



Faculty of Economics and Business



Faculty of Business Economics



KATHOLIEKE
UNIVERSITEIT
LEUVEN

New ways of working: An aid for employees?

**Understanding inconsistencies in the relationship between work–home practices
and employees’ home and work outcomes**

Dissertation presented to obtain the degree of
Doctor in Business Economics (PhD)
by KU Leuven
and the degree of
Doctor of Business Economics
by Hasselt University

by

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This dissertation is supported by the Flemish Fund for Scientific Research (FWO) under grants nr. G063014N and nr. G075419N.

Since the dissertations defended at the Faculty of Economics and Business are the personal work of their respective authors, the latter bear full responsibility.

Daar de proefschriften in de reeks van de Faculteit Economie en Bedrijfswetenschappen het persoonlijk werk zijn van hun auteurs, zijn alleen deze laatsten daarvoor verantwoordelijk.

To all who taught me love for knowledge, for animals, for others, and for myself.

DANKWOORD

“To enjoy, to question—never to assume, or trample. Thus the great ones (my great ones, who may not be the same as your great ones) have taught me—to observe with passion, to think with patience, to live always caringly.”

— Mary Oliver, in *Upstream*, 2018, p. 57

Af en toe zijn dingen niet zoals ze lijken, of staan ze niet in de juiste volgorde, maar is dat net wel de bedoeling. Op die manier is ook dit dankwoord niet geschreven aan het begin maar wel aan het einde van dit hoofdstuk—van mijn doctoraal hoofdstuk. En geloof het of niet: hoewel deze thesis de volle 149 pagina’s telt, is dit onderdeel het meest lastige om neer te pennen (al is hier mogelijk sprake van ‘selectief geheugen’, zoals we wellicht ergens leerden tijdens één van de verplichte en nuttige vakken binnen ons doctoraal programma). Vakkundig uitgesteld tot het einde, doe ik hier aan het begin van deze thesis—het einde van mijn doctoraatstraject—mijn best om de juiste dankbetuiging bij de juiste personen te krijgen. *Let’s go.*

Mijn oprechte dank gaat allereerst uit naar mijn promotor, Marijke Verbruggen. Marijke, nog een laatste keer maak jij het me moeilijk een alinea op papier te zetten—dat deze alinea te lang is, vergeef je me hopelijk deze keer wel. Ik ben er immers van overtuigd dat ik dit doctoraat zonder jouw begeleiding niet had kunnen afwerken tot wat het nu is. Zo kan ik het aantal onbestaande Engelstalige uitdrukkingen (ik zou deze dan wellicht ‘non-uitdrukkingen’ noemen) waar jij me op hebt gewezen, niet bijhouden. Met andere woorden: ik heb ze niet bijgehouden, ondanks dat jij me weleens vertelde dat het overzichtelijk en gestructureerd bijhouden van zaken wellicht ‘zinnig’ is. Ik ben er nog niet uit hoe jij erin slaagde om mij de voorbije jaren op die manier te sturen dat ik én plezier aan mijn werk beleefde (meestal toch) én binnen de tijd een doctoraat afmaakte (en wat voor een). Hoe dan ook ben ik je bijzonder dankbaar voor de autonomie, de strenge deadlines, de iets lossere deadlines, de (gepercipieerde) vrijheid en de gerichte inhoudelijke input die je me de voorbije 4,5 jaar gaf. Met trots vertel ik de buitenwereld al eens over jouw warme en efficiënte managementstijl. Nieuwe werkvormen, een hulp voor werknemers? Nieuwe managementvormen voor mij alleszins wel. Ik bewonder hoe jij leiderschap, expertise en menselijkheid met elkaar kan combineren en zo niet enkel mijzelf, maar ook een hele onderzoeksgroep in goede (loop)banen kan leiden. Bij dat allereerste sollicitatiegesprek wist ik niet dat mijn gevoel over jou toch redelijk correct die lading dekte. Eén thesis, één projectvoorstel, één bijna-pilootstudie en één kantoorhond later ben ik jou enorm dankbaar voor jouw bijdragen binnen en buiten het schrijfproces van dit doctoraat; voor jouw steeds bezige maar steeds open geest. Dank je om me bij die te korte sollicitatiebrief het voordeel van de twijfel te geven en nadien op basis van jouw vertrouwen in mij (en misschien ook wel een heel klein beetje in mijn CV en in de tweede assessment), mij de doctoraatspositie aan te bieden. Want niet enkel bracht ik het doctoraat tot een goed einde—andersom bracht ook het doctoraat mij veel (zelf)kennis bij, waarmee ik vol vertrouwen de toekomst in stap.

Daarnaast bedank ik de voltallige commissie van (lees: voor) mijn doctoraat. Ik benadruk ‘voor’, want zonder de inzet van elk van de commissieleden had in deze thesis niet gestaan wat er nu staat. In het bijzonder bedank ik mijn co-promotor Patrizia Zanoni voor de standvastigheid

van de discussievragen doorheen de jaren tijdens tafel- of seminariesgesprekken allerlei (mixed-method en gender is belangrijk in onderzoek). Patrizia, met jou is het nooit saai. Daarnaast wil ik Rein De Cooman, Sophie De Winne, Colette van Laar en Daantje Derks bedanken voor hun tijd en energie doorheen mijn seminaries. Ik weet nu dat het geen cliché maar wel waarheid is om iemand te danken voor ‘inzichtelijke commentaren’ of ‘waardevolle feedback’. Ik voegde woord bij woord en hoop dat jullie dit beamen bij het lezen van de epiloog in zijn finale versie.

Onlosmakelijk verbonden met ‘commentaren’ en ‘feedback’ (al dan niet waardevol) zijn mijn collega’s. Ik weiger bewust om een opsomming te maken van allen die mijn *Work and Organisation Studies* (WOS)-pad kruisten, met als voornaamste reden mijn gebrek aan vertrouwen in exhaustieve opsommingen—een assumptie door menig single-case study bevestigd. Bij de start van mijn doctoraat had ik weinig benul van de impact van collega’s op werk en welzijn; nu weet ik beter. Bijna iedereen bracht mij wel iets bij—dan maar hopen dat het ook minstens een klein beetje andersom ook zo is. Dank jullie, allen, op jullie eigen manier. In het bijzonder: Giverny, om spil te zijn in mij binnenloodsen bij WOS. Driewerf hoera voor foto’s van toenmalige kantoren met verjaardagsjes en voor jouw oprechte evaluatie van ‘de werksfeer daar’. Ik vertrouwde op jouw ervaring en had daar nog geen seconde spijt van. Tijd is rekbaar; zo ook die seconde die zich uitbreidde naar één, twee, drie, vier jaar van *memes* en mijmeren, filosoferen en leren, spelen (al dan niet als een jong dier) en werken (mogelijk ook soms eerder als een jong dier). Dank je voor de inspirerende momenten in en buiten ons kantoor. Jasper, om mij te wijzen op de feilbaarheid van eerste indrukken en om mijn context én mijn agency de voorbije jaren beter te maken. Dank voor veel en voor veel ook niet. Zeker behorende tot veel: danspassen, wilde verhalen van eigen makelij, reflecties over de academische wereld en die daarbuiten. Zeker behorende tot veel ook niet: crazy Jaspers om 16u. Wouter, om mij aan de start stante pede thuis te doen voelen in een avond/sfeer-kantoor (al dan niet met toeniet-zo-maar-nu-wel-een-beetje-meer-vegan pizza op een enthousiast bedje van chaos)—mijn *person-environment fit* stond meteen op punt. Wat mij betreft: meer parachutespringen, minder Australië. Joost, *if it’s not in the dankwoord, it didn’t happen*: dank je voor de legitieme overpeinzingen over gezonde lichamen, gezonde geesten en alles daartussenin. Jill en Kim, voor de consequent aanwezige glimlach (ook op dagen van slaapttekort). Hans, voor de immer bevlogen statistische bijstand en voor het dragen van een statistiektrui. ToTran and Marlies, for helping me to understand the importance of chasing (from whatever distance) what is right.

En, geen werk zonder privéleven. Dank je: Nathalie, om mij te leren beslissen met hartstocht en de zijpaden te leren bewandelen. Manuel, for feeding my mind with dialogues on books, people, and much. *Ya todo está*. Roel, voor het menselijke (af en toe wat statistisch getinte) advies. Emotie + ratio = goud. Eva, voor jouw visie op mens en dier, op contact en verbinding, op waarden en waarde—en voor jouw onvoorwaardelijke toewijding aan dit alles (en natuurlijk voor de vele maffe gebeurtenissen en eindeloze praatjes op veldjes, in auto’s of ‘eventjes’ tussendoor aan de telefoon). Jouw rol in mijn traject is niet te onderschatten. Charlotte en Mira, om, verenigd in verschil, tijdens mijn doctoraat zowat drie jaar mijn werk-thuis balans mee te vormen (en soms een beetje te vervormen, maar hé, *there is a crack in everything*). Nicolai, Julie (*runner’s highest*), Kim, Elien, Nora, Geraldine, Lore, Marie, Bart, Rosanne en de vele anderen, om mee invulling en kleur te geven aan de ‘privé’ in mijn eigen werk-privé balans.

In de *work-life balance* literatuur wordt weleens gesteld om de veelgebruikte term ‘werk-familie balans’ te vervangen door ‘werk-privé balans’ daar het privéleven zich tegenwoordig breder manifesteert dan enkel gezin en familie. In deze thesis (leest u verder!) koos ik voor het ‘werk-thuis balans’ daar ergens tussenin. Want hoewel ik in de epiloog prat ga op het belang van het privéleven breder dan familie, ben ik de mijne erg dankbaar. Sarah en Mehdi, voor jullie waanzinnigheid die mij—elk op een andere manier—hielp om met beide voeten in de realiteit te blijven staan en mij niet te verliezen in wat belangrijk is (enkel) in de academische wereld. Thomas, voor de asperges en de rode wijn. Linde, om het belang van hersenvoer, conversatie en dialoog te onderstrepen (en daar border collie-metaforen voor te gebruiken). Papa, voor jouw steun en trots vanuit iedere uithoek van de wereld (en, sorry voor de autoblutsen). Mama, voor jouw geloof in dingen, in tijd, en in dingen de tijd geven. *You can't have it all*, maar vandaag denk ik dat toch een beetje wel (lokale bio-groenten inclusief). Oma, voor jouw behendigheid om steeds bezig te zijn (en als het kan liefst met meer dan één ding tegelijk) en mij dit wellicht ergens doorgegeven te hebben—hoe bijzonder hard kwam dit van pas bij het tot stand brengen van deze thesis en daarbuiten. Boppo, voor jouw dierenliefde; voor jouw drang naar kennis; voor wie jij was, bent en steeds zal zijn.

Michiel, jij deed mij de kern van mijn onderzoeksthema's beleven: hoe werk en privé onlosmakelijk met elkaar verbonden zijn; hoe ik zonder jou deze thesis niet had kunnen volbrengen op de manier waarop dit nu is gebeurd. Mijn intuïtieve kookstijl had sowieso voor ongezonde (zonnebloemolie is *evil!*) en (nog meer) ongestructureerde maaltijden gezorgd in periodes van acute schrijfafkeer en avondlijk computerschermstaren (om nog maar te zwijgen over de mogelijke bacteriële staat van, ik zeg maar wat, onze vloer). Dank je om weg te weten met situaties waarin je mij niet begrijpt (weet dat ik dat zelf ook niet doe). *Engineer's mind on point*. Ik kan niet verwoorden wat jij voor mij hebt betekend de voorbije jaren. Loop ver, maar blijf ook zeker waar je bent—de honing smaakt fantastisch.

Zonder woorden: Duck, Mitrill, Aili, Yanco en Floris. En Kokos: *let's go*.

Joni Delanoetje, 20 juni 2019

“Sustained attention is probably the best drug there is.”
— *Peter Hinssen*

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PROLOGUE

“The perfect gift is no longer a single house but a house, or a mind, divided. Man finds he has two halves to his existence—leisure and occupation—and from these separate considerations he now looks upon the world. In leisure he remembers radiance; in labor he looks for results.”

— Mary Oliver, in *Upstream*, 2018, p. 112

Theoretical background

Due to increased female labor market participation, the rise of single-parent and dual-earner families and changing gender norms (Butts, Casper & Yang, 2013; Hammer, Colton, Caubet & Brockwood, 2002; Kossek & Ruderman, 2012; Neal & Hammer, 2007), a growing number of employees today has to combine work with other life roles (Casper et al., 2007; Greenhaus & Powell, 2003; Kalliath & Brough, 2008). In addition, work-home balance and flexibility are becoming increasingly important values in today’s labor market, especially among the new generation of millennials, who will make up for approximately half of the workforce by 2020 (Ehrhart, Mayer, & Ziegert, 2012; Giardini & Kabst, 2018). In response to this new reality, organizations today increasingly offer work-home practices to their employees (Beauregard & Henry, 2009; Thompson, Beauvais, & Lyness, 1999). Work-home practices are HR initiatives that provide employees with additional resources (e.g., flexibility, time) that can facilitate balancing work with other life roles (Kossek, Lewis & Hammer, 2010) and may therefore help to lower employees’ work-home conflict, that is, the conflict that occurs when employees’ participation in their work role interferes with their participation in their home roles and activities (Greenhaus & Beutell, 1985). Work-home practices typically include flexible work arrangements (e.g., home-based telework) and work-time reductions (e.g., part-time work). It is argued that offering work-home practices may help organizations to attract the best-qualified employees (Beauregard & Henry, 2009; Bourhis & Mekkaoui, 2010) and to maintain a healthy and productive workforce (Beauregard & Henry, 2009; Casper & Buffardi, 2004). For instance, since using work-home practices may facilitate employees’ work-home combination, it may lower employees’ stress and enhance their job satisfaction, engagement, performance, commitment and retention (Beauregard & Henry, 2009).

In line with their growing prevalence in organizations, the topic of work-home practices—and in particular their effectiveness—has become increasingly popular in academic research in the past few decades (Beauregard & Henry, 2009). Research on this topic can largely be divided into two groups of studies. First, several studies have focused on the impact of the *availability*

of work-home practices (Butts et al., 2013; Scandura & Lankau, 1997). These studies argue that the pure availability of work-home practices in an organization can trigger favorable outcomes among employees through the mechanism of social exchange. In particular, organizations that offer work-home practices may signal to their employees that they care about them and employees who perceive their organization as caring are likely to do something in return, for instance, by increasing their work engagement and job performance (Kooij et al., 2013). In addition, work-home practice availability may foster a family-friendly organization culture (Wilson et al., 2004), which may make it more acceptable to talk about and take care of home responsibilities and could therefore result in less stress and lower work-home conflict (Mesmer-Magnus & Viswesvaran, 2006; Mauno, Kinnunen & Pyykkö, 2005; Thompson et al., 1999). In line with these arguments, research has found the availability of work-home practices to be linked with more work engagement (e.g., Richman et al., 2008; Anderson & Kelliher, 2009), higher job performance (e.g., Beauregard & Henry, 2009; Cegarra-Leiva, Sánchez-Vidal & Gabriel Cegarra-Navarro, 2012), less stress (Mackie, Holahan & Gottlieb, 2001; Thompson & Prottas, 2006) and less work-home conflict (e.g., Batt & Valcour, 2003; Butts et al., 2013).

A second group of studies on the effectiveness of work-home practices has focused on the impact of the *use* of work-home practices. Since work-home practices give employees more resources (e.g., time, flexibility), it is expected that using these practices may facilitate balancing work and home responsibilities and may therefore result in less work-home conflict (Beauregard & Henry, 2009; Butts et al., 2013). In this way, work-home practices are believed to have an instrumental value for employees who use them. In addition, lower work-home conflict may result in other favorable employee outcomes (Allen et al., 2000). For instance, lower work-home conflict has been found to relate to less stress (e.g., O'Driscoll et al., 1992; Anderson, Coffey & Byerly, 2002), more work engagement (e.g., Halbesleben, 2010; Parkes & Langford, 2008) and more job performance (e.g., Beauregard & Henry, 2009; Frone, Yardley & Markel, 1997).

However, whereas research on the link between work-home practice availability and employee outcomes has found rather consistent beneficial effects, research on the use of work-home practices is far less conclusive (Butts et al., 2013). That is to say, despite the widespread expectation that the use of work-home practices decreases work-home conflict and may therefore result in other favorable employee outcomes, extant research on these effects is vastly inconclusive, finding sometimes positive effects, sometimes no effects and sometimes even harmful effects (Allen et al., 2013; Beauregard & Henry, 2009; Butts et al., 2013; Kelly et al.,

2008; Kossek & Ozeki, 2008). In particular, some studies find that work-home practice use is, as expected mostly, related with less work-home conflict (Butts et al., 2013), yet, other studies find no effect on work-home conflict (e.g., Saltzstein, Ting & Saltzstein, 2001) or even a conflict enhancing effect (e.g.; Hammer et al., 2002). Similarly, whereas some studies have shown work-home practice use to relate negatively to stress (e.g., Gajendran & Harisson, 2007; Voydanoff, 2005) and positively to work engagement (e.g., Richman et al., 2008) and job performance (e.g., Baltes et al., 1999), other studies find no link at all between work-home practice use and work engagement (Parkes & Langford, 2008) or job performance (Kelly et al., 2008) or even find harmful effects, including positive associations with stress (e.g., Mann & Holdsworth, 2003) and negative associations with work engagement (e.g., Sardeshmukh, Sharma & Golden, 2012) and job performance (e.g., Hartman, Stone, & Arora, 1991; for an overview, see Beauregard & Henry, 2009). Furthermore, if studies do find effects of work-home practices on work-home conflict or other home and work outcomes, effect sizes are generally very small (Allen et al., 2013; Butts et al., 2013; Gajendran & Harrison, 2007).

To date, researchers have sought several theoretical explanations for the observed inconsistencies in research results on the use of work-home practices. First, the impact of using a specific work-home practice may depend on how this practice is implemented in the organization or the work team. The way a work-home practice is implemented may affect the degree of resources (e.g., flexibility) provided by the work-home practices as well as the occurrence of potential negative side effects (e.g., career penalties when using a work-home practice, isolation, etc.). For example, research on telework has shown that the effects of telework differ depending on whether employees can only use telework on fixed days or whether they can freely choose to work from home each day (Allen, Renn & Griffeth, 2003). Relatedly, also an employees' home context may affect the degree of resources that work-home practices render to employees, depending on employees' household structure (ten Brummelhuis & Van Der Lippe, 2010) or home demands (Butt et al., 2013; Saltzstein, Ting & Saltzstein, 2001; Shockley & Allen, 2007). Second, employee differences may account for observed inconsistencies as a specific work-home practice may fit better with the needs and/or characteristics of certain employees than with those of others. Accordingly, research has suggested to take into account several differences between employees when studying effects of work-home practices (Demerouti et al., 2014), including personality (Kinnunen, 2003), working time preferences (Clarkberg & Moen, 2001; Wilkens et al., 2018; Peters, Tijdens & Wetzels, 2004) or preferences to either integrate or separate work with private life (Ammons,

2013). Thus, research on work-home practices may benefit from differentiating between specific practices, taking into account differences in how a specific practice is used and including individual differences between employees.

In addition, researchers have argued that the designs of the studies examining the use of work-home practices may explain some of the current observed inconsistencies (Casper et al., 2007). First, scholars have argued to distinguish between specific types of work-home practices rather than to combine different types of practices into one aggregate score, as has often been done (Kelly et al., 2008; Wayne et al., 2017; Shockley & Allen, 2007). This is because different practices have different functions and provide different resources (e.g., additional time versus additional flexibility) and accordingly, their specific effects are likely to differ (Allen et al., 2013; Glass & Finley, 2002; Saltzstein, Ting & Saltzstein, 2001).

Second, work-home practice researchers to date have often used cross-sectional research designs (for examples, see Butts et al., 2013; Harker Martin & MacDonnell, 2012), which do not allow to rule out selection effects that may explain current inconsistent results (Casper et al., 2007). For instance, in studies that do not take into account enough—or the right—control variables, results may be influenced by the specific profile of employees who use a certain work-home practice (e.g., employees with the most work-home conflict may opt for part-time work; only the best performing employees may be allowed to telecommute). In this case, observed differences in outcomes between users and non-users of a certain practice may be wrongly attributed to the use of that work-home practice. Such effects may not manifest in studies that include the right controls and, hence, inconsistencies between studies may be explained by the fact that a comparison is made across multiple studies that do not use include the same control variables or that do not use the same research designs. Therefore, research on the effects of work-home practice use may benefit from longitudinal and/or experimental designs that allow for studying causality in effects (Casper et al., 2007; Kelly et al., 2008) and, hence, could help to exclude the possibility of alternative explanations other than the work-home practice as an antecedent.

Finally, researchers have noted that a person-level of analysis, which is mostly used in studies on the topic to date, may not be suitable to detect and explain all effects of work-home practices on employee outcomes (Eby et al., 2007; Maertz & Boyar, 2011). Specifically, employee outcomes may fluctuate from day to day and, hence, may not solely be considered as person-level, stable constructs but also as daily fluctuating constructs (Daniels, 2006). Applying this to inconsistencies in work-home research, the person-level measurement of an outcome

may be a mixture between an individual's past memories of that outcome prompted by the measurement occasion, an ongoing process of that outcome on that specific day, and/or an individual's general perception of that outcome (Maertz & Boyar, 2011). Distinct, daily measures that allow for a temporal ordering of day-to-day experiences over time may provide one solution to avoid this blend of different perceptions. Especially in the case of work-home practices—for which the effects of usage may differ from one day to another (e.g., different effects of home-based telework depending on whether employees worked from home that day or not; Vega, Anderson & Kaplan, 2015)—using daily measurements of both antecedent (i.e., work-home practice use) and outcomes may help to clearly locate the effects of work-home practices on employees outcomes. For example, person-level job performance may not be affected by telework since the number of teleworking days may not be high enough to cause a better perception of job performance in general. However, day-level job performance may differ on teleworking versus office days with an increased performance on teleworking days specifically, for instance because employees can concentrate better when working from home (Vega, Anderson & Kaplan, 2015). Therefore, research on work-home practices may benefit from also examining daily effects of the use of work-home practices.

Aim of this dissertation

As work-home practices are becoming more current in the today's 'new world of work' (Wilkens et al., 2018), it is important for researchers and practitioners to explain the observed inconsistencies in outcomes of work-home practice use and to understand the beneficial and/or harmful effects of using these practices. The main aim of this dissertation is therefore to improve our understanding of the impact of work-home practice use and get insight into the conditions under which work-home practices improve or, conversely, harm employee outcomes. In doing so, we will also address several of the methodological shortcomings mentioned above that have been identified as potentially biasing research results and therefore likely contributing to the inconsistency in research findings to date. We will do this in three empirical studies, in each of which we focus on one or more specific work-home practices.

In a first study, we focus on the impact of two work-home practices (i.e., home-based telework and part-time work) on two outcomes (i.e., work-to-home and home-to-work conflict) and take into account characteristics of the use/non-use of these practices. In particular, we posit that there are similar sources of variance within both the group of users and the group of non-users that are more important for understanding work-to-home conflict and home-to-work conflict than the mere use of these practices. We focus on two specific dimensions, specifically

(1) the degree to which employees' (non-)use of a specific work-home practice is in line with their preference (i.e., volition); and (2) the pressure they experience from the work and/or the home environment to act in another way that they prefer (i.e., perceived work pressure and perceived home pressure). In this study, we combine a classical field survey in 381 staff members of a Belgian university with an experimental vignette survey in 556 employees to study the relevance of these two dimension when explaining employees' work-home conflict. Hypotheses are tested using hierarchical regressions.

In a second study, we examine the daily impact of using one specific work-home practice, i.e., home-based telework, on both work-to-home and home-to-work conflict. We argue that whether a teleworker worked from home on a given day or not would affect their work-home boundary role transitions that day (e.g., doing home tasks while working; finishing work tasks after hours), which would in turn affect the conflict employees experience between work and home. In addition, we argue that the latter impact may not be equally strong for everybody, but would depend on individuals' preferences to protect their home(/work) domain from work(/home) interruptions. Hence, we study how a teleworking day affects daily work-to-home conflict and daily home-to-work conflict. In doing this, we consider both the use of telework and the experience of work-to-home and home-to-work conflict as daily fluctuating experiences that may shed light on the day-to-day effects of telework on work-to-home and home-to-work conflict. We capture these dynamic processes at the work-home interface among both users and non-users of home-based telework and include both work-to-home transitions and home-to-work transitions as mediators. Hypotheses are tested through multilevel moderated mediation modeling using diary data collected during 14 consecutive workdays with 81 employees (N = 678 data points).

In a third study, we evaluate a pilot initiative on telework in a Belgian company using a quasi-experimental design to study the causal effects of home-based telework on employees' person-level and day-level stress, work-to-home conflict, work engagement and job performance. Employees in the intervention group (N = 39) were allowed to work from home on at most two days a week during a period of three months, whereas employees in the control group (N = 39) were not. We combine a pretest-posttest design—to assess changes in person-level outcomes over time—and a daily diary design—to examine day-level effects of having worked at home on a given day. Pretest-posttest data are collected during a pretest survey before telework was introduced (T1) and a posttest survey at the end of the three-month pilot period (T2) and are analyzed through paired samples t-tests and analysis of variance. Day-level data

are collected in 13 daily assessments during consecutive workdays one month after the onset of the pilot and are analyzed through mixed coefficient modeling.

An overview of the conditions affecting work-home practice effectiveness and the methodological shortcomings addressed in our studies is given in Table 1. We hope that our studies will improve the understanding of when work-home practices effectively improve employees' home and work outcomes. This knowledge is necessary if we want to improve the implementation of work-home practices in organizations and, thus, truly help employees with their work-home combination.

Table 1. Overview of conditions and shortcomings addressed by the studies in this dissertation

	Study 1	Study 2	Study 3
<i>Conditions affecting work-home practice effectiveness</i>			
- Contextual implementation features	X		X
- Individual employee preferences	X	X	
<i>Methodological shortcomings</i>			
- Distinguish between specific types of work-home practices	X	X	X
- Use experimental design to limit selection bias	X		X
- Study within-person effects in addition to person-level effects		X	X

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STUDY 1: THE USE OF WORK–HOME PRACTICES AND WORK–HOME CONFLICT: EXAMINING THE ROLE OF VOLITION AND PERCEIVED PRESSURE IN A MULTI–METHOD STUDY¹

Abstract

One of the major shifts in today’s world of work is the rise of individuals who have to combine work and home responsibilities. In response to this trend, organizations are increasingly offering work-home practices, i.e., HR-practices such as telework and part-time work that can help employees to combine work and home roles. However, extant research on the relationship between work-home practice use and both work-to-home conflict (i.e., work interfering with private life) and home-to-work conflict (i.e., private life interfering with work) shows inconsistent results. In this study, we aim to further our understanding of why the use of work-home practices is not consistently linked to work-home conflict. We posit that employees’ work-home conflict does not so much depend on whether or not they use a specific work-home practice, but rather on (1) the degree to which their (non-)use of this practice is in line with their preference (i.e., volition) and (2) the pressure they experience from the work and/or the home environment for using or not using that practice (i.e., perceived work pressure and perceived home pressure). We test this expectation for two specific work-home practices, specifically home-based telework and part-time work. Hypotheses are tested in both a field study—using survey data with a sample of 381 employees from a middle-large Belgian university—and an experimental vignette study—using a between-subject design with a sample of 556 Belgian employees. Results support the relevance of volition, perceived work pressure and perceived home pressure for understanding work-home conflict; yet, some differences were found between the two types of work-home conflict (i.e., work-to-home and home-to-work conflict), and between the two types of work-home practices. Our results nuance the dichotomy between users and non-users of work-home practices that has been dominantly used in the work-home practice literature to date and point to relevant sources of variation among both the group of users and the group of non-users. These findings may encourage researchers to examine characteristics of employees’ work-home practice use (e.g., volition, perceived pressure) in addition to the mere use of these practices when studying their effectiveness.

¹ Delanoëje, J., & Verbruggen, M. (under review). The use of work-home practices and work-home conflict: Examining the role of employee preferences and perceived pressure in a multi-method study. Under review since 28 May 2019 in *Frontiers in Psychology*, section *Organizational Psychology*.

Introduction

Due to increased female labor market participation, the rise of single-parent and dual-earner families and changing gender norms (Butts et al., 2013; Hammer et al., 2002; Kossek and Ruderman, 2012; Neal and Hammer, 2007), a growing number of employees today has to combine work with other life roles (Greenhaus and Powell, 2003; Kalliath and Brough, 2008). In response to this new reality, organizations increasingly offer work-home practices to their employees (Beauregard and Henry, 2009; Thompson et al., 1999); i.e., practices which provide additional resources (i.e., flexibility or time) to employees to facilitate balancing work with other life roles (Kossek et al., 2010). Work-home practices typically include flexible work arrangements (e.g., home-based telework) and work-time reductions (e.g., part-time work).

Despite the widespread expectation that employees who make use of work-home practices will experience less work-home conflict (Beauregard and Henry, 2009), extant research on the relationship between work-home practice use and both work-to-home conflict (i.e., work interfering with private life) and home-to-work conflict (i.e., private life interfering with work) shows inconsistent results (e.g., Demerouti et al., 2014; Shockley and Allen, 2007; for a meta-analysis, see Kelly et al., 2008). While some studies found, as expected, that employees who make use of work-home practices experience less work-to-home conflict and/or less home-to-work conflict (Byron, 2005; e.g., Anderson et al., 2002; Hammer et al., 1997; Madsen, 2003), others studies found no link between these constructs (Beauregard and Henry, 2009; Mesmer-Magnus and Viswesvaran, 2006; e.g., Henz and Mills, 2014) and still others even found these practices to increase work-home conflict (Glass and Finley, 2002; Hammer et al., 2005; Hill et al., 2003; Hilbrecht et al., 2008; Schieman and Young, 2010). Furthermore, if studies find effects of work-home practice use on work-home conflict, effect sizes are generally very small (Allen et al., 2013; Gajendran and Harrison, 2007).

The observed inconsistencies in outcomes of work-home practice use lie at the core of our study. To date, research on the effects of work-home practice use has mainly focused on how users differ from non-users in terms of work-to-home and home-to-work conflict. In doing so, these studies ignore important differences *within* the groups of users and non-users. In this study, we posit that there are similar sources of variance within both groups that are more crucial for understanding work-home conflict than the mere use of work-home practices. We focus on two specific sources of variance: (1) the degree to which employees' (non-)use of a specific work-home practice is in line with their preference (i.e., volition); and (2) the pressure they experience from the work and/or the home environment to act in another way that they prefer

(i.e., perceived work pressure and perceived home pressure). These two characteristics are regularly referred to when researchers try to explain why work-home practice use is sometimes more and sometimes less effective (e.g., Delanoeije et al., 2019; Shockley and Allen, 2007; Virick et al., 2010); however, to the best of our knowledge, no study to date has examined the relevance of these two sources of variance directly.

By distinguishing between volition and perceived pressure, the role of the potential difference between employees' wants and obligations is emphasized. Some studies on work-home issues did already mention preference-related concepts, yet they did not specifically distinguish volition from pressure. For instance, Thornthwaite (2004) argued that preferences for work-home practices differed between employees, yet preferences were framed in terms of different demands, for instance family demands or demands of the specific job. In line with suggestions of previous scholars (Kossek and Ruderman, 2012), we argue that these demands either may be internalized and feel as volitional (i.e., wants) or either may function as pressure not in line with these wants. This difference between volition and pressure may also explain current inconsistencies in the moderating effects of, for instance, home demands on the relation between work-home practice use and employee outcomes, since for some employees these demands may induce a preference for using a specific work-home practice, while others may experience these demands as pressuring them towards doing something they would preferably not do (e.g., Hill et al., 1998; Butts et al., 2013; Saltzstein et al., 2001; ten Brummelhuis and Van der Lippe, 2010). To be able to distinguish wants from obligations, this study therefore directly assesses feelings of volition and perceived pressure related to employees' work-home practice use.

