

# The International Journal of Human Resource Management

ISSN: (Print) (Online) Journal homepage: [www.tandfonline.com/journals/rijh20](http://www.tandfonline.com/journals/rijh20)

## Covid-19, working from home and work–life boundaries: the role of personality in work–life boundary management

O. Raphael Oseghale, Dennis Pepple, Michael Brookes, Alex Lee, Hafiz Alaka, Akua Nyantakyiwaa & Ajlaa Mokhtar

**To cite this article:** O. Raphael Oseghale, Dennis Pepple, Michael Brookes, Alex Lee, Hafiz Alaka, Akua Nyantakyiwaa & Ajlaa Mokhtar (30 Oct 2024): Covid-19, working from home and work–life boundaries: the role of personality in work–life boundary management, The International Journal of Human Resource Management, DOI: [10.1080/09585192.2024.2422013](https://doi.org/10.1080/09585192.2024.2422013)

**To link to this article:** <https://doi.org/10.1080/09585192.2024.2422013>



© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 30 Oct 2024.



Submit your article to this journal [↗](#)




View related articles [↗](#)



View Crossmark data [↗](#)

# Covid-19, working from home and work–life boundaries: the role of personality in work–life boundary management

O. Raphael Oseghale<sup>a</sup> , Dennis Pepple<sup>b</sup>, Michael Brookes<sup>c</sup>, Alex Lee<sup>a</sup>, Hafiz Alaka<sup>a</sup>, Akua Nyantakyiwaa<sup>a</sup> and Ajlaa Mokhtar<sup>a</sup>

<sup>a</sup>Hertfordshire Business School, University of Hertfordshire, Hatfield, UK; <sup>b</sup>University of Leicester School of Business, University of Leicester, Leicester, UK; <sup>c</sup>Syddansk Universitet, University of Southern Denmark, Slagelse, Zealand, Denmark

## ABSTRACT

Working from home (WFH) has accelerated in occurrence following social distancing measures directed at stemming the spread of Covid-19 globally. Using a sample of 41 in-depth qualitative interviews and measurement of the personality scores of the 41 interviewees, who are UK academics, using the IPIP test questionnaire, we explored how mandatory WFH impacts the boundary management of different academics based on their personality and the role of personality in their boundary-management approach to enhance work-life balance (WLB) during Covid-19. Our results suggest that mandatory WFH impacts academics differently depending on their personality, with academics high in conscientiousness and introversion (compared to their neurotic and extroverted colleagues) more suited to managing work and life domains to maintain a WLB while working from home. Building on boundary theory, we uncovered that while conscientious and introverted academics preferred and used integration as their boundary-management style, extroverted academics preferred segmentation in favor of family, but used volleying as a boundary-management style. Neurotic academics leaned toward our newly uncovered boundary-management style – quitter. Our findings suggest that the family circumstances of academics play an important role in their boundary-management styles. Overall, our study suggests relationships between personality and boundary-management styles and characteristics.

## KEYWORDS

Covid-19; working from home; work–life balance; boundary management; personality

## Introduction

The Covid-19 outbreak in December 2019 forced businesses to implement a partial or complete lockdown following the United Kingdom (UK) government's social distancing regulations, which were brought in

**CONTACT** O. Raphael Oseghale  [r.oseghale@herts.ac.uk](mailto:r.oseghale@herts.ac.uk)  Hertfordshire Business School, University of Hertfordshire, Hatfield LA10 9AB, UK

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group  
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

to protect the public in 2020. One notable social distancing measure was working from home (WFH), which was implemented to enable employees to continue to carry out their work in the safer environment of their homes. WFH during the Covid-19 lockdown involved initiatives imposed by organizations whereby their employees could work from their homes through the use of computer-based assisted technology (Shao et al., 2021) while socially distancing from colleagues, customers, and stakeholders consistent with social distancing regulations.

