challenge appraisal levels at Time 1, $\Delta\chi^2(1) = 3.33$, $p = .068$. Across Time 2 to Time 3, the relationships from threat appraisal changes to engagement were slightly, but not statistically significantly stronger than the relationships from threat levels at Time 2, $\Delta\chi^2(1) = 3.68$, $p = .055$. The latter aligns with the recent findings by Edwards et al., (2017), which showed that changes in threat were more strongly related to employees' post-merger integration than baseline threat levels. For researchers, these findings suggest that failing to account for the effects of within-person changes in the antecedent constructs may result in limited understanding regarding the underlying processes that influence employees' change reactions. Therefore, researchers are encouraged to utilize longitudinal study designs that measure the same constructs across the same individuals to shed light on evolving employee change experience during unfolding organizational change events.

The examination of within-person change trajectories, and their interrelationships across two time spans in Article III, also represented a more informative and accurate attempt to test theorized spiraling relationships. While spirals refer to changes in one construct fueling further changes, such as positivity fostering cognitive changes within an individual, which lead to subsequent changes in positivity (Fredrickson, 2001), prior research about engagement spirals has mainly tested such notions by examining over time differences between persons (Reis et al., 2015). Article III went beyond this research by demonstrating how work engagement and cognitive appraisals accumulate and cascade over time through fostering changes in each other, resulting in spiraling relationships over time. The found relationships also provided evidence regarding downward cycles or loss spirals. Loss spirals refer to dynamic processes, wherein those with fewer psychological resources, and who experience decreases in resources, are more vulnerable to future resource losses resulting in a downward cycle of decreasing energies, motivation, expectations, and affective states (Hobfoll, 1989, 2002). Taken together, these findings provided new empirical evidence for gain (Fredrickson, 1998) and loss spirals (Hobfoll, 1989) by increasing the understanding about spirals of work engagement and cognitive appraisals during demanding events. In addition, as interventions typically aim at inducing change within individuals, within-person analyses are suitable for informing scholars and practitioners alike concerning intervention design and testing (Curran & Bauer, 2011; Hamaker et al., 2015; Henk & Castro-Schilo, 2016).

Relatedly, analytical approaches that do not segregate within-person changes from between-person differences, such as commonly applied autoregressive cross-lagged panel model, have been criticized for producing estimates that are difficult to interpret (e.g., Berry & Willoughby, 2017). However, the additional analysis of Article II (see Chapter 5.3.1) revealed that these findings did not differ between the cross-lagged panel model and latent change score analysis, wherein the latter segregates within- and between-person differences. Therefore, while researchers are encouraged to select analytical frameworks that map well with theoretical notions (Hamaker et al., 2015; Henk & Castro-Schilo, 2016), this additional analysis did not indicate that the cross-lagged panel model would have yielded unreliable results in this substudy.

6.2 DISCUSSION OF THE THEORETICAL MODEL

The developed theoretical model (see Chapter 4, Article I) addressed the theoretical aim of the dissertation by presenting essential psychological antecedents and processes that influence employees' work engagement during organizational change and their dynamic relationships. As a theoretical contribution, the provided comprehensive and holistic model that synthesized and

linked the existing literature from different domains of research (e.g., organizational change, leadership, trust, cognitive appraisals, work engagement) in new ways and thus expanded the theoretical understanding concerning the dynamics of employees' change experiences as elaborated in the following. As an example, the model coupled together central suppositions of the cognitive appraisal theory with job crafting and work engagement research, which is discussed in more detail later in this chapter.

Perhaps most importantly, by integrating various relatively separate domains of research, the theoretical model advances the dynamic perspective to examining psychological effects of organizational changes by providing a theoretical rationale for reciprocal relationships in employee change experience. Conversely, existing theoretical frameworks and models on the topic have focused on positing sequential, one-way relationships among constructs typically categorized into antecedents (inputs), change reactions (mediating processes), and change consequences (outcomes; see Choi, 2011; Fugate, 2013; Mishra & Spreitzer; 1998; Oreg et al., 2011; Oreg et al., 2018; Rafferty et al., 2013). The current model encourages a shift in focus towards reciprocal relationships, which is likely to shed light on the direction of causal relationships and provide insights regarding the dynamism within psychological processes underlying employees' well-being, motivation, and adjustment.