We test the relationship between volition and perceived pressure related to work-home practice use on the one hand and work-to-home conflict and home-to-work conflict on the other hand in two studies: a field study—using survey data with a sample of 381 employees from a middle-large Belgian university—and an experimental vignette study—using a between-subject design with a sample of 556 Belgian employees. In addition, since it has been argued that different practices serve different functions and should therefore be studied separately (Glass and Finley, 2002; Kelly et al., 2008; Saltzstein, Ting and Saltzstein, 2001; Shockley and Allen, 2007), we test the relevance of volition and perceived pressure for two specific work-home practices, i.e., home-based telework—from now on referred to as telework—and part-time work.

The contribution of our study is threefold. First, our study extends the dichotomous

classification between users and non-users of work-home practices by incorporating important sources of variance related with work-home practice use that are expected to play a role among both users and non-users: (1) volition and (2) perceived (work and home) pressure. Taking into account these sources of variance—irrespective of employees’ use—is likely to render the effects of organizational work-home practices more understandable. More insight in this matter may be useful for organizations to optimize their work-home policies. If employees’ work-home conflict depends on volition and perceived pressure related to work-home practice use, organizations might profit from tailor-made support programs that enable employees to make volitional decisions on work-home practice use, and/or to manage external pressure they experience. Second, we test the relevance of these sources of variance not only in a field study, but also in an experimental vignette study to allow for causality claims. Whereas correlational field studies, which are used most often in research on this topic (Baltes et al., 1999; Butts et al., 2013), are unable to rule out reversed causation or selection effects, vignette studies allow to attribute causality to the factors that are manipulated (in our study: volition, perceived pressure and use), thus precluding reversed causality by design. Third, we test the relevance of volition and perceived pressure for both telework and part-time work. In that way, our study includes an immediate replication among two different work-home practices, which can strengthen the conclusions from this study.

Theoretical foundations

Work–home conflict

Greenhaus and Beutell (1985) defined work-home conflict as a type of inter-role conflict in which the role demands stemming from one life domain (work or home) are incompatible with role demands stemming from the other domain. The direction of this conflict can go two ways: either individuals can be hindered to meet role demands in the private life due to work demands (“work-to-home conflict”), or they can be hindered to meet role demands in the work domain due to private life demands (“home-to-work conflict”). Previous research has shown work-to-home conflict and home-to-work conflict to be related yet distinct constructs (Byron, 2005; Kelloway et al., 1999).

Work-home conflict generally arises when the time devoted to one role precludes meeting the demands in the other role (time-based conflict) or when stress or strain in one role precludes meeting the demands in the other role (strain-based conflict) (Greenhaus and Beutell, 1985). A third form of conflict (i.e., behavior-based conflict) involves the conflict that arises when the behavior required in one role makes it difficult to fulfill requirements of another role

(Greenhaus and Beutell, 1985; for instance, a dominant way of communicating may be effective to reach certain work goals but may not be successful in one's family life). Neuroscientific research suggests that the neural processes underlying time-based and strain-based conflict lay very closely together and are strongly associated with similar emotional and stress-reactions in the brainstem different from those of behavior-based conflict, that are involved with neuroplasticity and learning (Poelmans and Stepanova, 2016). In this paper, we focus on work-home conflict comprising time-based and strain-based conflict, which we see as the affective experience resulting from stress and negative emotions (such as anxiety, irritability and guilt) related to the work-home interface (Eby et al., 2005; Greenhaus and Beutell, 1985; Morgan and King, 2012).

Work-home practice use and work-home conflict

Since work-home practices offer employees additional resources (e.g., flexibility, time), it is widely expected that using these practices can facilitate balancing work with other life roles (Kossek et al., 2010) and may therefore help employees to lower their work-to-home and home-to-work conflict (Beauregard and Henry, 2009). Yet, as was mentioned above, research on the topic to date has largely found inconsistent results (Kelly et al., 2008), with some studies finding the expected conflict-reducing effect while other studies found no effect and still others even found a conflict enhancing one. These inconsistencies stimulated researchers to examine the link between the use of work-home practices and work-home conflict in a more fine-grained way. Research to date has done this in two main ways.

First, to better understand the observed inconsistencies, research started to distinguish between specific work-home practices since different practices serve different functions and may therefore have different effects. These studies indeed found that effects may differ depending on the specific work-home practice (Allen et al., 2013; Glass and Finley, 2002; Kelly et al., 2008; Saltzstein et al., 2001; Shockley and Allen, 2007). Therefore, in the current study, we study the effects of two specific practices that provide different resources to employees, in particular telework (providing additional flexibility) and part-time work (providing additional time).

Second, the inconsistencies in research on work-home practice use also stimulated researchers to examine the role of moderating factors, like home demands (e.g., Golden et al., 2006; ten Brummelhuis and Van der Lippe, 2010), gender (e.g., Greenhaus and Parasuraman 1999; Sullivan and Lewis, 2001), supervisor support (e.g., Wang and Walumbwa, 2007; Shockley and Allen, 2007), leadership style (e.g., Wang and Walumbwa, 2007), and boundary

management preferences (e.g., Delanoeije et al., 2019). Two arguments are frequently used when substantiating the moderation hypotheses. First, several studies focused on moderators that may affect employees' preference for work-home practice use, contending that work-home practice use will be more (/less) effective when this use is more (/less) in line with employees' preference. For instance, Shockley and Allen (2007) argued that work-home practice use would be more effective for employees with high home demands because these employees are more likely to prefer additional resources; and Delanoeije et al. (2019) as well as Virick et al. (2010) expected that working from home would be more (/less) effective for employees who preferred (/did not prefer) integrated work-home boundaries. Second, a number of studies focused on contextual (work or home) characteristics that are likely to undermine the benefits of work-home practice use and could in that way exert pressure on employees act in another way than they prefer. For instance, Shockley and Allen (2007) argued that in organizations that are little family-supportive, users of work-home practices are likely to experience less positive outcomes because they experience disapproving sentiments from supervisors and coworkers and a general feeling that use is unacceptable. Similarly, the outcomes of using telework are assumed to be lower when the home environment undermines focus and concentration, for instance when the household size is large (e.g., Golden et al., 2006; Greer and Payne, 2014).

Intriguingly, most of these studies look for moderators that explain variance within the group of users of work-home practices (e.g., Hammer et al., 2005; Saltzstein et al., 2001; Shockley and Allen, 2007). In that way, they ignore that there may also be important—and quite similar—sources of variance at play among the group of non-users. For instance, in some cases, not using a specific practice may be highly in line with a person's preference (e.g., when employees do not have caring responsibilities; or when they prefer to maximize their work-related social contacts) and, as such, for these employees, not using a work-home practice may be experienced as highly volitional. Similarly, employees who do not use work-home practices may under certain circumstances experience pressure to make use of a specific practice, for instance when the organization is reducing office space or when the spouse expects the employee to take up more family responsibilities. This variance in the group of non-users has received little research attention to date. This could explain why research results on the role of moderating factors to date are far from conclusive. For example, whereas some studies found that work-home practice use is related with lower work-home conflict when employees experience high home demands/responsibilities (e.g., Butts et al., 2013; Byron, 2005; for a meta-analysis, see Allen et al., 2013), other studies found the opposite effect (e.g., Hilbrecht et

al., 2008 Saltzstein et al., 2001; ten Brummelhuis and Van der Lippe, 2010). Also, whereas some studies have shown that women benefit more from work-home practices than men (e.g., Kossek et al., 2006), some studies show the opposite (e.g., Meeussen et al., 2018).

In this study, we contend that before looking at moderating factors, it is important to understand the sources of variance that are at play among both the group of users and the group of non-users. In line with the arguments frequently used in research on moderating factors, we focus on the following two sources of variance: (1) the degree to which employees' (non-)use of a specific work-home practice is in line with what they would preferably do (i.e., volition), and (2) the extent to which employees experience pressure from either the work environment or from their private life to act in a different way than they prefer (i.e., perceived work pressure and perceived home pressure). We posit that both users and non-users vary on these characteristics and that these characteristics are more important for understanding employees' work-to-home and home-to-work conflict than the mere use of work-home practices. In what follows, we explain how volition and perceived pressure may function as sources of variance in employees and how they are likely to relate with work-home practice effectiveness.

Volition

Volition refers to the degree to which employees use or not use a specific work-home practice because they prefer to do so. Individuals are likely to experience volition when they are in a situation that is in line with their preferences because the behavior is then more congruent with their goals and identities (Gagné and Deci, 2005). To date, volition has—to the best of our knowledge—not yet been included in research on the effects of work-home practices. There are, however, several indications in the literature that employees differ in their preferences for specific work-home practices and thus in the extent to which they are likely to experience their use or non-use of a specific work-home practice as volitional. For instance, research on work-home boundary management styles has shown that employees differ in their preference to either segment or integrate boundaries between work and private life (Kossek et al., 2012). As telework risks to blur the boundaries between work and home (Ashorth et al., 2000), it seems likely that some employees may prefer to make use of telework while others would preferably not do so. Similarly, research has shown that employees differ in the numbers of hours they preferably work (e.g., Lu, 2011) and, accordingly, it is likely that some employees may prefer to work part-time while others may prefer to work full-time. Accordingly, several scholars have called for the inclusion of individuals' preferences for telework (Standen et al., 1999) and part-time work (Feldman, 1990; Nardone, 1986) to better understand the effects of

these work-home practices.

In this study, we expect that employees who experience their use of a specific work-home practice as volitional, have more positive emotions and less stress and therefore experience less work-home conflict. Volition, or fit between individuals' behaviors and their preferences, is a central element in several psychological and decision-making theories explaining individuals' well-being and stress, such as the demand-discretion model (Karasek, 1979), self-determination theory (Deci and Vansteenkiste, 2004; Gagné and Deci, 2005) and decision-justification theory (Connolly and Zeelenberg, 2002). When employees experience a certain choice (e.g., their use or non-use of a specific work-home practice) as volitional, they are likely to feel energized (Lu, 2011), intrinsically motivated (Deci and Vansteenkiste, 2004; Gagné and Deci, 2005) and well able to justify their situation (Connolly and Zeelenberg, 2002), which may all trigger positive emotions and reduce stress (Boon et al., 2011; Lu, 2011; Gagné and Deci, 2005; Kossek and Ruderman, 2012; Kristof-Brown and Janssen, 2007; Verbruggen and van Emmerik, 2019). Reduced stress has, in turn, been related with lower work-home conflict (Burke, 1988; Ilies et al., 2007; for a meta-analysis, see Williams and Alliger, 1994). Conversely, when employees make use of a work-home practice even though they would preferably not do so or, conversely, when they do not make use of a work-home practice while they would preferably do so, they are likely to experience more negative emotions and stress which may then intensify their work-home conflict.

A few studies support the relevance of volition for work-home conflict. For instance, Gadeyne et al. (2018) showed that work-related ICT-use outside working hours increased work-home conflict for employees with a segmentation preference but not for employees with an integration preference (Gadeyne et al., 2018). Relatedly, Delanoëije et al. (2019) found that employees' preference to protect their home domain for work intrusions worsened the work-home conflict increasing effect of daily home-to-work boundary role transitions. Similarly, Bogaerts et al. (2018) found a strong negative relationship between perceived boundary management fit and work-home conflict and Lu (2011) showed that a fit between actual and preferred working hours was negatively related with work-home conflict. Building on the above, we hypothesize:

Hypothesis 1: The degree of volition for using or not using telework is negatively related to work-to-home conflict (Hypothesis 1a) and home-to-work conflict (Hypothesis 1b)

Hypothesis 2: The degree of volition for using or not using part-time work is negatively related to work-to-home conflict (Hypothesis 2a) and home-to-work conflict (Hypothesis 2b)

Perceived pressure

It is widely known that constraints from the social context, both at work and at home, can induce pressure upon employees to act in another way than they want to (Poelmans, 2005). We pose that also in the context of work-home practices, employees may perceive external pressure to act differently than they would preferably do. Although research on work-home practices has rarely included external pressure explicitly, there are several indications in the literature of their existence. Both the work environment and the private life have been repeatedly identified as contexts from which pressure can arise.

First, several studies have pointed to the existence of pressure from the *work environment*, especially pressure to *not* make use of work-home practices. For example, the supervisor or colleagues may induce pressure to not make use of work-home practices, for example when they show little understanding for family issues (Thompson et al., 1999) or, when they view employees' use of these practices as complicating the work organization (Ilgen et al., 2005; Lembrechts et al., 2018). Accordingly, a family-*unfriendly* organizational culture has been suggested to induce perceived pressure to not make use of these practices (Anderson et al., 2002; Behson, 2005; Kossek et al., 2010; Ryan and Kossek, 2008; Thompson et al., 1999). The work environment could also induce pressure to *make* use of offered work-home practices, although this possibility has been mentioned less often in the literature. An indirect reference to this possibility has been made by Hoffman and Cowan (2008), who argued that organizations exert pressure over their employees by offering work-home practices for their employees. Therefore—by merely offering these practices—organizations may create a norm and in that way induce a perceived pressure to make use of these opportunities. Individuals may also perceive a pressure to use work-home practices when organizations reduce the office space because of cost-winning aspects (Hill et al., 2003; Stavrinidis, 1991, in Baruch, 2002).

Second, several studies indicate that employees may perceive pressure from their *private life* to either use or not use work-home practices. For instance, employees with high family-related demands (such as young children) who would preferably not make use of work-home practices may experience a pressure to make use of these practices to take care of these home demands. The home environment may also pressure employees to *not* use work-home practices. For instance, financial factors might pressure employees to not make use of part-time work (Bielby and Bielby, 1989; Zabalza et al., 1980) and having children may induce a pressure to *not* use telework since employees with children tend to expect more interruptions and less productivity while working at home (Demerouti et al., 2014; ten Brummelhuis and Van der

Lippe, 2010).

We expect that more perceived pressure, either from the work or the home environment, will be associated with more work-home conflict. Individuals have a tendency to evaluate their (work and home) environment against internal standards such as their preferences, desires, values or goals (Lazarus and Folkman, 1984; Paddhi and Pattnaik, 2014). When individuals experience external pressure to act in another way than they prefer, they are likely to appraise the environment as a threat (Lazarus, 1991; Lazarus and Folkman, 1984), which may elicit negative emotions such as frustration or guilt, inducing stress and therefore work-home conflict (Bochantin and Cowan, 2016; Guendouzi, 2006; Morgan and King, 2012). The person-environment fit literature also suggests that a perceived mismatch between the environment and one's personal preferences—like in the case of perceived pressure—may induce negative emotions and stress (Edwards and Rothbard, 1999; Harrison, 1978; Padhi and Patnaik, 2014). Therefore, and in line with suggestions of Poelmans (2005) and Demerouti et al. (2014), we expect that perceived pressure that arises from the work environment (“work pressure”) and from one's private life (“home pressure”) are related with more work-home conflict:

Hypothesis 3: The degree of perceived work pressure opposed to an individual's preference to use or not use telework is positively related to work-to-home conflict (Hypothesis 3a) and home-to-work conflict (Hypothesis 3b).

Hypothesis 4: The degree of perceived home pressure opposed to an individual's preference to use or not use telework is positively related to work-to-home conflict (Hypothesis 4a) and home-to-work conflict (Hypothesis 4b).

Hypothesis 5: The degree of perceived work pressure opposed to an individual's preference to use or not use part-time work is positively related to work-to-home conflict (Hypothesis 5a) and home-to-work conflict (Hypothesis 5b).

Hypothesis 6: The degree of perceived home pressure opposed to an individual's preference to use or not use part-time work, is positively related to work-to-home conflict (Hypothesis 6a) and home-to-work conflict (Hypothesis 6b).

We tested the relevance of volition and perceived pressure in two studies. First, we conducted a field study using survey data collected with employees (study A). Second, to enable the causal inference between our hypothesized independent variables and outcome variables, we also conducted an experimental vignette study (study B).

Materials and methods of study A

Sample and procedure

Survey data were collected with employees of a middle-large Belgian university during the summer of 2015. All academic, administrative and technical staff were approached via e-mail to fill in the online survey. A total of 381 staff members (response rate: 30%) filled out the questionnaire. The majority of the sample was female (59.4%). Respondents were between 20 and 64 years old ($M = 39.64$, $SD = 11.38$) and had between 0 and 6 children living at home ($M = 1.14$, $SD = 1.14$). Furthermore, 212 respondents (55.6%) made use of telework and 98 (25.7%) made use of part-time work. Among those who worked part-time, 20 respondents (20.4% of the part-time working respondents) indicated to have another job outside their part-time job at the university. To avoid confounding effects, we left these respondents out of the analyses for part-time work as we do not know whether their total working time adds up to a full-time job or not.

Measures

Volition. We developed an adaptive four-item scale to measure the degree to which the (non-)use of a specific work-home practice is volitional. The items are adapted to the specific work-home practice (i.e., telework and part-time work) and to the respondent's actual use of that practice. The four items are: (1) "I make use (/do not make use) of [specific work-home practice] because I truly want it like this"; (2) "I would preferably not make use (/make use) of [specific work-home practice]" (reverse scored); (3) "It is entirely my own decision to make use (/to not make use) of [specific work-home practice]"; (4) "If it was entirely up to me, I would not make use (/make use) of [specific work-home practice]" (reverse scored). Items were rated on a five-point Likert scale (1: Totally disagree – 5: Totally agree). Respondents had to fill in the volition scale twice, once for telework and once for part-time work. We tested the validity and reliability of this scale for both telework and part-time work using two other samples, showing support for the quality of this scale (for detailed information about this validation phase: see Appendix). In this study, the scale turned out to be reliable for both telework ($\alpha = .93$) and part-time work ($\alpha = .89$).

Perceived pressure. We measured perceived pressure from the work environment ("work pressure") and perceived pressure from the private life ("home pressure") using single-item measures based on the measures of Shockley and Allen (2015) for "pressure from work" and "pressure from home". In particular, to assess perceived work pressure, we asked our respondents to evaluate the following item: "I experience pressure from my work or my

employer to make use (/to not make use) of [specific work-home practice]”². Similarly, to assess perceived home pressure, respondents had to evaluate the statement: “I experience pressure from my private life to make use (/to not make use) of [specific work-home practice]”¹. Respondents had to evaluate the statements on a scale from 0 (Totally disagree) to 10 (Totally agree). Both the measure for perceived work pressure and the one for perceived home pressure had to be filled in twice, once for telework and once for part-time work.

Work-to-home conflict. Work-to-home conflict was measured using the six items to measure time-based and strain-based work-to-home conflict of Carlson et al. (2000). The six items were found to reliably assess this construct ($\alpha = .90$). Sample items are “My work keeps me from my family activities more than I would like” and “When I get home from work I am often too frazzled to participate in family activities/responsibilities”. The response scale ranged from 1 (Totally disagree) to 5 (Totally agree).

Home-to-work conflict. Home-to-work conflict was assessed using the six items to measure time-based and strain-based home-to-work conflict of Carlson et al. (2000). The six items had to be rated on a five-point Likert scale ranging from 1 (Totally disagree) to 5 (Totally agree). Sample items are “The time I spend on family responsibilities often interfere with my work responsibilities” and “Due to stress at home, I am often preoccupied with family matters at work”. The scale was found to be reliable ($\alpha = .84$).

Controls. We included control variables that have been hypothesized to influence work-home conflict. In particular, we controlled for gender (0 = man; 1 = woman), age (in years), and number of children because women, older employees, and employees with more care dependent children have been shown to experience more work-home conflict (Butts et al., 2013; Byron, 2005; Madsen, 2003). In addition, we included use of telework (1: yes; 0: no) as a control in the regressions on telework and use of part-time work (1: yes; 0: no) in the regressions on part-time work.

² Since we hypothesized an impact of the pressure employees experience to act in another way than they prefer, the measurement was adapted based on their score on the volition-measure. In particular, we assessed “pressure to use a specific work-home practice” if employees indicated they would *preferably not use* that practice (i.e., for users: when they had a score of 3 or higher on the volition scale and for non-users: when they had a score lower than 3 on the volition scale) and we assessed “pressure to not use a specific work-home practice” if employees indicated they would *preferably use* that practice (i.e., for users: when they had a score lower than 3 on the volition scale and for non-users: when they had a score of 3 or higher on the volition scale).

Analyses

Hierarchical regressions were used to test the hypotheses. In a first step, control variables (i.e., age, gender, number of children, use of the specific work-home practice) were entered (Model 1) and in the second step, our key explanatory variables (i.e., volition and the perceived pressure variables) were added (Model 2). The inclusion of use of the specific work-home practice as a control variable is a central point in our study, as we argue that it is not solely the use of practices, but more importantly volition and perceived pressure related to work-home practice use that are relevant for understanding work-home conflict. Multi-collinearity was checked for all predictors by tolerance analysis. All of the predictors' tolerance were above the cutoff of .10 (ranging between .41 and .99), suggesting that there is no risk for multicollinearity (Tabachnick and Fidell, 2001).

Results and discussion of study A

Basic descriptive statistics of the sample, reliability coefficients, and correlations between this study's variables are shown in Table 1 (see next page). Table 2 (see in two pages) shows an overview of all regression outcomes.

Table 1. Means, standard deviations, reliability coefficients and correlations of all study variables in study A

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. Volition (telework)	3.86	1.22	.93											
2. Volition (part-time)	4.07	0.99	.13*	.89										
3. Work pressure (telework)	2.45	3.36	-.41**	-.13*	-									
4. Home pressure (telework)	1.23	2.54	-.22**	.03	.36**	-								
5. Work pressure (part-time)	1.19	2.75	-.03	-.51**	.19**	.06	-							
6. Home pressure (part-time)	1.54	2.71	-.11	-.30**	.11	.17**	.16**	-						
7. Work-to-home conflict	2.74	1.00	-.06	-.24**	.21**	.02	.21**	.17**	.90					
8. Home-to-work conflict	1.67	0.63	-.07	-.12*	.16**	.25**	.09	.24**	.35**	.84				
9. Use of telework (1 = yes)	0.58	0.49	.65**	.04	-.12*	-.02	.06	.09	.25**	.14**	-			
10. Use of part-time work (1 = yes)	0.26	0.44	-.15**	-.16**	.07	.14*	.26**	.07	-.14**	-.05	-.16**	-		
11. Gender (1 = male)	0.40	0.49	.03	.01	-.13**	-.02	-.12*	-.01	.13*	.10	.00	-.18**	-	
12. Age	39.56	11.29	-.05	-.13*	-.04	-.08	.05	.01	-.02	-.08	-.11*	.27**	.20**	-
13. Number of children	1.15	1.14	-.02	-.22**	.03	.05	.20**	.12*	.05	.11*	.06	.18**	.10	.34**

** $p < 0.01$, * $p < 0.05$. $N = 381$. M = Mean. SD = Standard deviation. Means are on a 1-5 Likert scale, except for work pressure and home pressure (0-10 Likert), use of telework, use of part-time work and gender (dummies), age (years) and children (number). Reliability coefficients are presented on the diagonal axis.

Table 2. Standardized regression coefficients (β 's) for effects of controls, volition, perceived work pressure and perceived home pressure in study A

	Home-based telework ^a				Part-time work ^b			
	Work-to-home conflict		Home-to-work conflict		Work-to-home conflict		Home-to-work conflict	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Gender	0.11*	0.14**	0.11*	0.12*	0.09	0.10	0.12*	0.12*
Age	-0.05	-0.03	-0.12*	-0.09	-0.04	-0.02	-0.15*	-0.13*
Children	0.06	0.04	0.13*	0.10	0.11	0.03	0.14*	0.10
Use	0.24**	0.46**	0.12*	0.23**	-0.16*	-0.26**	0.02	0.01
Volition		-0.32**		-0.14		-0.14*		-0.04
Work pressure		0.17**		0.09		0.20**		0.03
Home pressure		-0.09		0.16**		0.13*		0.24**
R ²	0.08**	0.18**	0.05**	0.12**	0.05*	0.16**	0.04*	0.10**
ΔR^2	0.08**	0.11**	0.05*	0.07**	0.05*	0.11**	0.04*	0.06**
F	7.39**	11.26**	4.57**	6.96**	4.23*	8.93**	3.08*	5.21**

** $p < .01$ * $p < .05$. Age is mean-centered. Gender is a dummy with 0 = female, 1 = male. ^a $N = 360$. ^b $N = 335$.

Volition

Hypothesis 1 expected that volitional (non-)use of telework would be negatively related with work-to-home conflict (*H1a*) and home-to-work conflict (*H1b*). As shown in Table 2, volition was found to be negatively related with work-to-home conflict ($\beta = -0.32$, $p < .01$) but not with home-to-work conflict ($\beta = -0.14$, $p = 0.06$). These results support *H1a* but not *H1b*.

Hypothesis 2 expected that volitional (non-)use of part-time work would be associated with less work-to-home conflict (*H2a*) and less home-to-work conflict (*H2b*). As shown in Table 2, volition was found to be negatively related with work-to-home conflict ($\beta = -0.14$, $p < .05$). This supports hypothesis *H2a*. Since the relationship with home-to-work conflict was not significant ($\beta = -0.04$, $p = .60$), we have to reject hypothesis *H2b*.

Perceived pressure

In line with hypothesis *H3a*, we found a positive relationship between work pressure for (not) using telework and work-to-home conflict ($\beta = 0.17$, $p < .01$). However, no significant relation was found with home-to-work conflict ($\beta = 0.09$, $p = .12$), so we have to reject *H3b*. Next, unlike hypothesized in hypothesis *H4a*, we did not find a relationship between home pressure for (not) using telework and work-to-home conflict ($\beta = -0.09$, $p = .07$). Thus, respondents who experienced more home pressure did not report higher work-to-home conflict.

We did find the expected positive relationship between home pressure for (not) using telework on home-to-work conflict ($\beta = 0.16, p < .01$), which supports hypothesis *H4b*.

In line with hypothesis *H5a*, we found a positive relationship between work pressure for (not) using part-time work and work-to-home conflict ($\beta = 0.20, p < .01$). Yet, we did not find a relationship with home-to-work conflict ($\beta = 0.03, p = .65$) and can thus not support hypothesis *H5b*. In line with hypotheses *H6a* and *H6b*, home pressure for (not) using of part-time work was found to be positively related with both work-to-home conflict ($\beta = 0.13, p < .05$) and home-to-work conflict ($\beta = 0.24, p < .01$).

Volition and perceived pressure versus use

Finally, we have a look at the impact of the use of telework and the use of part-time work. In our theorizing, we posited that volition and perceived pressure related to work-home practice use would be more crucial for understanding work-home conflict than the mere use of specific work-home practices. To evaluate this assumption, we compare the explained variance of Model 1 (in which the mere effect of practice use is examined, as done in traditional studies investigating the effect of practice use) with the explained variance of Model 2. For telework, the inclusion of volition and perceived pressure was found to more than double the explained variance of work-to-home conflict and home-to-work conflict compared to Model 1. Similarly, for part-time work, the inclusion of volition and perceived pressure was found to increase the explained variance of work-to-home conflict and home-to-work conflict up to three times. So, in line with our expectations, volition and perceived pressure seem to be more important than the mere use of work-home practices in explaining work-home conflict.

Discussion

The results of this survey study suggest that volition, perceived work pressure and perceived home pressure are all relevant for understanding employees' work-home conflict, yet, these sources of variance seem to be more important for understanding work-to-home conflict than for home-to-work conflict.

First, in line with our expectations, *work-to-home conflict* was found to be related with volition and perceived work pressure in both the regression on telework and the regression on part-time work, as well as with perceived home pressure in the regression on part-time work. However, unlike hypothesized, perceived home pressure related to telework was not linked with higher work-to-home conflict. It could be that the effect we hypothesized is neutralized by the opposite effect: some employees may for instance experience home pressure to not let work

intrude in the family sphere and thus to not use telework, which could shelter them from work-to-home conflict. Or it could be that there is a compensatory reversed causation effect and that employees with low work-to-home conflict experience more home pressure, for instance from their spouse, to use telework since the work-home combination is now going ‘so easy’ for them and using telework could then enable them to take up more home responsibilities additive to their work role. We cannot examine this reversed causation path due to the cross-sectional nature of the data.

Second, for *home-to-work conflict*, we only found a significant link with perceived home pressure (in both the regression on telework and the regression on part-time work). Neither volition, nor perceived work pressure were found to be related with home-to-work conflict. Perhaps, floor effects may inhibited us to observe an impact, since participants scored at the lower end of the home-to-work conflict. Alternatively, it could be that volition and perceived work pressure are not so relevant for understanding variation in home-to-work conflict. Perhaps, involuntary interruptions from the private life may still cause home-to-work conflict (Carlson et al., 2015; Matthews et al., 2010; Smit et al., 2016), irrespective of whether employees’ use of a specific work-home practice is volitional or of whether an employees perceive pressure from the work context to act in another way than they prefer. It could also be that there are compensatory effects at play. For instance, employees who perceive high work pressure can perhaps adapt their private life role (for instance, adapt the way their private life is organized, such as getting household care to lower home demands) to that extent that their private life does not further interfere with their work, which may buffer the expected positive effect of work pressure on home-to-work conflict.

Interestingly, our results suggest that home pressure is related with both work-to-home and home-to-work conflict, whereas work-pressure is only relevant for understanding work-to-home conflict. This is in line with earlier research on private life and work stressors, which has shown that private life stressors affected both work-to-home and home-to-work-conflict, whereas job stressors affected work-to-home conflict to a greater extent than it affected home-to-work conflict (Byron, 2005).

Overall, our findings show that volition and perceived pressure explained more variance than the mere use of a specific work-home practice. These results support our argument to include these sources of variance when studying the effect of work-home practices on work-home conflict. A major limitation of this study is that we used cross-sectional data. In addition, for some of our explanatory variables, mainly for volitional (non-)use of part-time work, we

found a high mean and low variance, which may have lowered the likelihood of observing an effect of this variable due to ceiling effects. To strengthen our findings, to test the hypothesized causal direction between the variables and avoid problems related to ceiling effects in our explanatory variables, we also tested the relevance of all characteristics (i.e., volition, perceived work pressure and perceived home pressure) in an experimental vignette study.

Materials and methods of study B

Sample and procedure

Data were collected using snowball sampling in the spring of 2016. Belgian employees were recruited through a call for participation sent out by one postgraduate student and eight undergraduate students from different regions in the country to increase geographical distribution. We targeted employees who had been working for at least 6 months to assure that respondents were familiar with working in an organization and would be able to understand and reliably assess the vignettes (Aguinis and Bradley, 2014; Wason et al., 2002). In total, 556 employees filled in this experimental survey. Sixty-three percent of the respondents were female respondents. Respondents were between 21 and 51 years old ($M = 34.98$, $SD = 9.53$) and had between 0 and 5 children ($M = 1.12$, $SD = 1.24$). Furthermore, 37.1% of the respondents made use of telework and 23.7% made use of part-time work.

We presented each respondent with two short stories, one related to telework and one related to part-time work. Half of the respondents was first presented the scenario on telework and the other half received the scenario on part-time work first. In both stories, we manipulated volition, perceived work pressure, perceived home pressure and actual use of the work-home practice, resulting in a randomized 2 (volition: yes/no) by 2 (perceived work pressure: yes/no) by 2 (perceived home pressure: yes/no) by 2 (use: yes/no) design. This resulted in a total of 16 experimental conditions, which were presented *between* (rather than *within*) respondents to avert potential fatigue (Weber, 1992). Cell sizes for this 2x2x2x2 design ranged between 31 and 42 ($N = 556$).

