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Adjustment to Remote Work During COVID-19

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Adjustment to Remote Work During COVID-19

A Thesis

Presented in

Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

By

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September 2021

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College of Science and Health

DePaul University

Chicago, Illinois

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Acknowledgements

I would like to acknowledge my thesis committee for their continued support and feedback throughout the development of this thesis. Thank you to Dr. Jane Halpert for your oversight and guidance on the conceptual development of the ideas expressed in this thesis. Thank you to Dr. Alyssa Westring for the special opportunity to get involved in an ongoing data collection initiative, focused on furthering our understanding of the unique challenges faced by workers during this unprecedented pandemic period. Thank you as well to Dr. Shelly Rauvola, particularly for your feedback and guidance on the data analysis portion of this thesis.

Furthermore, I would like to thank those in my personal life who have contributed to my academic accomplishments. First, both of my parents, for their unwavering support and encouragement. I am also grateful to my girlfriend, for her compassion and patience during my academic pursuits. Finally, I would like to acknowledge my former research mentors whom I worked under at the University of Colorado Boulder and who I would not be here without, including Dr. Akira Miyake and Dr. Joshua Correll.

Biography

Nicholas Carruth was born in Burlington, Vermont on March 10, 1990. After graduating from Burlington High School, he went on to attend the University of Colorado Boulder where he studied general psychology and graduated with a Bachelor of Arts degree in May of 2012. He then went on to obtain a full-time job working as a Professional Research Assistant in social and cognitive psychology, publishing on topics such as self-control, learning, memory, and motivation.

Wanting to root his theoretical interests in more applied contexts, he applied to DePaul University's Industrial / Organizational psychology PhD program in 2018. At the time of this thesis, he is between his second and third year of graduate study, where he has researched topics such as workplace discrimination, emotional job demands in the workplace, and team dynamics with a specialization in quantitative methodology. He has worked in applied contexts at Amazon and more recently at Underwriters Laboratories, where he is responsible for building out people analytics systems and predictive capabilities.

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Abstract

In this study, several candidate antecedents to job satisfaction and subjective well-being were tested in a sample of remote workers during the COVID-19 pandemic. Participants (N = 126) responded to an online survey. Drawing from boundary and person-environment fit theories, the effect of segmentation preferences on these outcomes was tested. Psychological detachment, work-family conflict, and family-work conflict were proposed as distinct candidate mediators in these relationships. Additionally, organizational segmentation culture, trait mindfulness, job demand, and household size were evaluated as potential moderators of these indirect effects. Results largely do not support these moderated-mediation hypotheses. However, segmentation preferences were found to be a generally robust predictor for workers' adjustments and experiences working remotely. Exploratory analyses revealed several key barriers and challenges when working from home. Several other variables emerged as potentially important antecedents to remote workers' job satisfaction and well-being, suggesting directions for future research.

Keywords: boundary theory, remote work, COVID-19, job satisfaction, well-being, work-family conflict, mindfulness, psychological detachment

Introduction

The COVID-19 Pandemic and Work

In the early stages of the COVID-19 pandemic, it was unclear what the immediate and long-term implications for organizations would be. At a broader level, scientific and political uncertainties produced a precarious and unpredictable environment, creating challenges for organizations that faced decisions related to worker safety. However, as the virus as well as our scientific understanding of its risk disseminated through society, a number of clear implications and patterns became apparent. Eighteen months into the pandemic, these implications are still developing, and we are beginning to see that some of them may not only represent temporary changes, but instead permanent and global transformations of the workplace.

First, there exist industries that are critical to the continued stability of society to such an extent that workers have had to continue their jobs with minimal changes in the nature of their work. These "essential workers" as they have become referred to (e.g., healthcare workers, mail couriers, transportation drivers) have had to continue work per usual, as their professions are not only critical to a functioning society but are also "hands on" in nature. These workers have faced a plethora of their own challenges such as having to wear personal protective equipment (PPE) and often having to decide between putting themselves and their families at risk or losing their jobs altogether. Furthermore, early research (e.g., Spoorthy et al., 2020; Williamson et al., 2020) has indicated that many essential workers (e.g., health-care workers) are facing threats to their mental health such as "moral injury": the profound psychological distress which results from actions, or the lack of them, which violate one's moral or ethical code (Litz et al., 2009).

Perhaps the most poignant examples of this have been scenarios where health care workers have had to make decisions about prioritizing the treatment of one patient over another as a consequence of shortages in available resources.

A second widespread implication of the pandemic—arguably as ubiquitous as the first—has been the transition from working in an office to working remotely or from home. Organizations have had to make sudden and unexpected transitions, shifting entire workforces into work-from-home scenarios in order to protect their workers from the spread of the virus. Gallup reports have shown that as of May, 2021 around 51% of the entire US workforce was working entirely from home, with 72% of those in white-collar positions working from home (Saad & Jones, 2021). Furthermore, Brynjolfsson et al. (2020) found that the percentage of individuals who have transitioned into remote working can be predicted by the incidence of COVID-19 in the respective geographic location, providing some evidence alluding to the causal impact of COVID-19.

In some sense these remote workers are among the most fortunate, as essential workers have had to face unprecedented risks to their health, and unemployment rose to a record-breaking 14.8% in April 2020 (Falk, 2020), although it has dropped since to around 6% (U.S. Bureau of Labor Statistics, 2021). While the importance of scientifically studying implications for the latter two categories should not be understated, the transition into remote work has been enormous in scale, and it has led to a variety of new challenges and questions related to the future of work. A recent article from Rudolph et al. (2020) that discusses the implications of the pandemic for Industrial / Organizational Psychology research raises a number of these possible issues. For example, what are some of the contextual factors that are associated with key outcomes for remote workers,

and how might remote work create challenges related to work-family conflict and difficulty detaching from work (Rudolph et al., 2020)? Another relevant question is if findings from prior research generalize to when workers are at home, in the midst of a pandemic? While one can make reasonable assumptions as to what some of these challenges might be, we are in urgent need of data that can address these concerns and identify the fundamental challenges that may be critical to maintaining a healthy and effective workforce.

How Remote Work is Different Now

Research related to working from home is not novel; in fact, the term "telecommuting" was coined in 1975 referring primarily to workers who could perform their work from decentralized locations over telephone lines, for example (Nilles, 1975). Since then, and as technological capabilities have advanced, a growing proportion of organizations have opted to allow their employees to work remotely either on occasion or on a full-time basis. As of 2019 an estimated 50% of the US workforce were able to work from home, at least on occasion (Song & Gao, 2019). The justification for allowing employees to work remotely often stems from the supposed benefits associated with working from home such as increased job satisfaction, improved family dynamics, and reduced costs for office space, though downsides to remote work have also been demonstrated (e.g., Anderson et al., 2015; Gajendran & Harrison, 2007; Golden et al., 2006). However, there are several key reasons why the nature of remote work at this moment in time differs from that of prior research.

First and foremost, the overwhelming majority of prior research on remote work has, by nature, focused on organizations that have *willingly* implemented work-from-

home policies. In other words, organizations who *can* allow workers to work from home and wish to do so have done so. In contrast, the COVID-19 pandemic has threatened the physical well-being of individuals around the world—particularly in the US, which has led the world in sheer number of cases (Johns Hopkins University, November 2020)—creating a climate of urgency where organizations have been forced into transitioning workers into remote roles. Furthermore, many of these workers (e.g., teachers) have had very little prior experience working from home, while others may have preferred not to work from home but were still forced into such arrangements (Kramer & Kramer, 2020). This difference between the nature of remote work before and during COVID-19 is critical for understanding the experiences of the current workforce in the United States. For example, during the pandemic organizations may have been inadequately prepared to transition workers into remote contexts. Resources such as web-based management systems, virtual conferencing capabilities, and online channels of communication may not have been in place, leading to impacts on quality and efficiency of work. On the employee side, workers have suddenly had to spend their working hours at home, dealing with potential new challenges related to family dynamics, available technology, and physical workspaces. While these are only a handful of the possible challenges of remote work during COVID-19, they highlight the question of whether or not prior research may generalize to present-day scenarios.

Another novelty in remote work during the present time has to do with broader challenges related to dealing with a pandemic. While there have been clear economic, political, and societal impacts, mental health challenges have also been rising. In fact, about 53% of adults in the United States reported that their mental health has been

negatively impacted due to the pandemic (Panchal & Kamal, 2020). This same research reported that 36% reported difficulty sleeping, 12% reported worsening chronic conditions, and 12% reported increases in alcohol consumption or substance use as a consequence of worry and stress due to the pandemic. This raises questions regarding potential interactions between these issues and work life. For example, to what extent are work-from-home dynamics related to overall well-being? More specifically, are problematic family dynamics caused by workers being forced to work from home associated with reductions in job satisfaction or well-being in general? Given the unique circumstantial characteristics of remote work described thus far, it seems that questions such as these warrant particularly close attention at this time.

The Benefits and Challenges of Remote Work in General

Work and Personal-Life Segmentation

One plausibly relevant construct for studying remote-work issues stems from boundary theory. Boundary theory deals with the ways in which individuals construct or maintain boundaries between different domains in their lives (Ashforth et al., 2000). Boundary theory also posits that individuals differ in the extent to which they prefer segmentation between domains, or "segmentation preferences," a concept that has been applied towards understanding work and personal life dynamics. Initial work from Edwards and Rothbard (1999) demonstrated that individuals vary in their preferences for segmentation; that is, the extent to which they prefer to keep work separate from personal or home life (individuals may either be "segmenters," "integrators," or somewhere in between). Some research has demonstrated that those who prefer segmentation (as opposed to integration) experience more desirable work-related outcomes (Derks et al.,

2016; Kreiner, 2006; Park et al., 2011). However, Kreiner (2006) demonstrated that "segmentation supplies"—the extent to which organizations *allow* for segmentation between work and personal life—is a key matching component for segmentation preferences. Incorporating the theoretical perspective of person-environment fit (P-E fit), Kreiner (2006) proposed that the *alignment* between segmentation preferences and segmentation supplies is critical in understanding outcomes such as work-family conflict, stress, and job satisfaction. More specifically, Kreiner (2006) found that as segmentation supplies became more aligned with segmentation preferences, participants reported less work-family conflict, stress, and greater job satisfaction (although it should be noted that the effects were less straightforward when segmentation supplies differed from or exceeded segmentation preferences). Importantly, a crucial implication of this research is that it may be the alignment between preferences and supplies that matters when it comes to predicting desirable work outcomes.

Further research found similar patterns as Kreiner (2006) after supplanting the segmentation supplies construct with "segmentation culture," or the extent to which the employees of a particular workplace behave with a segmented work style (e.g., Foucreault et al., 2018; Park et al., 2011). The distinction here is a matter of the extent to which an organization *allows* for segmentation (supplies) vs. the extent to which an organization's employees *behave* in segmented ways (culture), though both may be similar in the extent to which they relate to various outcomes. Given recent trends of researchers focusing on culture (e.g., Foucreault et al., 2018; Park et al., 2011), as well as a need for parsimony, only segmentation culture will be considered in the present research. Furthermore, the extent to which employees in an organization *behave* in

segmented ways is likely to be a stronger predictor of key outcomes than the extent to which employees perceive that their organization will *allow* for segmentation. For example, it is possible that although an organization may allow for segmentation, its employees behave in highly integrated ways. Since employees are likely to be influenced by their co-worker's behaviors, culture may play a bigger role in such a case than perceived supplies (e.g., Park et al., 2011).

Although the idea that the alignment between segmentation preferences and culture is crucial has become popular, acknowledging alignment alone may be too simplistic. For example, might it be that segmentation preferences alone predict important work-related outcomes, but to a greater or lesser extent depending on the segmentation culture? Could alignment between segmentation preferences and culture matter more for certain outcomes, or matter more for segmenters vs. integrators? Could there be other contextual variables upon which the predictive ability of segmentation preferences depends? This is one way in which the present research attempts to extend boundary theory research; to dig deeper into the ways in which preferences and culture might matter for remote workers.