Furthermore, the developed model posits cross-foci effects between different targets, that is, employees' trust and fairness perceptions are expected to transfer between top management and supervisor. It is important to note that such cross-foci effects (e.g., a relationship between trust towards supervisor and top management) are likely to be weaker than the effects within the same foci or target (e.g., a relationship between trust and fairness perceptions concerning the top management; Lavelle, Rupp, & Brockner, 2007). Accordingly, in their meta-analytical study, Rupp et al. (2014) found that "multifoci justice perceptions more strongly predicted target similar than dissimilar outcomes" (p.160). As a contribution to the target similarity literature, the developed model postulates mediating processes that may explain cross-foci effects in trust and fairness perceptions. For instance, while top management trust is not posited to have a direct effect on supervisory fairness, this relationship is expected to be mediated by top management fairness. Employees who trust their top management tend to perceive the actions of the top management more fairly (i.e., a within-foci effect; see Article II). Consequently, those who perceive to be treated in a fair manner by the top management are likely to hold more favorable perceptions of their supervisor's fairness as well (i.e., a cross-foci effect; e.g., Wo et al., 2015). Therefore, the developed model provided a novel perspective concerning the underlying processes that may produce cross-foci effects in trust and fairness perceptions across two levels of organizational leadership.

Relatedly, research suggests that cross-foci effects are accentuated when the target (e.g., a supervisor) is perceived as a prototypical member of the social group, such as a work team (Hogg, 2001; Platow & Van Knippenberg,

2001). Prototypicality refers to the extent that a member of the group (e.g., a leader) is seen to embody what the group stands for and is perceived as representative of the group (Hogg, 2001). Recently, a study by Lipponen et al. (2018) found a positive relationship from employees' perceptions of supervisory fairness to top management fairness when the supervisors were seen to be prototypical members of the team. Research has also shown that prototypicality accentuates the effects of fairness and trust to change appraisals (Koivisto et al., 2013) and that prototypical leaders are perceived to be fairer than non-prototypical leaders (for a review, see Haslam, Reicher, & Platow, 2011). Taken together, employees' perceptions of leaders' prototypicality represents a potential extension to the developed theoretical model as it may influence fairness perceptions and moderate the reciprocal effects across leadership levels and from trust and fairness to change appraisals.

Another intriguing question related to reciprocal relationships across supervisor and top management is, what happens when employees' perceptions about the top management and supervisors are inconsistent? For example, in a case where an employee trusts their supervisor but not the top management. Drawing from Holtz's (2013) trust primacy model, it can be expected that in such case, perceptions that are held with higher certainty have a stronger impact. For instance, if the employee is certain that the supervisor is trustworthy, but the employee is not that certain about the trustworthiness of the top management, it is therefore more likely that employees' perceptions of trustworthiness influence evaluations regarding the top management, than vice versa.

Notably, the dissertation's comprehensive model (Article I) appears to be the first to combine the literature of individuals' cognitive future-related appraisals of events (Fugate, 2013; Lazarus & Folkman, 1984; Roseman & Smith, 2001) with the domains of work engagement (Schaufeli et al., 2002) and job crafting (Tims et al., 2012) research. The model therefore complements and contributes to an existing theoretical framework by Van den Heuvel et al. (2010), which similarly postulates antecedents and processes that influence employees' job crafting and work engagement in the context of organizational change.

A key difference in comparison to the dissertation's theoretical model is that Van den Heuvel et al. (2010) drew from the job demands-resources (JD-R) theory to posit a direct relationship from job-related demands to work engagement during organizational change events. According to the JD-R model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), job demands represent work conditions (e.g., time pressure and workload) that are generally expected to be associated with psychological costs, such as increases in exhaustion (cf. Bakker & Demerouti, 2017; Cavanaugh, Boswell, Roehling, & Boudreau, 2000). Notably, in JD-R, the detrimental effects of demands are not expected to depend on employees' subjective cognitive interpretations and appraisals of these demands, but rather, "individual differences will merely modify the extent of these reactions as well as the perceptions and cognitive

operations" (Demerouti et al., 2001, p. 510). This perspective seemingly contradicts a central tenet of the cognitive appraisal theory, which posits subjective appraisals as crucial underlying determinants of subsequent responses (Lazarus & Folkman, 1984). Furthermore, recent studies have challenged the aforementioned supposition of the JD-R framework (see also Bakker & Demerouti, 2017).

In their study Crawford et al. (2010) argue that the JD-R model "may be overly parsimonious" as "research grounded in this perspective has produced conflicting, inconsistent, and unexpected findings on the relationship between demands and engagement" (p. 835). Accordingly, in their meta-analysis Crawford et al. (2010) showed that subcategorizing job demands either as positive challenges (e.g., potential for future gains) or negative hindrances (e.g., potential for hindering attainment of personal goals), explained the inconsistent findings of prior studies and increased the explanatory strength of job demands to work engagement. These findings were in accordance to the challenge-hindrance framework (Cavanaugh et al., 2000), which posits that stressors may have positive or negative outcomes depending on whether they represent a potential for personal gain (i.e., a challenge stressor) or act as an obstruction to personal goals (i.e., a hindrance stressor). Accordingly, Crawford et al. (2010) relied on a priori categorization of demands either as positive or negative, which was based on "subject matter experts' categorizations, employee ratings of job demands as challenging and/or hindering, critical incident techniques, and previous meta-analyses" (p. 838). These findings suggested that it is insufficient to expect work-related demands to have only a negative impact across all individuals.