WFH has gained traction due to the changing nature of work, new technological developments, and the need to make work accessible (Lippe & Lippényi, 2020). The past three decades have seen an increased call for organizations to offer their workers more flexibility, for example by drawing up remote work plans (Lippe & Lippényi, 2020). In Europe (including the UK), an EAE Business School report found that the number of companies using remote working had increased to 88% in 2020 from an initial 4% (EAS, 2020). The huge increase in the percentage of employees involved in remote working has been overwhelmingly linked to the Covid-19 pandemic (Venkatesh et al., 2021). However, only some jobs (those that can be done using computers) could be carried out at home. According to the Office of National Statistics in 2020, 47% of UK people worked from home in April 2020, 86% of those because of Covid-19.

One pertinent problem associated with WFH generally is that it blurs the boundaries between work and life (Rapp et al., 2021). WFH was known to blur boundaries before the Covid-19 lockdown (Donnelly & Proctor-Thomson, 2015). However, with children (who could not go to school) and all family members at home during the lockdown, this blurring became exacerbated (Adisa et al., 2022; Holder, 2020). Additionally, individuals working from home—both those with a family at home and those without—who could not go out for leisure or other social activities due to the lockdown also had to manage other nonwork issues, such as cooking and receiving phone calls from extended family members/friends (Kossek et al., 2021). These new dynamics made it difficult for employees working from home to effectively manage work and life domains, which engendered boundary management, work–life balance (WLB), and performance issues for many employees working from home during the pandemic (Adisa et al., 2022).

Research results from studies on WFH and WLB during crises have been mixed. WFH and WLB research during prior crises (such as the earthquakes in New Zealand, which created similar living and working conditions to those of Covid-19) by Donnelly and Proctor-Thomson (2015) found that mandatory WFH helped most employees to maintain WLB. In contrast, Palumbo et al. (2021) and Rapp et al. (2021) observed that WFH during the lockdown impacted employee WLB both negatively and

positively. Recent studies suggest that achieving good WLB while WFH depends on the employees' capacity for effective boundary management (Allen et al., 2021; Gardner et al., 2021). However, the Covid-19 pandemic and the consequent disruptions in the work–life spheres have further underscored the need to study WFH, boundary management, and WLB (Adisa et al., 2022). Research into this area could provide significant insight into how to select and train appropriate workers and develop boundary management/WLB policies and programs better suited to WFH in the context of the 'new normal' (Kramer & Kramer, 2020) or the next crisis, to avoid the stress/burnout and decline in productivity associated with poor boundary management when WFH (Adisa et al., 2022).

Boundary theory (BT) (Ashforth et al., 2000) suggests that individuals create and maintain boundaries between domains (work and life) in their efforts to maintain good WLB. Boundary-management research conducted both before and during the Covid-19 lockdown agreed that boundary-management styles that enhance WLB include segmentation and integration, but that individuals differ in their preference for either segmentation or integration of work–life domains (Kreiner et al., 2009, Rapp et al., 2021). While scholars agree that individuals differ in these preferences for integration or segmentation and that individual personality plays a role in boundary-management strategies (Afota et al., 2023; Kossek et al., 2012), BT tends to overlook how individual personality impacted the boundary-management behavior of employees (Gardner et al., 2021) in terms of enhancing WLB during the pandemic (Adisa et al., 2022; Allen et al., 2021). In fact, no published work (except Kroumova et al., 2021, which examined personality and work–family conflict) has studied how personality influences boundary management and the implications of this for WLB during the Covid-19 pandemic in the literature. Thus, Rapp et al. (2021) and Rothbard et al. (2021) have called for research to examine how WFH in a specific context (such as the pandemic) influences employee boundary management in different occupations depending on their individual personalities. To effectively develop personalized boundary-management policies and programs for an appropriate workforce in the new normal post-pandemic, it is important to understand why individuals may choose a particular boundary-management style and tactic over another, and the nature and effectiveness of different boundary-management styles in terms of maintaining good WLB while working from home (Cho, 2020; Gardner et al., 2021). According to Tett and Burnett (2003), situations like the Covid-19 pandemic evoke the expression of specific personality traits.