Indeed, some recent research has tested more complex relationships between segmentation preferences and work-related outcomes. For example, Foucreault et al. (2018) found that psychological detachment (the ability to disengage from work; Sonnentag & Fritz, 2007) mediated the relationship between segmentation preferences and emotional exhaustion. Furthermore, the positive relationship between segmentation preferences and psychological detachment was stronger when segmentation culture was high (the organizational members also preferred segmentation). They also found a

surprising positive simple relationship between segmentation preferences and emotional exhaustion, such that those who preferred more segmentation also reported greater emotional exhaustion. Prior research has also found that segmentation preferences are positively associated with psychological detachment (e.g., Park et al., 2011), while evidence for a clear simple relationship between segmentation preferences and work-related outcomes such as well-being has been more conflicting. The present research will test several different potential indirect effects between segmentation preferences and work-related outcomes that may help to further specify how segmentation preferences play a role in understanding important work-related outcomes.

Work–Family Dynamics

Up until this point in this paper, conflict that arises due to tension between one's work and family has been broadly referred to as work-family conflict. Indeed, most of the research cited thus far has treated work-family conflict as a single construct. However, a clear distinction made in some of the literature on work and family dynamics is the difference between work-family and family-work conflict (WFC and FWC, respectively). WFC occurs when work negatively interferes with family (e.g., a worker has too little time to spend with their family), and family-work conflict (FWC) occurs when family negatively interferes with work (e.g., a worker has to miss work because of a sick child) (Gutek et al., 1991). Research on whether remote work has beneficial or harmful effects on WFC and FWC has been somewhat equivocal. Some research has shown that remote work is associated with increased levels of both types of conflict (e.g., Eddleston & Mulki, 2017; Higgins et al., 2014). Other research has shown that remote work is

associated with less family and work conflict in general (e.g., Gajendran & Harrison, 2007), though the researchers did not distinguish between WFC and FWC.

Other research on work and family dynamics with remote workers has demonstrated differential effects between the two that are dependent on contextual moderators. For example, Golden et al. (2006) found that remote work was associated with greater FWC, particularly when household sizes were larger. They also found that remote work was associated with *less* WFC conflict, particularly when perceived job autonomy was high. These effects make sense conceptually; when working from home, workers might have an easier time allocating attention to their families (e.g., time previously spent on commuting can be allocated towards family), therefore reducing WFC. When job autonomy is high (i.e., workers have the ability to dictate their own work schedules), this relationship may be stronger, since workers can attend to their families as needed. Furthermore, when working from home, workers may become distracted by their families when trying to complete work, leading to increased FWC, and the larger the size of the family the more likelihood there is for this to occur.

It is also possible that segmentation preferences relate to the extent to which workers experience WFC or FWC. In prior research, this has most clearly been demonstrated with WFC. For example, both Derks et al. (2016) and Yang et al. (2019) found significant negative correlations between segmentation preferences and WFC such that those who preferred more segmentation experienced less WFC. In contrast to these findings, Rudolph et al. (2020) suggested that remote workers during the pandemic who prefer segmentation might also experience *more* work-family conflict, since they might not be equipped for dealing with the overlap between work and family that occurs when

working from home (though the authors did not distinguish between WFC and FWC). Unfortunately, prior research on segmentation preferences has rarely examined its effects on FWC, leaving the nature of this relationship to be discovered. For the purposes of the present research, I will adapt a similar approach of conceptualizing work and family dynamics, treating WFC and FWC as distinct outcomes of interest, but with a sample of only remote workers (i.e., without being able to compare remote and non-remote workers). More specifically, constructs such as segmentation preferences between work and home life will be used to predict the extent to which workers experience WFC and FWC. Furthermore, WFC and FWC will be examined as potential mediators in the relationship between segmentation preferences and work-related outcomes such as job satisfaction and well-being.

Psychological Detachment

One challenge that remote workers often report experiencing, at least in anecdotal ways, is an inability to "shut work down" when it is time to stop working for the day. Indeed, Keilliher and Anderson (2010) showed that remote work can lead to a phenomenon known as "work intensification," such that employees who transition to remote working contexts report exerting more effort and devoting more hours to work (as compared to when they worked in the office). The ability to disengage from work mentally and to be unoccupied by work-related duties is known as "psychological detachment" (Sonnentag & Fritz, 2007). Theoretically, in a remote working context, psychological detachment may be plausibly viewed as either an independent variable, moderator, mediator, or an outcome. For example, it might be reasonable to assume that a stronger ability to detach from work will be associated with greater well-being, since

workers who can detach from work may avoid work intensification and problematic spillover into personal life. Alternatively, one could argue that psychological detachment might be an important *outcome* related to constructs such as segmentation preferences (e.g., Foucreault et al., 2018; Park et al., 2011). Considering both of these possibilities, the present research posits that psychological detachment might mediate the relationship between segmentation preferences and work-related outcomes.

Trait Mindfulness

One understudied, yet plausible individual difference that may relate to psychological detachment is trait mindfulness, or "the tendency to be highly aware of one's internal and external experiences in the context of an accepting, non-judgmental stance toward those experiences" (Cardaciotto et al., 2008, p. 205). In one sense, psychologically detaching from work may be conceptualized as a self-regulatory behavior that requires an awareness of the present moment in order to both remember and disengage the mind from work-related thoughts. Hulsheger et al. (2014) found that mindfulness was related to sleep quality and that this relationship was mediated by psychological detachment. Howell et al. (2010) found that mindfulness predicted well-being, directly and indirectly through the self-regulation of sleep. Although these results do not necessarily paint a clear picture of the role of mindfulness in psychological detachment and well-being, they do demonstrate clear associations. Furthermore, given that trait mindfulness has been shown to predict positive outcomes such as worker well-being (e.g., Brown & Ryan, 2003), a reasonable question to ask is how trait mindfulness might be involved in some of the questions outlined in the present research thus far. Perhaps segmentation preferences relate to psychological detachment, but the relationship

is particularly strong for those who are high in trait mindfulness, due to their ability to disengage the mind from work. In the stressful and novel remote-working conditions that workers are facing at the present time, understanding the role of trait mindfulness may be particularly beneficial.

Hypotheses

The hypotheses for the present research are structured conceptually within three moderated-mediation models (see figures below). Relationships within these models are treated as distinct hypotheses. Therefore, although results may not support the models in their entirety (e.g., significant interaction effects with each proposed moderator), individual and bivariate relationships are of equal interest. Furthermore, although many of the hypotheses are extrapolated from prior research, one overarching question is whether the nature of these previously established relationships will generalize to remote workers during the COVID-19 pandemic. The models are centered around the relationship between segmentation preferences and the outcomes of job satisfaction and well-being. However, due to the equivocal nature of prior research examining these relationships, directionality in these bivariate relationships is not hypothesized. Rather, specific indirect effects between segmentation preferences and these outcomes are hypothesized.

The first hypothesis tests the possibility that there is an indirect effect of segmentation preferences on job satisfaction and well-being through psychological detachment. There are several reasons why this might be the case. First, research has consistently demonstrated a positive association between segmentation preferences and psychological detachment (Foucreault et al., 2018; Hahn & Dormann, 2013; Park et al.,

2011). Second, psychological detachment has also been demonstrated to relate to positive outcomes such as well-being (Fritz et al., 2010; Hulsheger et al., 2014; Sonnentag & Fritz, 2007). The directionality of these relationships is intuitive; those who prefer segmentation might be more likely to establish behaviors that allow them to disengage from one domain (i.e., work) when it is time to orient towards another. One of these practiced behaviors is likely to be psychological detachment, since detachment involves the active mental disengagement from work in after-work periods (Sonnentag & Fritz, 2007). Psychological detachment might, in turn, promote job satisfaction and well-being since those who psychologically detach may have more desirable experiences during their off time from work, enhancing their perceptions of job satisfaction and well-being.

> ***Hypothesis 1:*** There will be a significant indirect effect of segmentation preferences on job satisfaction and well-being through psychological detachment. Psychological detachment will be positively associated with segmentation preferences as well as job satisfaction and well-being.

The next set of hypotheses addresses the general question of under what circumstances psychological detachment matters more for the relationship between segmentation preferences and job satisfaction and well-being. The first candidate moderator is segmentation culture, which might amplify the relationship between segmentation preferences and psychological detachment. Similarly, Foucreault et al. (2018) found the relationship between segmentation preferences and psychological detachment to be stronger when culture also exhibited high segmentation. Second, it may be that segmentation preferences are associated with psychological detachment, but particularly for individuals who are high in trait mindfulness (who may be more aware of

their attentional focus and therefore more capable of disengaging their minds from work),

which has been found to relate to psychological detachment in prior research (Hulsheger

et al., 2014). Those low in trait mindfulness may not be as aware of their present

circumstances, hindering their ability or motivation to psychologically detach from work.

Finally, when job demand is particularly high, segmenters may be less able to detach

from work as a consequence of having to invest additional time into work. *Figure 1*

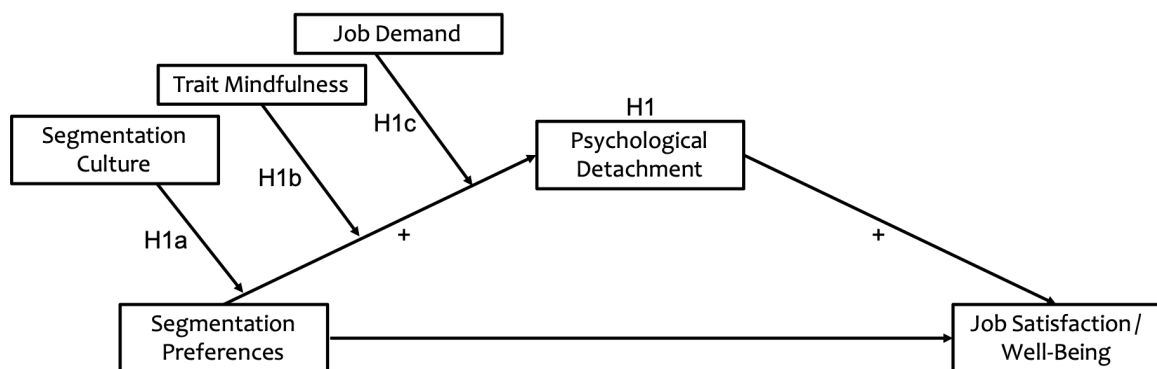depicts *Hypotheses 1:1c.*

Figure 1

Visual Presentation of Hypotheses 1:1c

> **Hypothesis 1a:** The indirect effect of segmentation preferences on job
>
> satisfaction and well-being through psychological detachment will be
>
> qualified by an interaction between segmentation preferences and culture,
>
> such that the positive relationship between segmentation preferences and
>
> psychological detachment will be stronger when segmentation culture is high
>
> (organizational members prefer segmentation).
>
> **Hypothesis 1b:** The indirect effect of segmentation preferences on job
>
> satisfaction and well-being through psychological detachment will be
>
> qualified by an interaction between segmentation preferences and trait

mindfulness, such that the positive relationship between segmentation preferences and psychological detachment will be stronger for individuals high in trait mindfulness.

Hypothesis 1c: The indirect effect of segmentation preferences on job satisfaction and well-being through psychological detachment will be qualified by an interaction between segmentation preferences and job demand, such that the positive relationship between segmentation preferences and psychological detachment will be weaker when job demand is high.