However, the examined effects in the study by Crawford et al. (2010) did not account for employees' subjective appraisals of job-related demands nor the supposition that demands and events may be appraised to have positive and negative personal impact (Fugate, 2013; Lazarus & Folkman, 1984). Accordingly, recent studies have demonstrated that the relations from job-related demands (e.g., stressful event, workload, time pressure, job complexity, role conflict) to various outcomes (e.g., affective states, job dissatisfaction, turnover intentions) is influenced by employees' subjective appraisals concerning the demand's positive and negative personal impact (Searle & Auton, 2015; Webster et al., 2011). In a similar vein, a study by Rafferty and Griffin (2006) highlighted the importance of employees' subjective appraisals of change as determinants of job satisfaction and turnover intentions.

Taken together, the reviewed findings suggest that it is insufficient to expect that demanding work settings, such as organizational change events, (a) have only adverse psychological effects, (b) are appraised only either as negative or positive, or (c) are appraised similarly across all individuals. Such assumptions may result in incomplete understanding concerning the processes of how demanding events influence employees' subsequent reactions. There-

fore, the developed theoretical model posits future-related cognitive appraisals of change events as key determinants of employees' job crafting behaviors and work engagement.

The postulated role of cognitive appraisals as predictors of work engagement (Article I) provides another extension to the model by Van den Heuvel et al. (2010). Van den Heuvel and colleagues posit reciprocal relationships between work engagement and employees' psychological capital, which consists of hope, optimism, self-efficacy, and resiliency (Luthans, Avolio, Avey, & Norman, 2007; Luthans & Youssef, 2004). As these constructs represent individual's positive and general beliefs, they are expected to act as psychological resources that foster and are further fostered by experiences of work engagement in the context of organizational change (Van den Heuvel et al., 2010). To couple these notions with the dissertation's theoretical model (Article I), higher levels of psychological capital, such as an individual's general tendency to be optimistic towards the future, are expected to foster employees' event-specific challenge appraisals and mitigate threat in accordance to cognitive appraisal theory (Lazarus & Folkman, 1984). These cognitive appraisals consequently influence employees' behavioral and affective reactions, such as job crafting and work engagement (see also Fugate, 2013). Therefore, in the context of organizational change, event-specific challenge and threat appraisals may partly mediate the relationship between psychological capital and work engagement, which has been found in prior research (e.g., Bailey et al., 2017).

6.3 LIMITATIONS

Of course, the empirical findings of the dissertation should be interpreted in the light of the study limitations. As "all research designs are flawed—though each is flawed differently" (Barends et al., 2013, p. 5), in the following I discuss the limitations of the utilized research design in the empirical substudies (articles II and III).

The applied methodology provides only limited evidence regarding causal effects (e.g., Hernán, 2018; Little, Preacher, Selig, & Card, 2007). Like many field studies examining employees' reaction to change, an observational study was conducted, not experimental research. Studies which do not manipulate the presumed predictor construct and analyze whether this manipulation causes differences between manipulation and control groups, provide only limited evidence for causality. While the applied methodology tests for associations between constructs, associations do not equal causality (Hernán, 2018; Pearl, 2000). Relatedly, the applied survey research methodology cannot eliminate the potential omitted variable problem. This problem refers to a potential scenario, where a variable that is not measured confounds with the predictor and outcome variables and causes the observed covariance between the analyzed constructs (e.g., Little et al., 2007). Another potential limitation regarding causal inferences in survey research is the potential common method

variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Common method variance means that the observed covariance between antecedent and outcome constructs could occur (in part) due to both constructs measured by the same method, such as self-report survey as in the present dissertation. While the significance of common method bias has been debated (Conway & Lance, 2010; Spector, 2006) the use of repeated measures across different contextual circumstances in the current study reduces this risk (Podsakoff et al., 2003; Spector, 2006). However, the focal constructs of the present dissertation (i.e., subjective evaluations of cognitive trust and fairness, the experience of work engagement, and cognitive appraisals of change) necessitated the use of self-report measures.