Vignettes

In line with recommendations of Aguinis and Bradley (2014), we presented all respondents the same baseline information to allow for comparison between respondents. Respondents were first informed that we would present them two hypothetical stories related to work-home practices, described as practices that organizations can offer to facilitate employees' combination of work with private life. Then two vignettes were presented.

The telework vignette described an employee who has two school-going children and works for an organization that offers the option to make use of telework, defined as the possibility to work from home on work-related tasks during regular work hours. Similarly, the part-time work vignette described an employee with two school-going children who works for an organization that offers the option to work part-time, defined as the option to work less hours than a full-time job, for example 60%. We specified that the employee had two school-going children in order to make the two stories more comprehensible (Aguinis, 2014) and to control for the influence of care-dependent children, which is known to affect work-home conflict (Byron, 2005; Shockley and Allen, 2007). The rest of the scenario was adapted to the different experimental manipulations. A sample vignette for the condition of volition (yes), perceived work pressure (yes), perceived home pressure (yes) and use of part-time work (yes) is the following:

“Imagine an employee in an organization. This organization offers the option to work part-time, i.e., the option to work less hours than a full-time job, for example 60%. This employee has two school-going children and has a personal preference to work part-time. Thus, if it was completely up to this person, he/she would work part-time. This employee also works part-time. However, this employee experiences pressure to work full-time from his/her supervisor as well as from his/her partner.”

After each scenario, respondents were asked to assess the work-to-home conflict and home-to-work conflict of the employee in the story. Given that participants rated another individual’s work-to-home conflict, we indicated participants to keep in mind the situation of the employee described in the scenario.

Rather than asking respondents to imagine themselves as an employee with certain fixed (e.g., having two school-going children) or manipulated characteristics (e.g., having a preference to work part-time, experiencing pressure from supervisor and/or partner to work part-time), we asked employees to imagine *another* employee and rate the expected amount of work-home conflict they would think this other employee would experience. In this way, we aimed to limit bias from respondents’ own background characteristics (e.g., number of children) or respondents’ own levels of volition, perceived pressure and work-home conflict and, hence, to study the pure effects of the *manipulated* independent variables since we were not interested in the effects of respondents’ own background information.

Measures

Volition. High volition (coded 1) was manipulated by stating that the employee's use or non-use of the specific work-home practice is in line with what this employee would choose to do if it was entirely up to this employee him- or herself. Similarly, low volition (coded 0) was manipulated by stating that the employee's use or non-use of the specific work-home practice was the opposite of what the employee would choose if it was entirely up to this employee him- or herself.

Perceived work pressure. Perceived work pressure was manipulated by stipulating that the employee perceived (coded 1) or did not perceive (coded 0) pressure from his/her supervisor to do the opposite of what (s)he preferred to do if it was entirely up to him- or herself. In line with Greenhaus and Powell's (2003) vignette manipulation for perceived work pressure, we narrowed down the work environment to one aspect, i.e., the supervisor, to make interpretation of the vignette easier for respondents (Aguinis and Bradley, 2014). We specifically choose for the supervisor as supervisor support has been consistently found to affect work-home conflict (e.g., Frye and Breugh, 2004). A manipulation check, which asked the respondents to what extent the described employee experienced pressure from his/her supervisor (1: 'No pressure at all' – 7: 'A lot of pressure'), showed that, as intended, the respondents reported significantly more pressure in the 'work pressure' condition than in the 'no work pressure' condition ($F(1,547) = 402.12, p < 0.01$, for vignettes on telework; $F(1,546) = 505.12, p < 0.01$, for vignettes on part-time work).

Perceived home pressure. Similarly, home pressure was manipulated by stipulating that the employee perceived (coded 1) or did not perceive (coded 0) pressure from his/her partner to do the opposite of what (s)he would prefer to do if it was entirely up to him- or herself. In line with Greenhaus and Powell's (2003) vignette manipulation for perceived home pressure, we narrowed down the private environment to one aspect, i.e., the partner, to make interpretation of the vignette easier for respondents (Aguinis and Bradley, 2014). We specifically choose for the partner as work-home decisions are often made at a couple level (Moen and Yu, 2000) and work-home practice use has shown to have cross-over effects on work-home conflict (Schooreel and Verbruggen, 2015). A manipulation check, which asked respondents to what extent the employee in the vignette experienced pressure from his/her partner (1: 'No pressure at all' – 7: 'A lot of pressure'), showed that in line with our manipulation, respondents reported significantly more pressure in the 'home pressure' condition than in the 'no home pressure' condition ($F(1,547) = 402.12, p < 0.01$, for vignettes

on telework; $F(1,546) = 505.12, p < 0.01$, for vignettes on part-time work).

Use. The use or non-use of part-time work and telework was manipulated by specifying whether the employee made use (coded 1) or did not make use (coded 0) of the specific work-home practice.

Work-to-home conflict. For work-to-home conflict, the statements we used were slight modifications of the six items of Carlson et al. (2000) as we used in the survey data. Sample items are “The work of this employee keeps him/her from his/her family activities more than (s)he would like” and “When this employee gets home from work (s)he is often too frazzled to participate in family activities/responsibilities”. The response scale ranged from 1 (Totally disagree) to 5 (Totally agree). This scale was found to be reliable in both the scenarios on telework ($\alpha = .90$) and on part-time work ($\alpha = .93$).

Home-to-work conflict. For home-to-work conflict, we opted to use an adapted single-item measure to decrease respondent fatigue. In particular, we directly asked how respondents assessed the home-to-work conflict by the following question: “All in all, to what extent do you think that this employee is experiencing a negative influence from his/her private life on his/her work?”. Respondents could answer this question on a scale from 1 (No negative influence at all) to 7 (Very strong negative influence). We consider this adapted single-item scale reliable as we found a similar single-item measure for work-to-home conflict (i.e., “All in all, to what extent do you think that this employee is experiencing a negative influence from his/her work on his/her private life?”) to correlate highly with the validated full six-item scale for work-to-home conflict for both the scenario’s on telework ($r = 0.61, p < 0.01$) and on part-time work ($r = 0.64, p < 0.01$).

Analyses

We conducted two-way analyses of variance to examine the influence of three key predictors (volition, work pressure, home pressure) on work-to-home and home-to-work conflict. In all analyses, we controlled for the use of the specific work-home practice.

Results and discussion of study B

Table 3 (see next page) shows an overview of all outcomes of the analyses of variance.

Table 3. Means of work-to-home conflict and home-to-work conflict and analyses of variance for variables of use, volition, work pressure and home pressure in study B

	Home-based telework						Part-time work					
	Work-to-home conflict ($M = 2.55, SD = 0.81$)			Home-to-work conflict ($M = 3.32, SD = 1.43$)			Work-to-home conflict ($M = 2.64, SD = 1.00$)			Home-to-work conflict ($M = 3.40, SD = 1.47$)		
	<i>F</i>	<i>MS</i>	<i>MD</i>	<i>F</i>	<i>MS</i>	<i>MD</i>	<i>F</i>	<i>MS</i>	<i>MD</i>	<i>F</i>	<i>MS</i>	<i>MD</i>
Use	0.64	0.40	-0.05 (0.07)	1.24	2.32	0.13 (0.12)	73.19**	62.94	-0.67** (0.08)	4.58*	9.09	-0.25* (0.12)
Volition	15.04**	9.23	-0.25** (0.07)	1.66	3.10	-0.15 (0.12)	5.48*	4.72	-0.19* (0.08)	17.52**	34.80	-0.51** (0.12)
Work pressure	23.71**	14.55	0.33** (0.07)	0.44	0.82	0.08 (0.12)	12.24**	10.53	0.28** (0.08)	0.12	0.23	0.05 (0.12)
Home pressure	8.71**	5.34	0.20** (0.07)	53.81**	100.30	0.86** (0.12)	12.38**	10.62	0.28** (0.08)	33.23**	66.00	0.70** (0.12)
Error	550	0.61		539	1.86		551	0.86		541	1.99	
R ²	0.08			0.10			0.16			0.09		

$N = 556$. ** $p < .01$ * $p < .05$. M = mean. SD = standard deviation. MS = the mean sum of squares due to the focus variable. MD = mean difference using pairwise comparisons between 0 and 1 categories of variables, based on estimated marginal means. Standard errors are given in parentheses. The means of work-to-home conflict are on a 1-5 Likert scale, the means of home-to-work conflict are on a 1-7 Likert scale.

Volition

In line with hypothesis *H1a*, volitional (non-)use of telework was negatively related with work-to-home conflict ($F(1,548) = 14.50, p < .01$). However, contrary to expectation (*H1b*), volitional (non-)use of telework was not significantly related with home-to-work conflict ($F(1,537) = 1.54, p = .22$). In line with hypotheses *H2a* and *H2b*, volitional (non-)use of part-time work was negatively related with both work-to-home conflict ($F(1,549) = 5.62, p < .05$) and home-to-work conflict ($F(1,539) = 17.79, p < .01$).

Perceived pressure

Hypotheses H3 and H4 related to telework. In line with hypothesis *H3a*, work pressure for (not) using telework was positively associated with work-to-home conflict ($F(1,548) = 23.84, p < .01$). The expected association with home-to-work conflict was, however, not found ($F(1,537) = 1.54, p = .22$) and we thus have to reject hypothesis *H3b*. In line with hypotheses H4a and H4b, we found the expected positive relationship between home pressure for (not) using telework and both work-to-home conflict ($F(1,548) = 8.67, p < .01$) and home-to-work conflict ($F(1,537) = 54.13, p < .01$).

Hypotheses H5 and H6 related to part-time work. In line with hypothesis *H5a*, we found the expected positive relationship between work pressure for (not) using part-time work and work-to-home conflict ($F(1,549) = 12.35, p < .01$), indicating less work-to-home conflict in the conditions without work pressure ($M = 2.50, SD = 0.06$) than in those with work pressure ($M = 2.77, SD = 0.06$). The expected positive relationship with home-to-work conflict was, however, not found ($F(1,539) = 0.15, p = .70$) and we thus have to reject hypothesis *H5b*. For home pressure, we found the expected positive relationship with both work-to-home conflict ($F(1,549) = 12.48, p < .01$) and home-to-work conflict ($F(1,539) = 34.28, p < .01$), indicating more work-to-home conflict and more home-to-work conflict in conditions with home pressure than in those without home pressure. This is in line with *H6a* and *H6b*.

Volition and perceived pressure versus use

In line with our expectations, volition and perceived pressure explained considerably more variance of work-to-home and home-to-work conflict than the use of the specific work-home practice. For telework, we did not see a significant impact of use on work-to-home conflict or home-to-work conflict whereas volition and the perceived pressure variables together explained 8% of the variance in work-to-home conflict and 10% of the variance in home-to-work conflict (Table 3). For part-time work, volition and perceived pressure were found to increase the

explained variance of work-to-home conflict ($R^2 = 0.16$) and home-to-work conflict ($R^2 = 0.09$) up to nine times compared to a model including only the use of the specific practice ($R^2_{\text{work-to-home conflict}} = 0.10$; $R^2_{\text{home-to-work conflict}} = 0.01$) (Table 3). This supports our expectation that these characteristics are more important than mere use for understanding differences in work-home conflict.

Discussion

As expected, we found all characteristics (i.e., volition, perceived work pressure and perceived home pressure) to be linked with *work-to-home conflict* in the expected direction for both telework and part-time work. Thus, contrary to study A, we did find an effect of home pressure for (not) using telework. This may support our reversed causation explanation we gave earlier for this finding; i.e., that our hypothesized positive relationship between home pressure and work-to-home conflict may be countered by a compensatory reversed causation effect implying a negative relationship between work-to-home conflict and home pressure (i.e., perhaps employees with low work-to-home conflict experience more pressure from their spouse to take up more home responsibilities since things are going so easy for them). Indeed, the results of this experimental vignette study are by design less prone to a reversed direction of causality.

As in study A, *home-to-work conflict* was not affected to the same extent as work-to-home conflict by volition and perceived pressure. For telework, we found the expected negative effect of home pressure on home-to-work conflict, yet—like in study A—neither volition nor work pressure affected home-to-work conflict. For part-time work, both volition and home pressure were linked with home-to-work conflict in the expected direction, but again, work pressure did not affect home-to-work conflict. These findings for home-to-work conflict were thus largely the same as in study A, except for one difference: whereas volitional (non-)use of part-time work was not related to home-to-work conflict in study A, we did find a significant relationship in study B. This may support the explanation we gave earlier for not finding this effect in study A, i.e., that this could be due either to the high scores and the low variance of volitional (non-)use of part-time work (i.e., ceiling effects) or to the low scores on the home-to-work conflict scale (i.e., floor effects) in study A.

General discussion

The results of both study A (field survey) and study B (experimental vignette survey) largely support the main proposition of this paper, i.e., that characteristics of employees' (non-

)use of a specific work-home practice are more important than the mere use of that practice to understand variance in work-home conflict. In particular, the two characteristics we included in this study, i.e., (1) volition for the (non-)use of telework and part-time work, and (2) perceived external pressure from the work context and/or from the private life, were found to explain at least double—and up to three times—the variance in work-home conflict in study A and up to nine times the variance in work-home conflict in study B compared to the mere use of a specific work-home practice.

Work-to-home conflict was significantly related with all the characteristics of work-home practice use we included—i.e., volition, perceived work pressure and perceived home pressure—in both the regression on telework and the regression on part-time work. We failed to find one effect in study A, namely an influence of home pressure in the regression on telework, but as we explained earlier, this is likely due to a compensatory reversed causation effect related to the cross-sectional nature of our dataset in this study.

Home-to-work conflict, on the other hand, was mainly related with perceived home pressure. In study B, we also found a positive relationship with volition in the regression on part-time work. While we failed to find this effect in study A, we believe this may be due to the relatively high mean value and low variance of volitional (non-)use of part-time work in that setting, or to the relatively low scores on the home-to-work conflict scale in this study.

In none of our studies, we found the expected effect of volitional (non-)use of telework on home-to-work conflict. Although this lack of effect on home-to-work conflict may also be due to the low scores on this variable, an alternative explanation for this finding may lie in the nature of telework as both when working from home and when working at the office, (in)voluntary interruptions from the private life may occur and cause home-to-work conflict (Allen et al., 2003; Smit et al., 2016)—irrespective of the extent to which one’s (non-)use of telework is volitional. These findings may also indicate that volition has a differential effect on home-to-work conflict depending on whether the volition relates to telework or to part-time work. This supports earlier recommendations to distinguish between specific work-home practices as each practice may function differently and should therefore be studied separately (Glass and Finley, 2002; Kelly et al., 2008; Saltzstein et al., 2001; Shockley and Allen, 2007).

In addition, in both studies, we found that perceived work pressure was not related with home-to-work conflict. Hence, work pressure and home pressure do not seem to affect home-to-work conflict to the same extent, which supports the relevance of distinguishing between different sources of pressure. The importance of this distinction has also been shown in other

research domains, like research on embeddedness (Lee et al., 2004) and turnover (Hom et al., 2012). These findings are also in line with earlier suggestions that work and private life may affect work-home conflict differently, and that the private life context should best be included when understanding employees' work-home conflict (Edwards and Rothbard, 1999; Padhi and Pattnaik, 2014; Poelmans, 2005). Overall, it seems important for future research to examine further why these differences between different sources of external pressure occur and to include these explanations in further theorizing on this issue.

Theoretical contributions

Our results first indicate the need for scholars to rethink how we evaluate the effectiveness of work-home practices. To date, studies on work-home practices have indicated that work-home practices are not always used when available (Allen et al., 2013; McDonald et al., 2005), and that, in the case of use, the use is not always associated with the intended positive effects on employee outcomes (e.g., Butts et al., 2013). We argue that not using available practices does not have to indicate a failed implementation policy neither does use of these practices imply a successful implementation. Rather, our results point to the necessity of using an employee-centered approach that focusses on how employees perceive the characteristics of their (non-)use of a specific work-home practice (i.e., volition and perceived external pressure) to evaluate the success of a work-home policy implementation. This suggestion follows up on earlier recommendations to consider the subjective experience of employees rather than to look at objective cyphers of use of work-home practices when studying their effectiveness (Guest and Boss-Nehles, 2013).

Second, although scholars have regularly referred to volition and external pressure when explaining why certain factors may moderate the effectiveness of work-home practice use (Golden et al., 2006; Shockley and Allen, 2007; Sullivan and Lewis, 2001; Thompson et al., 1999; Wang and Walumba, 2007), our study examined these sources of variance directly, in that way providing a good basis for further moderation studies. By distinguishing between volition and perceived pressure, our study emphasizes the potential difference between employees' wants and demands and indicated the need for researchers to consider whether certain demands (e.g., home demands, work demands) may feel as volitional (i.e., wants) or either may function as a pressure not in line with these wants. In addition, our study may stimulate researchers not to only pay attention to sources of variation among users of work-home practices, but also among non-users. Most moderation studies on the topic (e.g., Golden et al., 2006; Thompson et al., 1999) have focused primarily on understanding variation in

outcomes among users, thereby treating non-users as a homogenous reference group. The lack of attention to variation among non-users is in line with a general tendency in psychological research to focus on factors that motivate or energize organisms to move, change or take action, thereby overlooking variation among those *not* changing or *not* taking action (Anderson, 2003; Verbruggen and De Vos, 2019). Our study showed that—irrespective of employees’ actual use—volition and perceived pressure related to work-home practice (non-)use are important for understanding work-home conflict, which suggests that similar sources cause variance relevant for understanding outcomes among both users and non-users.

Third, some differences between the results of study A and study B illustrated the relevance of using experimental designs. Experimental designs rule out alternative explanations such as reversed causality and selection effects by design, which makes them an interesting addition to traditional field studies.

Fourth, our results affirm the need for scholars to study work-home practices separately since we found some differences between effects on telework and on part-time work when studying work-home conflict. However, even among these two different practices, our findings indicate the importance of volition and perceived external pressure for both work-home practices, especially when understanding variation in work-to-home conflict.

Overall, our findings are in line with previous recommendations that rather than looking at *objective* measures of the work-home interface (e.g., looking at the specific amount of time or resources to allocate to either the work or the non-work domain, or looking at objective working conditions such as use versus non-use of work-home practices), researchers should consider employee’s *subjective* perceptions as antecedents of work-home conflict (Grawitch et al., 2010; Grawitch et al., 2011; Valcour, 2007). We consider volition and perceived pressure as (subjective) perceptions related to the (objective) use of work-home practices and our results show that these characteristics indeed matter above and beyond the mere use of work-home practices. In the same perspective, authors have already argued to evaluate work-home practices based on their alignment with characteristics of employees, their perceived work context, and their broader private life context (Grawitch et al., 2011). Our research follows up this recommendation by including volition and perceived pressure from two different life spheres to (not) use work-home practices.

Limitations and future research

Our study has a number of limitations. First, some methodological considerations can be

made. In line with earlier studies (e.g., Shockley and Allen, 2015), we used single-item measures to measure perceived pressure. Future research may want to develop and validate multiple item scales to improve the assessments of perceived pressure. Second, in our vignette study, we asked participants to rate another employee's work-home conflict. Therefore, in this study, we may have gauged to a slightly different variable of work-home conflict, i.e. projected work-home conflict rather than self-experienced conflict. Future research may benefit from replicating our results with an experimental manipulation of self-experienced work-home conflict. Finally, we used cross-sectional data for our field study and therefore cannot rule out correlational instead of causal effects in this study. Future research might benefit to include measurements of volition and perceived pressure at different time points, both *before* and *after* decisions about use and non-use of practices are made and implemented. An additional asset of this approach is that decisions might then be studied in more detail, which may reveal possible effects of cognitive dissonance and internalization (i.e., becoming satisfied with circumstances as they are and internalize these circumstances as volitional).

Practical implications

Our results show that for work-home practices to have beneficial effects, employees should be allowed to make use of work-home practices if they want to, without experiencing pressure to either use or not use offered practices. Enabling employees to have control over their use of these practices and not pressuring them thus seems to be key in a successful implementation. Yet, our results also showed that pressure from employees' private life is predictive for their work-home conflict. Therefore, effective organizational implementation of work-home practices may be insufficient to guarantee low work-home conflict. Career counseling could be one path through which organizations may help their employees to cope with pressure from their private life. For instance, research has shown that employees can benefit from certain psychological techniques to cope with diverging responsibilities from different life roles (Versey, 2015). Finally, if outcomes depend on employees' volition and perceived pressure, organizations might profit from tailor-made support programs that help employees to reach a match between working conditions and their preferences, enhancing volitional use, and/or to manage perceived external pressure. Enabling employees to make volitional choices and asserting them more control over working conditions might then optimize the effects of work-home practices. Additionally, organizations may consider idiosyncratic employment arrangements (i.e., "i-deals"; Rousseau, 2005) when work-home practices do not fit with an employees' home context. Research has found alleviating effects of flexibility i-deals on

employees' work-home conflict (Bayazit and Bayazit, 2017) and has in general found positive effects of flexibility i-deals on employee performance (Marescaux et al., 2012) and commitment (Las Heras et al., 2017). Thus, idiosyncratic deals could be one means to align employees' contextualized wants and obligations and those of the organization.

Conclusion

In this study, we showed the relevance of including aspects associated with the use or non-use of work-home practices for understanding the effectiveness of these practices. We found evidence that (1) *volition* for use or non-use of telework and part-time work and (2) *perceived pressure* from the work environment and from the private environment to use or not use these practices explained more variance in both work-to-home conflict and home-to-work conflict than the mere use of these work-home practices. We therefore encourage scholars and practitioners to focus on these characteristics rather than on measures of mere use when studying the effectiveness of work-home practices.

Appendix: Validation of volition scale

We validated the volition scales for telework and part-time work using two additional datasets following guidelines of Netemeyer et al. (2003). An initial validation of the scales was conducted using a sample of 467 working parents recruited through kindergartens and primary schools. Exploratory factor analysis showed that the eight items loaded on two factors and all factor loadings were above .78. The corrected item-to-total correlations were all above .64, indicating that the items correlated well with the overall scale (Everitt, 2002; Field, 2005). In addition, both the volition scale for telework ($\alpha_{\text{home-based telework}} = .90$) and the volition scale for part-time work ($\alpha_{\text{part-time work}} = .90$) showed good internal consistency.

Validity, reliability and construct stability of the scales were further tested in a second sample, i.e., a two-wave online survey study conducted with 118 employees. Respondents filled in two questionnaires, one month apart. We first performed a confirmatory factor analysis (CFA) on the four items measuring volition for telework and the four items measuring volition for part-time work using a Satorra-Bentler correction to correct for non-normality (Satorra and Bentler, 2001). Result of this CFA showed support for the expected two-factor structure: one factor capturing volition for telework and one factor capturing volition for part-time work ($\chi^2[19] = 56.70, p < .001$; SRMR = 0.07; CFI = 0.94; TLI = 0.91; Hu and Bentler, 1999; Hoyle, 1995). All items loaded well on their respective factor (factor loadings ranging between 0.56 and 0.97, $p < .001$). Second, reliability analyses showed that both the volition scale for telework

and the volition scale for part-time work had good internal consistency at both wave 1 ($\alpha_{\text{home-based telework}} = .90$; $\alpha_{\text{part-time work}} = .89$) and at wave 2 ($\alpha_{\text{home-based telework}} = .89$; $\alpha_{\text{part-time work}} = .89$). Test-retest reliability was high for the scale on part-time work ($r = 0.78, p < .001$) and moderate for the scale on home-based telework ($r = 0.58, p < .001$) (DeVon et al., 2007; Weafer et al., 2013). Finally, we analyzed construct stability over time by testing a model wherein we let indicators at the first test occasion (T1) correlate with their corresponding indicator at the retest occasion (T2). We first checked whether the constructs are measured by the same measurement model at T1 and T2 by comparing a model not assuming measurement invariance (i.e., factor loadings on indicators at T1 and at T2 are allowed to fluctuate freely) with a model assuming measurement invariance (i.e., factor loadings on indicators at T1 and at T2 are set equal). Fixing the factor loadings to be equal at T1 and T2 did not worsen the fit of the model ($\chi^2_{\text{diff}} = 10.77, p = 0.10$), and this model showed acceptable fit ($\chi^2[102] = 216.52, p < .001$; SRMR = 0.08; CFI = 0.92; TLI = 0.90), which confirms measurement invariance. We then evaluated construct invariance (i.e., whether the construct mean is stable) by estimating the construct intercepts at T1 and at T2 and see whether they differed from each other. The intercepts did not differ from each other for both the scale for telework ($t(63) = 1.29, p = .92$) and the scale for part-time work ($t(63) = 1.56, p = .94$), which confirms stability over time for both constructs.

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STUDY 2: BOUNDARY ROLE TRANSITIONS: A DAY-TO-DAY APPROACH TO EXPLAIN THE EFFECTS OF HOME-BASED TELEWORK ON WORK-TO-HOME CONFLICT AND HOME-TO-WORK CONFLICT³

Abstract

Does working from home on a given day complicate or rather facilitate combining work and home roles that day, why and for whom? To answer these questions, we examined how a teleworking day affects daily work-to-home conflict and daily home-to-work conflict. Based on boundary theory, we expected these relationships to be mediated by daily role transitions and moderated by employees' preferences to protect their home(/work) domain from work(/home) interruptions. Hypotheses were tested through multilevel moderated mediation modeling using diary data collected during 14 consecutive workdays with 81 employees ($N = 678$ data points). In line with our expectations, employees were found to make more work-to-home transitions (i.e., interruptions of work activities to deal with home demands during work hours) on teleworking days, which was related to lower work-to-home conflict but higher home-to-work conflict on these days. They also made more home-to-work transitions (i.e., interruptions of home activities to deal with work demands after hours) on teleworking days, which was related to more work-to-home conflict on these days. The latter effect was stronger for employees with a home protection preference. There was no moderating impact of work protection preference. Overall, employees experienced less work-to-home conflict but more home-to-work conflict on teleworking days compared to non-teleworking days.

- On days that employees work from home, they make more work-to-home transitions and more home-to-work transitions.
- Work-to-home transitions are related with less daily work-to-home conflict but more daily home-to-work conflict.
- Home-to-work transitions are associated with more work-to-home conflict.
- Employees' preference to protect the home domain from work interruptions strengthens the conflict enhancing effect of home-to-work transitions on work-to-home conflict.

³ Delanoeije, J., Verbruggen, M., & Germeys, L. (2019). Boundary role transitions: A day-to-day approach to explain the effects of home-based telework on work-to-home conflict and home-to-work conflict. *Human Relations* (IF = 3.04). <https://doi.org/10.1177/0018726718823071>

Introduction

Home-based telework, hereafter referred to as telework, becomes increasingly prevalent in organizations across the world (Allen et al. 2015; Greer and Payne, 2014). This work arrangement allows employees to execute work tasks from home during some portion of the working week using information and communication technologies (ICT) (Bailey and Kurland, 2002). Organizations increasingly invest in telework to address the need of a growing number of employees to combine work with home roles (Greenhaus and Powell, 2003; Kalliath and Brough, 2008). However, to date, it remains unclear whether telework facilitates or rather complicates combining work and home roles (Allen et al., 2015; Butts et al., 2013).

On the one hand, telework gives employees flexibility and autonomy in where and how to work (Kossek et al., 2006). This flexibility may enable employees to better schedule their work hours around their home demands (Golden et al., 2006; Versey, 2015). For instance, on days teleworkers work from home, they can easily interrupt their work activities to do the laundry or to pick up the kids from school on time. Such role transitions on a teleworking day may facilitate fulfilling one's home roles that day and, accordingly, may lower employees' work-to-home conflict (Golden et al., 2006), that is, the conflict that occurs when employees' participation in their work role interferes with their home roles and activities (Greenhaus and Beutell, 1985). In line with this reasoning, several studies have found that telework relates to less work-to-home conflict (Gajendran and Harrison, 2007; Golden et al., 2006).

However, a few other studies have found the reverse effect, that is, that telework is related to more work-to-home conflict (Hammer et al., 2005; Hill et al., 2003; Schieman and Young, 2010). These studies explain this work-to-home conflict enhancing effect by arguing that when employees work from home, their home boundaries are more blurred that day since the home domain is then used for work activities (Schieman and Young, 2010; Duxbury et al., 1992). Because the home boundaries are then more blurred, employees are more inclined to keep thinking of work and keep doing work tasks at home that day, even after hours, which could hinder them to meet their home demands in the evening and, as such, they may experience more rather than less work-to-home conflict that day (Voydanoff, 2005).

Some studies further posit that telework complicates balancing work and home roles because it increases home-to-work conflict (Duxbury et al., 1992; Golden et al., 2006), that is, the conflict that occurs when employees' home activities and commitments interfere with their work responsibilities (Greenhaus and Beutell, 1985). These studies argue that on days employees work from home, family members more easily interrupt them, even for trivial

requests (Allen et al., 2003; Kurland and Bailey, 1999). In addition, the home tasks are more salient while at home, which may trigger employees who are working from home to interrupt their work to address these tasks (Golden et al., 2006). These role transitions may hinder them to fulfill their work role that day, which may induce home-to-work conflict.

Interestingly, all the arguments above refer to daily role transitions—more specifically: role transitions on teleworking days—as an important explanatory mechanism for both the possible conflict reducing effect and the potential conflict enhancing effects of telework. According to boundary theory (Ashforth et al., 2000), role transitions refer to psychological and/or behavioral switches employees make between the work role and the home role to juggle their work and home responsibilities (Ashforth et al., 2000). On days teleworkers work from home, they are likely to make more work-to-home transitions—i.e., interruptions of their work activities to address home demands during work hours. These transitions may facilitate fulfilling one’s home role that day—thereby lowering work-to-home conflict—but could also prevent employees from fulfilling their work role that day—thereby triggering home-to-work conflict. In addition, on days teleworkers work from home, their home boundaries are more blurred and, therefore, teleworkers may make more home-to-work transitions after hours that day—i.e., interruptions of home activities to address work demands after hours—which may enhance rather than reduce their work-to-home conflict. Despite the likely importance of role transitions on a teleworking day for understanding the relationship between telework and work-to-home and home-to-work conflict, research on these relationships has not yet included role transitions nor examined these relationships on a daily basis (Bailey and Kurland, 2002; Gajendran and Harrison, 2007). If telework affects employees’ work-home interface via daily role transitions on teleworking days, teleworkers’ and non-teleworkers’ work-to-home and home-to-work conflict may only differ on days teleworkers work from home and not on days they work at the office. Therefore, building on boundary theory, the first aim of this study is to examine whether a teleworking day affects employees’ work-to-home and home-to-work conflict—over and above the impact of being a teleworker—via daily role transitions.

A second aim of this study is to better understand for whom the favorable path (i.e., telework lowering work-to-home conflict) and for whom the unfavorable paths (i.e., telework enhancing work-to-home and home-to-work conflict) are likely to dominate. Research has shown that individual and situational characteristics, such as personality traits (Raghuram and Wiesenfeld, 2004), family demands (Byron, 2005) and job demands (Glavin and Schieman, 2011) moderate the relationship between telework and work-to-home and/or home-to-work

conflict. Building on boundary theory, we expect that employees' segmentation preferences play a crucial moderating role because these preferences affect how stressful role transitions are for employees and, thus, how much conflict these transitions are likely to trigger (Gadeyne et al., 2018; Derks et al., 2016). Segmentation preferences have been shown to be domain specific: employees' preference to protect their work from home interruptions (i.e., work protection preference) differs from their preference to protect their home from work interruptions (i.e., home protection preference) (Methot and LePine, 2016). These segmentation preferences are considered to be distinct constructs; so, employees may be high (/low) on work and high (/low) on home protection preference at the same time or be high on one preference and low on the other (Methot and LePine, 2016). The stronger employees' home (/work) protection preference, the more stressful work (/home) interruptions are likely to be (Kreiner, 2006). A recent study for instance showed that boundary violations (i.e. role transitions that violated employees' work-home boundary more than they preferred) increased employees' work-to-home and home-to-work conflict (Hunter et al., 2017). We add to this study by arguing that role transitions may not only be stressful but could also be helpful, depending on the type of role transition and on the fit with an employees' segmentation preference (Ashforth et al., 2002). Accordingly, we expect work and home protection preference to moderate the relations between role transitions and work-home conflict.