The next hypothesis introduces a second potential mediator in the relationship between segmentation preferences and job satisfaction and well-being: WFC. There are again several reasons why this might be the case. First, research has consistently demonstrated a negative association between segmentation preferences and WFC, such that those who prefer segmentation experience less WFC (e.g., Derks et al., 2016; Yang et al., 2019). Second, research has also shown that WFC impairs a number of work-related outcomes such as psychological distress, job satisfaction, organizational commitment, and turnover (Carlson et al., 2000; Frone et al., 1992; Higgins et al., 1992; O'Driscoll et al., 1992). This raises the possibility that segmentation preferences are associated with outcomes such as job satisfaction and well-being, but indirectly by reducing WFC and in turn enhancing job satisfaction and well-being. More specifically, segmenters may have better acquired, over time, the skills needed to prevent their work from spilling over into the personal lives. Indeed, it may very well be the case that one of these skills is psychological detachment, which may be associated with reduced WFC. However, psychological detachment is treated as a distinct mediator in the present

research because it is likely associated with a much broader variety of phenomena (e.g., more relaxation during off-work hours) than reduced WFC alone. Furthermore, there are likely additional behaviors other than psychological detachment that segmenters may have acquired that would lead to reduced WFC, such as physically separating their workspaces from their personal spaces (e.g., as found by Kreiner et al., 2009).

> **Hypothesis 2:** There will be a significant indirect effect of segmentation preferences on job satisfaction and well-being through WFC. WFC will be negatively associated to both segmentation preferences and job satisfaction and well-being.

The next set of hypotheses addresses the general question of under what circumstances WFC matters more or less for the relationship between segmentation preferences and job satisfaction and well-being. The first candidate moderator is segmentation culture, which might amplify the negative relationship between segmentation preferences and WFC (Hypothesis *2a)*. In other words, integrators may experience even more WFC as compared to segmenters, when segmentation culture is high. A related question that may be assessed in testing this moderation is the extent to which alignment between preferences and culture matters more for segmenters vs. integrators. More descriptively, since segmenters may have acquired important skills for reducing the spill over from work into their personal lives, it is possible that they will be less susceptible to the negative consequences of misalignment between their preferences and organizational culture. On the other hand, integrators, who may have fewer of these behavioral skills, may rely more on the alignment of culture with their preferences in order to reduce WFC (i.e., they achieve desired integration only when their culture aligns

with their preferences, leading to perceptions of less WFC). A hypothetical visual

depiction of this moderation is presented in *Figure 2a.* Finally, a second candidate

moderator in the relationship between segmentation preferences and WFC is job demand,

which may attenuate this relationship (Hypothesis 2b*)*. More specifically, those that have

a higher job demand may experience more spillover into their family lives, resulting in

increased WFC and attenuating the impact of segmentation preferences on WFC. *Figure*

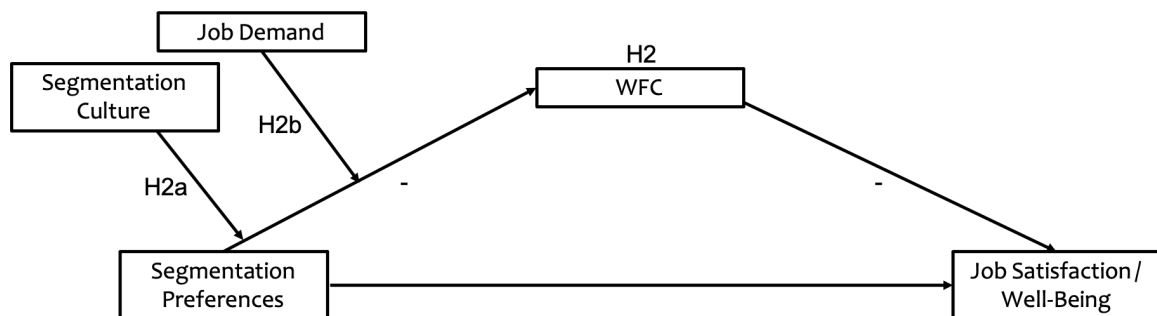*2* depicts *Hypotheses 2:2b.*

Figure 2

Visual Presentation of Hypotheses 2:2b

Hypothesis 2a: The indirect effect of segmentation preferences on job

satisfaction and well-being through WFC will be qualified by an interaction

between segmentation preferences and segmentation culture, such that the

negative relationship between segmentation preferences and WFC will be

stronger when segmentation culture is high. Segmenters will report a similarly

low level of WFC regardless of culture, while integrators will experience

more WFC when segmentation culture is misaligned (high), as opposed to

aligned (low).

Hypothesis 2b: The indirect effect of segmentation preferences on job

satisfaction and well-being through WFC will be qualified by an interaction

between segmentation preferences and job demand, such that the negative

relationship between segmentation preferences and WFC will be weaker when

job demand is high.

The third hypothesis relates to the potentially mediating role of FWC in the

segmentation preferences-job satisfaction and well-being relationships. As discussed in

the introduction, research linking segmentation preferences to FWC is sparse, though

FWC has been shown to relate negatively to outcomes such as job satisfaction (e.g., Ernst

& Ozeki, 1998). However, given the current circumstances of remote workers in the US

(i.e., many have been forced into such arrangements), it is plausible that segmentation

preferences are positively associated with FWC such that segmenters experience more

FWC than integrators. Segmenters may not be as accustomed to the unpredictable and

less controllable nature of family spillover into work life when working from home. For

this reason, the behavioral skills discussed in Hypothesis 2a acquired by segmenters, may

be less effective when it comes to preventing family interference with work life, as these

interferences may be inevitable and less malleable as compared to spillover from work

into family life. This explanation also fits in with the suggestion from Rudolph et al.

(2020) that segmenters may experience challenges when forced to work remotely related

to role blurring and perceptions of increased conflict between work and family (although

they did not distinguish between WFC and FWC). On the other hand, integrators may

either be less bothered by spillover from family into work life, or even welcome such

interruptions, which would imply reduced perceptions of FWC as compared to segmenters.

Hypothesis 3: There will be a significant indirect effect of segmentation

preferences on job satisfaction and well-being through FWC. FWC will be

positively associated to segmentation preferences (i.e., segmenters experience

greater FWC) and negatively associated to job satisfaction and well-being.

The final set of hypotheses addresses the general question of under what circumstances FWC matters more or less for the relationship between segmentation preferences and job satisfaction and well-being. The first candidate moderator is segmentation culture, which might attenuate the positive relationship between segmentation preferences and FWC (Hypothesis 3a*). Opposite to Hypothesis 2a*, with FWC it may further be the case that *integrators* are less susceptible to misalignment between preferences and culture as compared to segmenters. More specifically, when segmenters work in a culture in which organizational members prefer integration, the impact of preferring segmentation on FWC might be amplified, since segmenters might feel even less equipped to deal with interruptions from family into work life when they perceive their organizational culture to orient towards an integrated style. In contrast, integrators may report less FWC as compared to segmenters regardless of culture, since a segmented culture may not alter their perceptions of family to work spillover as being acceptable or even welcomed. A hypothetical visual depiction of this moderation is presented in *Figure 3a*. Finally, a second candidate moderator in the relationship between segmentation preferences and FWC is household size, which may amplify this relationship (Hypothesis 3b*). More specifically, those that have larger households may by

nature, experience more spillover from family into their work lives, resulting in increased

FWC (as found by Golden et al., 2006) and amplifying the impact of segmentation

preferences on WFC. In other words, segmenters may perceive even more FWC as

compared to integrators when household sizes are large. *Figure 3* depicts *Hypotheses*
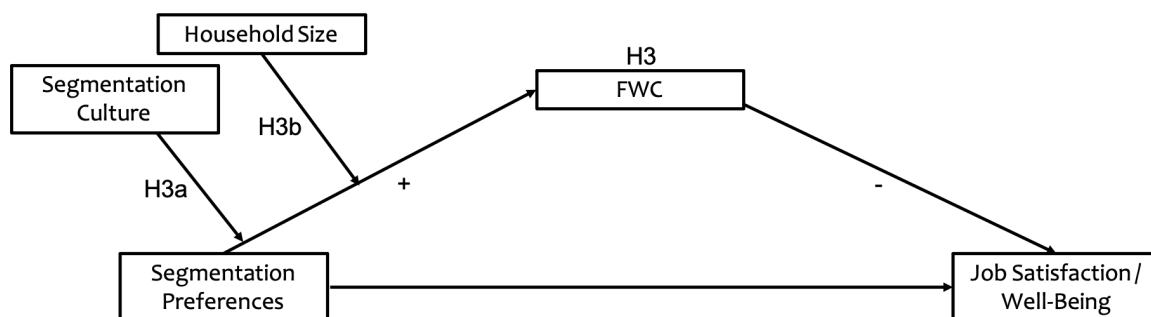
3:3b.

Figure 3

Visual Presentation of Hypotheses 3:3b

Hypothesis 3a: The indirect effect of segmentation preferences on job

satisfaction and well-being through FWC will be qualified by an interaction

between segmentation preferences and segmentation culture, such that the

positive relationship between segmentation preferences and FWC will be

stronger when segmentation culture is low. Integrators will report a similarly

low level of FWC regardless of culture, while segmenters will experience

more FWC when segmentation culture is misaligned (low), as opposed to

aligned (high).

Hypothesis 3b: The indirect effect of segmentation preferences on job

satisfaction and well-being through FWC will be qualified by an interaction

between segmentation preferences and household size, such that the positive

relationship between segmentation preferences and FWC will be stronger

when household sizes are large.

Exploratory Directions and Research Questions

As is described in the method section that follows, the data collection for this

project occurred as part of an extension to a previously-administered survey that was

given to participants in Spain during the early stages of the COVID-19 pandemic. This

new round of data collection took place by administering an extended version of the

original survey to academic alumni / LinkedIn networks and email threads of colleagues

from different locations in the US. The survey therefore included a variety of original

items and measures that are not pertinent to the present research. However, some of these

measures might be interesting to further consider in an exploratory fashion. Many of the

items are descriptive in nature (e.g., "what are some of the problems you associate with

working from home?"), but allow for the addition of several research questions:

Research Question 1: What percentage workers spent time working from

home before the pandemic?

Research Question 2: What are some of the barriers that remote workers face

in trying to stay focused when working from home?

Research Question 3: Did job satisfaction change in general from before the

pandemic to the present time?

Research Question 4: Do workers wish to return to working in the office after

the pandemic ends?

Research Question 5: What would allow workers to feel safe returning to

work in the office (e.g., vaccines, a reduction in COVID-19 cases, etc.)?

Method

Participants

Participants (*N* = 126) were recruited in a variety of ways for the present research. The author, along with a professor on his thesis committee, sent the survey out to several different potential participant pools. These included networks from LinkedIn (i.e., posting the survey to LinkedIn), posts on Facebook, and monthly email newsletters. The survey was advertised as a way for potential participants to contribute towards our understanding of some of the work-related consequences of the COVID-19 pandemic and participants completed the survey on a volunteer basis. The majority of survey respondents were working in remote contexts at the time of data collection, which coincided with the largest spike of COVID-19 cases in the US thus far. Therefore, unemployed and non-remote workers were excluded from analyses.

Demographics

A total of 126 complete survey responses from remote workers were collected. Of these, 78% (98) self-identified as female and the remaining 22% (28) identified as male. The mean age was 39.34 and 96% (110) of participants received the survey link through Linkedin, email or Facebook. Additionally, 54% (68) of respondents indicated that they occupied an "employee" level at their organization, while 32% (40) of respondents indicated that they occupied an "area director, manager, or boss" position. 90% (112) of participants were full-time workers, while the remaining 10% (14) indicated they were part-time workers.

Power Considerations

Relevant prior research predicting psychological detachment with segmentation preferences and supplies in a regression model (Park et al., 2011) obtained a multiple R^2 of 0.16, which would indicate a need for around 100 total participants to detect the same effects with 95% power. Research by Kreiner et al. (2006) predicting FWC with segmentation preferences and supplies in the context of a larger polynomial regression model obtained a multiple R^2 of 0.34, which would necessitate a sample size of around 50 in order to detect effects with 95% power (sample size estimates calculated with G*Power 3.1 software). The sample of 126 participants in the present research should therefore be adequately powered to detect similar effect sizes.