Despite the study's limitations concerning causal inferences, the present dissertation aimed at increasing the current understanding about the impact and causal relationships between the examined constructs. For instance, whether work engagement helps employees to perceive the change event in a positive rather than in a negative manner. While acknowledging these limitations, I chose not to avoid causal language (e.g., "influence," "effect," and "impact") entirely when describing and discussing the aims of the study. As recently argued by Hernán:

> *The proscription against the C-word is harmful to science because causal inference is a core task of science, regardless of whether the study is randomized or nonrandomized. Without being able to make explicit references to causal effects, the goals of many observational studies can only be expressed in a roundabout way. The resulting ambiguity impedes a frank discussion about methodology because the methods used to estimate causal effects are not the same as those used to estimate associations.*
>
> <div align="right">Hernán, 2018, p. e1</div>

As another restriction, the applied study design was limited to three measurement time points with a time lag of one year (see Figure 3). Shorter measurement time lags could produce stronger relations as they are less vulnerable to interim effects (Dormann & Van de Ven, 2014). More frequent measures would also potentially capture more information concerning the pace of within-person changes and potential time-dependent fluctuations in relationships (see Dalal, Bhave, & Fiset, 2014; Little, 2013; McArdle, 2009; Pitariu & Ployhart, 2010; Ployhart & Vandenberg, 2010).

Another methodological limitation is the relatively low response rate and attrition over time among the respondents. The utilized data set, which included those who responded to all three surveys during the two-year time span (N = 623), represented roughly only 4.15% of the population of 15,000 employees. While attrition analyses did not indicate that the attrition would have affected the main conclusions of the study, the low response rate limits generalizing the findings to apply to all the employees of the examined organization.

Despite the limitations, the applied methodology has several significant strengths. By investigating relationships over time and thus fulfilling one of the prerequisites for causal inferences, as the cause must precede the consequence (Pearl, 2000), the present dissertation helps to overcome the limitations of previous cross-sectional studies. However, there was no temporal separation between the examined latent change score constructs in Article III (see Figure 5) limiting the causal inferences regarding these relationships. Nevertheless, examination of relationships between simultaneous change processes has been proposed for theory operationalization (Cheong, MacKinnon, & Khoo, 2003; Henk & Castro-Schilo, 2016) and follows existing practices (e.g., McArdle & Prindle, 2008; Petrou et al., 2018; Sianoja, Kinnunen, Mäkikangas, & Tolvanen, 2018; Sung et al., 2017). Furthermore, by taking into account the prior level of the dependent variable, the conducted analyzes provide stronger evidence for causality and more accurate estimates for causal effects in comparison to cross-sectional studies or longitudinal studies that do not control for prior levels (Cole & Maxwell, 2003). This is especially so for the applied analytical framework in Article III, which by segregating within- and between-person variances further strengthens the causal inferences drawn from that study (Hamaker et al., 2015; Usami, Hayes, & McArdle, 2016). As the estimated reciprocal models included tests for reverse causality, by examining alternative longitudinal models, the present findings provide a more comprehensive account regarding the direction of causality between the examined constructs in contrast to study designs examining solely unidirectional relationships (Farrell, 1994).

Additionally, the analytical framework applied in this study, longitudinal structural equation modeling with latent variables, has several strengths in comparison to analyses based on composite variables. Such strengths include accounting for measurement error and potential measurement invariance, thus resulting in more reliable statistical estimates (Bollen, 1989; Byrne, 2012; Ferrer et al., 2008; Little, 2013; Ployhart & Vandenberg, 2010). Third, the dissertation utilized longitudinal data with sufficient sample size, which in the context of an organizational change can be difficult to obtain for a variety of reasons, such as organizational access or employee attrition (Cartwright & Schoenberg, 2006). Therefore, the examined data represents an evident methodological strength in comparison to a large portion of prior organizational change research (Oreg et al., 2011; Vakola, 2016). The present dissertation answer calls to advance organizational change and organizational psychology research by utilizing longitudinal data (e.g., Salas et al., 2017; Vakola, 2016).

Four contextual issues in the present study might affect the generalization of the found empirical results. First, the top management of the examined public sector organizations was responsible and in charge of the planning and implementation of the merger, but they were not responsible for the original merger decision made by the politicians in the city council (see Chapter 5.2.1). This situation contrasts with typical organizational command hierarchy, such as often found in the private sector, wherein the top management is responsible for

deciding on the execution and timing of organizational changes. In contexts where the top management is responsible also for the initial organizational change decision, it is quite likely that employees' evaluations concerning the soundness of the original merger decision shape their subsequent evaluations of top management's competence and reliability (i.e., cognitive trust) and fairness perceptions of the process. While this contextual feature is unlikely to affect the main findings, it should be kept in mind when considering the generalization of the study's results over different organizational change contexts.

As a second issue related to the context of the current research, the merger studied in the present dissertation was primarily a 'merger of equals'; in the merger, the services of both organizations were retained, and the new merged organization consisted roughly the same number of employees from both pre-merger organizations. Therefore, the studied context differs from acquisitions that are often characterized by a clear division between the acquirer and acquired companies. Relatedly, studies have shown that the employees from acquired company react differently to the merger in comparison to employees who work for the acquiring company (Edwards & Edwards, 2012; Edwards et al., 2017; Giessner et al., 2012). While the effect of participants' pre-merger organization was controlled for in the analyzes, it is possible that this sample characteristic may limit the generalization of the study's results to acquisitional contexts.