The contributions of this study are threefold. First, by examining daily role transitions as mediators in the relationship between telework and work-to-home and home-to-work conflict, our study helps to understand through which mechanisms telework affects the work-home interface. Even more, by including two types of role transitions as a mediator (i.e., work-to-home and home-to-work transitions), we simultaneously account for both favorable and unfavorable effects of telework, which may yield a more nuanced understanding of the impact of telework. Secondly, by examining the moderating role of segmentation preferences, our study helps to understand for whom the favorable and for whom the unfavorable effects of telework are likely to dominate. Insights into such moderators can help to understand the inconsistent results on the relation between telework and work-home conflict found in research to date (Allen et al., 2015; Butts et al., 2013). In addition, we take into account the directionality of employees' segmentation preference, i.e., whether it concerns employees' work or their home protection preference (Methot and Lepine, 2016). A few studies examined if segmentation preferences moderate the impact of telework (Hyland et al., 2005; Lapierre et al., 2016) or the impact of role transitions (e.g. Derks et al., 2016; Gadeyne et al., 2018); yet, these

studies did not always find effects, perhaps because they ignored the domain-specificity of these preferences. Building on the result of Hunter and colleagues (2017) that daily boundary violations—thus, role transitions from one domain that are not in line with one’s preference to protect that domain—increase daily work-to-home and home-to-work conflict, we test the moderating role of the domain-specific segmentation preference upon the relation between daily role transitions and daily conflict. Thirdly, we look at the relationships between telework and conflict on a daily level since the effects of telework may mainly occur on teleworking days. Even though teleworkers rarely work from home every day, research on telework has rarely applied a daily diary design (for an exception, see the study of Vega and colleagues (2015) who found that teleworkers’ job satisfaction and performance was different on teleworking days than on office days). Using a daily diary design also answers calls to capture role transitions at the day they occur (Smit et al., 2016) and to conceptualize work-home conflict as a daily fluctuating experience (Hunter et al., 2017; Shockley and Allen, 2015). Overall, the results of our study can inform organizations about why and for whom working from home facilitates or rather complicates combining work and home roles.

Theoretical background and hypothesis development

Daily work-to-home and home-to-work conflict and telework

Most studies on work-to-home and home-to-work conflict are cross-sectional studies focusing on employees’ general levels of conflict (Casper et al., 2007). Several scholars have recommended to move away from such a stable-level approach (i.e., using a global judgment of work-home conflict) to a dynamic episodes approach (i.e., using daily judgments) because employees’ conflict experiences are likely to vary daily as a result of daily fluctuating role behaviors (Hunter et al., 2017; Maertz and Boyar, 2011; Shockley and Allen, 2015). Research has indeed found work-to-home and home-to-work conflict to fluctuate on a daily basis (Ilies et al., 2007; Maertz & Boyar, 2011). Surprisingly, research on the relationship between telework and work-to-home and home-to-work conflict to date has exclusively used a stable-level approach. However, teleworkers rarely work from home every day and their role behaviors—and, thus, their conflict—may strongly depend on whether they worked from home that day or not. Moving towards a dynamic episodes approach to understand the impact of telework may therefore improve our understanding of the phenomenology of telework (Maertz and Boyar, 2011; Vega et al., 2015). In line with this rationale, this study examines the relationships between a teleworking day and daily work-to-home and home-to-work conflict. In particular, building on boundary theory, we expect that these relationships are mediated by

daily role transitions and moderated by segmentation preferences (see Figure 1). In what follows, we first explain boundary theory and then develop our hypotheses.

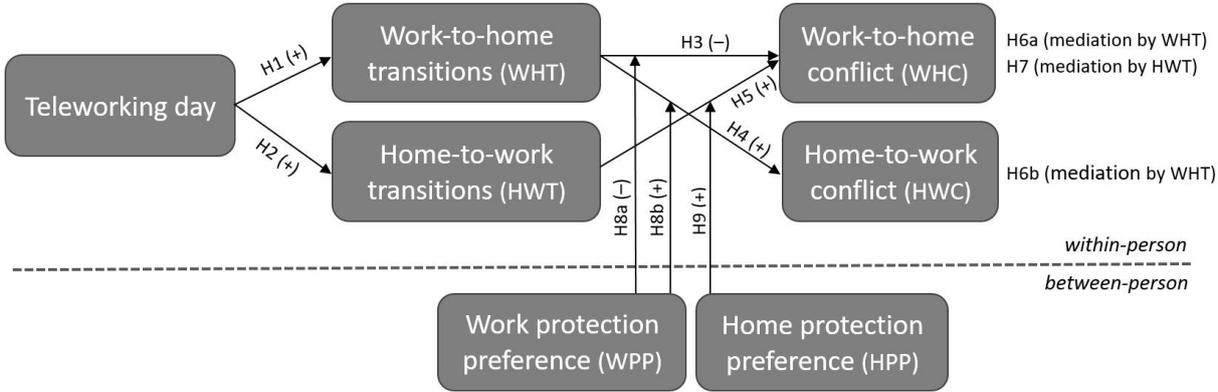


Figure 1. Visualization of the hypothesized model with reference to all hypotheses

Boundary theory and boundary role transitions

Boundary theory posits that individuals create and maintain psychological, physical and/or behavioral boundaries around their different life roles, such as their work and home roles (Ashforth et al., 2000). These boundaries are characterized by a degree of permeability, which refers to the ease with which psychological or behavioral aspects of other life roles can cross these boundaries (Ashforth et al., 2000). The more permeable the boundaries of a certain life role are, the more likely it is that employees make role transitions from that role to their other roles—thus, the more likely employees are to make psychological and/or behavioral switches to their other roles (Ashforth et al., 2000). The permeability of a certain life role—and, thus, the likelihood of role transitions—can vary over time depending on, among others, the place where the role is performed that day (Allen et al., 2015; Voydanoff, 2005). Thus, permeable boundaries imply that employees can be involved in one role (e.g., talking with or thinking about family members, making a dentist appointment) while being located in another role/domain (e.g., at work) (Ashforth et al., 2000). For instance, when employees work from home, their work and home roles are temporarily co-located in the home domain, which may make the boundaries of both roles more permeable that day (Allen et al., 2015). Consequently, role transitions are then more likely to occur (Lapierre and Allen, 2006).

According to boundary theory, role transitions can either reduce or enhance work-home conflict, depending on the type of these transitions. Whereas some role transitions may facilitate combining work and home roles (e.g., interrupting work to pick up the kids), other role

transitions (e.g., starting to work again in the evening) may enhance conflict (Ashforth et al., 2000). Boundary theory further suggests that how role transitions relate to work-home conflict is person-specific and may depend on, among others, the extent to which employees prefer their roles to be permeable (Kreiner, 2006; Michel and Clark, 2013). While some individuals prefer impermeable boundaries to keep their different roles as separated as possible (i.e., segmentation preference), others prefer to have more blurred boundaries and to make more transitions between their roles (i.e., integration preference) (Kreiner, 2006). For employees with a segmentation preference, role transitions (i.e., their boundary crossing behavior) are incongruent with their preferred boundary management style (i.e., their boundary crossing preference) and, therefore, these transitions are likely to induce more strain and trigger more conflict (Ashforth et al., 2000; Kreiner, 2006; Michel & Clark, 2013). A few studies have indeed found segmentation preferences to moderate the effect of boundary crossing behaviors (Edwards and Rothbard, 1999; Matthews et al., 2010). Since most individuals do not value each role to the same extent, they may mind interruptions of certain roles more than interruptions of other roles (Maertz and Boyar, 2010). Several researchers have therefore argued (Kossek and Lautsch 2012; Powell and Greenhaus, 2010) and one study has shown (Methot & Lepine, 2016) that employees' segmentation preference is domain-specific, that is, that employees' preference to protect the work role from home interruptions (i.e., work protection preference) is different from their preference to protect the home role from work interruptions (i.e., home protection preference). However, to our knowledge, research on role transitions and work-home conflict to date has not yet examined the moderating role of these domain-specific preferences. Knowledge on these moderating effects may explain current observed inconsistent relationships between role transitions and work-home conflict.

Telework and boundary role transitions

Building on boundary theory, we first expect that on days employees are telecommuting, they make more work-to-home transitions than on days they are working onsite. On days employees work from home, they perform their work tasks while being physically located in their home domain (Shumate and Fulk, 2004). Since the home domain is both psychologically and behaviorally associated with employees' home tasks and responsibilities, the boundaries of the work role are likely to become more permeable while working at home (Voydanoff, 2005). Accordingly, interruptions of the work role to perform some home tasks are more likely (Ashforth et al., 2000). These work-to-home transitions enable employees to address some home responsibilities during work hours, which is precisely one of the main reasons why

employees often want to telework (Fonner & Stache, 2012). Research has indeed shown that the co-location of work with home may increase the ability to make—and therefore the occurrence of—work-to-home transitions (Matthews et al., 2010). We therefore expect more work-to-home transitions on teleworking days.

Hypothesis 1: On days teleworkers work from home, they make more daily work-to-home transitions than on days they do not work from home.

Second, we expect that teleworkers experience more home-to-work transitions on teleworking days than on non-teleworking days. On a teleworking day, not only the work role, but also the home role is likely to be more permeable because the physical place that is normally reserved for the home role has now been used to address work role demands during the day. In addition, on days teleworkers work from home, the work day often gets prolonged or extended, for instance because they want to finish up some work tasks or want to compensate for the home tasks done during the work hours earlier that day (e.g., a parent who had stopped working early that day to pick up the children from school may continue working in the evening to catch up) (Greer and Payne, 2014). As such, teleworkers may make more home-to-work transitions after hours on teleworking days than on non-teleworking days.

Hypothesis 2: On days teleworkers work from home, they make more daily home-to-work transitions than on days they do not work from home.

Boundary role transitions and work–home conflict

Next, we expect that work-to-home transitions—i.e., interruptions of the work role to address some home tasks during work hours—can reduce work-to-home conflict (Ashforth et al., 2000; Voydanoff, 2005). Making work-to-home transitions allows employees to respond to home demands during work hours, which may facilitate fulfilling one’s home role that day and may therefore decrease work-to-home conflict that day (Voydanoff, 2005). In addition, since work-to-home role transitions can help employees to adjust their work hours to their home tasks, employees are likely to feel more in control of the interactions between their different life domains, which is believed to reduce negative spillover effects from one domain to the other (Versey, 2015). Several studies have found perceived control to be negatively related to work-to-home conflict (Maume and Houston, 2001; Versey, 2015).

Hypothesis 3: Daily work-to-home transitions are negatively related to daily work-to-home conflict.

However, on days when employees make more work-to-home transitions to address their

home demands during work hours, they may find it harder to fulfill their work tasks that day and could therefore experience more home-to-work conflict (Golden et al., 2006; Lapierre and Allen, 2006). Work-to-home transitions during work hours may reduce the time that is left to fulfill one's work demands that day and could mentally distract employees from their work tasks (Lapierre and Allen, 2006). This may result in reduced focus and decreased work task performance that day (Smit et al., 2016). Accordingly, when employees make more work-to-home transitions on a given day, they may feel that their home activities hinder them more to fulfill their work role that day and, thus, they may report more home-to-work conflict:

Hypothesis 4: Daily work-to-home transitions are positively related to daily home-to-work conflict.

In addition, home-to-work transitions—i.e., interruptions of the home role to address work tasks outside work hours—are likely to increase work-to-home conflict. The more often employees interrupt what they are doing at home to perform work tasks after hours, the less time and resources they are likely to have available for participating in their home activities, such as care and household tasks or quality time with family members. This may hinder employees in allocating their required amount of time to their home role that day and, therefore, increase work-to-home conflict (Carlson et al., 2015). In addition, home-to-work transitions may hinder employees to mentally detach and disengage from work (Derks et al., 2016; Schieman and Young, 2013), which may also enhance work-to-home conflict (Demerouti et al., 2014; Golden, 2012; Voydanoff, 2005). Two prior cross-sectional studies (Carlson et al., 2015; Matthews et al., 2010) and one daily diary study (Hunter et al., 2017) have indeed found home-to-work transitions to relate positively to work-to-home conflict.

Hypothesis 5: Daily home-to-work transitions are positively related to daily work-to-home conflict.

Mediating mechanisms of boundary role transitions

Our hypothesized pathways between a teleworking day and role transitions (hypotheses 1–2) and between role transitions and work-to-home and home-to-work conflict (hypotheses 3–5) imply that we expect the effect of a teleworking day on both work-to-home conflict and home-to-work conflict to be mediated by role transitions.

Hypothesis 6: Daily work-to-home transitions mediate the negative relationship between a teleworking day and daily work-to-home conflict (hypothesis 6a) and the positive relationship between a teleworking day and daily home-to-work conflict (hypothesis 6b).

Hypothesis 7: Daily home-to-work transitions mediate the positive relationship between a teleworking day and daily work-to-home conflict.

The moderating role of segmentation preferences

Finally, in line with boundary theory, we expect that the relations between role transitions and work-home conflict depend on employees' domain-specific segmentation preferences (i.e., their work protection preference and their home protection preference). Employees who have a higher work protection preference (i.e., who want to protect their work role from home interruptions) are likely to experience work-to-home transitions as more stressful because these transitions are incongruent with their work role protection preference (Ashforth et al., 2000) and, therefore, they may experience more conflict as a result of these transitions (Ashforth et al., 2000). As such, the relationship between work-to-home transitions and work-to-home conflict is likely to be less negative and the relationship between work-to-home transitions and home-to-work conflict is likely to be more positive when employees' work protection preference is higher. Similarly, employees with a higher home protection preference (i.e., who want to protect their home role from work interruptions) may experience home-to-work transitions as more stressful because these transitions are incongruent with their home protection preference (Kreiner, 2006) and, therefore, they may experience more work-to-home conflict as a result of these transitions (Ashforth et al., 2000; Kreiner, 2006).

Hypothesis 8: Work protection preference moderates the relation between work-to-home transitions and work-to-home conflict, such that this relationship is less negative for employees high on work protection preference (hypothesis 8a), and the relation between work-to-home transitions and home-to-work conflict, such that this relationship is more positive for employees high on work protection preference (hypothesis 8b).

Hypothesis 9: Home protection preference moderates the relation between home-to-work transitions and work-to-home conflict, such that this relationship is more positive for employees high on home protection preference.

Methodology

Procedure and participants

We collected daily diary data from Flemish employees with parental responsibility, because parents encounter specific work-home challenges (e.g., raising a child) and variance in work-home conflict is high within this group (Madsen, 2003). Employees were recruited through a call for participation sent out by one postgraduate student and four undergraduate students from different regions in Belgium to increase geographical distribution. This resulted in a convenience sample of 81 employees. Convenience samples are considered to be quite suitable for elaborated research designs such as daily diary studies (Demerouti and Rispens,

2014). Fifty-three of our respondents were teleworkers (i.e., employees who telecommute at least one day per week) and 28 were non-teleworkers (i.e., employees who did not telecommute on a regular basis). We included non-teleworkers in our sample to be able to examine whether a teleworking day has an effect over and above the impact of being a teleworker and, if so, whether the former effect is indeed more important than the latter⁴.

Data were collected through online questionnaires sent via e-mail. Respondents first filled out a general survey with background information, including demographics and segmentation preferences. Then, respondents received a short daily survey during 14 consecutive workdays. We opted for 14 workdays to ensure that we had multiple teleworking days per teleworker. Respondents were instructed to fill out the survey just before going to bed. Of 93 employees who filled out the first general survey, 81 respondents fully filled out at least one of the daily surveys (response rate = 87%). Daily response rates varied from 30% to 79%, and respondents filled out the daily questionnaire between 1 and 14 times in total ($M = 8.81$, $SD = 3.53$), resulting in 678 out of 1134 possible observations (60%).

The majority of the sample was female (65%) and worked full time (76%). Official work hours per week ranged from 18 hours to 40 hours ($M = 35.21$, $SD = 5.16$). The sample consisted of 35% professional workers, 21% clerks, 20% middle managers and 25% had another function. Tenure ranged from 4 months to 24 years ($M = 9.03$, $SD = 5.71$). Respondents had one to four children ($M = 1.94$, $SD = 0.78$) of which the youngest child was maximum 11 years old ($M = 4.56$, $SD = 3.60$). All respondents had a partner.

Of the 53 teleworkers, 29 worked from home on average one day a week, 14 respondents worked from home on average two days a week and 10 respondents worked from home on average more than two days a week. Of the 28 non-teleworkers, 15 said that telework was not available in their organization, ten respondents said that this practice was not available for their function and three respondents indicated it was available but they did not use it. We also ran ANOVA analyses to see whether teleworkers differed from non-teleworkers on any of the study's variables. Results showed that teleworkers experienced more work-to-home transitions ($M = 2.86$, $SD = 1.43$) than non-teleworkers ($M = 1.92$, $SD = 1.21$; $F(1,79) = 15.68$, $p < .01$)

⁴ To make sure that our analyses are not influenced by the inclusion of non-teleworkers in our sample, we additionally tested our model separately on the subsample of teleworkers and on the subsample of non-teleworkers. Results of these analyses using both subsamples were in line with the reported results of the total sample. Given our aim to examine whether a teleworking day has an effect over and above the effect of being a teleworker, we report the analyses on the full sample.

and that teleworkers had more job autonomy ($M = 4.71$, $SD = 0.77$) than non-teleworkers ($M = 3.59$, $SD = 1.26$; $F(1,79) = 25.06$, $p < .01$). We found no other differences between teleworkers and non-teleworkers in our sample.

Trait measures

Work and home protection preferences and several control variables were measured once in our general survey. In line with several other studies (e.g., Kreiner et al., 2009), we consider these preferences as personal characteristics that stay stable over short time spans.

Work protection preference. We measured work protection preference with the four-item scale of Methot and LePine (2016) that measures ‘preference to protect the work domain from home intrusions’. Respondents had to evaluate the items on a seven-point Likert scale (1 = Not applicable at all; 7 = Fully applicable). A sample item is ‘I prefer to keep non-work life at home’. The scale was found to be reliable (Cronbach’s $\alpha = 0.84$).

Home protection preference. We measured home protection preference with the four-item segmentation preference scale of Kreiner (2006), which was later labeled as ‘preference to protect the home domain from work intrusions’ by Methot and LePine (2016) because of its one-directional nature. Respondents had to evaluate the items on a seven-point Likert scale (1 = Not applicable at all; 7 = Fully applicable). A sample item is ‘I prefer to keep work life at work’. The scale was found to be reliable (Cronbach’s $\alpha = 0.86$).

Controls. We included gender (0 = woman; 1 = man), age (in years), and number of children as control variables because women, older employees, and employees with more care dependent children have been shown to experience more work-home conflict (Butts et al., 2013; Byron, 2005; Madsen, 2003). In addition, we controlled for job autonomy (measured using the 3-item scale of Hackman and Oldman, 1976; e.g., ‘This job gives me considerable opportunity for independence and freedom in how I do the work’; Cronbach’s $\alpha = 0.85$), since telework is mostly available in autonomous jobs (Kossek et al., 2006). Job autonomy may affect discretion over role transitions and has been found to be an important predictor of work-home conflict (e.g., Kossek et al., 2006). Finally, we controlled for being a teleworker and for telework frequency. We controlled for being a teleworker (i.e., a dummy variable which is 1 if the employee telecommutes at least once a week and 0 if the employee does not telecommute on a regular basis) to make sure that any effect of ‘a teleworking day’ we find in our analysis does not capture the effect of being a teleworker or not. We also controlled for telework frequency (0 = telecommutes never; 1 = on average one day a week; 2 = on average two days a week; 3 =

on average more than two times a week) as this may affect how easily an employee forms scripts that ease telecommuting (Fonner and Stache, 2012) and facilitate making work-home role transitions (Ashforth et al., 2000; Smit et al., 2016).

State measures

Teleworking day, role transitions and work-home conflict were all measured in the daily surveys. We used slightly adapted versions of validated role transition and work-home conflict scales: we rephrased the original items to adapt them to the daily level by adding ‘today’ (for a similar approach: see Ilies et al., 2017) and we replaced ‘family’ by ‘home’ since this allows employees to take into account not only family-related but also other home-related concerns. The latter was done in line with recent calls for broader conceptualizations of the home context in work-home research (e.g. Greenhaus and Kossek, 2014).

Teleworking day. Teleworking day is a dummy-variable that is 1 if respondents indicated in the daily survey that they had worked from home that day during the regular work hours, and 0 otherwise. We asked respondents to indicate the situation that was most important for them on that day and specified that working from home meant executing work tasks which are normally done at the work place, at home during regular work hours. Respondents who had not worked that day, for instance due to illness, were coded as missing.

Daily work-to-home transitions. Daily work-to-home transitions were measured with an adapted version of the work-to-home transition measure of Matthews and colleagues (2010). Respondents were asked to evaluate the following statements on a seven-point Likert scale (1 = Not applicable at all to 7 = Fully applicable): (1) ‘Today, I left during my lunch break to meet home responsibilities’; (2) ‘Today, I interrupted my work to meet a home responsibility (like making a dentist or doctor appointment)’; (3) ‘Today, I answered calls or replied to e-mails from family members or friends while working’; and (4) ‘Today, I changed the hours I worked to tackle home issues’. We consider the measure to be an index since the four statements may not equally apply every day and, thus, do not necessarily correlate with each other on a daily basis (Bollen and Bauldry, 2011).

Daily home-to-work transitions. To assess daily home-to-work transitions, we adapted four items from Matthews and colleagues’ (2010) home-to-work transition measure. Respondents were asked to assess the following items on a seven-point Likert scale (1 = Not applicable at all to 7 = Fully applicable): (1) ‘Today, I answered to work-related calls or e-mails outside work hours’; (2) ‘Today, I stopped what I was doing after work hours to call work or to

send a work-related mail’; (3) ‘Today, I changed plans at home to meet work-related responsibilities’; and (4) ‘Today, I have gone into work to meet work responsibilities outside work hours’. We consider the daily home-to-work transitions measure to be an index, as the four statements may not equally apply every day.

Daily work-to-home conflict. We measured daily work-to-home conflict using a shortened and slightly adapted version of the Carlson et al. (2000) scale. To decrease respondent fatigue, we used two out of three highest loading items of the strain-based conflict scale and two of the three highest loading items of the time-based conflict scale, resulting in four items. The four items were: (1) ‘Today, I had to miss activities at home due to the amount of time I had spent working’, (2) ‘Today, the time I spend on work responsibilities interfered with my responsibilities at home’, (3) ‘Today, after work, I was so emotionally drained that it prevented me from contributing at home’, and (4) ‘Today, after work, I was too stressed to do the things I enjoy due to all the pressures at work’. Respondents had to indicate to which extent they agreed with the given statements on a scale from 1 (Strongly disagree) to 7 (Strongly agree). The daily Cronbach’s α ranged from 0.76 to 0.92, with an average of 0.85.

Daily home-to-work conflict. We measured daily home-to-work conflict using a shortened and slightly adapted version of the Carlson et al. (2000) scale. We used two out of three highest loading items of the strain-based conflict scale and two of the three highest loading items of the time-based conflict scale, resulting in four items. The four items were: (1) ‘Today, the time spent on home tasks caused me not to spend time in activities at work that could be helpful to my career’, (2) ‘Today, I had to miss work activities due to the amount of time I spent on home tasks’, (3) ‘Today, because I was stressed from responsibilities at home, I had a hard time concentrating on my work’, and (4) ‘Today, tension and anxiety at home weakened my ability to do my job’. Respondents were asked to indicate the extent to which they agreed with the given statements on a scale from 1 (Strongly disagree) to 7 (Strongly agree). The daily Cronbach’s α ranged from 0.70 to 0.97, with an average of 0.84.

Strategy of analysis

We have a two-level model with repeated measurements (daily variables) at the first level ($N = 678$ occasions) and individuals at the second level ($N = 81$ respondents). Since we have nested observations (i.e., days nested within employees), we used linear mixed coefficient modeling (MCM) in R. We tested the mediation (i.e., hypotheses 5–6) using the mediate package in R with quasi-Bayesian Monte Carlo approximation (MacKinnon et al., 2004) which is suitable for parametric multilevel mediation models (Bauer et al., 2006). Effects were

computed for each of 10,000 bootstrapped samples, and 95% confidence intervals were computed by determining the effects at the 2.5th and 97.5th percentiles. This method also allows to calculate the percentage of the total effect that is explained by the mediator. To study our cross-level moderation effects (i.e., hypotheses 7–8), we followed the guidelines of Aguinis and colleagues (2013) and grand mean centered level two predictors. We did not person-mean center our level one mediators as they function as both predictor and outcome. Finally, we employed restricted maximum likelihood (REML) estimation, as REML does not expect all fixed effects to be known without errors and maximizes only the portion of the likelihood that does not depend on the fixed effects, which makes this method suitable for complex models including multiple fixed effects (Gilmour et al., 1995), like ours.

Results

Descriptive statistics and multilevel modeling

Table 1 (see next page) shows the descriptive statistics and correlations of the study's variables.

Table 1. Means, standard deviations and correlations among the study's variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender (1 = female)	0.35	0.48												
2. Age	36.53	5.57	.16											
3. Number of children	1.94	0.78	.09	.31**										
4. Job autonomy	4.84	1.20	.29*	.03	-.17									
5. Telework frequency	1.07	1.01	.21	.21	.21	.14								
6. Teleworker (1 = yes)	0.65	0.48	.20	.15	.11	.24*	.78**							
7. Teleworking day (1 = yes)	0.49	0.35	-.14	.16	.04	-.11	.48**	.31**						
8. Work-to-home transitions	2.70	1.04	.11	-.05	.13	.08	.43**	.41**	.12					
9. Home-to-work transitions	2.27	1.23	.24**	.24**	.08	.16	.17	.07	.02	.19				
10. Work protection preference	3.65	1.35	.01	.05	-.04	-.14	-.02	.08	.04	-.06	.09			
11. Home protection preference	4.22	1.44	-.07	-.17	-.13	-.24*	-.28*	-.20	-.15	.01	-.20	.35**		
12. Work-to-home conflict	2.18	1.09	-.06	.04	-.05	.00	-.21	-.20	.10	.67*	.40**	.23**	.19	
13. Home-to-work conflict	1.79	0.92	.03	-.07	.09	-.09	.03	.06	-.04	.35**	.06	.21	.22*	.48**

** $p < 0.01$, * $p < 0.05$. $N = 81$ persons and $N = 678$ occasions. *M* = Mean. *SD* = Standard deviation. Means are on a 1-7 Likert scale, except for age (years), telework and gender (dummies), children (number) and telework frequency (1-3 Likert). Correlations between daily variables are person-mean centered (i.e. based on averaged scores across all measurement occasions per person).

Results of the multilevel moderated mediation models

For both work-to-home conflict and home-to-work conflict, we compared five alternative models: (1) a fixed intercept model with no predictors (i.e., general linear model), (2) a multilevel (i.e., random intercept) model with no predictors (i.e., null model), (3) a multilevel model consisting of only the control variables (i.e., controls only model), (4) a multilevel model consisting of the main effects of both controls and predictors but no interaction effects (i.e., main effects only model) and (5) the full multilevel moderated mediation model that we hypothesized.⁵ For work-to-home conflict, the latter model had a better fit than the four alternative models (see Table 2). However, for home-to-work conflict, the main effects only model was found to have the best fit (see Table 2). Therefore, for hypotheses on home-to-work conflict, we report the findings from the multilevel model without interaction.

Table 2. Global fit indices and model comparison for the corresponding models; ML estimation

	df	AIC	BIC	-logLik	Comparison	L ratio
Work-to-home conflict						
1. General linear model	2	2420.14	2429.18	1208.07		
2. Null model	3	2246.49	2260.04	1120.24	2 vs 1	175.65**
3. Controls only model	9	2254.07	2294.75	1118.04	3 vs 2	4.41
4. Main effects only model	13	2193.73	2252.47	1083.86	4 vs 2	72.76**
5. Full model with interactions	16	2170.16	2242.47	1069.08	5 vs 4	29.56**
Home-to-work conflict						
1. General linear model	2	2087.57	2096.61	1041.79		
2. Null model	3	1788.10	1801.6	891.05	2 vs 1	301.47**
3. Controls only model	9	1797.53	1838.20	889.77	3 vs 2	2.57
4. Main effects only model	11	1746.20	1795.91	862.10	4 vs 2	57.91**
5. Full model with interaction	13	1747.91	1806.65	860.95	5 vs 4	2.29

** $p < 0.01$, * $p < 0.05$. $N = 81$ persons and $N = 678$ occasions. ML estimation because models with different fixed effects cannot be meaningfully compared using REML estimation (Wood, 2011).

Table 3 (see next page) shows the results of the multilevel analyses to predict work-to-home transitions (Model 1), home-to-work transitions (Model 2), work-to-home conflict (Model 3) and home-to-work conflict (Model 4). A visual overview of the results is given in Figure 2 (see in two pages). As can be seen in Table 2, 69% of the variance in work-to-home

⁵ We did not hypothesize a relationship between home-to-work transitions and home-to-work conflict as based on boundary theory and on the meaning of these constructs, we did not expect a meaningful relation between these two constructs. To check whether this was a plausible assumption, we additionally tested a model in which a path between home-to-work transitions and home-to-work conflict was added. The results showed no significant relationship between home-to-work transitions and home-to-work conflict ($\beta = 0.04$; $p = 0.07$). In addition, this model was not found to have a better fit than the hypothesized model as reported above ($\Delta\chi^2(1) = 3.24$; $p = 0.07$).

transitions, 55% of the variance in home-to-work transitions, 58% of the variance in work-to-home conflict and 48% of the variance in home-to-work conflict is due to within-person variation. This supports our choice for multilevel analyses. In addition, for teleworkers, 70% of the variance in work-to-home conflict was found to be due to within-person variation whereas in non-teleworkers this was only 30%. For home-to-work conflict, however, the within-person variance was highly similar for teleworkers (i.e., 46%) and non-teleworkers (i.e., 50%). Telecommuting thus seems to trigger more daily fluctuations in work-to-home conflict than in home-to-work conflict.