Procedure

As noted in the introduction, the data collection for this research took place as part of an extended project that replicated and extended prior research conducted in Spain during the early stages of the pandemic. An initial version of the survey was provided and translated to English. All of the measures described in the hypotheses were new additions to the survey included for the purposes of the present research. The survey was estimated to take around 20 minutes to complete and consenting participants completed the survey online, from remote locations. The survey was administered via Qualtrics survey-design software (Qualtrics, Provo, UT). Participants consented to provide contact details in the event that the researchers wish to send a follow-up survey in the future. Otherwise, each completed survey was assigned a random participant identifier number and the surveys were anonymized for the purposes of analysis and reporting.

Measures

Work-Family and Family-Work Conflict

WFC and FWC were assessed with 5 items each (α = .89 and .87, respectively) originally

from Fisher et al. (2009). Because participants in this study were not assumed to live with

family members, items were adapted to refer to "personal life" instead of "family life".

An example of a WFC item is "my personal life suffers because of my work". An

example of an FWC item is "my work suffers because of everything going on in my

personal life." Responses were collected on a 7-point Likert scale with answers ranging

from "strongly disagree" to "strongly agree". Lower scores indicated less WFC / FWC

and higher scores indicated a greater degree of conflict.

Well-Being

Well-being was assessed with 6 items (α = .82) that comprise the Short

Depression – Happiness Scale (Joseph et al., 2004). Participants were asked to rate how

often they had felt six different emotions over the prior two months on a 7-point Likert

scale ranging from "never" to "always". An example item is "I felt that life was

enjoyable". Lower scores indicated less well-being while higher scores indicated greater

well-being.

Job Satisfaction

The survey included two different items for assessing job satisfaction. First, the

original version of the survey (administered in Spain) included a single item that may be

used to assess current levels of job satisfaction: "I like my job". Participants rated this

item on a 7-point Likert scale ranging from "strongly disagree" to strongly agree". In

addition, a new item was included to assess *changes* in job satisfaction from before the

pandemic to the present time. This item read "how much did your job satisfaction change

from before the COVID-19 pandemic to now?" Participants responded on a 5-point

Likert scale ranging from "I am much less satisfied with my job" to "I am much more

satisfied with my job". For the analyses this item was recoded so that 0 represented no

change in job satisfaction. More specifically, responses were recoded so that -2

corresponded to "I am much less satisfied with my job", -1 corresponded to "I am

somewhat less satisfied with my job", 0 corresponded to "My job satisfaction has

remained the same", 1 corresponded to "I am somewhat more satisfied with my job", and

2 corresponded to "I am much more satisfied with my job". Both of these job satisfaction

items were considered as plausible outcomes. There is relatively robust evidence to

suggest that the validity of using single-item measures of job satisfaction is typically

sufficient (e.g., Nagy, 2002; Wanous et al., 2007). Furthermore, Wanous et al. (2007)

emphasized that when assessing *changes* in job satisfaction, single-item measures are

particularly appropriate.

Segmentation Preferences and Culture

Segmentation preferences were measured with 4 items (α = .92) from Kreiner et

al. (2006). An example item is "I don't like to have to think about work while I'm at

home". Segmentation *culture* was measured with 4 items (α = .81) adapted by Park et al.

(2011) from the Kreiner et al.'s (2006) segmentation *supplies* scale. An example item is

"the people I work with forget about work when they're home". Participants responded

on a 7-point Likert scale ranging from "strongly disagree" to "strongly agree". Lower

scores on both indicated less segmentation (more integration) and higher scores indicated

more segmentation. Since most participants were working remotely (thus, home and

work are not physically distinct), the instructions for responding to both sets of these items asked participants to respond in terms their "typical behaviors and preferences about separation between work and home life, even though you may be working from home currently".

Psychological Detachment

Psychological detachment was measured with 4 items (α = .87) from Sonnentag and Fritz (2007). The questionnaire asks participants to respond in terms of how they experience time after work. An example item is "during time after work, I don't think about work at all". Participants responded on a 7-point Likert scale ranging from "strongly disagree" to "strongly agree". Lower scores indicated lower psychological detachment and higher scores indicated higher psychological detachment.

Trait Mindfulness

Trait mindfulness was measured with 3 items (α = .84) acquired from the Mindful Attention Awareness scale (MAAS) developed by Brown and Ryan (2003). The original scale consists of 15 items. However, because of length limitations in the current research, the 3 items with the strongest factor loadings from the initial Brown and Ryan (2003) research were used. An example item is "I rush through activities without being really attentive to them". The 3 items all had factor loadings between 0.74 and 0.78. Lower scores on this measure indicated lower trait mindfulness and higher scores indicated higher trait mindfulness.

Household Size

To measure household size, participants were asked the question "including yourself, how many family members do you live with, in your home, on a permanent

basis?" Respondents slid a response bar that ranges from 1 to 12 family members to respond to this item.

Job Demand

To measure job demand, participants were asked "on average, about how many hours, total, have you worked per week over the last two months?" Participants slid a response bar that ranged from 0 to 100 hours to respond to this item.

Demographics

In addition to the primary measures described above, the survey included a series of questions that assessed participant demographics. These included gender, age, and industry in which they worked.

Results

Scoring and Aggregation

For each of the multiple-item measures described in the method section, items were reverse-scored where necessary and aggregated by averaging items together into single scores for the purposes of analysis. For example, a particular participant's responses to the psychological detachment questionnaire were averaged together to create a single psychological detachment score for that individual. In addition, predictors and outcomes were mean centered for the purposes of the mediation and moderated-mediation analyses. Results from multiple regressions are displayed as standardized regression coefficients. Table 1 presents descriptive statistics for all of the main variables in this study.

Table 1

Means, Standard Deviations and Zero-Order Correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Seg Prefs	3.74	1.04	*.92*									
2. Seg Culture	2.68	0.78	**.27**	*.81*								
3. Mindfulness	3.80	1.00	-.11	.09	*.84*							
4. Job Demand	44.36	11.11	**-.22**	-.15	-.09	—						
5. Household	2.79	1.38	-.09	-.08	-.05	-.01	—					
6. Detachment	2.72	1.09	**.19**	**.29**	.12	**-.31**	-.07	*.87*				
7. WFC	2.79	1.08	.14	**-.19**	**-.24**	**.22**	.02	**-.44**	*.89*			
8. FWC	2.45	0.99	.13	-.16	**-.18**	-.10	**.28**	-.17	**.38**	*.87*		
9. Well Being	3.53	0.61	**-.19**	.06	**.37**	.09	**.19**	.13	**-.44**	**-.18**	*.82*	
10. Job SF	4.09	0.85	**-.27**	-.03	**.19**	-.02	.17	-.06	-.12	-.08	**.27**	—
11. Job SF 2	0.00	1.12	**-.23**	.17	**.27**	-.02	.11	**.20**	**-.34**	**-.23**	**.28**	**.25**

Note. N = 126. *M* and *SD* are used to represent mean and standard deviation, respectively. Correlations equal to or greater than |.17| are statistically significant at the *p* < .05 level (items in bold). Scale reliabilities are in italics on the diagonal. Seg Prefs = segmentation preferences; Seg Culture = segmentation culture; Household = household size; Detachment = psychological detachment; WFC = work-family conflict; FWC = family-work conflict; Job SF 2 = change in job satisfaction. Job demand was measured on a scale ranging from low demand (0) to high demand (100).

Hypothesis Testing

The hypotheses were tested in a series of moderated-mediation models. It is important to note that for each hypothesis, a total of 3 different outcomes were considered: job satisfaction, well-being and changes in job satisfaction (from before the pandemic until time of data collection). Therefore, for each mediation or moderated mediation hypothesis, 3 models were run. In order to test the hypotheses associated with each moderator, separate models were tested for each, so that highest order interactions were two way. Statistical significance levels were determined using an alpha criterion of less than 0.05. Moderated mediation models were tested by estimating indirect effects using the "Mediation" package (Tingley et al., 2014) in R statistical software. Moderation was therefore interpreted in the context of indirect effects estimates by estimating the

indirect effects as conditionally dependent on the moderator variables. Monte Carlo sampling estimations were performed to estimate the indirect effects. Monte Carlo estimation samples coefficients from the data for both the *a* (relationship between IV and mediator) and *b* (relationship between the mediator and outcome) paths, subsequently creating a sampling distribution of the products of the *a* and *b* coefficients (i.e., indirect effects estimates). These estimates can be computed at various levels of the variable that moderates the *a* path (e.g., 1 *SD* above or 1 *SD* below the mean of the moderator). Finally, for each test of direct, indirect and conditional differences between indirect effects, 10,000 Monte Carlo simulations were performed.

Hypothesis 1

Hypothesis 1 concerned the mediation of the segmentation preferences – job satisfaction / well-being relationship by psychological detachment. In an initial regression model, psychological detachment (mediator) was regressed onto segmentation preferences. In a second series of regression models, the primary outcomes were regressed onto segmentation preferences and psychological detachment. The results of these regressions are presented at the top of Table 2.

Considering the outcome of job satisfaction first, Monte Carlo simulations were run to test the direct and indirect effects of segmentation preferences through psychological detachment. Although the direct effect was significant (*effect* = .293, $CI_{95\%}$ = [-.429, -.160]), the indirect effect was not (*effect* = .008, $CI_{95\%}$ = [-.020, .040]). Next, well-being was tested as an outcome in the same model by repeating the process. Although a significant direct effect was observed, no indirect effect was observed, (*effect* = .02, $CI_{95\%}$ = [-.001, .060].

Finally, change in job satisfaction (from before the pandemic until the data was collected) was tested as an outcome in this same model by repeating the process. In this model, the direct effect was significant (*effect* = -.32, $CI_{95\%}$ = [-.494, -.140] as well as the indirect effect (*effect* = .05, $CI_{95\%}$ = [.004, .130], indicating that psychological detachment partially mediated the relationship between segmentation preferences and change in job satisfaction. However, the direction of the direct effect of segmentation preferences on change in job satisfaction remained negative, while the indirect effect through psychological detachment was positive. This inconsistent mediation indicates that psychological detachment may have acted as a *suppressor* variable in the segmentation preferences – change in job satisfaction relationship (MacKinnon et al., 2000). While those who prefer segmentation reported less positive changes in job satisfaction, segmentation preferences were simultaneously associated with greater psychological detachment, which was in turn associated with more positive changes in job satisfaction. Since no directional *direct* effects of segmentation preferences on change in job satisfaction were hypothesized, this result provides partial support for Hypothesis 1. Table 2 displays these results.

Table 2

Moderated Mediation Results for Hypothesis 1

Predictors	Mediator = Psych Detachment		DV = Job Satisfaction		DV = Well-Being		DV = Change in Job SF	
	β	SE$_B$	β	SE$_B$	β	SE$_B$	β	SE$_B$
Seg Prefs	.20*	.09	-.36*	.09	-.21*	.09	-.30*	.09
Detachment	—	—	.05	.09	.19*	.09	.26*	.09

Direct, indirect and conditional indirect effects	Effect [CI$_{95\%}$]	Effect [CI$_{95\%}$]	Effect [CI$_{95\%}$]
Direct effect of Seg Prefs	-.293* [-.429, -.160]	-.120* [-.226, -.020]	-.320* [-.494, -.140]
Indirect effect of Seg Prefs	.008 [-.020, .040]	.020 [-.001, .060]	.050* [.004, .130]
Conditional indirect effect at:			
Low Seg Culture (–1 *SD*)	.006 [-.020, .040]	.016 [-.006, .050]	.036 [-.009, .110]
High Seg Culture (+1 *SD*)	.003 [-.020, .030]	.009 [-.020, .050]	.021 [-.042, .100]
Difference	.004 [-.056, .067]	.010 [-.056, .080]	.023 [-.114, .159]
Low Mindfulness (–1 *SD*)	.014 [-.055, .090]	.041 [-.007, .100]	.101* [.011, .220]
High Mindfulness (+1 *SD*)	.001 [-.017, .020]	.003 [-.018, .030]	.008 [-.040, .060]
Difference	-.014 [-.056, .091]	.038 [-.015, .104]	.093 [-.011, .221]
Low Job Demand (–1 *SD*)	.001 [-.028, .030]	.020 [-.013, .070]	.043 [-.029, .140]
High Job Demand (+1 *SD*)	.001 [-.023, .030]	.013 [-.020, .050]	.029 [-.043, .110]
Difference	.000 [-.038, .038]	.006 [-.047, .061]	.015 [-.100, .133]

Note. N = 126. Seg Prefs = segmentation preferences; Detachment = psychological detachment; Seg Culture = segmentation culture. Confidence intervals, direct, indirect and conditional indirect effects were calculated using 10,000 repetitions of Monte Carlo estimations for each. * p < .05.