A third contextual feature is that the public sector organizations where the present study took place guaranteed secure employment. This may have had an impact on change recipients' cognitive appraisals as in contexts with a threat of job-loss, appraisals could produce even stronger effects due to higher uncertainty (Lazarus & Folkman, 1984). However, this assumption is debatable due to inconsistent findings. On the one hand, in their review, de Jong et al. (2016) concluded that the impact of organizational restructuring did not depend on whether there were change-related staff reductions or not. On the other hand, the study by Vakola (2016) suggested that the perceived impact of change, such as loss of privileges, influenced employees' both negative and positive initial reactions to change.

Finally, the data were collected from a Finnish organization, which may limit the generalizability of the findings across different countries and cultures. For example, the sample of the current study was comprised almost entirely of Finnish participants[6] who on average have shown low power distance (Hofstede, 1980). Low power distance means that people expect and demand justification of the existing hierarchical order (Hofstede, 1983). Presumably, this may make fairness perceptions, as defined and measured in the current study (e.g., provided explanations, given feedback and information, treatment), particularly salient. However, employees from a national culture char-

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[6] Here participants self-reported mother tongue is used as a proxy of their nationality. Only two (0.3 %) participants in the sample (*N*=623) reported their mother tongue to be other than the official languages, Finnish and Swedish, in Finland.

acterized by a higher power distance might not share similar expectations towards the authorities. This could include lower expectations towards organizational leaders to provide explanations or information regarding the decision-making processes, therefore presumably attenuating the effects of fairness perceptions on trust (see Berman, Murphy-Berman, & Singh, 1985; Choi & Mattila, 2006; Henrich, Ensminger, et al., 2010; Kim & Leung, 2007). Taken together, more studies that utilize samples collected across the globe are needed for illuminating the generalizability of the found relationships. This advice applies to psychological research in general as the current understanding of human behavior and psychology is overwhelmingly based on samples drawn from societies that are western, educated, industrialized, rich, and democratic—in short, "WEIRD" (Arnett, 2008; Henrich, Heine, & Norenzayan, 2010).

6.4   DIRECTIONS FOR FUTURE RESEARCH

While the present findings examined reciprocal relationships between cognitive trust in top management and perceptions of merger process fairness during an unfolding organizational change event, organizational change events provide noteworthy opportunities to provide further insights regarding the impact of employees' trust and fairness evaluations. First, individuals pay particular attention to information related to trust and fairness in uncertain environments, thus accentuating their effects (Dirks & Ferrin, 2002; Li, 2012; Lind, 2001). Therefore, organizational changes represent an interesting context to examine fairness and trust transfers between supervisors and top management (see Article I) and the potential moderating role of experienced uncertainty in these relationships. However, as there appears to be no such organizational change research, future studies are needed to shed light on the conditional aspects of these relationships.

Second, organizational changes are often associated with new employee-leader relationships, such as changes in supervisors due to team restructuring and changes in top management because of a merger or new employees joining the merged organization. As such, significant change events often provide an opportunity to examine how early-stage trust perceptions evolve and influence fairness perceptions. For instance, future studies might examine the notion that less certain trustworthiness evaluations, as presumably in the case of early-stage relationships, should exert weaker effects on subsequent fairness perceptions and may be more prone to change over time (Holtz, 2013). Relatedly, as lack of information regarding the target of trust is expected to accentuate the use of indirect and alternative information for trust decisions (McKnight, Cummings, & Chervany, 1998), further research could examine the potential effects of trust cues. For example, van der Werff and Buckley (2017) found that among newly recruited employees, trust towards co-workers

was positively influenced by trust in the professional role occupied by the target of trust, and if the newcomers identified with the same group. Therefore, for instance in the case of supervisory changes as a result of an organizational change, employees might report higher trust towards those new supervisors who are from the same pre-merger organization as the employee in question, or if the employees also trust the organization's top management.

Another interesting potential avenue for future fairness research would be to examine the potential effect of social comparison processes in employees' fairness evaluations (Rupp, Shapiro, Folger, Skarlicki, & Shao, 2017). As an example, in the contemporary fairness research, leaders who follow the consistency rule, such as how to apply procedures consistently across people and situations (Leventhal, 1980), are expected to generate positive responses among employees. However, the same effect might not be found in environments that are characterized by intergroup comparisons, such as organizational mergers and acquisitions, which typically make the pre-merger organizational membership salient in the minds of employees (Giessner et al., 2012). In such contexts, employees have been shown to prefer leaders who favor their own group (i.e., ingroup) at the expense of the other group (i.e., outgroup; Duck & Fielding, 2003; Platow, Hoar, Reid, Harley, & Morrison, 1997). Notably, while these findings are inconsistent with the consistency rule, they are in accordance with the social identity perspective of leadership suggesting that in such competitive context, subordinates may support leaders who are perceived to act on behalf of one's ingroup (Haslam et al., 2011). Future research could illuminate the conditions under which certain fairness rules are important, for instance, by examining whether employees' trust organizational leaders especially if the leaders are perceived to favor one's pre-merger organization over the other merging partner (Jetten, Duck, Terry, & O'Brien, 2002).