Table 3. Random coefficient modeling results to predict work-to-home transitions (Model 1), home-to-work transitions (Model 2), work-to-home conflict (Model 3) and home-to-work conflict (Model 4)

	Model 1		Model 2		Model 3		Model 4	
	Work-to-home transitions		Home-to-work transitions		Work-to-home conflict		Home-to-work conflict	
	β	<i>SE</i>	<i>B</i>	<i>SE</i>	β	<i>SE</i>	β	<i>SE</i>
Intercept	2.21**	0.27	2.33**	0.34	2.32	0.30	1.28**	0.25
Gender (0 = male, 1 = female)	0.08	0.24	0.47	0.30	-0.16	0.25	0.09	0.22
Age	-0.03	0.02	0.04	0.03	-0.00	0.02	-0.02	0.02
Children	0.10	0.15	-0.03	0.19	0.04	0.15	0.10	0.13
Job autonomy	0.00	0.10	0.12	0.12	0.10	0.10	-0.04	0.09
Telework frequency	0.06	0.17	0.19	0.22	0.11	0.18	-0.09	0.16
Teleworker	0.32	0.36	-0.48	0.46	-0.38	0.38	0.01	0.33
Teleworking day	1.13**	0.14	0.37**	0.14	-0.58**	0.12	0.13	0.09
Work-to-home transitions (WHT)					-0.09**	0.03	0.15**	0.02
Home-to-work transitions (HWT)					0.24**	0.03		
Home protection preference (HPP)					0.08	0.11	0.13	0.07
Work protection preference (WPP)					-0.01	0.10		
WHT x WPP					0.02	0.02	<i>ns</i>	<i>ns</i>
HWT x HPP					0.06*	0.02		
Variance level 2 (employee)	0.79 (31%)		1.30 (45%)		0.92 (42%)		0.69 (52%)	
Variance level 1 (day)	1.81 (69%)		1.60 (55%)		1.28 (58%)		0.62 (48%)	

** $p < 0.01$, * $p < 0.05$. $N = 81$ persons and $N = 678$ occasions. *ns* = model not significant. Age, children, job autonomy, telework frequency, WPP and HPP are centered (grand mean centered). WHT and HWT are not centered (person-mean centered) as they also function as outcomes in the moderated mediation model.

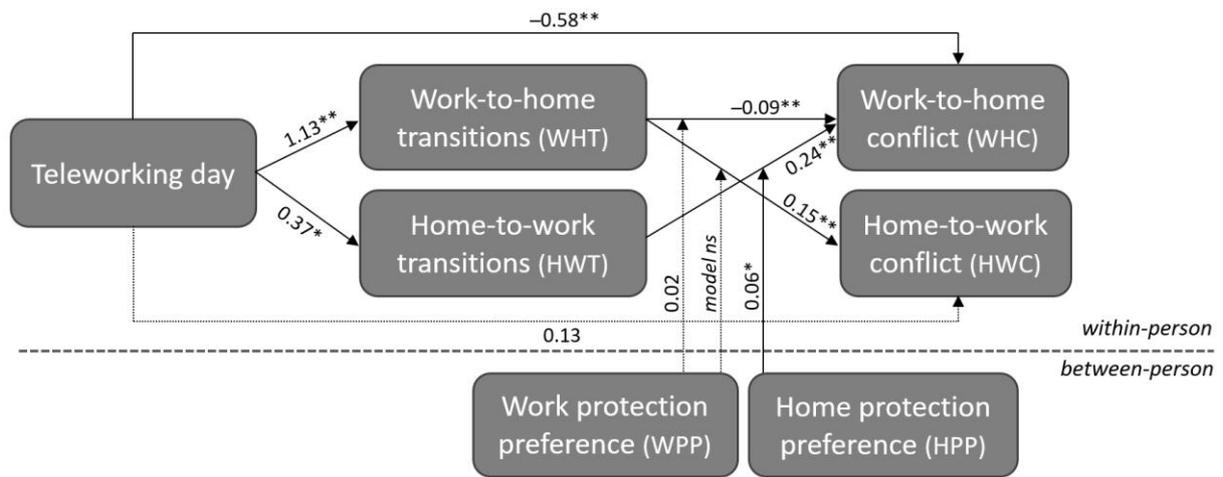


Figure 2. Regression coefficients for the relationships in our moderated mediation models to predict work-to-home conflict and home-to-work conflict. The hypothesized moderation model to predict home-to-work conflict was not significant, thus regression coefficients for this model with no cross-level interaction effect is shown. The regression coefficients between teleworking day and home-to-work conflict and home-to-work conflict controlling for work-to-home transitions and home-to-work transitions (i.e., the direct effects) are given in the figure. ** $p < 0.01$, * $p < 0.05$

Hypothesis 1 predicted that employees make more work-to-home transitions on a teleworking day than on a non-teleworking day. As can be seen in Table 3 (Model 1), the estimate of a teleworking day on work-to-home transitions ($\beta = 1.13$, $t = 8.10$, $p < .01$) was significantly positive, supporting hypothesis 1. Hypothesis 2 predicted that employees make more home-to-work transitions on a teleworking day than on a non-teleworking day, which was also supported by our results ($\beta = 0.37$, $t = 2.68$, $p < .01$; Table 3, Model 2). Next, we predicted that employees who made more work-to-home transitions on a given day would report less work-to-home conflict (hypothesis 3) and more home-to-work conflict (hypothesis 4). In line with these hypotheses, Table 3 shows a negative relationship between work-to-home transitions and work-to-home conflict ($\beta = -0.09$, $t = -2.74$, $p < .01$; Model 3) and a positive relationship between work-to-home transitions and home-to-work conflict ($\beta = 0.15$, $t = 6.52$, $p < .01$; Model 4). Hypothesis 5 predicted that more home-to-work transitions on a given day would relate to more work-to-home conflict, which was also confirmed by our results ($\beta = 0.24$, $t = 7.48$, $p < .01$; Table 3, Model 4).

Hypothesis 6 expected that work-to-home transitions would mediate the relation between a teleworking day and work-to-home conflict (hypothesis 6a) and home-to-work conflict (hypothesis 6b). In line with these hypotheses, we found that work-to-home transitions

mediated 15% of the total effect of a teleworking day on work-to-home conflict ($\beta = -0.10$, CI $[-0.18, -0.03]$, $p < .01$) and 58% of the total effect of a teleworking day on home-to-work conflict ($\beta = 0.17$, CI $[0.11, 0.24]$, $p < .01$). The quasi-Bayesian Monte Carlo analysis further showed that work-to-home transitions and home-to-work transitions only partially mediated the total effect of a teleworking day on work-to-home conflict as there was still a direct effect on work-to-home conflict ($\beta = -0.58$, 95% CI $[-0.82, -0.33]$, $p < 0.01$; see also Table 3, Model 3: $\beta = -0.58$, $t = -4.70$, $p < .01$). The relationship between teleworking day and home-to-work conflict was fully mediated by work-to-home transitions as there was no direct effect of a teleworking day on home-to-work conflict ($\beta = 0.13$, 95% CI $[-0.03, 0.30]$, $p = .12$; see also Table 3, Model 4: $\beta = 0.13$, $t = 1.53$, $p = .13$). The total effect of a teleworking day on work-to-home conflict was found to be negative ($\beta = -0.60$, $p < .01$) and the total effect of a teleworking day on home-to-work conflict was found to be positive ($\beta = 0.31$, $p < .01$).

Hypothesis 7 expected that home-to-work transitions would mediate the relation between a teleworking day and work-to-home conflict. In line with this hypothesis, we found that home-to-work transitions mediated 17% ($\beta = 0.08$, CI $[0.01, 0.06]$, $p < .05$) of the total effect of a teleworking day on work-to-home conflict. The relationship between teleworking day and work-to-home conflict was only partially mediated by work-to-home transitions as there was still a direct effect on work-to-home conflict ($\beta = -0.58$, 95% CI $[-0.82, -0.33]$, $p < 0.01$; see also Table 3, Model 3: $\beta = -0.58$, $t = -4.70$, $p < .01$). The total effect of a teleworking day on work-to-home conflict was found to be negative ($\beta = -0.60$, $p < .01$).

Hypothesis 8 predicted that for employees who had a high work protection preference, the negative relationship between work-to-home transitions and work-to-home conflict would be weaker (hypothesis 8a) and the positive relationship between work-to-home transitions and home-to-work conflict would be stronger (hypothesis 8b). However, we have to reject hypothesis 8a since the interaction effect in predicting work-to-home conflict was not significant ($\beta = 0.02$, $t = 0.66$, $p = .51$; Table 3, Model 3), nor was hypothesis 8b since the model including the interaction effect to predict home-to-work conflict did not show a better fit than the model including only all main effects ($\chi^2(2) = 2.29$, $p = 0.32$; Table 2).

Finally, hypothesis 9 predicted that for employees with a high home protection preference, the positive relationship between home-to-work transitions and work-to-work conflict would be stronger. Our result show support for hypothesis 9 since we found a positive interaction effect ($\beta = 0.06$, $t = 2.55$, $p = < .05$; Table 3, Model 3). As can be seen in the visually plotted effect in Figure 3, the relationship between home-to-work transitions and work-to-home

conflict is more positive for employees with a high home protection preference (i.e., one standard deviation above average) than for employees with a low home protection preference (i.e., one standard deviation below average).



Figure 3. Moderation effect of home protection preference (level 2; grand mean centered) on the relationship between daily home-to-work transitions (level 1; in this figure, person-mean centered for meaningful interpretation of the interaction effect) and daily work-to-home conflict (level 1, not centered). Low/few = $M-1SD$, high/many = $M+1SD$

Finally, we note that none of the outcome variables was significantly related with whether a person was a teleworker or not—nor with any of the other control variables. This suggests that teleworkers and non-teleworkers make a similar amount of role transitions and experience similar levels of work-home conflict on office days and they only differ on these outcomes on teleworking days. Thus, to understand daily role transitions and daily work-home conflict, a teleworking day seems indeed more important than being a teleworker or not.

Discussion

This study aimed to shed light on how telework affects employees' work-to-home and home-to-work conflict by using a daily diary approach. Building on boundary theory, we expected that these relationships would be mediated by daily role transitions (Allen et al., 2003; Ashforth et al., 2000) and moderated by employees' domain specific segmentation preferences, i.e., their home protection and work protection preference (Kreiner, 2006).

Our results supported our hypothesized mediation paths. First, we found that on days teleworkers worked from home, they made more work-to-home transitions, which in turn were

related with less work-to-home conflict. This suggests that role transitions can be beneficial for employees' work-home conflict since they enable employees to respond more easily to their home demands. This result extends earlier studies on role transitions which to date have mainly focused on the costs rather than on the benefits of these transitions (Allen et al., 2003; Ashforth et al., 2000; Hunter et al., 2017). These studies argue that making role transitions has a switching cost, for instance, by depleting self-regulatory resources (Hunter et al., 2017; Smit et al., 2016) or removing resources from one domain to another (Carlson et al. 2015, Matthews et al., 2010), which is expected to increase work-home conflict. Our results show that this is not always the case. More specifically, our results suggest that role transitions may also serve as a resource that facilitates combining multiple roles, since transitioning from the work role to the home role may help to respond to pending home demands (Ashforth et al., 2000; Carlson et al., 2015; Jett and George, 2003).

Second, we found that on teleworking days, employees make more home-to-work transitions after hours, which were related with more work-to-home conflict. Because the home environment becomes the work environment on teleworking days, the boundary between the work and the home domain is likely to get more permeable and more easily crossed (Ashforth et al., 2000; Standen et al., 1999). This may hinder employees to carry out their home role responsibilities (Matthews et al., 2010) and to detach from work in the evening (Boswell and Olson-Buchanan, 2007), increasing daily work-to-home conflict. Yet, our results also showed that the total effect of a teleworking day on work-to-home conflict was negative. So, the work-to-home conflict reducing effect of work-to-home transitions seems to be stronger than the conflict enhancing effect of home-to-work transitions since overall, employees experience less work-to-home conflict on teleworking days. Yet, since the relationship between a teleworking day and work-to-home conflict was only partially mediated by role transitions, other mediators are important as well. Future research may therefore want to explore other mediators that can account for the conflict-reducing effect.

Third, the increase in daily work-to-home transitions on teleworking days was also related with more home-to-work conflict. This result is in line with earlier findings that have found telework to be positively related with home-to-work conflict (Golden et al., 2006; Lapierre and Allen, 2006). Probably, teleworkers take up more home responsibilities when working from home because the home domain is then more salient (Greenhaus and Powell, 2003), increasing the extent to which home demands interfere with work (Lapierre and Allen, 2006). Since work-to-home transitions fully mediated the relationship between a teleworking day and daily home-

to-work conflict, role transitions seem to be a sufficient explanation for the finding in earlier studies that telework is related with increased home-to-work conflict (Golden et al., 2006; Lapierre and Allen, 2006).

We only found support for one of the expected moderation effects, specifically, for the moderating role of home protection preference on the relationship between home-to-work transitions and work-to-home conflict. As hypothesized, home-to-work transitions increased work-to-home conflict for all employees, but this effect was stronger for employees with a higher home protection preference. This result is in line with earlier studies that found employee's segmentation preference to moderate the effect of segmentation behaviors on work-to-home conflict (Edwards and Rothbard, 1999; Matthews et al., 2010).

We did not find the hypothesized moderating effects of work protection preference on the relation between work-to-home transitions, on the one hand, and work-to-home and home-to-work conflict, on the other hand. This indicates that work-to-home transitions are equally beneficial (i.e., lowering work-to-home conflict) and equally harmful (i.e., increasing home-to-work conflict) for employees with a high work protection preference as for employees with a low work protection preference. Perhaps, we did not find support for the moderating role of work protection preference since most employees in our sample did not score high on this preference ($M = 3.65$ on a scale from 1 to 7). Another possible explanation could be that work protection preference fluctuates daily, rather than it being a stable characteristic, and that it is this daily preference rather than the stable characteristic that moderates daily effects of role transitions on work-home conflict (van Steenbergen et al., 2017). Future research should further explore this issue.

Theoretical contributions

This study contributes to the literature in several ways. First, we simultaneously accounted for possible positive and potential negative effects of telework on employees' work-home conflict by including two mediators: work-to-home and home-to-work transitions. In that way, our study extended our knowledge on the mechanisms by which telework affects employees' daily work-home conflict, which is an important advancement for the literature on telework (Allen et al., 2003; 2015). In addition, by showing that work-to-home transitions are related to lower work-to-home conflict, our study adds to the literature on role transitions. While boundary theory suggests that role transitions can both help and hinder combining work and home roles depending on the type of transitions, research to date has mostly focused on conflict

enhancing pathways through boundary blurring. Our results also confirm the earlier suggested importance of distinguishing between work-to-home and home-to-work conflict when studying effects of telework (Golden et al., 2006) and the finding that telework more directly affects work-to-home than home-to-work conflict (Shockley and Allen, 2007).

Second, our findings indicate that the adverse impact of home-to-work transitions on work-to-home conflict depends on employees' home protection preference. In addition, our finding that home protection preference but not work protection preference had a moderating role supports previous research that stressed the importance of distinguishing between the domain-specificity of employees' segmentation preference (Methot and Lepine, 2016; Olson-Buchanan and Boswell, 2006; Powell and Greenhaus, 2010).

Third, by studying effects of telework on work-home conflict on a daily basis, we followed up on recommendations from the work-home literature to consider work-home conflict as an episodic event rather than as a general level state (Maertz and Boyar, 2011). Despite evidence that work-home conflict fluctuates substantially from day to day (Hunter et al., 2017; Vega et al., 2015), no research on the relationship between telework and work-home conflict to date had used a daily approach. By zooming in on the daily effects of telework, we helped to clarify how telework affects employees' daily work-home experiences and shed light on the dynamics of the impact of telework.

Practical contributions

Given the increased prevalence of telework in organizations worldwide (Allen et al. 2015), it is important for managers to understand whether, why and for whom the use of this work arrangement affects employees' work-to-home and home-to-work conflict—two important outcomes for both employees and organizations because of their known association with life and job dissatisfaction, absenteeism, turnover intentions and lower productivity levels (Allen et al., 2000; Byron, 2009; Gajendran and Harrison, 2007). Our results show that teleworking days enable employees to better fulfill their home roles while working from home. Irrespective of their work protection preference and despite the work-to-home conflict increasing effect of more home-to-work transitions on teleworking days, teleworkers experience on average less work-to-home conflict on days they work from home than on office days. These findings thus support the use of telework as a home-friendly work arrangement. Telework could be made even more home-friendly when the work-to-home conflict enhancing effect of telework via increased home-to-work transitions could be lowered. This could be done, for instance, by a

code of conduct about after-hours working, by role modeling of supervisors and by avoiding creating an integration culture, which pushes employees to stay connected to work after hours (Gadeyne et al., 2018). This is at most important as our results show that this work-to-home conflict enhancing effect via home-to-work transitions is worse for employees with a home protection preference and, hence, these employees should be considered in counseling and protected from potential push policies to use telework. Finally, our results show that it is important for organizations to safeguard employees' performance on teleworking days since employees feel that the work interruptions to address home demands during the day hinder them to perform optimally. Managers may want to avoid this effect, for instance by offering counseling to help employees cope in other ways with pressing home demands while teleworking. Research has shown that employees can benefit from certain psychological techniques to cope with opponent responsibilities from different life roles (Versey, 2015).

Limitations

This research has a number of limitations. First, we measured daily role transitions and daily work-home conflict at the same measurement moment and are thus unable to infer directionality nor causality from these findings. Future research could address this issue, for instance by assessing role transitions in the early evening and the experienced work-home conflict at the end of the day. Second, all measures were self-reported, which may lead to common-method bias (Siemsen et al., 2010). Yet, we person-mean centered the variables as our research questions mainly focused on within-person fluctuations, thereby limiting between-person differences (Ilies et al., 2011) and relatedly, common-method bias problems. Last, we targeted employees with parental responsibilities and, therefore, our findings may not generalize towards employees without children, as research has shown that work-home conflict may be different in nature and, hence, has different antecedents, for these employees.

Suggestions for future research

Researchers have argued to include different dimensions of telework, such as whether the telework is requested by the organization or by the employee (Feldman and Gainey, 1997) or whether the employee has control over when to use telework (Kossek et al., 2006). Since these dimensions affect to what extent work and home interruptions are desired by the employee (Jett and George, 2002), they may influence how telework relates to daily role transitions and/or how role transitions relate to work-home conflict. Relatedly, some research has hinted to look at specific characteristics of role transitions, such as whether the role transitions are self-initiated

or other-initiated (Ashforth et al., 2000; Smit et al., 2016). It therefore seems important for future research on this topic to take into account specific dimensions of telework and specific characteristics of role transitions.

Conclusion

This study examined why and for whom working from home affects employees' work-to-home and home-to-work conflict that day. We revealed work-to-home and home-to-work transitions as mediating mechanisms that explain both the positive and the negative impact of a teleworking day on employees' work-home conflict. Overall, teleworkers experienced less work-to-home conflict and more home-to-work conflict on teleworking days compared to non-teleworking days. We also found support for a moderating role of home-protection preference: the more employees preferred to protect their home from work interruptions, the more conflict they experienced from such interruptions. No moderating role was found for work protection preference. Overall, our study supports the use of a daily diary approach to understand the relationship between telework and work-home conflict.

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STUDY 3: EFFECTS OF HOME-BASED TELEWORK ON EMPLOYEES' PERSON-LEVEL AND DAY-LEVEL OUTCOMES: A PILOT INTERVENTION STUDY

Abstract

This study examines the impact of telework on employees' stress, work-to-home conflict, work engagement and job performance on both a between-person and a within-person (i.e., day-to-day) level. Hypotheses were tested by evaluating a pilot initiative on telework in a Belgian company using a quasi-experimental design. Employees in the intervention group ($N = 39$) were allowed to work from home on at most two days a week during a period of three months, whereas employees in the control group ($N = 39$) were not. We collected two types of data. First, to examine changes in person-level outcomes over time, we collected pretest-posttest data (T1 = before telework was introduced; T2 = at the end of the three-month pilot period), which were analyzed through paired samples t-tests and analysis of variance. Second, to examine day-level effects of having worked at home on a given day, we collected day-level data on 13 consecutive workdays one month after the onset of the pilot. The daily diary data were analyzed through mixed coefficient modeling. Pretest-posttest analysis showed that employees in the teleworking group had less stress and less work-to-home conflict at T2 compared to T1, but no differences in work engagement or job performance were found over time. In the control group, there were no pretest-posttest differences in any of these outcomes. Daily analyses showed that teleworkers reported lower stress, similar work-to-home conflict, higher work engagement and higher job performance on teleworking days compared to non-teleworking days. There were no differences between teleworkers and non-teleworkers on these outcomes on non-teleworking days. Our results provide support for both general and daily effects of telework, but the effects were dependent upon the level of analysis.

Introduction

Home-based telework—hereafter referred to as telework—is a work arrangement that allows employees to execute working tasks from home during some portion of the working week using information and communication technologies (Bailey & Kurland, 2002). This work arrangement is gaining interest in modern organizations (Allen, Golden & Shockley, 2015). Not only does this work arrangement decrease office costs and commuting time (Bailey & Kurland, 2002), offering telework may also help organizations to maintain a healthy and well performing workforce (Standen, Daniels & Lamond, 1999). In particular, as telework gives employees more flexibility through enhanced control over the place and time of working (Allen, Renn &

Griffeth, 2003; Kossek, Lautsch & Eaton; Maruyama & Tietze, 2012; Standen et al., 1999), using this practice is expected to lower employees' stress (Kröll, Doebler, & Nüesch, 2017; Thompson & Prottas, 2006), decrease their work-home conflict (Allen, Golden, & Shockley, 2015), enhance their work engagement (Masuda, Holtschlag, & Nicklin, 2017) and increase their job performance (Gajendran & Harrison, 2007), among others.

However, research that examines the relationship between the use of telework and these outcomes remains inconclusive (Biron & van Veldhoven, 2016; Boell, Cecez-Kecmanovic & Campbell, 2016; Gajendran & Harrison, 2007). Whereas some studies and meta-analyses on the topic found that the use of telework is associated with the expected favorable outcomes (Allen et al., 2015; Casper et al., 2007; Gajendran & Harrison, 2007; Golden, Veiga, & Simsek, 2006; Harker Martin & MacDonnell, 2012; Hill et al., 1998; Kossek, Lautsch & Eaton, 2006), other studies and meta-analyses found null-effects (Kröll et al., 2017; Mesmer-Magnus & Viswesvaran, 2006; Morganson et al., 2010) or even unfavorable outcomes, such as higher stress (Mann & Holdsworth, 2003), more work-to-home conflict (Hammer et al., 2005), lower work engagement (Sardeshmukh, Sharma & Golden, 2012), and lower job performance (Beauregard & Henry, 2009).

As several authors argued (Allen & Eby, 2016; Biron & van Veldhoven, 2016), one of the reasons for these inconsistencies may lie in the dominant approach used to examine the impact of telework, i.e., by comparing outcomes among users and non-users of telework (or among employees with different levels of teleworking intensity) using a cross-sectional or multiple-wave design (Allen & Eby, 2016; Biron & van Veldhoven, 2016; Gajendran & Harrison, 2007). This approach has two main shortcomings.

First, this approach is not able to rule out selection effects, i.e., the influence of ex-ante differences between employees who choose to use telework and those who opt to not use this practice. For instance, research has shown that in particular employees with the highest need for telework—e.g., employees who have already high stress levels or high work-home conflict (Bailey & Kurland, 2000; Hammer et al., 2011)—use this practice. As such, when telework studies find similar or higher levels of stress or work-home conflict among users compared to non-users of telework, this finding could imply that telework is ineffective as a stress-reducing practice, but it could also be due to higher ex-ante levels of stress or work-home conflict in the group of users compared to the group of non-users. Several scholars have therefore urged for telework intervention studies (Allen et al., 2015; Antonakis, Bendahan, Jacquart & Lalive, 2010; Brough & O'Driscoll, 2010), preferably in a naturalistic setting (Nielsen & Miraglia,

2017), as this study design enables researchers to control for potential selection effects that could alternatively explain observed effects. As an intervention design includes random assignment to intervention and control groups (Allen et al., 2015; Antonakis et al., 2010; Brough & O’Driscoll, 2010), it allows to make causality claims and determine whether observed effects are caused by the telework intervention itself rather than by confounding factors such as selection effects (Cook, Campbell & Shadish, 2002; Shadish & Cook, 2009).

Second, the dominant approach to study the impact of telework focuses on discovering differences between users and non-users of telework. However, some effects of telework may only emerge on days on which the employee worked from home and may therefore result in within-person (i.e., day-to-day) differences, but not necessarily in differences between users and non-users of telework (i.e., between-person effects). For instance, researchers have argued (Golden et al., 2006) and found (Delanoëije et al., 2019) that teleworkers experience less work-to-home conflict because they can do some home tasks during their working day, such as doing the laundry or picking up their children from school; however, this only applies to teleworking days. Similarly, it has been said that teleworkers may work more productively because they experience less interruptions from their colleagues (Windeler et al., 2017); however, reduced interruptions are likely to be specific to teleworking days and could not be expected on office days. These arguments therefore suggest within-person differences (i.e., different outcomes on teleworking days compared to office days), which—as research in other domains has clearly demonstrated (Dalal et al., 2000; Vancouver, Thompson, & Williams, 2001; Vega et al., 2015)—do not necessarily aggregate into between-person effects since other mechanisms may be at play. In order to understand the impact of telework, it is therefore important to not only look at differences between users and non-users of telework but to also examine daily effects.

This study aims to improve our understanding of the impact of telework by simultaneously addressing these two shortcomings. First, we want to examine the impact of telework while taking into account potential selection effects. We will do this using an intervention design, which enables us to study whether outcomes differ before and after the implementation of a telework policy in both a group that is allowed to telecommute and a control group that is not allowed to telecommute. Including a control group enables us to attribute post-intervention changes to the implementation of a telework policy rather than to alternative factors (Cook, Campbell & Shadish, 2002; Shadish & Cook, 2009). Second, we examine the impact of telework both on a between-person and on a within-person level. In that way, our study allows to better understand at which level (i.e., general versus daily) which effects of telework occur.

Although telework studies have started to examine day-level effects of telework (Anderson, Kaplan, & Vega, 2014; Biron & van Veldhoven, 2016; Delanoëije, Verbruggen & Germeys, 2019; de Vries, Tummers, & Bekkers, 2018; Vega, Anderson & Kaplan, 2015), no study—to the best of our knowledge—has simultaneously examined both levels into one study. By capturing both person-level and day-level effects in an intervention design, our results may help researchers and practitioners to understand the variety of ways that telework affects employees (i.e., affecting general feelings about one’s job or affecting the daily experiences on the job dependent on the place of working) accounting for potential selection effects.

Effects of telework on employee outcomes

Telework is typically seen as a way for employers to increase employee wellbeing and performance (Kelly et al., 2008; Standen, Daniels & Lamond, 1999). By providing teleworkers with more flexibility and autonomy, telework enables employees to cope with demands from both the home domain and the workplace (Bailey & Kurland, 2002; Standen, Daniels & Lamond, 1999) and, hence, improve several home and work outcomes (Allen et al., 2015; Daniels, Lamond & Standen, 2001). In this study, we focus on four outcomes which have been associated with telework both on a general level and on a daily level: stress (Anderson et al., 2014; Kossek, Lautsch & Eaton, 2006; Mann & Holdsworth, 2003), work-to-home conflict (Allen et al., 2015; Delanoëije et al. 2019; Hammer et al., 2005; Golden et al., 2006), work engagement (Richman et al., 2018; Sardeshmukh et al., 2012; ten Brummelhuis, Bakker, Hetland & Heulemans, 2012) and job performance (Beauregard & Henry, 2009; Casper et al., 2007; Hill et al., 1998; Vega et al., 2015; Windeler et al., 2017).

As we argued above, we aim to examine both the between-person and the within-person (i.e., day-to-day) impact of telework. These effects may be very different in nature because the former concern general changes in employees’ thoughts and feelings (Vega et al., 2015), whereas the latter are present specifically on teleworking days. On these days, employees have more flexibility throughout the workday (Golden et al., 2006), spend less time commuting (Bailey & Kurland, 2002), experience less interruptions from colleagues (Windeler et al., 2016) and experience more control over work processes (Kossek, Lautsch & Eaton, 2006). Zooming in on these daily effects may unravel how daily telework use affects daily fluctuating employee home and work outcomes. Scholars have already recommended studying daily fluctuating home and work outcomes (Daniels, 2006; Maertz & Boyar, 2011; Shockley & Allen, 2015). Indeed, research has found stress (Ilies et al., 2007), work-to-home conflict (Ilies et al., 2007; Maertz & Boyar, 2011), job performance (Vega et al., 2015) and work engagement (Petrou et

al., 2012) to fluctuate on a daily basis. In what follows, we will first develop our person-level hypotheses and then our day-level hypotheses.

Person-level outcomes

Person-level stress. Stress can be described as negative physical or emotional reactions in employees (Bentley et al., 2016). We expect that, first, telework may decrease employees' person-level stress as teleworking enables employees to organize their general work schedule in the way they like, which has been found to decrease person-level stress (Kossek, Lautsch & Eaton, 2006). For instance, through saving weekly commuting time, telework enables employees to invest more time in leisure activities to recover from work (Bentley et al., 2016; Stephens & Szajna, 1998). Even if these recover-activities do not happen every day, individuals who feel in control over how they allocate their resources between their work activities and other activities are able to self-regulate their resources successfully, decreasing person-level stress (Grawitch et al., 2010). Indeed, if the general job demands match the resources of the worker, person-level stress is less likely to emerge (Parent-Thirion et al., 2016). Accordingly, general autonomy over the place, time and manner of working has been linked with lower person-level stress (De Spiegelaere, Van Gyes & Van Hootehem, 2016). Second, the allowance to telework may contribute to employees' feelings of supervisor trust and support (Lapierre & Allen, 2006) which has been linked with lower person-level stress (Barnett & Brennan, 1995; O'Driscoll et al., 2003; Kooij et al., 2013). In addition, employees may more effectively seek out feedback with a supportive supervisor if they need to tackle difficult work tasks (Huang, 2012), increasing their resources to meet their work demands in general and, hence, decreasing person-level stress (Bentley et al., 2016; Parent-Thirion et al., 2016). We therefore hypothesize:

Hypothesis 1: Employees who are allowed to telework will experience less person-level stress after the onset of a telework intervention compared to employees who are not allowed to telework.

Person-level work-to-home conflict. Work-to-home conflict is the conflict that occurs when individuals' time devoted to participation in their work role (time-based work-to-home conflict) or when individuals' stress in their work role (strain-based conflict) interferes with their home roles and activities (Greenhaus & Beutell, 1985). Telework may decrease person-level work-to-home conflict in employees as teleworkers are enabled to arrange their work demands around their home demands through an increased scheduling autonomy, decreasing their person-level work-to-home conflict (Beauregard & Henry, 2009; Golden et al., 2006). Indeed, one of the most common reasons employees give for teleworking is to combine work with private life more easily (Allen et al., 2015). If employees are enabled to align their work

schedule with their preferred working schedule—for instance, teleworking on days they can pick up the kids from school—telework may increase employees' time to spend time with their family and to meet home responsibilities in general (Allen et al., 2015; Golden et al., 2006; Major, Klein & Ehrhart, 2002; Standen et al., 1999). Indeed, there are several indications in the literature that telework can decrease person-level work-to-home conflict (Golden et al., 2006; Madsen, 2003; Voydanoff, 2005). We therefore hypothesize:

Hypothesis 2: Employees who are allowed to telework will experience less work-to-home conflict after the onset of a telework intervention compared to employees who are not allowed to telework.

Person-level work engagement. Work engagement is defined as a “positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Bakker & Salanova, 2006, p. 702). As a family-friendly work arrangement, telework may increase general work engagement by means of social exchange (Blau, 1964). As such, if employees experience that their organization cares for them, they may return this with positive attitudes and behaviors (Kooij et al., 2013), increasing person-level work engagement (Bakker & Schaufeli, 2008). Organizational support has indeed been found as an important antecedent of person-level work engagement (Richman et al., 2008). In addition, employees who are given the opportunity to work either at the office or either at home on some days of the week are granted autonomy over where and how they work. Such a choice over the place and the way of working has been positively linked with person-level work engagement (Anderson & Kelliher, 2009). We therefore hypothesize:

Hypothesis 3: Employees who are allowed to telework will show higher work engagement after the onset of a telework intervention compared to employees who are not allowed to telework.