Hypotheses 1a. Hypothesis 1a concerned the moderating role of segmentation culture in the simple mediation models tested above. The indirect effects of segmentation preferences on job satisfaction through psychological detachment were tested at +1 and -

1 *SDs* above / below the mean of *segmentation culture*. Indirect effects were not significant at either the low (*effect*$_{low(-1SD)}$ = .006, CI$_{95\%}$ = [-.020, .040]) or high (*effect*$_{high(+1SD)}$ = .003, CI$_{95\%}$ = [-.020, .030]) levels of segmentation culture, failing to provide support for Hypothesis 1a.

Next, the identical process was repeated treating well-being as an outcome. Indirect effects were not significant at either the low (*effect*$_{low(-1SD)}$ = .016, CI$_{95\%}$ = [-.006, .050]) or high (*effect*$_{high(+1SD)}$ = .009, CI$_{95\%}$ = [-.020, .050]) levels of segmentation culture. Finally, indirect effects on change in job satisfaction were also not significant at either the low (*effect*$_{low(-1SD)}$ = .036, CI$_{95\%}$ = [-.009, .110]) or high (*effect*$_{high(+1SD)}$ = .021, CI$_{95\%}$ = [-.042, .100]) levels of segmentation culture. These results failed to provide support for Hypothesis 1a.

Hypotheses 1b. Hypothesis 1b concerned the moderating role of *trait mindfulness* in the simple mediation models tested above. The indirect effects of segmentation preferences on job satisfaction through psychological detachment were tested at +1 and -1 *SDs* above / below the mean of trait mindfulness. Indirect effects were not significant at either the low (*effect*$_{low(-1SD)}$ = .014, CI$_{95\%}$ = [-.055, .090]) or high (*effect*$_{high(+1SD)}$ = .001, CI$_{95\%}$ = [-.017, .020) levels of trait mindfulness.

Next, the same indirect effects were tested with well-being as the outcome. Again, indirect effects were not significant at either the low (*effect*$_{low(-1SD)}$ = .041, CI$_{95\%}$ = [-.007, .100]) or high (*effect*$_{high(+1SD)}$ = .003, CI$_{95\%}$ = [-.018, .030) levels of trait mindfulness. Lastly, treating change in job satisfaction as the outcome, the indirect effect at the low end of trait mindfulness was significant and positive (*effect*$_{low(-1SD)}$ = .101, CI$_{95\%}$ = [.011, .220]) and non-significant at the high end (*effect*$_{high(+1SD)}$ = .008, CI$_{95\%}$ = [-

.040, .060]), suggesting that for those low in mindfulness, psychological detachment may partially mediate the relationship between segmentation preferences and changes in job satisfaction. However, the estimated difference between these indirect effects was non-significant ($diff$ = .093, CI$_{95\%}$ = [-.011, .221]). These results failed to support Hypothesis 1b.

Hypotheses 1c. Hypothesis 1c concerned the moderating role of *job demand* in the same mediation model. Indirect effects were not significant at either the low ($effect_{low(—1SD)}$ = .001, CI$_{95\%}$ = [-.028, .030]) or high ($effect_{high(+1SD)}$ = .001, CI$_{95\%}$ = [-.023, .030) levels job demand. With well-being as the outcome in the same model, indirect effects were neither significant at the low ($effect_{low(—1SD)}$ = .020, CI$_{95\%}$ = [-.013, .070]) or high ($effect_{high(+1SD)}$ = .013, CI$_{95\%}$ = [-.020, .050) levels of job demand. Lastly, with change in job satisfaction as an outcome, indirect effects were neither significant at the low ($effect_{low(—1SD)}$ = .043, CI$_{95\%}$ = [-.029, .140]) or high ($effect_{high(+1SD)}$ = .029, CI$_{95\%}$ = [-.043, .110) levels of job demand. These results fail to support Hypothesis 1c.

Hypothesis 2

Hypothesis 2 concerned the mediation of the segmentation preferences – job satisfaction / well-being relationship by WFC. In an initial regression model, WFC (mediator) was regressed onto segmentation preferences. In a second series of regression models, the primary outcomes were regressed onto segmentation preferences and WFC. The results of these regressions are presented at the top of Table 3.

First, Monte Carlo simulations were run to test the direct and indirect effects of segmentation preferences through WFC on job satisfaction. Although the direct effect was significant, the indirect effect was not ($effect_{Direct}$ = -.275, CI$_{95\%}$ = [-.410, -.140];

$effect_{Indirect}$ = -.009, CI$_{95\%}$ = [-.040, .010]). Next, well-being was tested as an outcome in the same model. Neither the direct nor indirect effects were significant ($effect_{Direct}$ = -.070, CI$_{95\%}$ = [-.162, .020]; $effect_{Indirect}$ = -.032, CI$_{95\%}$ = [-.081, .010]). Finally, change in job satisfaction was tested as an outcome. In this model, the direct effect was significant although the indirect effect was not ($effect_{Direct}$ = -.224, CI$_{95\%}$ = [-.400, -.050]; $effect_{Indirect}$ = -.038, CI$_{95\%}$ = [-.103, .010]). These results fail to support Hypothesis 2.

Table 3

Moderated Mediation Results for Hypothesis 2

Predictors	Mediator = WFC		DV = Job Satisfaction		DV = Well-Being		DV = Change in Job SF	
	β	SE$_B$	β	SE$_B$	β	SE$_B$	β	SE$_B$
Seg Prefs	.13	.09	-.34*	.08	-.12	.08	-.24*	.09
WFC	—	—	-.09	.08	-.42*	.08	-.30*	.09
Direct, indirect and conditional indirect effects			Effect [CI$_{95\%}$]		Effect [CI$_{95\%}$]		Effect [CI$_{95\%}$]	
Direct effect of Seg Prefs			-.275* [-.410, -.140]		-.070 [-.162, .020]		-.224* [-.400, -.050]	
Indirect effect of Seg Prefs			-.009 [-.040, .010]		-.032 [-.081, .010]		-.038 [-.103, .010]	
Conditional indirect effect at:								
Low Seg Culture (−1 *SD*)			-.013 [-.053, .010]		-.044 [-.103, .000]		-.047 [-.122, .010]	
High Seg Culture (+1 *SD*)			-.013 [-.059, .020]		-.044 [-.116, .020]		-.047 [-.138, 020]	
Difference			.000 [-.050, .050]		.000 [-.089, .087]		.000 [-.103, .107]	
Low Job Demand (−1 *SD*)			-.004 [-.037, .020]		-.027 [-.101, .040]		-.030 [-.123, .050]	
High Job Demand (+1 *SD*)			-.011 [-.061, .030]		-.071* [-.147, -.010]		-.079* [-.182, .000]	
Difference			.006 [-.043, .059]		.043 [-.055, .145]		.005 [-.071, .178]	

Note. N = 126. Seg Prefs = segmentation preferences; WFC = work-family conflict; Seg Culture = segmentation culture. Confidence intervals, direct, indirect and conditional indirect effects were calculated using 10,000 repetitions of Monte Carlo estimations for each. * p < .05.

Hypothesis 2a. Conditional indirect effects of segmentation preferences on job satisfaction through WFC were tested at low (-1 *SD*) and high (+1 *SD*) levels of *segmentation culture*. These effects were not significant at either the low ($effect_{low(—1SD)}$ = -.013, $CI_{95\%}$ = [-.053, .010]) or high ($effect_{high(+1SD)}$ = -.013, $CI_{95\%}$ = [-.059, .020) levels of segmentation culture. These indirect effects were also non-significant on the outcome of well-being at low and high ends of segmentation culture ($effect_{low(—1SD)}$ = -.044, $CI_{95\%}$ = [-.103, .000]; $effect_{high(+1SD)}$ = -.044, $CI_{95\%}$ = [-.116, .020) and on the outcome of change in job satisfaction ($effect_{low(—1SD)}$ = -.047, $CI_{95\%}$ = [-.122, .010]; $effect_{high(+1SD)}$ = -.047, $CI_{95\%}$ = [-.138, .020), failing to support Hypothesis 2a.

Hypothesis 2b. To test Hypothesis 2b, conditional indirect effects of segmentation preferences on outcomes through WFC were tested at low (-1 *SD*) and high (+1 *SD*) levels of *job demand*. These effects were not significant on job satisfaction ($effect_{low(—1SD)}$ = -.004, $CI_{95\%}$ = [-.037, .020]; $effect_{high(+1SD)}$ = -.011, $CI_{95\%}$ = [-.061, .030). Indirect effects on well-being were not significant at the low end of job demand ($effect_{low(—1SD)}$ = -.027, $CI_{95\%}$ = [-.101, .040]), though they were significant at the high end of job demand ($effect_{high(+1SD)}$ = -.071, $CI_{95\%}$ = [-.147, -.010), suggesting that WFC partially mediated the relationship between segmentation preferences and well-being for those with high job demands. However, the estimated difference between low and high job demand groups was non-significant ($diff$ = .043, $CI_{95\%}$ = [-.055, .145]). Similarly, the indirect effects on change in job satisfaction were not significant at the low end of job demand ($effect_{low(—1SD)}$ = -.030, $CI_{95\%}$ = [-.123, .050]), though they were significant at the high end of job demand ($effect_{high(+1SD)}$ = -.079, $CI_{95\%}$ = [-.182, .000), suggesting that WFC partially mediated the relationship between segmentation preferences and change in

job satisfaction for those with high job demands, though the difference between high and low groups was non-significant (*diff* = .005, $CI_{95\%}$ = [-.071, .178]). All in all, these results fail to support Hypothesis 2b.

Hypothesis 3

Hypothesis 3 concerned the mediation of the segmentation preferences – job satisfaction / well-being relationship by FWC. In an initial regression model, FWC (mediator) was regressed onto segmentation preferences. In a second series of regression models, the primary outcomes were regressed onto segmentation preferences and FWC. The results of these regressions are presented at the top of Table 4.

Monte Carlo simulations were run to test the direct and indirect effects of segmentation preferences through FWC on job satisfaction. Although the direct effect was significant, the indirect effect was not (*effect*$_{Direct}$ = -.283, $CI_{95\%}$ = [-.419, -.150]; *effect*$_{Indirect}$ = -.001, $CI_{95\%}$ = [-.028, .030). Next, well-being was tested as an outcome in the same model. Neither the direct nor indirect effects were significant (*effect*$_{Direct}$ = -.087, $CI_{95\%}$ = [-.188, .010]; *effect*$_{Indirect}$ = -.015, $CI_{95\%}$ = [-.045, .000). Finally, change in job satisfaction was tested as an outcome. In this model, the direct effect was significant although the indirect effect was not (*effect*$_{Direct}$ = -.235, $CI_{95\%}$ = [-.417, -.060]; *effect*$_{Indirect}$ = -.027 $CI_{95\%}$ = [-.080, .010])*,* failing to support Hypothesis 3.