Organizational change events typically bring forth uncertainty, and thus among employees generate evaluations how the future in the changing organization will be like for oneself (Lazarus & Folkman, 1984). Future research could shed light on how the realization of expectations or discordance between expectations and outcomes influences employee change experience. Such studies could, for instance, examine whether the reactions differ among those whose expectation realize in comparison to employees' who are either negatively or positively surprised by the personal consequences of the change event. Similar notions apply to the potential effect of trust on fairness perceptions. For example, Jones and Skarlicki (2013) proposed a condition for the confirmation bias effect; if a perceived event is not consistent with perceiver's expectancies, and especially when individual experiences injustice or unfavorable events, it results in sense-making efforts. In such cases, individuals evaluate the event more carefully and contemplate how it should affect their perceptions of the entity. Therefore, when faced with adverse inconsistency (i.e., leaders who are trusted are perceived to act in an unfair manner), increased cognitive efforts should reduce the potency of confirmation bias and attenuate the effect of cognitive trust on subsequent justice perceptions.

As the results of Article III suggested that the relationships from threat and challenge appraisals to work engagement differed, future research could further examine the potential underlying processes behind this finding. For example, studies could explore whether the effects of negative and positive appraisal differ in their duration, such as whether threat has more long-lasting effects than challenge. Such research could inform whether employees' negative or positive reactions to change events have stronger effects, as previous research on the topic has resulted in inconsistent findings (see Chapter 6.1.2). Relatedly, future research could also examine the simultaneous occurrence of challenge and threat appraisals across different phases of demanding events. For example, scholars have suggested that the higher the ambiguity in a given situation (e.g., outcomes for oneself are not known), the more people experience negative and positive reactions simultaneously (Bledow, Schmitt, Frese, & Kühnel, 2011; Folkman & Lazarus, 1985; Lazarus & Folkman, 1984; Rafferty & Griffin, 2006).

Given the found reciprocal relationships between engagement to change appraisals (Article III), researchers are encouraged to expand their theorizing and testing of employees' positive state of mind towards work (e.g., work engagement) in other roles during demanding events. For instance, engagement may act as a psychological resource with beneficial effects on adjustment, therefore warranting exploration of its other beneficial effects during organizational change. Furthermore, as there is a dearth of studies examining work engagement in the context of organizational changes, researchers are urged to examine other potential change-specific constructs as antecedents of engagement. Such studies would further inform organizations concerning the effective means to foster employees' work engagement during turbulent times. Finally, the found within-person changes in work engagement (see Chapter 5.2.4) is in contrast with prior findings suggesting that work engagement is a relatively stable construct (Seppälä et al., 2015). Unlike previous studies, in the current research work engagement was examined during a significant organizational change event and found to decrease on average from pre-merger to first post-merger phase ($M = -.21$, $p < .001$), which was characterized by substantial contextual changes. Coupled together with the literature showing that significant organizational changes often result in adverse reactions among employees (for a review, see Oreg et al., 2011), the findings of this dissertation highlight the importance of examining work engagement in various contexts to achieve a more comprehensive picture of its role and change trajectories.

In addition, while the theoretical model of the dissertation (see Chapter 4) draws from prior empirical research findings, several of its aspects warrant further study. While existing research has shown the benefits of leader-related trust and fairness perceptions on cognitive change reactions (see Fugate, 2013; Mishra & Spreitzer, 1998; Oreg et al., 2011), there appear to be no studies that examine whether supervisor or top management related trust and fairness perceptions have stronger relationships with cognitive appraisals. While not focusing on potential differences in such relationships, a study by Koivisto et

al. (2013) provided preliminary evidence. Their findings indicated similar predictive strength from supervisory justice ($\beta = -.28$, $p < .01$) and organizational justice ($\beta = -.30$, $p < .01$) to threat appraisals. Such further studies on the topic could provide essential knowledge for organizations to direct their leader-related resources to help employees perceive change events positively. Furthermore, in the developed model, cognitive change appraisals are posited as mediators for the relationships from leader-related trust and fairness perceptions to proactive behaviors, that is, job crafting. Studies examining this proposition would illuminate the conditions for empowering employees' proactive behaviors and successful adjustment to organizational change.