Person-level job performance. Job performance is considered as “a worker's effective execution of tasks or job and useful contribution to the social work environment” (Abramis, 1994, p. 549). Telework may increase person-level job performance. First, based on social exchange theory (Blau, 1964), employees who feel treated favorably by their organization will feel they have to exchange this with positive attitudes and behaviors, increasing employees' ability, motivation and opportunity to contribute to their organization (Appelbaum et al., 2000; Kooij et al., 2013). Hence, if employees consider their allowance to telework as favorable, this may increase their person-level job performance. Second, employees who are allowed to telework may perceive more supervisor support (Lapierre & Allen, 2006) which may empower them to reach work goals and increase job performance (Huang 2012; Thomas et al., 2009)—for instance through seeking out feedback with supportive supervisors (Huang, 2012). Some

studies have indeed showed telework to increase employees' person-level job performance (e.g., Callentine, 1995; Hill et al., 1998; for a review, see Beauregard & Henry, 2009; for a meta-analysis, see Gajendran & Harrison, 2007). We therefore hypothesize:

Hypothesis 4: Employees who are allowed to telework will show higher job performance after the onset of a telework intervention compared to employees who are not allowed to telework.

Day-level outcomes

Day-level stress. We expect that telework may decrease employees' day-level stress. Specifically, on teleworking days, employees are likely to experience more flexibility and less commuting time, which may decrease stress on these specific days (Anderson et al., 2014; Moen, Kelly, Tranby & Huang, 2011). Day-level flexibility may function as an additional resource to tackle high work demands on that specific day (Bailey & Kurland, 2002; Marshall, Barnett & Sayer, 1997; Melchior et al., 2007) and may increase sleep (Moen et al., 2011). Moreover, the lack of commuting may buffer employees from daily stressors due to commuting to work (Evans, Wener & Phillips, 2002; Peters, Tijdens, & Wetzels, 2004), decreasing day-level stress on teleworking days (Costal, Pickup & Di Martino, 1988). In addition, on teleworking days, interruptions from colleagues—a commonly cited demand (Jett & George, 2003)—are less likely occur (Windeler et al., 2017). In line with these arguments, previous research has already shown teleworking days to be related with increased positive affect and decreased negative affect (Anderson et al., 2014). We therefore hypothesize:

Hypothesis 5: On days teleworkers work from home, they will experience less stress compared to days they do not work from home.

Day-level work-to-home conflict. We expect that work-to-home conflict will be lower on teleworking days. First, telework allows the occurrence of interruptions of the work role to address some home tasks during work hours (Golden et al., 2006), which may reduce employees' work-to-home conflict on that specific day (Ashforth, Kreiner & Fugate, 2000; Voydanoff, 2005). Hence, when they are working from home, employees are able to respond to home demands during work hours, which may facilitate fulfilling one's home role that day and decrease that day's work-to-home conflict (Voydanoff, 2005). Indeed, recent research has found teleworking days to be related with less daily work-to-home conflict, and that this effect was partially mediated by transitions from the work domain to the home domain on teleworking days (Delanoëije et al., 2019). In addition, since employees are able to adjust their work hours to their home tasks on teleworking days (Golden et al., 2006), employees are likely to feel more in control of the interactions between their different life domains on that day, which is believed

to reduce negative spillover effects from one domain to the other (Zedeck & Mosier, 1990). For example, if employees experience work-related problems, negative spillover to the home domain is less likely to occur because employees working from home have the control over when to stop or start addressing work demands and stop and start addressing home demands. Based upon the above, we hypothesize:

Hypothesis 6: On days teleworkers work from home, they will experience less work-to-home conflict compared to days they do not work from home.

Day-level work engagement. We expect that work engagement will be higher on teleworking days. First, when working from home, employees have discretion over the way or the timing in which they execute their working tasks that day compared to office days. This task specific autonomy may serve as an important job resource (De Spiegelaere, Van Gyes & Van Hootegem, 2016). This daily job autonomy has repeatedly been found as an important antecedent for daily work engagement (e.g., Kühnel, Sonnentag & Bledow, 2012; Sonnentag, Dormann & Demerouti, 2010; Xanthopoulou et al., 2009; for an overview, see Bakker, 2014). Relatedly, employees may increase self-management on teleworking days, as there is no direct supervision on these days. Previous research has shown daily self-management to increase daily work engagement (Breevaart, Bakker & Demerouti, 2014). Second, on teleworking days, daily work engagement may be fostered because employees are then able to work without interruptions from colleagues and are able to communicate more efficiently with team members (e.g., using virtual communication, employees lose less time on informal talks) (Gajendran & Harrison, 2007; Windeler et al., 2017). In line with the above, one study has indeed found higher work engagement on days employees work from home (ten Brummelhuis, Bakker, Hetland & Heulemans, 2012). We therefore hypothesize:

Hypothesis 7: On days teleworkers work from home, they will experience higher work engagement compared to days they do not work from home

Day-level job performance. We expect that employees will perform better on days they work from home. Among the most common reasons employees give for teleworking are the wish to work more productively and get more work done on these days (Allen et al., 2015; Anderson & Kelliher, 2009). When working from home, employees can work without interruptions from colleagues (Mann & Holdsworth, 2003) and, therefore, working from home may enhance focus and increase employees' control over how to structure and fulfill their daily working tasks (Bakker & Demerouti, 2008). Studies have indeed suggested (Bailey & Kurland, 2002; Duxbury & Neufeld 1999) and found (Smit et al., 2016; Windeler et al., 2017) that

working from home may increase day-level job performance through decreased interruptions from colleagues. In addition, the time that is saved by not having to commute to work, may be spent on working tasks (Apgar, 1998). One study did find that on teleworking days, employees reported higher levels of job performance (Vega et al., 2015). Therefore, we hypothesize:

Hypothesis 8: On days teleworkers work from home, they will experience higher job performance compared to days they do not work from home.

Methodology

This study was conducted in a large international construction and property development firm that has its headquarters in Brussels, the capital of Belgium. The aim of the study was to evaluate a pilot initiative that allowed home-based telework in two departments in the headquarters of this company during a period of three months, from mid-April to mid-July. Before this study, employees in this company (and in these departments) were allowed to telework on an ad hoc basis (e.g., to care for a sick child or in case of bad weather). The idea of a more systematic telework policy was introduced by a group of mid-level managers who, as part of a master business class, had worked out the business case for a systematic telework policy. They argued that telework could both enhance time-efficiency of the current employees who would have to commute less and be an asset to attract new – in particularly young – employees, who increasingly value flexibility and work-home balance (Randstad, 2017). This group of mid-level managers presented their ideas to the board of the company, who agreed upon a pilot initiative to explore the impact of telework on employee functioning (i.e., wellbeing and performance). Given the rather ‘conservative’ culture in this company, the introduction of telework would imply a significant change for this company and therefore, the board wanted to well understand its impact before deciding about the introduction of a telework policy for the whole company. The board selected two departments in the headquarters (i.e., the engineering and the estimating departments) that could be part of the pilot initiative and decided to allow telework on two fixed days a week, i.e., on Tuesday and Thursday (which are the days with most traffic to and from Brussels), during a period of three months. We were contacted by the group of mid-level managers who were organizing the pilot initiative to conduct an evaluation of this initiative.

Procedure and design

We opted for an intervention group-control group design in order to be able to compare an intervention group, i.e., employees who were allowed to telework, with a near-equivalent

control group, i.e., a non-teleworking group with no change in telework policy (Cook et al., 2002). This design allowed us to control for history effects (i.e., the influence of other events and changes in the company, which could be expected to affect the intervention and the control group in a similar way; Cook et al., 2002). The two department heads assigned their employees to either the intervention group or the control group based on the employees' daily commuting time (i.e., needs-based assignment) and their job performance. The latter criterion was taken into account since the supervisors wanted to have a guarantee that the teleworking employees were able to do their job well without being monitored directly. These two criteria (i.e., commuting time and job performance) are likely to be a good reflection of how telework allowance decisions are made in many organizations (Lembrechts et al., 2016; Poelmans & Beham, 2008; Windeler et al., 2017).

The evaluation of the pilot initiative consisted of two parts. The first part concerned a pretest-posttest study to examine general changes in employee functioning due to the allowance of telework. To this end, we collected survey data at two points in time, i.e. before the start of the pilot initiative (T1) and near the end of the three-month intervention period (T2). The second part of the evaluation concerned a daily diary study to examine the within-person changes due to having worked from home on a given day. We decided to also look at daily effects since the effects of telework are likely to depend on whether or not one has worked from home on a certain day (Vega et al., 2015). To examine the daily effects, we collected daily diary data during 13 consecutive working days.

Of the 78 participants who completed the survey at T1, 65 participants also completed the survey at T2 (response rate = 83%). We did not find any differences on background variables (i.e., autonomy, commuting time, gender, age, having a partner, amount of children) and baseline measures of our study variables between respondents who filled out the survey at T2 and respondents who did not fill out the survey at T2. We did find a difference for department ($F(1,72) = 13.75, p < .01, \eta_p^2 = .16$), as the dropout group existed for 38.4% out of respondents from the Engineering Department compared to 83.5% in the group who filled out both T1 and T2. The number of respondents to the daily surveys ranged from 29 (37.2%) to 68 (87.2%), and respondents filled out the daily questionnaire between 2 and 13 times in total ($M = 9.62, SD = 3.71$), resulting in 741 out of 1001 possible observations (74%).

Description of the sample

Of the initial 78 respondents, 50% were in the intervention group. Most of the respondents

(75.7%) worked in the Engineering Department. The majority of the sample was male (75.6%) and worked full-time (87.2%). Study participants held jobs at various hierarchical levels with a range of job titles including senior calculator, tender manager, bid manager, prequalification officer, and technician. Tenure ranged from 0 to 45 years ($M = 10.50$, $SD = 9.10$). Respondents had zero to four children ($M = 1.23$, $SD = 1.10$) and 58 respondents indicated to live together with a partner.

We tested whether the employees in the control group differed from their teleworking colleagues on background characteristics and on the baseline measures of our study variables. No significant differences were found in department, gender, age, having a partner, amount of children, stress, work-to-home conflict or work engagement. However, employees in the control group differed from their teleworking colleagues with respect to commuting time ($F(1,73) = 17.35$, $p < 0.01$, $\eta_p^2 = .19$) and self-reported performance at T1 ($F(1,74) = 6.30$, $p < 0.05$, $\eta_p^2 = .08$). These differences are consistent with the fact that the assignment of employees to the teleworking group was based upon employees' need for telework (i.e., longer commuting times) and on their performance. To take into account these differences at T1, we conducted all the analyses with and without controlling for commuting time and job performance at T1. Since both types of analyses showed the same results, we decided to report the results without any control variable.

Trait measures

Group. Group is a dummy-variable which is coded 1 if the respondent was part of the intervention group (i.e., employees who were allowed to telework on 2 fixed days a week, i.e. Tuesday and Thursday) and 0 if the respondent was part of the control group (i.e., employees who were not allowed to telework).

Stress. We measured stress at T1 and T2 using 5 items of the General Health Questionnaire by Goldberg and Hillier (1979) ($\alpha_{T1} = .77$, $\alpha_{T2} = .86$). Sample items are 'To which extent have you been nervous in the past month?' and 'To which extent have you thought of yourself as worthless in the past month?'. The response scale ranged from 1 (Totally not) to 7 (Totally).

Work-to-home conflict. Work-to-home conflict was measured at T1 and T2 using the three-item scales of Carlson, Kacmar and Williams (2000) for time-based work-to-home conflict ($\alpha_{T1} = .88$, $\alpha_{T2} = .94$) and strain-based work-to-home conflict ($\alpha_{T1} = .86$, $\alpha_{T2} = .91$). We replaced 'family' by 'private life'. Sample items are 'My work keeps me from my private life activities more than I would like' (time-based work-to-home conflict) and 'When I get home

from work I am often too frazzled to participate in private life activities/responsibilities' (strain-based work-to-home conflict). The response scale ranged from 1 (Totally disagree) to 7 (Totally agree).

Work engagement. Work engagement was measured at T1 and T2 using six items of the nine item work engagement scale of Schaufeli et al. (2006) ($\alpha_{T1} = .89$, $\alpha_{T2} = .93$). To reduce respondent fatigue, we selected the vigor and the dedication subscale (three items each) and left out the work absorption scale (three items, e.g. 'I get carried away when I am working'). We did this because we consider both the vigor and the absorption scale as task-specific compared to the job specific dedication scale (Sonnetag, 2017). In this way, we aimed to capture, in fewer items, both task specific and job specific aspects of the original scale. Sample items are 'At work, I burst of energy' and 'I am enthusiastic about my job'. The response scale ranged from 1 (Totally disagree) to 7 (Totally agree).

Job performance. We measured self-reported job performance at T1 and T2 using the six-item scale from Abramis (1994) ($\alpha_{T1} = .84$, $\alpha_{T2} = .88$). Sample items are 'How well did you, in your own opinion, took responsibility during the last work week?' and 'How well did you, in your own opinion, reach your goals during the last work week?'. The response scale ranged from 1 (Very bad) to 7 (Very good).

State measures

Teleworking day, stress, work-to-home conflict, work engagement and job performance were all measured in the daily surveys. The measures we used in the daily surveys were in general shortened versions of the measures we used in the general questionnaires in order to lower fatigue. In addition, we adapted the items to the daily level (for a similar approach: see Ilies et al., 2017).

Teleworking day. Teleworking day is a dummy-variable, which is 1 if respondents indicated in the daily survey that they had worked from home that day during the regular working hours, and 0 otherwise. Respondents who had not worked that day, for instance due to illness, were coded as missing.

Daily stress. To measure daily stress, we adapted the 5 items to capture stress from the General Health Questionnaire of Goldberg and Hillier (1979) to daily items. Sample items are 'To which extent have you been nervous today?' and 'To which extent have you thought of yourself as worthless today?'. The response scale ranged from 1 (Totally not) to 7 (Totally). The daily Cronbach's α ranged from .79 to .89, with an average of 0.84.

Daily work-to-home conflict. We measured daily work-to-home conflict using a shortened and slightly adapted version of the Carlson et al. (2000) scale. To decrease respondent fatigue, we used two out of three highest loading items of the strain-based conflict scale and two of the three highest loading items of the time-based conflict scale, resulting in four items. Items were adjusted to day-level measurement. The four items were: (1) ‘Today, I had to miss activities in my private life due to the amount of time I had spent working’, (2) ‘Today, the time I spent on work responsibilities interfered with my responsibilities in my private life’, (3) ‘Today, after work, I was so emotionally drained that it prevented me from contributing in my private life’, and (4) ‘Today, after work, I was too stressed to do the things I enjoy due to all the pressures at work’. Respondents were asked to indicate the extent to which they agreed with the given statement on a scale from 1 (Strongly disagree) to 7 (Strongly agree). The daily Cronbach’s α ranged from 0.76 to 0.95, with an average of 0.81.

Daily work engagement. To measure daily work engagement, we adapted the 6 items of the scale of Schaufeli et al. (2006) to daily items ($\alpha_{[D1-D13]} = [0.90; 0.95]$, $\alpha_M = 0.93$). Sample items are ‘Today at work, I burst of energy’ and ‘Today, when I got up in the morning, I felt like going to work’. The response scale ranged from 1 (Totally disagree) to 7 (Totally agree).

Daily job performance. To measure daily job performance, we used 3 of the 6 items of the scale from Abramis (1994) and adapted them to daily items ($\alpha_{[D1-D13]} = [0.70; 0.90]$, $\alpha_M = 0.83$). Sample items were ‘How well did you, in your own opinion, took responsibility today?’ and ‘How well did you, in your own opinion, reach your goals today?’. The response scale ranged from 1 (Very bad) to 7 (Very good).

Strategy of analysis

To analyze the pretest-posttest data, we performed paired samples t-tests and calculated Cohen’s d and partial eta-squared (η_p^2) effect sizes. Cohen’s d is considered to be a small effect if $0.2 \leq d < 0.5$, a medium effect if $0.5 \leq d < 0.8$, and a large effect if $d \geq 0.8$ (Cohen, 1988), whereas partial eta-squared can be interpreted as a small effect if $.01 \leq \eta_p^2 < .06$, a medium effect if $.06 \leq \eta_p^2 < .14$, and a large effect if $\eta_p^2 \geq .14$ (Cohen, 1988).

To examine the daily effects, we performed linear mixed coefficient modeling (MCM). MCM takes into account the nested structure of the daily data, with repeated measurements (daily variables) at the first level ($N = 741$ occasions) and individuals at the second level ($N = 78$ respondents). We employed restricted maximum likelihood (REML) estimation, as this restricted form of maximum likelihood (ML) estimation is more suitable for complex datasets

including multiple fixed effects (Corbeil & Searle, 1976; Gilmour et al., 1995). Contrary to ML, REML estimation does not expect all fixed effects to be known without errors and maximizes only the portion of the likelihood not depending on the fixed effects. Following the guidelines of Aguinis, Gottfredson and Culpepper (2013), we centered level one predictor variables to the individual mean and level two predictor variables to the grand mean.

Results

Comparison between T1 and T2

Table 1 (see next page) shows the descriptives and correlations of the study variables in the T1-T2 comparison. In the teleworking group, employees filled in the daily survey between two and 13 times ($M = 10.03$, $SD = 3.32$) and worked on average two days (out of six possible days) at home during these two to 13 measurement moments. Nine employees of them never worked from home. In the non-teleworking group, one employee did not fill in any of the daily surveys, so (s)he was left out of the daily analyses. The other 38 employees in the control group filled in the daily survey between two and 13 times ($M = 8.92$, $SD = 3.97$). One employee from the control group reported one day of telework during the daily assessments.

Table 2 (see next page) gives an overview of the means at T1 and T2 on the three home outcomes (stress, time-based work-to-home conflict, strain-based work-to-home conflict) and the two work outcomes (work engagement, job performance) for both the teleworking group and the control group, as well as the results of the paired-sample t-tests and the effect sizes.

Table 1. Means, standard deviations and correlations for trait variables in the pretest-posttest analyses

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Group (1 = intervention) T1	0.50	0.50										
2. Stress T1	3.23	1.10	-0.09									
3. Work-to-home conflict, time-based T1	4.63	1.57	0.07	0.43**								
4. Work-to-home conflict, strain-based T1	3.97	1.44	0.02	0.57**	0.54**							
5. Work engagement T1	5.17	0.95	0.17	-0.36**	-0.07	-0.07						
6. Job performance T1	5.48	0.75	0.01	-0.26*	0.07	-0.01	0.64**					
7. Stress T2	2.88	1.17	-0.24	0.75**	0.23	0.43**	-0.36**	-0.30*				
8. Work-to-home conflict, time-based T2	4.24	1.74	0.01	0.32*	0.73**	0.38**	-0.12	0.22	0.26*			
9. Work-to-home conflict, strain-based T2	3.45	1.61	-0.08	0.38**	0.40**	0.65**	-0.13	0.09	0.45**	0.58**		
10. Work engagement T2	5.00	1.01	0.24	-0.46**	-0.15	-0.21	0.54**	0.53**	-0.52**	-0.10	-0.22	
11. Job performance T2	5.50	0.75	0.23	-0.30*	0.00	-0.00	0.76**	0.51**	-0.40**	0.07	-0.01	0.72**

** $p < 0.01$, * $p < 0.05$. $N_{T1} = 78$, $N_{T2} = 65$. M = Mean. SD = Standard deviation. For Group, the mean is on a dummy. For other variables, means are on a 1-7 Likert

Table 2. Means, standard deviations, and results of the paired samples t-tests ($\Delta(T1-T2)$) and analyses of variance (ANOVAs) for study variables at pretest (T1) and posttest (T2) measurement occasion comparing intervention and control group of the employees who filled in both T1 and T2 in the teleworking group and the control group

	Teleworking group ^a				Control group ^b				ANOVA
	T1	T2	$\Delta(T1-T2)$	<i>d</i>	T1	T2	$\Delta(T1-T2)$	<i>d</i>	η_p^2
Stress	3.08 (0.95)	2.62 (1.04)	0.46 (0.84)**	0.56 _{medium}	3.24 (1.23)	3.18 (1.27)	0.06 (0.73)	0.08	0.06*
WHC, time-based	4.73 (1.33)	4.26 (1.75)	0.46 (1.25)*	0.37 _{small}	4.52 (1.68)	4.22 (1.78)	0.30 (1.21)	0.25	0.00
WHC, strain-based	3.95 (1.26)	3.31 (1.61)	0.64 (1.42)**	0.45 _{small}	3.99 (1.58)	3.58 (1.65)	0.41 (1.11)	0.37	0.01
Work engagement	5.29 (0.96)	5.22 (0.96)	0.07 (0.50)	0.15	4.93 (0.93)	4.75 (1.05)	0.18 (0.86)	0.21	0.01
Job performance	5.68 (0.70)	5.66 (0.66)	0.01 (0.52)	0.03	5.22 (0.70)	5.32 (0.82)	-0.10 (0.91)	-0.11	0.01

** $p < .01$ * $p < .05$. ^a $N = 34$. ^b $N = 30$. Standard deviations are given in parentheses.

As can be seen from Table 2, we found a significant increase in home outcomes in the teleworking group: the means differed significantly between T1 and T2 for stress ($\Delta(T1-T2) = 0.47, p < .01, d = .56$), time-based work-to-home conflict ($\Delta(T1-T2) = 0.46, p < .05, d = .37$) and strain-based work-to-home conflict ($\Delta(T1-T2) = 0.64, p < .05, d = .45$). Work outcomes did not increase from T1 to T2 in the teleworking group, as the means for work engagement ($\Delta(T1-T2) = 0.07, p = .40, d = .15$) and job performance ($\Delta(T1-T2) = 0.01, p = .87, d = .03$) were not different at T1 and T2. In the control group, we did not find an increase in either home or work outcomes, as the means for stress ($\Delta(T1-T2) = 0.06, p = .66, d = .08$), time-based work-to-home conflict ($\Delta(T1-T2) = 0.30, p = .19, d = .25$), strain-based work-to-home conflict ($\Delta(T1-T2) = 0.41, p = .05, d = .37$), work engagement ($\Delta(T1-T2) = 0.18, p = .27, d = .21$) and job performance ($\Delta(T1-T2) = -0.10, p = .55, d = .11$) did not differ between T1 and T2. Thus, hypothesis 1, which expected a decrease in person-level stress after the onset of a telework intervention, is supported through a medium effect size for the significant positive drop in stress in the teleworking but not in the control group. We also found support for hypothesis 2 as we found significant pretest-posttest drops—yet with small effect sizes—in work-to-home conflict and home-to-work conflict in the teleworking and not in the control group. Hypothesis 3 and hypothesis 4, which expected an increase in both work engagement and person-level job performance, are not supported as we did not find a difference between T1 and T2 in work engagement or job performance, in neither the teleworking nor the control group. An overview of the pretest-posttest comparisons of all outcome variables is given in Figure 1.

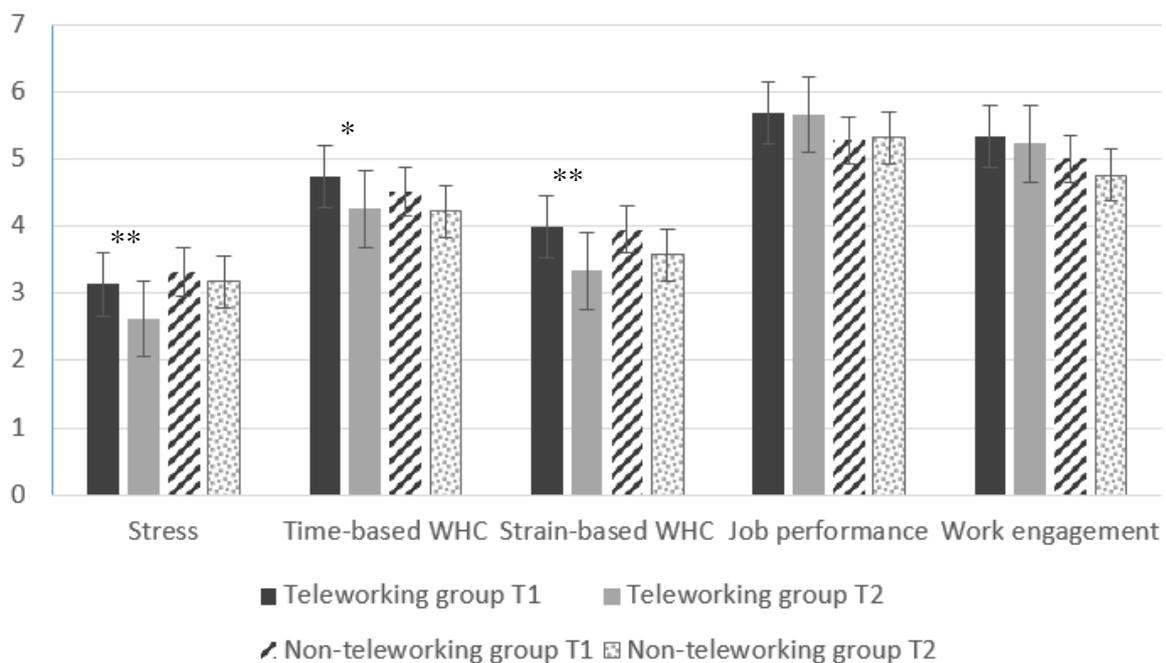


Figure 1. Pre-test post-test comparisons of means at T1 and T2

The partial eta-squared (η_p^2) analyses further show small (i.e., for strain-based work-to-home conflict, job performance and work engagement) to medium effect sizes (i.e., for stress) for the pretest-posttest differences ($\Delta(T1-T2)$) between the teleworking group and the control group (Table 2). Only the medium effect size for stress was found to be statistically significant ($F(1,62) = 4.21$, $p < .05$, $\eta_p^2 = .06$). The rather small sample size of the experiment and comparison groups ($N = 30$ and $N = 34$) may have too little power to detect significant differences for small effect sizes.

Daily within-person effects

Table 3 shows the descriptives and correlations of the study variables in the multilevel analyses.

Table 3. Means, standard deviations and correlations for state variables in the daily analyses

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Teleworking day	0.47	0.08		-0.07	-0.08*	0.12**	0.04
2. Daily stress	2.68	0.93	-0.02		0.16**	-0.23	-0.44
3. Daily work-to-home conflict	1.65	0.70	-0.07	0.20		-0.19	-0.12**
4. Daily work engagement	4.71	1.00	-0.13	-0.59**	-0.34**		0.56**
5. Daily job performance	5.25	0.70	-0.02	-0.57**	-0.31**	0.78	

** $p < 0.01$, * $p < 0.05$. $N = 78$ persons (77 for daily variables) and $N = 741$ occasions. *M* = Mean. *SD* = Standard deviation. For Teleworking day, the mean is on a 0/1 dummy, for all other variables, means are on a 1-7 Likert scale. Within-person correlations are shown above and between-correlations are shown below the diagonal. Between-person correlations, means and standard deviations are person-mean centered (i.e. based on averaged scores across all measurement occasions per person).

Table 4 (see next page) shows the results of the multilevel analyses to predict daily stress (Model 1), daily work-to-home conflict (Model 2), daily work engagement (Model 3), and daily job performance (Model 4). As can be seen in this table, 43% of the variance in daily stress, 59% of the variance in daily work-to-home conflict, 42% of the variance in work engagement and 49% of the variance in job performance is due to within-person variation. This supports our choice for multilevel analyses as this remaining variance may be due to daily fluctuations in work location.

Table 4. Random coefficient modeling results to predict stress (Model 1), work-to-home conflict (Model 2), work engagement (Model 3) and job performance (Model 4).

	Model 1		Model 2		Model 3		Model 4	
	Stress		Work-to-home conflict		Work engagement		Job performance	
	γ	<i>SE</i>	γ	<i>SE</i>	γ	<i>SE</i>	γ	<i>SE</i>
Intercept	2.65**	0.11	1.60**	0.08	4.77**	0.11	5.29**	0.11
Teleworking day (1 = yes)	-0.72**	0.10	-0.11	0.10	0.48**	0.10	0.57**	0.10
Group (1 = intervention)	-0.10	0.21	-0.03	0.15	0.38	0.21	0.05	0.21
Variance level 2 (person)	0.77 (57%)		0.41 (41%)		0.82 (58%)		1.52 (57%)	
Variance level 1 (day)	0.57 (43%)		0.59 (59%)		0.58 (42%)		1.48 (49%)	

** $p < 0.01$, * $p < 0.05$. *SE* = standard error.

Hypothesis 5 predicted that the intervention group would have less daily stress on a teleworking day compared to a non-teleworking day. As can be seen in Table 4 (Model 1), the estimate of teleworking day on daily stress ($\gamma = -0.72$, $p < .01$) was negative and significant, supporting hypothesis 5. Hypothesis 6 predicted that employees would experience less daily work-to-home conflict on a teleworking day compared to a non-teleworking day. The estimate of teleworking day on daily work-to-home conflict ($\gamma = -0.11$, $p = .28$ – see Table 4, Model 2) was not significant, thus, hypothesis 6 is not supported. Hypothesis 7 predicted that employees would show a higher work engagement on a teleworking day compared to a non-teleworking day, which is supported by the positive and significant estimate of teleworking day to predict work engagement in Model 3 ($\gamma = 0.48$, $p < .01$). Finally, hypothesis 8 predicted that employees would have higher job performance on a teleworking day compared to a non-teleworking day, which is again supported in the positive and significant estimate of teleworking day in Model 4 ($\gamma = 0.57$, $p < .01$).

Discussion

This study aimed to answer the questions whether selection effects account for current inconsistent effects of telework, or whether there are other effects of telework on person-level employee outcomes. In addition, we aimed to answer the question of whether telework has day-specific effects that may explain current inconsistent results of telework research by highlighting effects that specifically manifest on days that employees work from home. We targeted these questions by first examining whether person-level stress, time-based and strain-based work-to-home conflict, work engagement and job performance differed before and three weeks after the onset of a telework intervention. Second, we examined whether day-level

measures of these outcomes differed on teleworking days compared to non-teleworking days.

Pretest-posttest differences between a teleworking and a non-teleworking group showed that in the teleworking group, person-level stress, time-based work-to-home conflict and time-based home-to-work conflict were significantly lower three weeks after the onset of the telework intervention, whereas there was no difference in these outcomes in the non-teleworking group. There was no significant change in person-level work engagement or job performance in neither of the groups. These pretest-posttest results suggest that irrespective of potential selection effects that may account for inconsistencies in studies on telework effects to date, telework does affect certain person-level outcomes (i.e., stress and work-to-home conflict) but not others (i.e., job performance and work engagement).

Our pretest-posttest results are in line with earlier studies that found telework to be related with lower person-level stress (Kossek, Lautsch & Eaton, 2006) and work-to-home conflict (Allen et al., 2015; Golden et al., 2006) and indicate that telework indeed increases employee wellbeing by decreasing stress and work-to-home conflict. These results they are not in line with studies that found increased person-level stress (Mann & Holdsworth, 2003) and work-to-home conflict (Hammer et al., 2005) because of telework. We argue that in these latter studies, selection effects (i.e. reversed causation effects) may explain the observed stress and conflict enhancing effects. After all, our results support the beneficial effects of a telework intervention on employees' person-level stress and work-to-home conflict hereby controlling for selection (i.e., reversed causation) effects by measuring outcomes before and after the onset of a telework intervention. In addition, our results show support for the idea that in previous studies, loose definitions of a telework arrangement may account for observed harmful relationships between telework and employees' person level stress and/or work-to-home conflict. Researchers have argued that different conceptualizations of telework may explain inconsistencies in research (for instance, some studies may include working after hours as telework, whereas others only include telework during traditional working hours; Allen, Renn & Griffeth, 2003; Golden, 2012). In our design, we controlled for such alternative explanations because the telework policy was the same for all participants involved. Hence, our results support the notion that telework has positive relationships with employee wellbeing in terms of person-level stress and person-level work-to-home conflict (Gajendran & Harrison, 2007).