Table 4

Moderated Mediation Results for Hypothesis 3

Predictors	Mediator = FWC		DV = Job Satisfaction		DV = Well-Being		DV = Change in Job SF	
	β	SE$_B$	β	SE$_B$	β	SE$_B$	β	SE$_B$
Seg Prefs	.16	.09	-.35*	.09	-.15	.09	-.25*	.10
FWC	—	—	-.01	.09	-.17	.09	-.18	.10
Direct, indirect and conditional indirect effects			Effect [CI$_{95\%}$]		Effect [CI$_{95\%}$]		Effect [CI$_{95\%}$]	
Direct effect of Seg Prefs			-.283* [-.419, -.150]		-.087 [-.188, .010]		-.235* [-.417, -.060]	
Indirect effect of Seg Prefs			-.001 [-.028. .030]		-.015 [-.045, .000]		-.027 [-.080, .010]	
Conditional indirect effect at:								
Low Seg Culture (–1 *SD*)			.000 [-.027, .030]		-.013 [-.045, .010]		-.018 [-.070, .010]	
High Seg Culture (+1 *SD*)			.001 [-.048, .050]		-.027 [-.077, .000]		-.040 [-.122, .010]	
Difference			.000 [-.056, .056]		.015 [-.031, .070]		.021 [-.054, .114]	
Small Household Size (–1 *SD*)			-.010 [-.059, .030]		-.040* [-.092, .000]		-.065* [-.154, .000]	
Large Household Size (+1 *SD*)			-.003 [-.031, .020]		-.012 [-.054, .020]		-.020 [-.089, .040]	
Difference			-.007 [-.060, .042]		-.028 [-.092, .028]		-.045 [-.151, .050]	

Note. N = 126. Seg Prefs = segmentation preferences; FWC = family-work conflict; Seg Culture = segmentation culture. Confidence intervals, direct, indirect and conditional indirect effects were calculated using 10,000 repetitions of Monte Carlo estimations for each. * p < .05.

Hypothesis 3a. Conditional indirect effects of segmentation preferences on job satisfaction through FWC were tested at low (-1 *SD*) and high (+1 *SD*) levels of *segmentation culture*. These effects were not significant at either the low (*effect*$_{low(-1SD)}$ = .000, CI$_{95\%}$ = [-.027, .030]) or high (*effect*$_{high(+1SD)}$ = -.001, CI$_{95\%}$ = [-.048, .050) levels of segmentation culture. These indirect effects were also non-significant on the outcome of well-being (*effect*$_{low(-1SD)}$ = -.013, CI$_{95\%}$ = [-.045, .010]; *effect*$_{high(+1SD)}$ = -.044, CI$_{95\%}$ = [-

.027, .000) and on the outcome of change in job satisfaction ($effect_{low(—1SD)}$ = -.018, $CI_{95\%}$ = [-.070, .010]; $effect_{high(+1SD)}$ = -.040, $CI_{95\%}$ = [-.122, .010), failing to support Hypothesis 3a.

Hypothesis 3b. Conditional indirect effects of segmentation preferences on outcomes through FWC were also tested at low (-1 *SD*) and high (+1 *SD*) levels of *household size*. These effects were not significant on job satisfaction ($effect_{low(—1SD)}$ = -.010, $CI_{95\%}$ = [-.059, .030]; $effect_{high(+1SD)}$ = -.003, $CI_{95\%}$ = [-.031, .020). Indirect effects on well-being were significant at the low end of household size ($effect_{low(—1SD)}$ = -.040, $CI_{95\%}$ = [-.092, .000]) and non-significant at the high end of household size ($effect_{high(+1SD)}$ = -.012, $CI_{95\%}$ = [-.054, .010), suggesting that FWC partially mediated the relationship between segmentation preferences and well-being for those with small household sizes. However, the estimated difference between low and high job household size groups was non-significant (*diff* = -.028, $CI_{95\%}$ = [-.092, .028]). Similarly, the indirect effects on change in job satisfaction were significant at the low end of household size ($effect_{low(—1SD)}$ = -.065, $CI_{95\%}$ = [-.154, .000]) and non-significant at the high end of household size ($effect_{high(+1SD)}$ = -.020, $CI_{95\%}$ = [-.089, .040), suggesting that FWC partially mediated the relationship between segmentation preferences and change in job satisfaction for those with small household sizes, though the difference between high and low groups was non-significant (*diff* = -.045, $CI_{95\%}$ = [-.151, .050]). These results fail to support Hypothesis 3b.

Exploratory Analyses

Research Question 1

The first research question was "what percentage of workers spent time working from home before the pandemic?" The median response to this item was 2, which corresponded to "on special occasions". Figure 4 shows the distribution of responses. As shown, the majority of respondents had not practiced full time remote working prior to the pandemic.

Figure 4

*Frequency of remote workers with prior experience working from home*
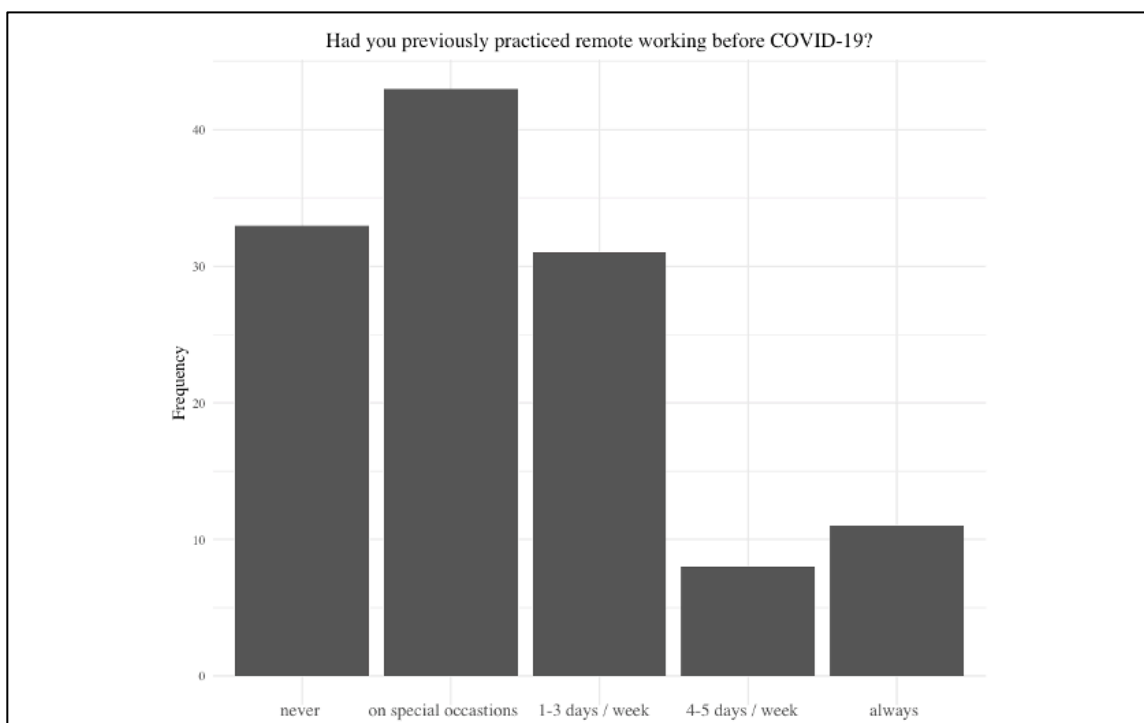
Note. N = 126.

Research Question 2

The second research question asked if there are barriers to remote workers' abilities to focus when working from home. As Figure 5 demonstrates, the most

commonly reported barrier was family interruptions, followed by concern about COVID-

19 and internet connectivity issues.

Figure 5

Frequency of reported barriers to staying focused when working from home
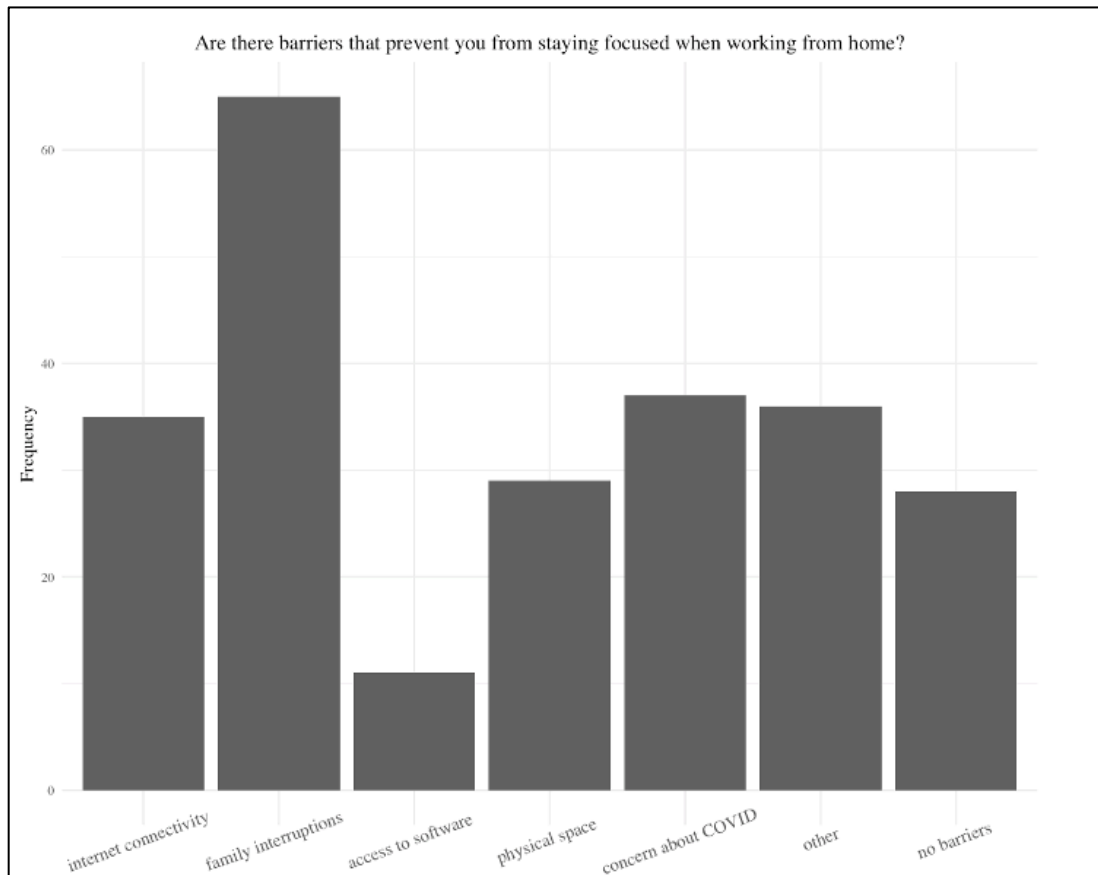
Note. N = 126. Participants were allowed to select more than 1 response. $N_{SELECTED}$ = 241.

Research Question 3

The third research question related to general changes in job satisfaction from

before the pandemic to the time of data collection. As is shown in Table 1, the mean

response to this question was 0.00 with a *SD* of 1.12, which corresponds to the response

"my job satisfaction has remained the same", suggesting that on average, workers'

overall job satisfaction was not changed as a consequence of working from home during

the pandemic. However, participants who scored 1 *SD* above the mean on segmentation preferences (i.e., segmenters) responded lower to this item on average (*M* = -0.36, *SD* = 1.01) compared to participants who scored 1 *SD below* the mean on segmentation preferences (i.e., integrators; *M* = 0.30, *SD* = 1.26). An independent t-test revealed that this difference was statistically significant, *t*(49) = -2.48, p = .017, indicating that "segmenters" experienced more negative changes in their job satisfaction as compared to "integrators".

Research Question 4

The fourth research question asked if workers wished to return to working in person after the pandemic. 37% (47) of participants indicated that they wished to return to working in person when it is safe to do so, while 63% (79) indicated that they did not wish to return to working in person.

Research Question 5

The final research question addressed what would allow workers to feel safe returning to work in person. As Figure 6 shows, most participants would require either a vaccine that is at least 90% effective, or a significant reduction of cases in their location. A full reopening of businesses in a worker's location was typically not sufficient to make participants feel safe enough to return. Overall, this suggests a relatively high threshold for workers to feel completely safe returning to work in person.