Future research would also benefit from collecting data from other sources than employees' self-report. Such sources include more objective outcome measures, such as employees' absence from work, productivity, or resignations, or peer evaluations of work performance. This research would provide further evidence on how subjective change experiences are related to objective measures, and therefore potentially highlighting further the importance to attend to these psychological factors.

Finally, more longitudinal field studies are needed to elaborate further the reciprocity, differing effects, and development of employees' change experiences across distinct phases of unfolding organizational change events. First, the present dissertation has provided a theoretical rationale and empirical evidence for dynamic relationships among employees' leader-related trust and fairness perceptions, and between work engagement and change appraisals in the context of organizational changes (Articles I, II, and III). While these findings support the argument that employees change experiences are more complex and dynamic than often portrayed in the existing organizational change research, the examined constructs represent only a portion of the wide array of psychological constructs related to employees change experiences (see Figure 1). More organizational change research examining other related variables is needed to achieve a more comprehensive understanding of the proposed dynamism in employees' experiences.

Second, the current findings show differences in the tested relationships between constructs related to change experiences at distinct phases of an unfolding change event (articles II and III). As these effects may be explained by employees' subjective experiences of ambiguity and uncertainty at different change phases, measuring such subjective experiences would shed light on the potential underlying conditions that may attenuate or accentuate changes and over time effects of employees' psychological reactions.

Third, while the present dissertation examined predictors of between-person variance in within-person change trajectories (Article III; see McArdle, 2009), future research focusing solely on within-person effect while controlling for between-person variance could provide further insights concerning the causal effects of employees change experiences (Smet et al., 2016). For example, studies have found that happy employees might not be more productive

than unhappy workers (between-person level), but an individual is more pro-
ductive when he or she is happy in contrast to times of being unhappy (Fisher,
2003; see also Dalal et al., 2014; Sitzmann et al. 2013).

6.5 PRACTICAL IMPLICATIONS

The present dissertation suggests that organizations would benefit from ac-
knowledging the dynamism in employee change experience, and from follow-
ing a holistic approach in managing the psychological effects of organizational
changes. The theoretical model (Article I) presents that it is essential to build
trust and fairness at the levels of immediate supervisors and top management
teams as these perceptions are expected to transfer from one target to another.
For organizations, this suggests that employees' negative perceptions of their
supervisors (e.g., lack of trust, perceived unfairness) may reduce the potency
of managerial actions that seek to foster employees' trust towards the top man-
agement. Importantly, the beneficial effects of favorable evaluations of the top
management may be mitigated if the employees do not also evaluate their su-
pervisors positively (Koivisto et al., 2013).

 For management practitioners, it is essential to recognize that the relation-
ship between trust and fairness is likely more complex than has traditionally
been portrayed in the research literature, as shown in Article II. For instance,
meta-analytic correlations (in the .50-70 range) have typically been
interpreted as justice being a robust antecedent of trust (e.g., Dirks & Ferrin,
2002; Colquitt et al., 2013). In light of the previous empirical literature, a prac-
titioner of evidence-based management might conclude that an intervention
designed to enhance justice perceptions will dramatically improve employee
trust (Holtz, 2015). However, the findings in Article II suggested that expecta-
tions for such robust effects are overly optimistic, as the found longitudinal
relationships controlling for previous scores of cognitive trust were weaker
than the meta-analytical correlations drawn from previous studies.

 Results also indicated that cognitive trust can exert just as strong, or
stronger, effects on perceptions of justice, than the other way around (see
Chapter 5.3.1). An existing belief that management is incompetent and unreli-
able is likely to negatively color one's perceptions of managerial actions (i.e.,
confirmation bias) and therefore reduce the potency of fairness interventions.
Importantly, as an additional benefit of trust, trusting employees may not hold
similarly high expectations regarding the provided explanations, feedback, or
information concerning the managerial decisions (Dirks & Ferrin, 2001;
Korsgaard, Brodt, & Whitener, 2002; Kramer, 1999; Van den Bos, Wilke, &
Lind, 1998). Potentially, this notion provides an alternative explanation for the
present finding showing that those who trusted the top management had more
favorable fairness evaluations.

 Taken together, managers are well-advised to build employees' trust to-
wards the organizational leadership and lead in a fair manner not only because

trust and fairness have beneficial effects on employees change appraisals (Article I), but also as trust and fairness may reinforce each other (Articles I and II). Specifically, managers who fail to adhere to principles of process justice (e.g., timely communication, consistent application of procedures) when planning and implementing significant change events, may do notable damage to managements reputations for trustworthiness, which in turn further negatively bias employee perceptions of fairness as the change event unfolds. Therefore, these dynamic and reinforcing relationships provide a novel perspective and further substantiation concerning the importance of trust and fairness, especially during significant organizational change events.