Our pretest-posttest results are not in line with studies that found higher (Richman et al., 2018) person-level work engagement or higher (Hill et al., 1998; Casper et al., 2007) person-level job performance as a result of telework. Several aspects of our study may explain why we

did not find an effect of a telework intervention on employees' person-level work engagement or job performance. First, as telework is becoming more current in recent decades (Allen et al., 2015), employees may not perceive the allowance to telework as a favor from their organization, but rather as an entitlement or as a right (Beauregard & Henry, 2009). If so, employees may not feel that they have to return something to their organization, and person-level work engagement or job performance or may not increase. Second, the telework intervention considered in our study was a fixed telework agreement (i.e., employees could work from home on two fixed days a week). Perhaps, the autonomy over the place of working that has been found to be related with higher work engagement (Anderson & Kelliher, 2009) may not be manifested when employees cannot choose themselves at which specific days they work from home. In addition, employees allocated to the teleworking group were high-performing employees. Hence, our design may not fully allowed to capture positive effects of the allowance to telework on employees' person-level performance through their perception of a supportive supervisor (Lapierre & Allen, 2006)—empowering them to reach work goals, increasing job performance (Huang 2012; Thomas et al., 2009)—as there may already was a selection effect for employees experiencing high supervisory support.

Daily analyses confirmed that day-level stress was lower and day-level job performance and work engagement were higher on teleworking days. There was no difference in work-to-home conflict on teleworking versus non-teleworking days. These results suggest that some effects of teleworking manifest specifically on teleworking days, whereas such daily effects do not seem to emerge for work-to-home conflict. To our knowledge, we are the first to study day-specific effects of telework on daily stress, yet the negative relationship between teleworking days and daily stress is in line with arguments often given for effects of telework on person-level stress, namely that telework decreases stress by offering employees more flexibility and saving commuting time. The extra flexibility that employees experience on teleworking days may function as an additional resource to tackle high work demands and increase sleep (Bailey & Kurland, 2002; Marshall, Barnett & Sayer, 1997; Melchior et al., 2007; Moen et al., 2011), decreasing stress on these days. In addition, the lack of stressors arising from commuting (Evans, Wener & Phillips, 2002) or from interruptions at work (Windeler et al., 2017) may explain our observed negative relation between teleworking days and daily stress.

Our failure to find the expected lower levels of daily work-to-home conflict on teleworking days compared to non-teleworking days may be explained by the risk of role blurring on these days. Specifically, on teleworking days, work physically enters the home environment and,

therefore, role blurring (i.e., confusion on which role is salient when located in an environment that is normally designated for behaviors related with one specific role) is likely to occur on these days (Ashforth et al., 2000; Hill et al., 1998). This role blurring has been found to increase work-to-home conflict (Glavin & Schieman, 2012) and has been put forward as an important risk of telework for employees' work-to-home conflict (Ashforth et al., 2000). Alternatively, our findings may be explained by floor effects since participants in our sample scored at the lower end of the daily work-to-home conflict scale. Scores on this variable were also very low in comparison to person-level measures of work-to-home conflict and to the other day-level outcomes, for which we did find significant effects. Therefore, this daily measure may not have adequately captured the variation at the lowest levels of daily work-to-home conflict, reducing the strength of the detected association and, hence, the likelihood of observing an effect.

Our daily analyses confirm two earlier studies that found higher work engagement (ten Brummelhuis et al., 2012) and higher job performance (Vega et al., 2015) on teleworking days. On these days, employees have control over how to structure work tasks (De Spiegelaere et al., 2016) and encounter less interruptions from colleagues or a crowded office environment (Windeler et al., 2017), which may explain increased work engagement and job performance on these days. Daily work engagement may also be fostered through daily self-management (Breevaart et al., 2014), for which the need is higher on teleworking days, as teleworkers need to self-manage their tasks these days (Demerouti et al., 2014).

Interestingly, taken together, our results suggest different person-level and day-specific effects of telework on employees' outcomes. We argue that, in addition to potential selection effects in telework studies to date, exactly these differences may account for current observed inconsistencies in telework research. In particular, our findings supported beneficial effects of telework on employees' person-level stress and work-to-home conflict, supporting earlier notions that telework has positive relationships with employee wellbeing in terms of person-level stress and person-level work-to-home conflict (e.g., Gajendran & Harrison, 2007). We did not find such person-level effects for work engagement and job performance. This may suggest that employees do not feel the need to 'give something back' to the organizations because the organization invested in telework. It could also be that employees counter their higher engagement or productivity on teleworking days with 'less engaged' and 'less productive' days at the office, since they may seek out less challenging tasks when they work at the office as they more easily get interrupted there (e.g., Windeler et al., 2017) and, hence, person-level work engagement and job performance is not affected.

Thus, first, combining the results of our pretest-posttest and daily analyses, our findings show that telework decreased both person-level stress as well as day-level stress on teleworking days. These results are in line with earlier research suggesting beneficial effects of telework on employee stress (Anderson et al., 2014; Kossek et al., 2006). However, second, our results did show a difference between the effects of a telework policy on person-level work-to-home conflict compared to its effects on day-level work-to-home conflict on teleworking days. We argue that role blurring on teleworking days may explain an increase in work-to-home conflict on these days (Ashforth et al., 2000; Glavin & Schieman, 2012; Hill et al., 1998). This role blurring may inhibit the expected work-to-home conflict reducing effects that employees may experience as they are better able to combine their home demands with their work demands on teleworking days (Ashforth et al., 2000; Voydanoff, 2005). A different explanation may yield that employees differently perceive work-to-home conflict depending on whether they think about it in general or specifically from day to day (Maertz & Boyar, 2011; Poelmans & Stepanova, 2016). Whereas work-to-home conflict may be equally perceived on teleworking days and non-teleworking days (i.e., also on teleworking days, home demands will be salient and may remember employees on their interference of their work with their private life; Ashforth et al., 2000), an employees' general perception of work-to-home conflict may be more depending on general job characteristics and the availability of family-friendly policies in the company. Hence, employees may have experienced their organization as more family-friendly, lowering their general perception of their own work-to-home conflict (i.e., lower person-level work-to-home conflict), whereas on a daily basis, they did not actually experience lower work-to-home conflict. Perhaps they did not have enough experience in teleworking to tackle both home and work demands on teleworking days or they did not experience that it was 'oke' for their supervisor to tackle home demands on teleworking days, which would decrease their work-to-home conflict on these days. Alternatively, floor effects may explain the lack of an effect on daily work-to-home conflict since participants scored at the lower end of the daily work-to-home conflict scale. Therefore, this scale may not have adequately captured the variation at the lowest levels of daily work-to-home conflict, reducing the strength of the detected association and, hence, the likelihood of observing an effect.

Third, our results showed no support for effects of the implementation of a telework policy on person-level work engagement or job performance, whereas we did find significantly higher work engagement and job performance on teleworking days compared to non-teleworking days. Similar to our earlier reasoning, these observed day-level but not person-level effects may

indicate that employees more easily consider telework affecting their day-to-day work engagement and job performance, and do not consider these teleworking days (i.e., being allowed to telework in general) to affect their job performance in general. Hence, a different perception of the effects of telework may lie at the basis for the different effects depending on the level of analysis. However, a different explanation may yield that telework is linked with higher work engagement and job performance by means of increased autonomy on days employees work from home (Sonnetag et al., 2010; ten Brummelhuis et al., 2012; Vega et al., 2015), increasing job performance particularly on these days. Consequently, job performance may be lower on office days, as employees may choose to keep their difficult tasks for which they need concentration for teleworking days, and use office days for different tasks. Indeed, working more productively is one of the main reasons employees give to work from home (Fonner & Stache, 2012). Alternatively, the lack of an effect of telework on person-level work engagement and job performance may suggest that the mechanism of social exchange—by which the allowance to telework would increase employees’ feelings to return something to their organization—either does not result in higher person-level work engagement and job performance; or that it does not come into play at all. It could also be that the employees in this study had not worked from home enough for the daily effect to convert into a general effect. Finally, the lack of an observed effect for person-level job performance could also be due to ceiling effects since the teleworking group was already higher in performance and, therefore, further increases in job performance were difficult to observe.

Our results highlight the need for researchers to consider effects of telework on both the person-level and the day-level, and to be aware that the effects may differ depending on the level of analysis. Zooming in into these levels may shed light on the way in which telework affects employee outcomes. For instance, a telework policy at a between-person level of analysis may not show a relationship with an employee outcome (e.g., job performance). However, a within-person analysis may reveal differences between teleworking and non-teleworking days on this particular outcome (e.g., whereas the effects of a telework policy may not be related with higher job performance when considering office days and teleworking days together, employees’ job performance may be significantly higher on teleworking days compared to office days; Vega et al., 2015). This knowledge may give researchers an insight in how telework affects employees from day to day and may help both researchers and practitioners to take advantage of these insights to develop telework policies that, through different mechanisms (i.e., effects of the possibility to telework in general, or day-specific

effects of teleworking versus non-teleworking days), improve employees' person-level and day-level outcomes.

Our results support beneficial effects of telework on person-level stress and work-to-home conflict and beneficial effects of teleworking days on day-level stress, work engagement and job performance. Based on our study results, the organization implemented home-based teleworking for a fixed 1-day per week arrangement within the whole company. Hence, our study is an answer to recent calls for more work-home intervention research (Brough & O'Driscoll, 2010; Hammer et al., 2016; Nielsen & Miraglia, 2017). In addition, the longitudinal nature of our study enables us to gather information on the mechanisms that determine the desired outcomes on both a person-level and a daily basis (Nielsen & Miraglia, 2017). Causal inferences based on intervention research and knowledge on day-specific effects help to understand how telework affects both employees' person-level and day-level outcomes.

Limitations

The main limitation of this study is that the one-company case design leads to low external validity of the findings. Hence, we suggest caution when generalizing findings towards other types of implementations and companies. Since we argued that implementation features play an important role when explaining effects of telework and that evaluations of interventions in different companies may show different effects, in this study, we have exemplified some of the effects that work-home policies can create rather than that we have searched for 'universal effects' of interventions. Hence, we have studied the effects of a telework intervention under specific boundary conditions rather than have looked for the confirmation of a specific theory.

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EPILOGUE

“*But the palace of knowledge is different from the palace of discovery.*”

— *Mary Oliver, in Upstream, 2018, p. 125*

In the past few decades, the number of employees facing the challenge of combining work with other life roles has grown tremendously (Fleetwood, 2007; Greenhaus & ten Brummelhuis 2013; Wilkens et al., 2018). Whereas research on the work-home interface started around the 1970s (Marks, 1977; Pleck, 1977), work-home combination became an increasingly important research topic in a wide range of disciplines especially the last two decennia (e.g., management, family studies, applied psychology – Beauregard & Henry, 2009; Fleetwood, 2007; Kalliath & Brough, 2008; Kossek et al., 2014). One facet of this research addresses work-home practices, i.e., HR initiatives that provide employees with additional resources that can facilitate balancing work with other life roles (Kossek, Lewis & Hammer, 2010). Organizations increasingly offer these practices to their employees in the expectation that by facilitating employee’s work-home combination they may improve employee outcomes (e.g., lower stress, lower work-home conflict, more engagement, higher performance; Anderson, Coffey & Byerly, 2002; Breaugh & Frye, 2008). However, extent research results on the effectiveness of work-home practice use are vastly inconclusive to date (Kossek & Michel, 2011). If we want to improve the effective implementation of work-home practices in organizations and, thus, truly help employees with their work-home combination, it is imperative to enhance our understanding of why these practices do not always lead to the expected beneficial outcomes.

The main aim of this dissertation was therefore to get insight into the conditions under which work-home practices improve or, conversely, harm employee outcomes. We did this in three empirical studies. These three studies did not only aim to shed light on specific conditions affecting the effectiveness of work-home practice use; they also intended to address a number of methodological shortcomings in past research that have been identified as potentially biasing research results and therefore likely contributing to the inconsistency in research findings to date. In particular, the studies in this dissertation:

- *Focus on specific work-home practices.* Each study in this dissertation examines the effect of one or more *specific* work-home practices: i.e., part-time work and home-based telework in study 1 and home-based telework in studies 2 and 3. Research on the effectiveness of work-home practices to date has often combined the use of different work-home practices into an aggregated score (e.g., Blair-Loy & Wharton, 2002). However, since specific

practices serve different functions (e.g., they may provide a different type of resource) and may have different side effects (e.g., career penalties may be associated more with part-time work than with telework), their effects are likely to differ. Accordingly, combining different practices into an aggregate score may mask practice-specific effects and consequently, the ‘total’ effect becomes hard to interpret. Several researchers have therefore called to focus on specific work-home practices when examining their effectiveness (Glass & Finley, 2002; Kelly et al., 2008; Shockley & Allen, 2007).

- *Make use of (quasi-)experimental designs to limit bias due to selection effects.* In two of the three studies (i.e., study 1 and study 3), we used a (quasi-)experimental design to rule out selection effects as alternative explanations for the observed relationships. Researchers have highlighted the need to use experimental designs to control for selection effects (e.g., Shockley & Allen, 2007). In cross-sectional research (which is used most often in research on this topic; Baltes et al., 1999; Butts, Casper & Yang, 2013), the design is unable to detect reversed causation effects. That is, the design does not allow researchers to determine whether an observed employee outcome is a consequence or rather an antecedent of work-home practice use. As such, this type of research cannot exclude alternative explanations for the observed relationships in terms of selection effects. For instance, a cross-sectional study that finds that users of a work-home practice experience more stress or more work-home conflict than non-users cannot exclude the possibility that this relationship is explained by the fact that employees already high in stress or work-home conflict are more likely to start using work-home practices. (Quasi-)experimental designs help to overcome this issue. In particular, a vignette design, as the one we used in the first study, allows to attribute causality to the factors that are manipulated (in our study: use, volition and pressure), thus precluding reversed causality by design. In addition, in an intervention design as the one used in our third study, selection effects can be detected by comparing characteristics of the experimental and the control group before the intervention. Potential differences can then be taken into account when analyzing pretest-posttest differences.
- *Study both between-person and within-person effects.* The studies in this dissertation did not only examine between-person differences—i.e., differences in employee outcomes between users and non-users of a specific work-home practice (i.e., in study 1 and 3)—but also within-person differences—i.e., differences in outcomes within the same employee across different days (i.e., in study 2 and 3). Past research on the effectiveness of work-home practice use has dominantly studied effects on a between-person level by comparing

either users with non-users or users with different levels of use intensity (Biron & van Veldhoven, 2016). However, some of the posed ‘between-person’ effects are likely to manifest only on the specific days that employees use that practice. For instance, it is often argued that working from home may reduce stress because it lowers commuting time; however, since commuting time is only reduced on teleworking days, this benefit may be specific to teleworking days and may thus not occur on office days. If effects only occur on days on which employees use that practice and if employees only use that practice occasionally (e.g., a few days per month), these effects are less likely to be observed using person-level measures of these outcomes, which capture employees’ general perceptions rather than their daily experiences of these outcomes (Maertz & Boyar, 2011). Several studies have therefore called to not only examine between-person but also within-person effects work-home practice use (Anderson, Kaplan & Vega, 2014; Biron & van Veldhoven, 2016; de Vries, Tummers & Bekkes, 2018; Vega, Anderson & Kaplan, 2015). By examining both between-person and within-person effects of work-home practice use, the studies in this dissertation may enhance our insight in the manner through which work-home practices affect employees outcomes—a need which researchers have articulated before (Allen, Renn & Griffeth, 2003; Allen, Golden & Shockley, 2015; Kelly et al., 2008).

In this epilogue, we first discuss how the findings of our studies improve our understanding of the effectiveness of work-home practices. We then discuss theoretical and practical implications and suggestions for future research. We end with general limitations.

What do we learn from our studies about work–home practice effectiveness?

The aim of this dissertation was to better understand the conditions under which work-home practices improve or, conversely, harm employee outcomes. Since work-home practices are expected to facilitate employees’ work-home combination, we focused in all our studies on the outcome of work-home conflict. In study 3, we additionally examined stress, work engagement and job performance. In what follows, we explain how our three studies improve our understanding of the effectiveness of work-home practices.

The role of individual preferences and volition

It is largely agreed that individual preferences play a key role in affecting individuals’ choices and the effects thereof (e.g., Deci & Ryan, 1985; Grawitch, Barber & Justice, 2010; Hakim, 2000). Nevertheless, research on the effectiveness of work-home practice use has rarely took individual preferences into account (exceptions regarding the fit between use of work-

home practices and boundary management preferences notwithstanding; e.g., Ammons, 2013). In this dissertation, we addressed this gap. In particular, two of the three studies included individual preferences: study 1 examined the relevance of employees' preference to use or to not use a specific work-home practice (i.e., home-based telework and part-time work) over and above the mere use of that practice for understanding employees' work-home conflict; and study 2 included employees' home and work protection preference to understand variation in the relationship between a teleworking day and daily work-home conflict. Overall, the results of these studies support the relevance of taking into account employee preferences to understand the effect of work-home practices.

First, the results of study 1 showed that the degree to which employees' work-home practice behavior (i.e., use or non-use of a specific practice) was in line with their preference was more important than their mere use of that practice for understanding their work-to-home conflict and, to a lesser extent, home-to-work conflict. Hence, the degree of an employees' volition for using or not using work-home practices seems to explain whether these practices lead to beneficial or rather harmful effects on work-home conflict. Whereas a few studies on work-home practice use have taken into account employees' work-home boundary management preferences (e.g., Ammons, 2013; Kreiner, Hollensbe & Sheep, 2009), preferences concerning work-home practice *use* have not been explicitly included so far. This is surprising since the use of work-home practices often implies the crossing of work and home role boundaries and, hence, different preferences for using such practices are likely to exist. Our results confirm that individuals differ in these preferences and that these differences are important for understanding the effects of work-home practices.

It is important to note that the findings of study 1 also suggest that *not using* a specific work-home practice may also be volitional, and, the other way around, that using a practice does not always imply that this use is in line with an employee's preference. Thus, our results imply that it should not be assumed that if employees use or if they do not use available work-home practices, this is so because they really want it like that. Only a few studies to date have tried to understand this availability-usage gap (e.g., Shockley & Allen, 2010; Thompson, 2008; Veiga, Baldrige & Eddleston, 2004). These studies have mainly tried to explain why employees do not always make use of available practices, suggesting an implicit assumption that all employees wish to use work-home practices, which—as our results show—is not necessarily the case. In addition, to the best of our knowledge, no study has tried to understand preference-related variation among users. A better understanding of preference-use

misalignments among both users and non-users, however, may be crucial to optimize work-home practice implementation.

Second, also the findings of our second study confirmed the importance of individual preferences. In this study, we found that employees made more home-to-work transitions (i.e., interruptions of home activities to deal with work demands after hours) on teleworking days than on office days, which was related to more work-to-home conflict on these days, and this effect was found to be stronger for employees with a higher home protection preference. This finding shows that the impact of boundary role transitions (here: home-to-work transitions) depends on individuals' preferences for such interruptions, with individuals with a stronger dislike for them experiencing more harm. This finding thus supports the relevance of behaving in line with one's preferences to predict work-to-home conflict. Yet, we did not find similar moderating effects of employees' work protection preference on the relationship between work-to-home transitions and home-to-work conflict. So, fit between behavior and preference may not always be equally important. Probably, employees attach a greater importance to protecting the home domain than to protecting the work domain from intrusions (see also earlier research on the asymmetric permeability of work and home boundaries; e.g., Frone, Russell & Cooper, 1992). Therefore, in addition to including an employees' preference for certain behaviors, it may also be important to take into account the importance of that behavior or life sphere for that employee.

Overall, the results of study 1 and 2 show that including employees' preferences can help to understand better why or when the use of work-home practices is effective in reducing employees' work-home conflict. Hence, future research may benefit from taking into account the fit between employees' preferred and their actual behaviors when studying work-home practice use.

The role of the (perceived) context

Past research on work-home practice use has already pointed to the importance of context for understanding the effectiveness of work-home practice use. For instance, organizational characteristics, such as a family-supportive culture (Kossek, Lautsch & Eaton, 2006; Thompson, Beauvais & Lyness, 1999) or an employee-involving culture (Grawitch, Gottschalk, Munz, 2006), have been found predictive for employee wellbeing and performance (Wilson et al., 2004) and for favorable results of the implementation of work-home policies (Nielsen & Miraglia, 2017). Also (contextual) characteristics of the specific practice or of its use has been

shown to affect its effects. For instance, the more formalized practices in an organization are, the less ambiguity or role uncertainty there is, which makes favorable outcomes more likely (Allen et al., 2003). Formalization has also been found to play a role in research specifically on telework. Research has for instance found the effects of telework to differ when the teleworking days in the organization are fixed compared to situations where employees can freely choose when they work from home or not; as well as when the use of telework is initiated by the organization versus initiated by the employees (Allen et al., 2003; Feldman & Gainey, 1997; Gajendran & Harrison, 2007; Putnam, Myers & Gailliard, 2013). Overall, the circumstances under which specific practices are implemented in an organization are important when explaining their effects (Allen et al., 2003; Glass & Finley, 2002; Nielsen & Miraglia, 2017). In addition, earlier research has also found the home context to matter. For instance, research has found that employees with more parental responsibilities benefit more from work-home practices than employees with less parental responsibilities (e.g., Butts et al., 2013; Byron, 2005; for a meta-analysis, see Allen et al., 2013). Also, the effectiveness of the specific practice of telework has been found to depend on whether employees are frequently interrupted or not while working at home (Demerouti, Derks, ten Brummelhuis & Bakker, 2014; ten Brummelhuis & van der Lippe, 2010).

The studies in this dissertation—in particular study 1 and 2—further support the importance of taking the (perceived) context into account for understanding the effectiveness of work-home practice use. In study 1, we included employees' perceived external pressure to use or not use work-home practices. So, rather than adding up several contextual features that may influence the effectiveness of work-home practices, we included employees' perceptions of whether these features (as a whole) exerted pressure on them to use or not use a specific work-home practice (i.e., part-time work or telework). The results of this study showed that perceived pressure from both the work and the home environment to use or not use a particular work-home practice explained variance in work-to-home conflict (both work and home pressure) and in home-to-work conflict (only home pressure), over and above the use of this practice and over and above volition over this use. So, irrespectively of whether an employees' current use or non-use of a work-home practice is volitional, employees may perceive pressure to act in another way than they prefer and this pressure may harm their work-home conflict.

Also the results of study 2 support the importance of the context, although only indirectly. In particular, our second study showed that on teleworking days, employees generally make more work-to-home transitions (i.e., interrupting work to take care of home responsibilities) on

teleworking day than on office days and because of these transitions, they experience less work-to-home conflict that day. This result suggests that for telework to have a conflict-reducing effect, it is important that the (organizational) context allows for making work-to-home transitions on teleworking days. Some organizations may forbid or try to discourage such transitions, for instance via a code-of-conduct or via electronic surveillance, because they fear for reduced performance. The results of study 2, however, suggest that such measures to limit these boundary role transitions may reduce the effectiveness of telework as a work-home practice (i.e., as a way to lower employees' work-to-home conflict). Remark that the effect of boundary role transitions was found over and above the effect of autonomy (which was included as a control variable). This means that even if employees perceive autonomy to work when and how they want, it is still important that they are able to make work-to-home transitions in order to experience the favorable impact on their work-to-home conflict.

Day-level effects in addition to person-level effects

Our studies reveal that in addition to person-level effects, which have been the focus of most studies on the topic, work-home practices can have day-level effects. In our second and third study, we explicitly tested day-level effects of telework, more specifically: we examined whether employees' work-home conflict (study 2 and 3), stress, work engagement and job performance (study 3) differed on teleworking days compared to office days. Results of both studies confirmed the importance of also examining daily effects.

In study 2, we focused on the relationship between a teleworking day and daily work-to-home and home-to-work conflict and examined the mediating role of boundary role transitions. In line with our expectations, employees were found to make more work-to-home transitions (i.e., interruptions of work activities to deal with home demands during work hours) on teleworking days, which was related to lower work-to-home conflict but higher home-to-work conflict on these days. They also made more home-to-work transitions (i.e., interruptions of home activities to deal with work demands after hours) on teleworking days, which was related to more work-to-home conflict on these days. In sum, there was a total negative effect of a teleworking day on work-to-home conflict and a total positive effect of a teleworking day on home-to-work conflict. So, on teleworking days, employees were found to experience less work-to-home conflict but more home-to-work conflict.

In study 3, we found that on teleworking days, employees experienced less daily stress, more daily work engagement and more daily job performance than on office days. Contrary to

the findings of study 2, however, we did not find daily effects of teleworking days on employees' work-to-home conflict. Possibly, the way telework was implemented in the specific organization in study 3 (e.g., on two fixed days of the week) differed from the situation of the respondents in study 2. It is for instance possible that the organization in study 3 had not granted employees the autonomy to make work-to-home transitions on teleworking days, which was found to be essential for decreasing daily work-to-home conflict in study 2. Also differences in employee characteristics, such as the employees' experience with working from home (which was very low for the employees in study 3), could explain that we found different effects. Perhaps it takes some time for employees to learn how to use the teleworking days in such a way that it helps to better balance work and home, which has also been suggested in earlier literature (e.g., Fonner & Stache, 2012).

This dissertation also showed that day-level effects sometimes differ from person-level effects. In particular, results of study 3 indicated day-level but no person-level effects of telework on work engagement and job performance, whereas person-level but no day-level effects of telework were found on work-to-home conflict. The lack of an effect of telework on person-level work engagement and job performance may suggest that the mechanism of social exchange—by which the allowance to telework would increase employees' feelings to return something to their organization—either does not result in higher person-level work engagement and job performance; or that it does not come into play at all. It could also be that the employees in this study had not worked from home enough for the daily effect to convert into a general effect. Finally, the lack of an observed effect for person-level job performance could also be due to ceiling effects since the teleworking group was already higher in performance and, therefore, further increases in job performance were difficult to observe. The lack of an effect on day-level work-to-home conflict and the presence of an effect on person-level work-to-home conflict may indicate that employees experienced their organization as more family-friendly, lowering their general perception of their own work-to-home conflict (i.e., lower person-level work-to-home conflict), whereas on a daily basis, they did not actually experience lower work-to-home conflict. Perhaps they did not have enough experience in teleworking to tackle both home and work demands on teleworking days or they did not experience that it was 'oke' for their supervisor to tackle home demands on teleworking days, which would decrease their work-to-home conflict on these days. Alternatively, floor effects may explain the lack of effects for daily work-to-home conflict since participants scored at the lower end of the daily work-to-home conflict scale. Scores on this variable were also very low in comparison to person-level

measures of work-to-home conflict and to the other day-level outcomes, for which we did find significant effects. Therefore, this daily measure may not have adequately captured the variation at the lowest levels of daily work-to-home conflict, reducing the strength of the detected association and, hence, the likelihood of observing an effect.

All in all, it seems important to distinguish the ‘general’ effects of work-home practices that manifest in differences *between* users and non-users from the day-specific effects that manifest *within* users between days that the practice is used compared to days the practice is not used. This confirms earlier research that found the presence or the direction of effects to differ depending on the level of analysis (e.g., Dalal et al., 2009; Vancouver, Thompson & Williams, 2001).

Implications for research

The studies in this dissertation also lead to some implications for research on work-home practice research. In what follows, we discuss the most important ones.

Expanding the traditional users versus non-users dichotomy

The main theoretical contribution of this dissertation is that our findings show the need for scholars to rethink the evaluation of work-home practices. In particular, our studies show that a simplistic focus on the mere use of work-home practices—hereby comparing users with non-users—is insufficient to understand their effects on employee outcomes and that a more nuanced approach is needed to capture the complexity of this issue. Our results highlighted two key nuances.

The first nuance is the relevance of employees’ volition and perceived contextual pressure for (not) using work-home practices. The fit between employees’ preferences for using work-home practices and their actual utilization of these practices seems essential when explaining the effects of these practices on employees’ work-home conflict. Also the congruence between employees’ preferences and pressure from their environment functions as an important predictor for work-home conflict. These findings are in line with person-environment fit theories that have emphasized the importance of boundary fit (i.e., the alignment of individual boundary preferences with individual boundary enactments; Ammons, 2013) and boundary congruence (i.e., the alignment of individual boundary preferences with environmental boundary preferences; Kreiner, 2006). Also strategic (e.g., Boon et al., 2011) and sustainable (e.g., De Prins et al., 2014) management scholars have emphasized the importance of person-organization fit and/or person-job fit for understanding effects of HR-practices on employee

outcomes. By taking into account the fit between employees' preferences and, on the one hand, work-home practice use and, on the other hand, contextual pressure, we follow up on earlier recommendations from work-home scholars to focus on individuals' psychological experience of work-home practices rather than to study the effects of descriptive use of these practices (Kossek et al., 2006; Shockley & Allen, 2007). Both volition and perceived external pressure for (not) using work-home practices seem to capture important aspects of employees' psychological experience of work-home practices that may explain the effects of these practices on employee outcomes. For example, to date, home demands—often operationalized as the number of children or the amount of demands the employee has to take care of at home—have been found to be an inconsistent moderator in the relationship between work-home practice use and employee outcomes (e.g., Byron, 2005); perhaps, including volition- and pressure-related differences between employees—which may be experienced irrespective of the measured home demands—may give a clearer image of the employees for whom these practices are effective. It is therefore important for work-home practice researchers to take these and other features of employees' psychological experience of work-home practices into account.

Secondly, also daily dependent effects of work-home practices are important when expanding the 'users' versus 'non-users' dichotomy. Since our findings showed that work-home practices affect employee outcomes also—and sometimes, differently—at the daily level (i.e., depending on whether employees used a specific practice that day), a comparison between work-home practice 'users' and 'non-users' is not always meaningful since some effects may only manifest on days employees use that specific work-home practice. Therefore, scholars may benefit from comparing days on which employees use available work-home practices versus days they do not use them, since this allows to study daily dependent effects. Understanding such daily effects can help explaining important within-person variance and shed light on daily mechanisms that aid or harm employees' day-level outcomes. Considering these daily mechanisms also allows researchers to study employees' daily psychological experience of work-home practices (such as their perceived psychological job control that day; e.g., the control to make cross boundary role transitions on teleworking days), which is likely to be an important determinant for beneficial effects of work-home practices on employee outcomes.

Presence of selection effects and reversed causality

A second implication of this dissertation is that we showed that selection effects—or compensatory effects—in work-home practice use may indeed occur and bias research results. In particular, in study 3—which involved the evaluation of a telework implementation in a

naturalistic setting—we found that employees who were assigned to the experimental (i.e., teleworking) group differed from their colleagues in the control group (who were not allowed to telework) on self-reported commuting time, autonomy and job performance. These differences were consistent with the fact that in this company, the managers had assigned employees to the teleworking group based on employees' need for telework (i.e., longer commuting times) and on their performance. So, not everybody seems equally likely to be allowed to telecommute. Without taking these a-priori differences between teleworkers and non-teleworkers into account, a study's conclusions risk to be biased. Indeed, it is then probable that observed differences between teleworkers and non-teleworkers are wrongly interpreted as a consequence of telework whereas they were, in fact, a-priori differences.