Figure 6

Frequency of responses to what would enable participants to feel safe enough to return to

working in person

What would cause you to feel safe enough to return to work in person?
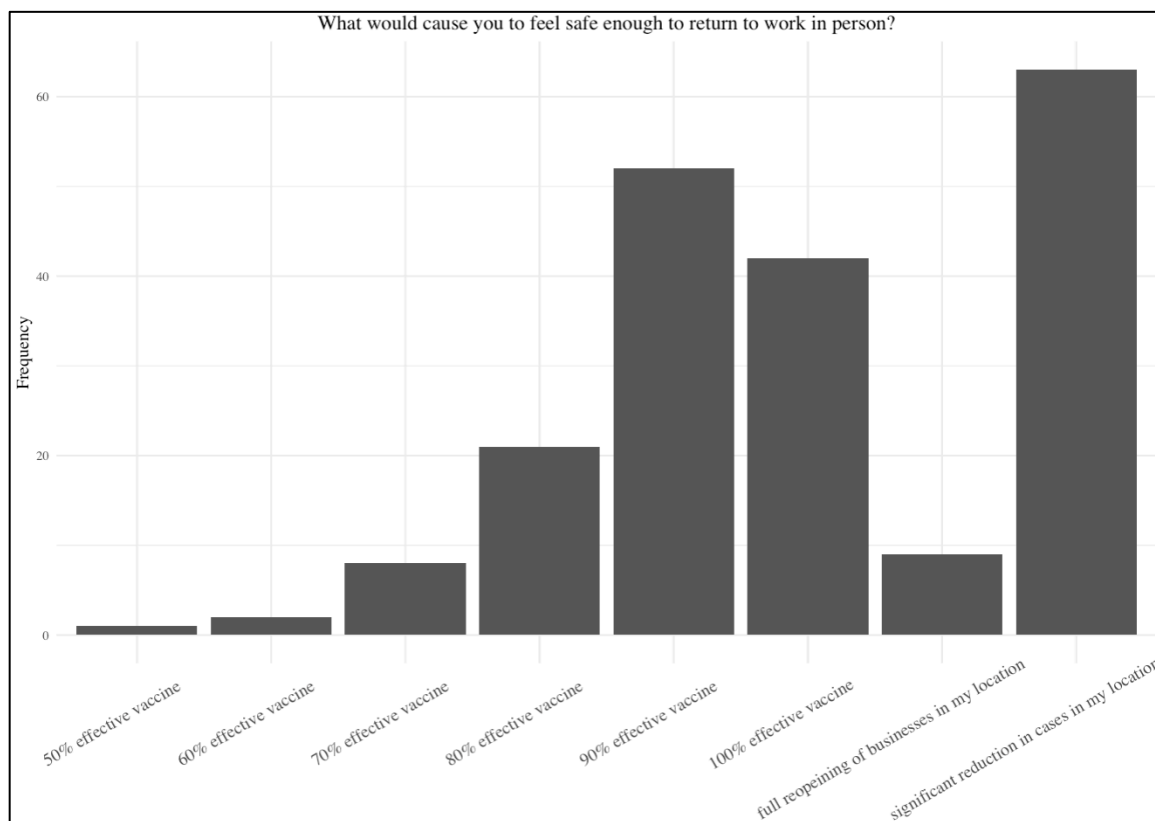
Note. N = 126. Participants were allowed to select more than 1 response. $N_{SELECTED}$ = 198.

Multiple Regressions

One more simplistic approach to analyzing the data from this study was to

determine which predictors in the models tested above are the most robust in terms of

predicting the primary outcomes measured. Therefore, a series of multiple regression

models was tested. Table 5 displays the results of these multiple regression models for

each outcome respectively. For job satisfaction, segmentation preferences emerged as

significant predictor over and above the others in the model (β = -.33, t(119) = -3.62, p <

.001) such that those who preferred more segmentation reported less job satisfaction. For

well-being, WFC emerged as a significant predictor (β = -.23, $t(119)$ = -3.91, p < .001), such that those who reported experiencing more WFC also reported reduced well-being. Additionally, trait mindfulness predicted well-being such that those higher in trait mindfulness reported experiencing greater well-being (β = .17, $t(119)$ = 3.31, p = .001). Finally, those who reported preferring more segmentation also reported less positive changes in job satisfaction since the pandemic started (β = -.26, $t(119)$ = -2.89, p = .005) and those who were higher in trait mindfulness reported more positive changes in job satisfaction since the pandemic began (β = .18, $t(119)$ = 2.10, p < .038).

Table 5

Multiple Regression Results

Predictors	DV = Job Satisfaction		DV = Well-Being		DV = Change in Job SF	
	β	SE_B	β	SE_B	β	SE_B
Seg Prefs	-.34*	.09	-.03	.08	-.23*	.09
Seg Culture	-.01	.09	.01	.08	.12	.09
WFC	-.03	.10	-.39*	.09	-.13	.10
FWC	-.04	.09	-.02	.09	-.07	.09
Detachment	-.01	.09	.02	.09	.15	.10
Mindfulness	.14	.09	.29*	.07	.19*	.09
Job Demand	-.01	.09	.20*	.08	-.06	.09
Household	.15	.09	.22*	.08	.14	.09

Note. Seg Prefs = segmentation preferences; Seg Culture = segmentation culture; WFC = work-family conflict; FWC = family-work conflict; Detachment = psychological detachment; Mindfulness = trait mindfulness. Adjusted R^2 for first model = .13, $F(8, 117)$ = 3.32, p = .002; second model = .30, $F(8, 117)$ = 7.78, p < .001; third model = .17, $F(8, 117)$ = 4.24, p < .001. * p < .05.

Discussion

The central hypotheses in this study were largely unsupported by the data. First, when estimated, the hypothesized simple mediation models did not show evidence of significant indirect effects. For Hypothesis 1, psychological detachment was found to partially mediate the relationship between segmentation preferences and changes in job

satisfaction. However, the directionality of the bivariate relationships in this model suggested that psychological detachment acted as a suppressor variable, rendering the interpretation of the mediation non-intuitive. Neither WFC nor FWC were found to mediate the relationship between segmentation preferences and any of the 3 primary outcomes.

In the absence of any simple mediation, conditional indirect effects were tested given the possibility that mediation may occur at higher or lower levels of any hypothesized moderator (e.g., segmentation culture). When testing conditional indirect effects at $\pm$ *SD* levels of the moderator variables, little evidence for robust moderated mediation was found. At the low end of trait mindfulness, psychological detachment mediated the relationship between segmentation preferences and changes in job satisfaction. However, this indirect effect was not significantly different than at the higher end of trait mindfulness. At the high end of job demand, WFC appeared to mediate the relationship between segmentation preferences and well-being as well as changes in job satisfaction. This would suggest that for those with heavy job demands, WFC functions as part of the mechanism for why high segmentation preferences impair well-being and lead to poorer changes in job satisfaction since the pandemic began. This would be an intuitive conclusion: those who prefer segmentation experience more WFC when job demands are high, in turn leading to reduced well-being and changes in job satisfaction. However, these indirect effects were not significantly different than indirect effects at the low end of job demand. Additionally, at the low end of household size, FWC appeared to mediate the relationship between segmentation preferences and well-being as well as changes in job satisfaction. The interpretation of this finding is less intuitive, as it would

seem that FWC would play a greater role for those with *larger* household sizes. Regardless, the differences in these indirect effects at low and high household sizes were not significantly different from one another.

There are several plausible overall explanations for the lack of support for the central hypotheses in this study. In order for the hypothesized mediation models and corresponding moderated-mediation models to be supported, the data should demonstrate some robust bivariate relationships. For example, in Hypothesis 1 psychological detachment was hypothesized to mediate the relationship between segmentation preferences and outcomes, such that psychological detachment would be positively associated with both. Although segmentation preferences were positively and significantly associated with psychological detachment, psychological detachment was not significantly related to outcomes such as job satisfaction and well-being. The correlation between psychological detachment and well-being was .13, but with the present sample size would need to be .17 to be statistically significant. Likewise, in Hypotheses 2 and 3, segmentation preferences were correlated with WFC at .14 and with FWC at .13. It is possible that with a larger sample size, these correlations would be more robust and hold up under further tests of moderated mediation that require more degrees of freedom.

A second concern with the hypotheses in this study is that they were too conceptually specific and elaborate to yield meaningful results with the sample of participants obtained. Some recent research with remote workers during the COVID-19 pandemic has found surprising results with respect to bivariate relationships with segmentation preferences. For example, Allen et al. (2021) found that, contrary to their

hypotheses, segmentation preferences were positively related to work-nonwork balance in a sample of remote workers during COVID-19. While they speculated that this might be due to variance restriction in their sample, it may be the case that some of these relationships as demonstrated in prior research may not hold up when assessing such circumstantially unique samples. This would suggest that an emphasis on more simplistic as opposed to multivariate relationships may be a better starting point for initial research on remote workers during the COVID-19 pandemic.

Although the central hypothesis in this research went unsupported, the research still makes several contributions. From the exploratory analyses, it is clear that one of the biggest challenges remote workers are facing during the pandemic is family interruptions. Future researchers should consider further investigating the nature and dynamics of FWC and WFC for remote workers. Second, although on average workers did not report substantial changes in their job satisfaction since the start of the pandemic, it is clear that "segmenters" are experiencing greater challenges than "integrators", particularly when it comes to job satisfaction measures. Future researchers may wish to consider this variable when studying remote working scenarios as it appears to play a key role in distinguishing how workers' feel about their jobs. Third, over half of the participants in this research (63%) indicated that they did not wish to return to working in person even when it is completely safe to do so. Organizational practitioners and researchers should expect the implications of moving into remote working scenarios to continue to some extent after the pandemic comes to an end. Workers may be more reluctant than ever to return to the office. Participants also indicated that in order to feel safe to return to working in person, they would require a vaccine that is at least 90% effective, or a substantial reduction in

COVID-19 cases. Finally, multiple regression analyses revealed some of the most robust predictors of key outcomes. As mentioned, segmentation preferences appear to be a robust predictor of job satisfaction measures for remote workers. Additionally, work-family conflict appears to be of particular importance for well-being when working remotely, suggesting that work spilling over into the family domain may be more problematic than family spilling over into the work domain for remote workers. Finally, trait mindfulness was associated with greater well-being and more positive changes in job satisfaction, suggesting that future researchers should consider this individual-difference variable when evaluating remote workers' experiences.

This research is not without its limitations. Although on the basis of prior research, power analyses indicated that the sample size was sufficient, it is likely that having a larger sample would provide greater power in order to better detect moderated mediation effects. As discussed, several relationships fell just short of statistical significance. Some of these relationships may require a greater sample size in order to detect. Furthermore, future remote work researchers may benefit from making efforts to obtain more diverse samples. Although this information was not obtained from participants, the survey was disseminated primarily within professional networks and on LinkedIn accounts, likely leading to a sample consisting of highly educated workers in academic and business settings with little socioeconomic diversity. Finally, single time point self-report studies have particular limitations. For example, the data for this study was collected during one of the worst periods of the pandemic in terms of COVID-19 cases and deaths. For this reason, some results may not be generalizable to remote workers during non-pandemic periods. However, given the likely long-lasting

implications for workers as a consequence of the COVID-19 pandemic, this research

should serve as a foundation for our future understanding of the complex nature of

remote work.

References

Anderson, A. J., Kaplan, S. A., & Vega, R. P. (2015). The impact of telework on emotional

experience: When, and for whom, does telework improve daily affective well-being?

European Journal of Work and Organizational Psychology, *24*(6), 882–897.

https://doi.org/10.1080/1359432X.2014.966086

Bick, A., Blandin, A., & Mertens, K. (2020). Work from Home After the COVID-19

Outbreak. *Federal Reserve Bank of Dallas, Working Papers*, *2020*(2017).

https://doi.org/10.24149/wp2017

Ashforth, B. E., Kreiner, G. E., & Fugate, M. (2020). *All in a Day's Work: Boundaries and

Micro Role Transitions*. 21.