The reciprocal relationships between employees' cognitive change appraisals (threat and challenge) and work engagement provide further implications for practitioners. The found reciprocal within-person dynamics suggest that for change managers, it is beneficial to acknowledge the potential dual-role of work engagement. The empirical findings suggested that engagement fosters positive (challenge) and mitigates negative (threat) cognitive appraisals throughout the merger process. Managers are therefore well-served to foster employees' work engagement not only because engagement is linked with increased performance (Christian et al., 2011), but also because an engaged workforce may be more resilient and adaptive in the face of demands. For instance, managers of organizations that are likely to undergo substantial changes in the near future, are advised to pay particular attention to their employees' work engagement before the change event. Relatedly, an assumption that engagement represents solely an outcome of employees' change reactions would lead managers to focus only on interventions that help employees to appraise the change event in favorable terms. However, the results suggest that if employees are not engaged in their work, their cognitions regarding the personal impact of upcoming changes are more limited and narrower, which is likely to impair the effects of such interventions.

Furthermore, the results showed that not only does engagement and employees' cognitive appraisals matter at the outset of an organizational change event but that preserving positivity (engagement, challenge appraisals) while decreasing negativity during the organizational change also begets further positivity across the unfolding change event. In other words, while low engagement and low positive expectations regarding one's future in the merged organization poses a notable risk, cultivating engagement and positive appraisals can act as a remedy. Similarly, mitigating increases (and fostering decreases) in negative appraisals (threat) may be more important for employees' work engagement than the amount of threat experienced at a specific time point. These findings emphasize the importance of attending to evolving employees' change reactions, for example via managerial actions, during the change process.

Notably, the results of Article III suggested that the most effective means to cultivate engagement during organizational changes may depend on the phase of the change process. During times of major changes, it is equally vital

to mitigate negative and enhance positive cognitive reactions, while through the later phase of a change process mitigating negative appraisals may be more critical. These results imply that strategies which focus only on reducing employees' threat appraisals (e.g., withhold discouraging information, emphasize lack of negative outcomes) may not be as effective as managerial actions that at the same time foster employees' positive outlooks towards the change (e.g., emphasize beneficial short- and long-term outcomes, highlight the positive aspects of change for individuals). Therefore, managers are well-served to recognize that employees may have negative and positive expectations simultaneously and that these relationships are different rather than simply mirror opposites. Taken together, the results of Article III provided valuable information for practitioners seeking the most effective means and timing for interventions to enhance employees' appraisals and engagement during a change event.

The practical implications of the dissertation have thus far focused on managerial actions and their impact on employees' well-being, change reactions, and motivation. In addition, the developed theoretical model of the dissertation (Article I) drew from job crafting literature to achieve a more comprehensive picture of the role of various organizational entities. This line of research has noted that employees may also proactively improve their work environment through seeking challenges, feedback, and reducing demands (Wrzesniewski & Dutton, 2001). Such behaviors may help employees to adjust during organizational change events (e.g., Van den Heuvel et al., 2010). This line of research expands the scope from leader-related perceptions (and their impact on employees' reactions) to employees as proactive change agents (e.g., Petrou et al., 2012). While leaders may promote job crafting through mitigating threat and fostering challenge appraisals (see Article I), organizations cannot impose job crafting on employees as job crafting stems from the employees' proactivity to improve their jobs. Organizations may thus foster job crafting either by job design (i.e., providing freedom to employees to craft their jobs if they wish, creating autonomous jobs) or via voluntary job crafting training that has been shown to benefit employees during organizational change (Van den Heuvel, Demerouti, & Peeters, 2015). While it is important to bear in mind that all organizational groups may foster the success of change endeavors, it is not beneficial (or sensible) to expect that through specific behaviors individual employees could solve organizational deficiencies, such as customs or culture that do not promote fair behaviors, trust, or positivity towards work.

6.6 CONCLUDING REMARKS

The main aim of the dissertation was to advance the understanding concerning the dynamism in employees' psychological experiences and reactions during unfolding organizational change events. This aim was addressed in one theoretical article (Article I) and two empirical studies (Articles II and III).

The theoretical model and the related findings of the dissertation suggested that organizational change research would benefit from advancing beyond the typical focus on sequential, one-way relationships, as it may fail in capturing the dynamic nature of employees' change experience. The results further highlighted the importance to examine employees' psychological experiences as they unfold and evolve during distinct phases of organizational change events. The provided theorizing and findings suggested that organizations are well-served to follow a comprehensive approach and recognize that both trust and fairness could, and should, be built at different levels of the organizational leadership. In addition to cognitive appraisals affecting work engagement and favorable fairness perceptions fostering trust, the findings revealed that researchers and practitioners alike would benefit from acknowledging the importance of trust for employees' fairness perceptions and work engagement for reducing negative and fostering positive change expectations.

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