The potential bias due to selection effects may explain why, in our first study, the effects in the cross-sectional field study were different from those in the experimental vignette study. In particular, in our field survey—wherein we could not account for selection effects or reversed causation—we found that home pressure concerning home-based telework was not linked with higher work-to-home conflict, as we had expected. We argued that this expected effect may be neutralized by the opposite effect, in particular that employees may for instance experience home pressure to *not* let work intrude in the private life and thus to not use home-based telework, sheltering them from high work-to-home conflict as a result of home pressure. Alternatively, it could be that there is a compensatory selection (or reversed causation) effect and that employees low in work-to-home conflict experience more home pressure to use home-based telework since the work-home combination is now going 'so easy' for them and using home-based telework could then enable them to take up more home responsibilities additive to their work role. The results of our experimental vignette study were by design less prone to a reversed causality and these results did show the expected positive association between home pressure concerning telework and work-to-home conflict. We therefore consider reversed causality as a plausible explanation for the lack of finding the expected effect of home pressure on work-to-home conflict in our field survey, especially since other results between the field survey and the vignette survey were similar.

Importance of the home domain

A third contribution of this dissertation is that we highlighted the important influence of the home domain—a domain over which organizations have little control—on the effectiveness of work-home practices. The findings of both study 1 and study 2 led to this conclusion. In particular, findings of study 1 suggest that effective organizational implementation of work-

home practices may be insufficient to guarantee a good work-home balance since employees experience pressure from their private life, which affects the effects of work-home practices on employees' work-home conflict. In addition, results of study 2 showed that there was a significant moderating (i.e., a conflict enhancing) effect of employees' home protection preference on the relation between home-to-work transitions and work-to-home conflict, whereas no moderating effect of work protection preference was found. This suggests a greater importance of protecting the home domain than protecting the work domain from intrusions, which is in line with earlier research on the asymmetric permeability of work and home boundaries (e.g., Frone, Russell & Cooper, 1992).

Given the importance of the home domain, it is surprising that research on work-home practice use to date has mainly focused on work-related factors to explain their effectiveness. Indeed, while many organizational variables have been put forward as important mediators or moderators to explain effects of work-home practices, contextual factors relating to the home context have been included to a much lesser extent so far. Our results suggest that this lack of incorporating employees' home context—which for many employees is probably the predominant context affecting many of their wellbeing and performance outcomes—may explain some of the current unexplained results in work-home practice research (i.e., since the home contexts of the respondents may differ and this may affect the effectiveness of work-home practice use). As such, it seems important for future research to take differences in employees' home context into account. In the same vein, earlier research has suggested the importance of the private life in employees' work decisions (e.g., Greenhaus & Powell, 2012).

Practical implications

The findings of our three studies lead to some practical implications. First of all, our results imply the importance for managers to take into account the harmful effects of pressure for using or not using work-home practices arising from the work context. The results of study 1 show that the informal culture is more important than the formal presence of HR-practices. In particular, the availability of work-home practices can open up the way for employees to volitionally use or not use them, decreasing their work-home conflict. This is in line with earlier studies that have rather consistently linked the availability but not the use of work-home practices with employees' work-home conflict (e.g., Butts et al., 2013). Yet, at the same time, our results show that pressure to use or to not use practices is likely to increase work-home conflict. Thus, irrespective of potential beneficial effects of volitional (non-)use, the occurrence of external pressure may increase work-home conflict. It is therefore utterly important for

organizations to strive for an environment in which employees who want to use work-home practices are allowed to do so, without experiencing opposing pressure from their work environment. In doing so, organizations could help employees to find a fit between their preferred and their enacted use of work-home practices, decreasing their work-to-home and home-to-work conflict. The supervisor probably plays an important role in this respect, since earlier research has clearly and repeatedly shown supervisor support for using work-home practices to affect the effects of these practices (e.g., Batt & Valcour, 2003; Poelmans & Beham, 2008). Attaining a supportive supervisor-subordinate relationship is in line with our findings to avoid pressure from the work environment when aiming for better employee outcomes.

Secondly, organizations should recognize the importance of the employees' home domain, since this domain may affect employees' work decisions (e.g., the use of work-home practices) and the effectiveness thereof. To this end, organizations may consider idiosyncratic employment arrangements (i.e., "i-deals"; Rousseau, 2005) whenever overall work-home policies do not suffice or do not fit with the individual's home context. Research has in general found positive effects of flexibility i-deals on employee performance (Marescaux et al., 2012) and commitment (Las Heras et al., 2017), although these findings were dependent on other factors, such as coworkers' reactions to the i-deal. Thus, idiosyncratic deals could be one means to align employees' contextualized wants and needs and those of the organization. More generally, organizations should be aware of the fact that the home context is more than simply family issues, but also include employees' hobbies, pets, etc.

Thirdly, the findings of study 2 indicate the importance of autonomy (i.e., in our study, employees' ability to interrupt their work and/or home activities) on teleworking days to explain daily work-home conflict. Scholars have highlighted the importance of autonomy for explaining effects of work-home practices on employees' work-home conflict (e.g., Kossek et al., 2006). Since our results indicated that employees made more work-to-home transitions on teleworking days, decreasing their work-to-home conflict on these days, employees' autonomy to make such transitions seems important for decreasing work-to-home conflict. This may indicate the need for organizations to grant employees the autonomy to make work-to-home transitions on teleworking days in order to decrease their daily work-to-home conflict. Yet, our results also showed downsides of this autonomy, since daily work-to-home transitions increased home-to-work conflict. In addition, employees were found to make more home-to-work transitions after hours on teleworking days, which increased their work-to-home conflict. Organizations may benefit from also taking into account these home-to-work conflict

enhancing effects of work-to-home transitions. For instance, organizations may aim to reduce these home-to-work conflict increasing effects by making explicit that employees are allowed make work-to-home transitions on teleworking days. For employees, this might decrease their perception of home-to-work conflict because they then would experience it is 'oke' to make such transitions.

Relatedly, our findings that telework has important daily effects may stimulate organizations to rethink how they evaluate the effects of telework. More specifically, our results show that when only general effects are considered, organizations may wrongly conclude that telework is ineffective. For instance, in our third study, we found no general effect of telework on work engagement and job performance, while we found that on a daily level, teleworkers reported more work engagement and higher job performance on teleworking days compared to office days. So, even though the daily effects may not always materialize in general changes, they are important because they point to a facilitated daily management. As such, understanding the daily impact may help to take more informed implementation and allowance decisions, especially since we know that managers are sometimes reluctant to allow telework since they fear difficulties in the daily management of teleworking employees, jeopardizing their output and/or performance (Poelmans & Beham, 2008).

Finally, organizations may want to be aware of selection effects of telework policies, for which we found indications in study 1 and study 3. Since work-home practices may lower employees' person-level and day-level work-home conflict (study 1, study 2) and stress as well as increase their day-level work engagement and job performance (study 3), managers may aim for making telework policies available for all employees. In this way, they would give employees the possibility to use telework according to their preference for using it (cf. the importance of volition, as discussed above). Being aware of selection effects could help to make managers aware of the risk of only making policies available for those employees already high in specific resources (e.g., autonomy) or skills (Gray & Tudball, 2003), hereby limiting other employees' chances to facilitate combining work with private life. Given the paradox that employees who need work-home policies the most are often not the ones who are granted access to these policies (Glass & Finley, 2002; Gray & Tudball, 2003), organizations may want to be aware of existing biases and consider loosening their criteria for allowing access to work-home policies. This could allow for the potential benefits of these policies to reach more employees.

General limitations and reflections

Despite the contributions and strengths of the studies in this dissertation, it is important to be aware also of the limitations. In this section, we therefore reflect on several of the choices we made and on the limitations that are associated with these choices.

A work-home conflict approach

Throughout this dissertation, we adopted a work-home conflict perspective. That is, in all studies, we examined the relationship between work-home practice use and work-home conflict. The conflict perspective on the work-home interface assumes that employees have a finite amount of resources (e.g., time, energy) available to divide between multiple life domains. According to this perspective, allocating resources to one domain (e.g., the work domain) decreases the amount of resources available to allocate to another domain (e.g., the home domain), which may in turn cause conflict between these domains (e.g., work-to-home conflict). Since the main aim of this dissertation was to understand inconsistencies in the literature on work-home practice use—which has dominantly applied a work-home conflict perspective—we considered it useful to adopt this perspective as well and, thus, use the same lens to our constructs of interest. However, the main drawback of a conflict approach is that it does not take into account the potential *advantages* of allocating resources to multiple life domains (i.e., potential beneficial spillover between domains). Scholars have been starting to acknowledge that participating in multiple roles may sometimes increase individuals' resources (e.g., enhancing one's skills or network) and in that way, participation in one role could facilitate participation and performance in other roles (e.g., Greenhaus & Powell, 2006; Wayne et al., 2007). Scholars have used several terms to refer to this positive interference, including positive spillover (e.g., Grzywacz & Marks, 2000), facilitation (e.g., Wayne et al., 2007), enhancement (e.g., Graves et al., 2007) and enrichment (Carlson et al., 2006).

Therefore, to evaluate whether a specific work arrangement is 'home-friendly', it may not suffice to examine the effect on work-home conflict. After all, according to a positive resource-gain perspective, employees' may experience several beneficial effects on home and work outcomes as a result of successfully combining multiple life roles, such as more work-home enrichment (i.e., the extent to which the participation in one role improves participation in the other role; Greenhaus & Powell, 2006), less stress (McNall et al., 2010), higher work engagement (Siu et al., 2010) and higher job performance (Ode-Dusseau et al., 2012). Whereas such a resource-gain perspective seems irreconcilable with a resource-loss perspective (e.g., a

work-home conflict approach), both types are in line with boundary theory, according to which the occupation of multiple roles and inter-role transitions may induce inter-role conflict through role blurring, but may also facilitate fulfilling multiple role demands by making role transitions when necessary (Ashforth et al., 2000). Since a good work-home balance may constitute something different than a lack of work-home conflict, scholars may want to expand their conflict-focused view and include positive concepts (e.g., work-home enrichment) as well when studying the effectiveness of work-home practice use.

Interestingly, overarching frameworks including both negative (e.g., conflict, interference) and positive (e.g., facilitation, enrichment) approaches (e.g., Chen & Powell, 2012; Grawitch et al., 2010; ten Brummelhuis & Bakker, 2012) to the work-home interface refer to both contextual (e.g., home, work) and internal (i.e. personality, self-regulatory traits, preferences) sources from which resource losses may arise. Accordingly, these sources will determine whether employees' management of work with home will lead to beneficial or detrimental effects. They also refer to the temporality of resources, distinguishing between structural (e.g., skills) and dynamic (e.g., mood) resources. We consider the results of our studies in line with these assumptions: our studies highlighted the relevance of contextual pressure and individual differences that may affect how employees experience their work-home practice use as well as the relevance of the level of analysis when studying the effects of work-home practices on employee outcomes.

Conceptualization of work-home practice use

We advise some caution when comparing the results over our three studies, since we may have studied different policies over the three studies by the nature of our selection criteria of what the work-home practices constituted. In study 1 and study 2, we had little information on whether the work-home policies under study were initiatives designed by organizations to facilitate employees' work-home combination. Since we recruited employees over different organizations and used limited definitions of work-home practices (e.g., working from home at least one day a week), the extent to which the policies under study were specific policies designed to facilitate employees' work-home combination may have differed over studies and participants. In contrast, in study 3, we studied one specific work-home intervention in a company considering this as a work-home initiative. It is likely that in cases that organizations offer practices for reasons not linked at all with facilitating work-home balance (e.g., because of the nature of the work; because of an individually-negotiated exemption for one specific employee), the effects of these practices may be different because these practices are in nature

different from work-home practices. For instance, earlier research has shown that the reason why organizations offer work-home practices may influence their effects on employee outcomes (Nishii et al., 2008).

In addition, since we studied specific work-home practices in this dissertation (i.e., home-based telework in all studies and part-time work in study 1), the results of our studies may not translate to other types of work-home practices. In study 1, we managed to compare two entirely different work-home practices (i.e., telework and part-time work) in the same research designs (i.e., in both a classical survey study and an experimental vignette study) and found similarities but also differences between the effects of volition and perceived external pressure on two types of work-home conflict. These differences may shed light on how characteristics of work-home practices are important for employee outcomes. For instance, our results showed that volition was important to understand the impact of part-time work but did not play a role for telework. Delving deeper into these results could be a starting point for researchers to determine the relevance of work-home practice characteristics when explaining their effectiveness.

Therefore, in the interpretation of our results, it is important to keep in mind the specific characteristics related to telework. Perhaps one important characteristic of telework distinct from other work-home practices is that direct contact with and control of the supervisor and the colleagues. In addition, employees are generally given the opportunity to adopt flexible start and end times for their work. Hence, translation of our results to other work-home practices is difficult and deserves some caution. A benefit of this focus on telework however is that our findings may not only provide insights on the effectiveness of the specific work-home practice of telework, but may provide insights on the effects of specific working characteristics (e.g., the increase of autonomy; flexible start and end times) of new ways of working. For instance, our findings indicate that the lack of close daily supervision when allowing employees to work remotely did not harm employee performance while allowing for beneficial effects on work-home conflict and stress. These insights could, for instance, be useful to increase employee autonomy and reduce close monitoring also for employees who are not able (e.g., because of the nature of the work) or wanting to work remotely.

Gender issues

We did not apply a gender lens in any of our studies. Whereas we controlled for gender in all of our analyses, we did not link our rationale more broadly to gender issues, which have been shown to be important in work-home studies (Bianchi & Milkie, 2010; Schieman &

Glavin, 2008; Moen, 2011; Padavic, Ely & Reid, 2019). Moreover, in study 1 and study 2, our samples predominantly consisted of women (59.4%, 63% and 65% in the three samples over the two studies), whereas in study 3, there was a reversed man/women ratio compared to these studies with a sample consisting for 75.6% out of men. These percentages indicate that a comparison of the results over our studies needs some caution but also suggest that gender issues may indeed be at stake since mostly women were willing to participate in our work-home research.

Researchers may want to consider that women are at a greater risk of ‘getting behind’ since they are more inclined to use work-home practices (Padavic et al., 2019). Specifically, by offering work-home practices, companies may worsen the gap between users—increasing their time away from the office, decreasing their working hours and demanding them to tackle role demands from work and home simultaneously—and non-users of practices—increasing their time at the office, increasing their working hours and enabling them to transfer home role demands to their partner (Padavic et al., 2019). Research confirms that work-home flexibility can worsen women’s positions in senior levels at work, further maintaining men’s dominant presence there (Moen, 2011; Padavic et al., 2019). However, work-home flexibility can also increase *men’s* work-home conflict since men may have trouble aligning a family-oriented work-family identity with their conduct of work because of existing work-oriented gender norms (Meeussen, Van Laar & Verbruggen, 2018; Padavic et al., 2019). This challenges the assumption that it is only the malalignment of *women’s* preferences with their possibilities for moving up the corporate ladder and indicate problems for men as well to reach a fit between preferred and actual working conditions. Accordingly, recent research failed to find a difference in experienced work-home conflict between men and women (Shockley et al., 2017), however, some differences were found when including dual-earner status, type of work-home conflict, parental status and job type. All in all, we cannot exclude the possibility that the main explanatory variables we used throughout our person-level analyses are in nature linked with gender and, therefore, the lack of the inclusion of gender issues in these studies may lead to important gaps in the interpretation of their results. Since we person-centered our daily variables in the within-person analyses in study 2 and study 3, results of these analyses can be interpreted with less caution to gender issues since they are robust for the stable within-person variable gender (i.e., our daily effects could not alternatively be explained by gender).

Using gender-stratified samples could be one way to exclude a method fallacy as an explanation for the female samples in study 1 and study 2 and to further study how gender is

intertwined with preferences and normative pressure for work-home practices. Since results of study 1 and study 2 showed the important role of perceived pressure for work-home practices, gender may need a more central role in work-home practice research because of gendered normative pressure (Meeussen et al., 2018; Meeussen et al., 2016; Moen, 2011). Relatedly, researchers may include issues of gender in future research questions concerning the link between gender, volition and perceived pressure.

However, one could ask to which extent it is desirable to look for “a universal figure, who represents anyone and everyone” (Acker, 1992, p. 259), or, in other words, to aim for studying a (non-existent) gender-neutral reality. In her seminal paper on gendering in organizational theory, Acker (1992) emphasizes that employees have other interests and duties than their work alone and, hence, are not capable of behaving purely rational or predictable. Therefore, it may be fruitful to get away from gender-neutral thought when there is no gender-neutral reality, and to track down causes above fixing consequences of ‘gendered’ theorizing (Acker, 1992). Applying this to our studies on the effectiveness of work-home practices, employees cannot be seen outside their context (i.e., home or work environment) or loose from their own interests (i.e., their preferences for using practices or their segmentation preferences). If gendered external pressure or individual differences constitute reality, researchers may want to think about antecedents of these issues and approach potential solutions via the causes of these gender differences rather than via fixes of these differences through studying the ‘gender-neutral’, universal employee through merely controlling for gender when aiming to explain the effects of work-home practices on employee outcomes.

Focus on employee wellbeing

Throughout this dissertation, we predominantly used an employee wellbeing perspective. Whereas in study 3 we did include work engagement and job performance—two constructs directly relevant for organizations—we did not include such measures in study 1 and study 2. Moreover, we only used self-reports of these measures in study 3, which may decrease their organizational relevance. Earlier research on the relationship between work-home practices and performance has highlighted the need for objective performance measures when studying effects of work-home practices on employee or firm performance (e.g., Beauregard & Henry, 2009; Kelly et al., 2008).

Still, we believe that understanding the effects of work-home practices on employee wellbeing is important for companies since employee wellbeing is key for a well-performing

and sustainable workforce (De Vos & Van der Heijden, 2017; Kossek, Valcour & Lirio, 2014; Moen, 2011; Taris & Schreurs, 2009). First, work-home practices may increase employee and/or organizational performance, either through decreasing work-home conflict (Demerouti, Bakker, & Voydanoff, 2010; Kelly et al., 2008; Kossek et al., 2014)—the key outcome variable throughout our studies—or through other mechanisms, such as social exchange processes, increased cost savings and reduced turnover (Beauregard & Henry, 2009). Organizations that wish to attract and retain a large pool of highly skilled employees and want to keep their resources (i.e., the employees and the organizational culture in which these employees thrive), will have to compete for these resources (Fleetwood, 2007; Guest, 2017). Second, employee wellbeing may increase employee performance. Scholars in the field of strategic HRM—which focusses on the improvement of business performance through differentiation from competitors, for instance through HR practices (Boselie, 2010; Purcell, 1999)—have acknowledged the inclusion of employee wellbeing into the HR practices-performance debate because of a possible ‘mutual gains’ perspective between employee and organization. In particular, employee happiness and relationship wellbeing has been found to positively relate with performance (Van de Voorde et al., 2012). Relatedly, scholars have argued to shift from an ‘added-value’ approach (i.e. what is the added value to organizational performance?) to a ‘value-laden’ approach (i.e. what is the impact on employee wellbeing?) since employee and organization benefits may not be so distinct from each other (Paauwe, 2009). Hence, organizations may use work-home practices to align employee wellbeing and organizational performance (Guest, 2002; Paauwe, 2006). Third and last, researchers and practitioners may want to assess critically the prior focus on business performance and the potential conflict between business objectives and employee health. In the field of sustainable HRM—which focusses on “human resource strategies and practices intended to enable organizational goal achievement while simultaneously reproducing the human resource base over a long-lasting calendar time” (Ehnert, 2009, p. 74)—scholars have urged to shift from a focus on strategy (i.e., improving business performance through HR practices; Boselie, 2010) to a focus on added value through bridging business objectives with employee wellbeing and societal objectives (De Prins et al., 2014). Accordingly, including the individual and society in HRM is necessary for organizations to maintain long-term survival and a sustainable position (De Prins et al., 2014). Also work-home scholars have argued that increasing employee wellbeing is critical for long-term workforce effectiveness and will help organizations to build a sustainable workforce (Kossek et al., 2014). Future perspectives may aim for bridging multiple stakeholders in new business climates rather than maximizing business performance in existing business contexts.

Yet, the main limitation of our employee wellbeing focus remains that it does not take potential conflicts of interest between employee and organization into account. In particular, decisions to allow employees access to work-home practices often converge into one decision: that of the manager (Poelmans & Beham, 2008). While our results recommend to not pressure employees for using or not using practices and to grant them enough autonomy (e.g., to make work-home role transitions), these recommendations did not address tensions between employees and their managers, which are likely to exist (Putnam et al., 2014). Managers often find themselves in pressured environments since their output is often closely monitored and directly dependent on the output of their subordinate employees. Therefore, they are often reluctant to potentially endanger business objectives by granting employees more flexibility and/or autonomy. Indeed, managers who perceive a threat for performance if they would allow for use of work-home practices are less likely to do so (Poelmans & Beham, 2008). For instance, they are more likely to allow work-home practices to employees whom they consider to possess good self-management skills. In addition, they are less likely to grant access to employees in interdependent teams since the performance of the team may be disrupted when employees use certain work-home practices (e.g., when they work remotely, when they start working part-time). On the other hand, if managers are highly dependent on an employee (e.g., a high-performing employee who is hard to replace), they may more easily allow access since allowance for work-home practice use may increase the likelihood of keeping this employee (Beauregard & Henry, 2009). These two paths, referred to as disruption and dependency paths (Lembrechts et al., 2018), show the opposite impact of team interdependency on managers' allowance decisions and both depend on managers' perceived threat to performance. Relatedly, the manager-employee relationship is critical in the allowance process of work-home practices (Poelmans & Beham, 2008) with a high-quality relationship and higher trust in the employee increasing the likelihood of positive allowance decisions (Lembrechts et al., 2016).

It thus seems that irrespective of potential benefits for employee outcomes, the allowance of work-home practice use is mostly dependent on managers' expectation of potential threat for—or contribution to—employees' performance. Hence, it is important that in the specific case of telework or part-time work, having employees to work remotely or part-time poses challenges for managers to manage the functioning and the output of their team. Also knowledge sharing, making sure that all employees are up to date and/or fluently managing the organization of meetings is challenging when employees work remotely or part-time (Lembrechts et al., 2016; Poelmans & Beham, 2008; Powell & Mainiero, 2010). Whereas our

dissertation did not include this manager perspective, our results indicate that it may be fruitful for managers to allow for work-home practices within the boundaries of what they consider possible. On the one hand, managers can be aware that they are limited to allow work-home practices to all employees because they need a trusting relationship with employees to whom they grant more autonomy. On the other hand, our results show that once trustworthy and/or high-performing employees are given access to work-home practices, these practices are likely to positively affect employees' work-home conflict and stress without penalizing their engagement or performance. Remarkably, previous research has pinpointed an 'autonomy-control paradox' of work-home practices. Specifically, increasing employee freedom and autonomy—for instance, through offering work-home practices—may paradoxically lead to employees who work more intensively and feel more controlled and constrained by their work (Putnam et al., 2013). This may indicate that work-home practices, although designed to—or at least, believed to—facilitate employees' work-home combination, may on the contrary increase working hours since access to practices is only granted if performance is not jeopardized.

Therefore, another limitation of our employee wellbeing focus is that organizations often have goals other than improving employee wellbeing when offering work-home practices, such as increasing performance (Putnam et al., 2013). Other reasons include saving desk space (Felstead, Jewson & Walters, 2005) through offering home-based telework, or saving personnel costs or preventing downsizing (Feldman, 1990; Kalleberg, 2000) through offering part-time work. It is therefore fruitful for researchers to (re)consider the core assumption that work-home practices are there to benefice employees. Surely, organizations aim for better employee outcomes and are willing to adopt an employee perspective, as long as this perspective does not conflict with the business objectives. Earlier conceptions of work-home practices as either 'employee-friendly' or 'employer-friendly'—depending on for whose interest practices are really designed—indicate this tension (e.g., Fleetwood et al., 2007; Lewis et al., 2007). Overall, it seems that work-home practices are there to respond to employee needs as long as these needs do not conflict with their business objectives. Researchers need to be aware of the shakiness of the assumption of the 'employee-friendliness' of work-home practices and of implementation tensions between employee and organization. Future research may therefore benefit from shifting from a strategy focus to a sustainability focus, since businesses may develop further in balanced business environments taking into account multiple stakeholders: the organization, the employee, and society as a whole (De Prins et al., 2014).

Suggestions for future research

Finally, the results of this dissertation shed light on some interesting avenues for future research. First of all, we found employees' psychological experience of work-home practices—i.e., volition and perceived pressure—to be important for understanding the impact of these practices. Future research may want to further explore the relevance of these and other facets of these psychological experiences. In this respect, it could be interesting to examine the role of self-regulatory processes (Allen et al., 2003; Allen et al., 2014; Smit et al., 2016). It may for instance be relevant to examine whether and how the use of a specific work-home practice may affect individuals' self-regulatory resources and whether this can help to explain the impact of that practice. In general, employees are expected to have a finite amount of self-regulatory resources available and using specific boundary management tactics—such as, making a lot of boundary role transitions as in the case of telework—may consume these resources (Smit et al., 2016; Muraven & Baumeister, 2000). A too large drain on these resources leads to self-regulatory depletion, which is known to have detrimental effects on several employee outcomes such as wellbeing and performance (McCrae & Löckenhoff, 2010; Smit, 2016). However, work-home practices may also aid employees to replenish their self-regulatory resources if these practices help them to successfully fulfill their work (/home) tasks. Employees who are effective in preserving their self-regulatory resources are more likely to successfully self-regulate their behavior and emotions, increasing the likelihood of attaining work and home goals (Smit., 2016). This ability for successful self-regulation may strongly depend on individuals' personalities (McCrae & Löckenhoff, 2010), since different personality types are linked with different behavioral and mood strategies for pursuing work goals. In addition, personality has been found to moderate the impact of individuals' self-regulatory depletion on their behaviors. Personality has also been found to moderate the relationship between social support and work-home conflict (Selvarajan et al., 2016), which could explain differences in preferences for using work-home practices. As such, personality may affect employees' psychological experiences related to work-home practice use and, thus, future research may benefit from including personality and psychological experiences when examining the effectiveness of work-home practice use.

For future research, it might also be interesting to study whether employees' volition and perceived external pressure—and their broader psychological experience—related to work-home practice use are stable or dependent from day to day and in that way affect *daily* work-home conflict. Observations in study 2 and study 3 showed that employees who are allowed to

telework often do not use available practices every day or week and that those not allowed to telework do ‘craft’ their jobs (i.e., in study 3, we found that some employees in the control group did work from home some days, for instance when one of their kids was ill). This may indicate daily-dependent preferences of employees to use work-home practices such as home-based telework. Relatedly, in addition to including employees’ preference for certain behaviors (i.e., for using or not using specific work-home practices, or for making boundary role transitions), it may also be important to take into account the importance of that behavior or life sphere for that employee.

Relatedly, future researchers may want to study the difference between employee preferences and perceived pressure. In our research, we considered individual preferences distinct from perceived external pressure. By distinguishing between volition (i.e., the fit between an individual’s preference and his/her behavior) and perceived pressure related with work-home practice use, we aimed to emphasize clearly the role of the (potential) difference between employees’ wants and obligations. Some studies on work-home issues did already mention preference concepts, yet they did not specifically distinguish preferences from pressure. In line with suggestions of previous scholars (Kossek & Ruderman, 2012), we argued that demands that are either internalized (i.e., considering something important) or intrinsic (i.e., considering something interesting) function as preferences. According to self-determination theory (Deci & Ryan, 2000), both internalized and intrinsic preferences may lead individuals to attain basic needs, increasing wellbeing and performance. However, potential differences between internalized and intrinsic preferences could be an interesting venue for researchers to study. Relatedly, just as there are situations in which individual preferences and external pressure may be difficult to distinguish from each other, there are also situations in which both are entirely different. For instance, earlier research has found that employees with an integration preference did not experience harmful effects of off-work smartphone use—unless they experienced high integration norms in their organization (Gadeyne et al., 2018). So, even in cases where behavior fits with preference, the impact of this behavior may still be negative when individuals experience pressure to act that way. So, pressure may externalize the motivation for a certain behavior, even if this behavior fits an individual’s preference.

In addition, future research on daily effects of telework on employee outcomes may benefit from considering mediators other than work-home boundary role transitions. Since we found telework to affect daily stress, work engagement and job performance—outcomes more distal to the daily work/home interface—these effects may be caused by other mechanisms than work-

home transitions. For example, increases in daily physical activity or a healthier work environment—with breaks chosen freely, increasing recovery experiences (Sonnentag et al., 2010; Windeler et al., 2017)—may mediate positive effects of teleworking days on employee outcomes. Also colleague interruptions—a commonly cited demand (Jett & George, 2003)—may function as an interesting mediator for future study since these interruptions are less likely to be present on teleworking days (Mann & Holdsworth, 2003). Earlier research has shown that working from home helps employees to deal with social exhaustion resulting from colleague interruptions (Windeler et al., 2017). Finally, increased focus may mediate effects of telework on daily work engagement and job performance. Among the most common reasons employees give for teleworking are the wish to work more productively and get more work done on these days (Allen et al., 2015; Anderson & Kelliher, 2009). Processes of focus—perhaps intertwined with mechanisms of increased daily activity, increased recovery experiences and less colleague interruptions—may be another mechanism by which teleworking days increase daily work engagement (ten Brummelhuis et al., 2012) and daily job performance (Vega et al., 2015).

More broadly, we encourage researchers in the work-home domain to continue to apply a broad perspective to the home domain, as we did in this study. This broad focus is in line with the recent shift in work-home research from a focus on ‘work-family’ to a focus on ‘work-home’ (or ‘work-non work’) in order to capture a broader area of employees’ personal lives than their children or their other (human) family members (Kossek, 2016). A focus on employees’ *family* lives can of course be relevant in specific cases, for instance when scholars are mainly interested in the effects of family matters or when they are mainly concerned with facilitating employees’ caring responsibilities for their spouse, children and/or parents. However, in many instances, it may be relevant to apply a broader focus and consider also other activities, such as employees’ hobbies, and other care-dependents, such as their pets. In particular, from studies on the human-animal bond in the field of anthrozoology (i.e., human-animal interaction studies), it is widely known that many individuals consider their pets as important family members (Barker, 2005; Walsh, 2009). In addition, the new labor market generation of millennials surpasses baby boomers as the largest pet owning generation and will make up for approximately half of the workforce by 2020. Translating this to work-home research, a new area lies open for the study of ‘pet-friendly’ practices or ‘work-pet’ practices. Currently, research on the inclusion of employees’ pet care responsibilities is emerging and is starting to explore, for instance, the use of telework to facilitate employees’ pet care or the practice of bringing pet dogs to the workplace (Barker et al., 2012; Cunha et al., 2018; Wilkin

et al., 2016). In addition, given the broad array of personal life matters that may affect employees' individual preferences and perceived (private) pressure—which seem crucial when studying work-home practices—we encourage researchers to extend objective measures capturing employees' private life aspects (e.g., amount of children, commuting time, presence of dependent care elderly) with subjective measures of employees' psychological experiences. Irrespective of which facets affect employees' preferences and pressure, using such employee-centered measures may help scholars to take into account the employee perspective and his or her private life context.

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*The library is dangerous—
Don't go in. If you do*

*You know what will happen.
It's like a pet store or a bakery—*

*Every single time you'll come out of there
Holding something in your arms.*

*Those novels with their big eyes.
And those no-nonsense, all muscle*

*Greyhounds and Dobermans,
All non-fiction and business,*

*Cuddly when they're young,
But then the first page is turned.*

*The doughnut scent of it all, knowledge,
The aroma of coffee being made*

*In all those books, something for everyone,
The deli offerings of civilization itself.*

*The library is the book of books,
Its concrete and wood and glass covers*

*Keeping within them the very big,
Very long story of everything.*

*The library is dangerous, full
Of answers. If you go inside,*

*You may not come out
The same person who went in.*

— *Don't Go Into the Library*

Alberto Ríos, 1952