Baron, R. M., & Kenny, D. A. (n.d.). *The Moderator-Mediator Variable Distinction in Social

Psychological Research: Conceptual, Strategic, and Statistical Considerations*. 10.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role

in psychological well-being. *Journal of Personality and Social Psychology*, *84*(4), 822–

848. https://doi.org/10.1037/0022-3514.84.4.822

Brynjolfsson, E., Horton, J., Ozimek, A., Rock, D., Sharma, G., & TuYe, H.-Y. (2020).

COVID-19 and Remote Work: An Early Look at US Data (No. w27344; p. w27344).

National Bureau of Economic Research. https://doi.org/10.3386/w27344

Cardaciotto, L., Herbert, J. D., Forman, E. M., Moitra, E., & Farrow, V. (2008). The

Assessment of Present-Moment Awareness and Acceptance: The Philadelphia

Mindfulness Scale. *Assessment*, *15*(2), 204–223.

https://doi.org/10.1177/1073191107311467

Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and Initial Validation of a Multidimensional Measure of Work–Family Conflict. *Journal of Vocational Behavior*, *56*(2), 249–276. https://doi.org/10.1006/jvbe.1999.1713

Derks, D., Bakker, A. B., Peters, P., & van Wingerden, P. (2016). Work-related smartphone use, work–family conflict and family role performance: The role of segmentation preference. *Human Relations*, *69*(5), 1045–1068. https://doi.org/10.1177/0018726715601890

Eddleston, K. A., & Mulki, J. (2017). Toward Understanding Remote Workers' Management of Work–Family Boundaries: The Complexity of Workplace Embeddedness. *Group & Organization Management*, *42*(3), 346–387. https://doi.org/10.1177/1059601115619548

Edwards, J. R., & Rothbard, N. P. (1999). Work and Family Stress and Well-Being: An Examination of Person-Environment Fit in the Work and Family Domains. *Organizational Behavior and Human Decision Processes*, *77*(2), 85–129. https://doi.org/10.1006/obhd.1998.2813

Ernst Kossek, E., & Ozeki, C. (1998). Work–family conflict, policies, and the job–life satisfaction relationship: A review and directions for organizational behavior–human resources research. *Journal of applied psychology*, *83*(2), 139.

Falk, G. (2020). *Unemployment Rates During the COVID-19 Pandemic*. Congressional Research Service.

Fisher, G. G., Bulger, C. A., & Smith, C. S. (2009). Beyond work and family: A measure of work/nonwork interference and enhancement. *Journal of Occupational Health Psychology*, *14*(4), 441–456. https://doi.org/10.1037/a0016737

Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: study of emotion and coping during three stages of a college examination. *Journal of personality and social psychology*, *48*(1), 150.

Foucreault, A., Ollier-Malaterre, A., & Ménard, J. (2018). Organizational culture and work–life integration: A barrier to employees' respite? *The International Journal of Human Resource Management*, *29*(16), 2378–2398. https://doi.org/10.1080/09585192.2016.1262890

Fritz, C., Yankelevich, M., Zarubin, A., & Barger, P. (2010). Happy, healthy, and productive: The role of detachment from work during nonwork time. *Journal of Applied Psychology*, *95*(5), 977–983. https://doi.org/10.1037/a0019462

Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: testing a model of the work-family interface. *Journal of applied psychology*, *77*(1), 65.

Gajendran, R. S., & Harrison, D. A. (2007a). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, *92*(6), 1524–1541. https://doi.org/10.1037/0021-9010.92.6.1524

Golden, T. D., Veiga, J. F., & Simsek, Z. (2006). Telecommuting's differential impact on work-family conflict: Is there no place like home? *Journal of Applied Psychology*, *91*(6), 1340–1350. https://doi.org/10.1037/0021-9010.91.6.1340

Gutek, B. A., Searle, S., & Klepa, L. (1991). *Rational Versus Gender Role Explanations for Work-Family Conflict*. 10.

Hahn, V. C., & Dormann, C. (2013). The role of partners and children for employees'

    psychological detachment from work and well-being. *Journal of Applied Psychology*,

    98(1), 26–36. https://doi.org/10.1037/a0030650

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis:*

    A regression-based approach. Guilford Publications.

Howell, A. J., Digdon, N. L., & Buro, K. (2010). Mindfulness predicts sleep-related self-

    regulation and well-being. *Personality and Individual Differences*, *48*(4), 419–424.

    https://doi.org/10.1016/j.paid.2009.11.009

Hülsheger, U. R., Lang, J. W. B., Depenbrock, F., Fehrmann, C., Zijlstra, F. R. H., & Alberts,

    H. J. E. M. (2014). The power of presence: The role of mindfulness at work for daily

    levels and change trajectories of psychological detachment and sleep quality. *Journal of*

    Applied Psychology, *99*(6), 1113–1128. https://doi.org/10.1037/a0037702

John Hopkins Coronavirus Resource Center. (n.d.). *United States cases by county.* Johns

    Hopkins University & Medicine. Retrieved April 15, 2020, from

    https://coronavirus.jhu.edu/us-map

Joseph, S., Linley, P. A., Harwood, J., Lewis, C. A., & McCollam, P. (n.d.). *Rapid assessment*

    of well-being: The Short Depression-Happiness Scale (SDHS). 14.

Kelliher, C., & Anderson, D. (2010). Doing more with less? Flexible working practices and

    the intensification of work. *Human Relations*, *63*(1), 83–106.

    https://doi.org/10.1177/0018726709349199

Kramer, A., & Kramer, K. Z. (2020). The potential impact of the Covid-19 pandemic on

    occupational status, work from home, and occupational mobility. *Journal of Vocational*

    Behavior, *119*, 103442. https://doi.org/10.1016/j.jvb.2020.103442

Kreiner, G. E. (2006). Consequences of work-home segmentation or integration: A person-environment fit perspective. *Journal of Organizational Behavior*, *27*(4), 485–507. https://doi.org/10.1002/job.386

Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review*, *29*(8), 695–706. https://doi.org/10.1016/j.cpr.2009.07.003

MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding and suppression effect. *Prevention science*, *1*(4), 173-181.

Nagy, M. S. (2002). Using a single-item approach to measure facet job satisfaction. *Journal of Occupational and Organizational Psychology*, *75*(1), 77–86. https://doi.org/10.1348/096317902167658

Nilles, J. (1975). Telecommunications and Organizational Decentralization. *IEEE Transactions on Communications*, *23*(10), 1142–1147. https://doi.org/10.1109/TCOM.1975.1092687

O'Driscoll, M. P., Ilgen, D. R., & Hildreth, K. (1992). Time devoted to job and off-job activities, interrole conflict, and affective experiences. *Journal of Applied Psychology*, *77*(3), 272–279. https://doi.org/10.1037/0021-9010.77.3.272

Panchal, N., & Kamal, R. (n.d.). *The Implications of COVID-19 for Mental Health and Substance Use*. 14.

Park, Y., Fritz, C., & Jex, S. M. (2011). Relationships between work-home segmentation and psychological detachment from work: The role of communication technology use at

home. *Journal of Occupational Health Psychology*, *16*(4), 457–467.

https://doi.org/10.1037/a0023594

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https://www.qualtrics.com

Saad, L., & Jones, J.M. (2021). *Seven in 10 U.S. white-collar workers still working*

remotely. Gallup.com. https://news.gallup.com/poll/348743/seven-u.s.-white-collar-

workers-still-working-remotely.aspx.

Song, Y., & Gao, J. (2019). Does Telework Stress Employees Out? A Study on Working at

Home and Subjective Well-Being for Wage/Salary Workers. *Journal of Happiness*

Studies. https://doi.org/10.1007/s10902-019-00196-6

Sonnentag, S., & Fritz, C. (2007). The Recovery Experience Questionnaire: Development and

validation of a measure for assessing recuperation and unwinding from work. *Journal of*

Occupational Health Psychology, *12*(3), 204–221. https://doi.org/10.1037/1076-

8998.12.3.204

Spoorthy, M. S., Pratapa, S. K., & Mahant, S. (2020). Mental health problems faced by

healthcare workers due to the COVID-19 pandemic–A review. *Asian Journal of*

Psychiatry, *51*, 102119. https://doi.org/10.1016/j.ajp.2020.102119

Tingley, D., Yamamoto, T., Hirose, K., Keele, L., & Imai, K. (2014). Mediation: R package

for causal mediation analysis. *Journal of Statistical Software*.

U.S. Bureau of Labor Statistics. (2021, August 16). *The Unemployment Situation — July*

2021. https://www.bls.gov/news.release/pdf/empsit.pdf

Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: how good are

single-item measures?. *Journal of applied Psychology*, *82*(2), 247.

Williamson, V., Murphy, D., & Greenberg, N. (2020). COVID-19 and experiences of moral

injury in front-line key workers. *Occupational Medicine*, *70*(5), 317–319.

https://doi.org/10.1093/occmed/kqaa052

Appendix A: Questionnaires

Segmentation Preferences (Kreiner, 2006)

Please respond to the following items in terms of your typical preferences about the separation between work and personal life, even though you may be working from home currently (responses on a 1-7 Likert scale ranging from "strongly disagree" to "strongly agree").

1. I don't like to have to think about work while I'm at home
2. I prefer to keep work life at work
3. I don't like work issues creeping into my home life
4. I like to be able to leave work behind when I go home

Segmentation Culture (Park et al., 2011)

Please respond to the following items in terms of the typical preferences and behaviors about the separation between work and personal life of the *people you work with*, even though they may be working from home currently (responses on a 1-7 Likert scale ranging from "strongly disagree" to "strongly agree").

1. The people I work with forget about work when they're home
2. The people I work with keep work matters at work
3. The people I work with prevent work issues from creeping into their home life
4. The people I work with can mentally leave work behind when they go home

Psychological Detachment (Sonnentag & Fritz, 2007)

Responses on 1-7 Likert scale ranging from "strongly disagree" to "strongly agree"

During time after work…
1. I forget about work
2. I don't think about work at all
3. I distance myself from my work
4. I get a break from the demands of work

Work-Family Conflict (Fisher et al., 2009)

Responses on 1-7 Likert scale ranging from "strongly disagree" to "strongly agree"

1. I often neglect my personal needs because of the demands of my work
2. My personal life suffers because of my work
3. I have to miss out on important personal activities because of my work
4. I come home from work (or finish work) too tired to do things I would like to do
5. My job makes it difficult to maintain the kind of personal life I would like

Family-Work Conflict (Fisher et al., 2009)

1. My personal life drains me of the energy I need to do my job
2. My work suffers because of everything going on in my personal life
3. am too tired to be effective at work because of things I have going on in my personal life
4. When I am at work, I worry about things I need to do outside of work
5. I have difficulty getting my work done because I am preoccupied with personal matters

Trait Mindfulness (adapted from Brown & Ryan, 2003)

Responses on 1-7 Likert scale ranging from "never" to "always"

1. It seems I am "running on automatic" without much awareness of what I'm doing
2. I rush through activities without being really attentive to them
3. I find myself doing things without paying attention

Short Depression – Happiness Scale (Joseph et al., 2004)

Responses on 1-7 Likert scale ranging from "never" to "always"

Please read each statement and select the response that best describes how frequently you felt this way in the past couple of months:

1. I felt dissatisfied with my life
2. I felt happy
3. I felt cheerless
4. I felt pleased with the way I am
5. I felt that life was enjoyable
6. I felt that life was meaningless

Job Satisfaction

Responses on a 1-5 Likert scale ranging from "strongly disagree" to "strongly agree"

1. I like my job

Change in Job Satisfaction

1. How much did your overall job satisfaction change from before the COVID-19 pandemic to now?
   a. I am much less satisfied with my job
   b. I am somewhat less satisfied with my job
   c. My job satisfaction has remained the same
   d. I am somewhat more satisfied with my job
   e. I am much more satisfied with my job

Job Demand

1. On average, about how many hours, total, have you worked per week over the last two months?
   a. Slider-bar response that ranges from 0 – 100 hours

Household Size

1. Including yourself, how many family members do you live with, in your home, on a permanent basis?
   a. Slider-bar response that ranges from 0-12 members