Recent efforts to theorize and extend BT by Baer et al. (2016) and Gardner et al. (2021) suggest that individuals with personality traits such as conscientiousness and extroversion manage work–life boundaries

better than their introverted or neurotic colleagues pre-Covid-19. According to this perspective, conscientious and extroverted individuals, through careful planning, hard work, diligence, and resource conservation (the latter of which is a form of adaptability that is associated with plasticity, according to Thompson et al., 2021) respectively, effectively segmented their work–life boundaries while working from home to maintain good WLB (Baer et al., 2016; Gardner et al., 2021). According to Kroumova et al. (2021), the behavioral tendencies associated with personality traits are construed as resources that can help the individual deal with conflicting role requirements. The authors found that neurotic and introverted individuals managed work–life boundaries poorly due to emotional reactivity (fear/worry) and resource depletion during privacy violations both of the work and the home domains, for example work spilled over into their home life and vice versa (Baer et al., 2016; Gardner et al., 2021). However, we note that the findings from pre-Covid-19 studies such as those by Gardner et al. (2021) and Baer et al. (2016) cannot be generalized to cover the Covid-19 work context. The mandatory use of WFH during the Covid-19 pandemic means that post-pandemic conditions differ significantly from the pre-Covid-19 work context. According to Venkatesh et al. (2021), conscientiousness may have a stronger positive (negative pre-Covid-19) relationship with job strain during Covid-19 due to their excessive focus on their job performance, which may hinder their ability to maintain a good WLB. Moreover, introverts, who are more comfortable working in isolation, perhaps with family members around, may better create and maintain boundaries in isolation while working from home during a pandemic.

Another major limitation associated with recent efforts to theorize and extend BT by exploring the links between personality, boundary management, and WLB is that only personality traits such as extroversion (and introversion) (Baer et al., 2016) and conscientiousness and neuroticism (Gardner et al., 2021) have been studied so far, and in separate studies. The four relevant Big Five personality traits (McCrae & Costa, 1997), extroversion, introversion, conscientiousness, and neuroticism (we exclude openness, as it is not theoretically associated with the ability to separate work from nonwork; O'Neill et al., 2009), have not been examined together in a single study (Adams, 2022), even though the examination of these traits could be valuable (Pavani et al., 2021). Individuals high in openness to experience do not possess the worker autonomy (De Jonge et al., 2001) required to assess and implement flexibility that is required by WFH (Donnelly & Proctor-Thomson, 2015). Drawing on research by Gardner et al. (2021) and Adams (2022), it is imperative to examine all four personality traits in a single study (context) to ensure that findings are: (a) attributed to the same mechanisms to enhance their reliability

and (b) valid for the design of boundary-management interventions that are more intuitive for employees. Moreover, more research is required to help us understand the role played by the other personality traits in employee boundary-management decisions, as contemporary workplaces comprise employees with all types of personalities (Adams, 2022; Gardner et al., 2021).

Therefore, this study aims to extend prior research on boundary theory by exploring how mandatory WFH impacts the boundary management styles of different individuals based on their personalities, and the role these boundary-management styles play in enhancing WLB. We extend boundary theory by providing theoretical insight into the role of personality traits in individual employees' (academics') boundary-management styles in their ability to enhance their WLB while working from home as a result of Covid-19. In so doing, we link different personality types to different boundary-management styles and characteristics in the literature, further extending boundary theory. We also widen the literature by providing new insight into the personalities of those employees who are more likely to segment work–life boundaries by putting family first (a practice considered inimical to organizational success) and the motivations for such behavior (Thompson et al., 2021). From a methodological standpoint, we contribute to the literature by collecting and analyzing qualitative and personality-test data from the same interviewees to achieve our research aim. Only a minimal number of studies on the effects of the Covid-19 pandemic have done this in the past. Finally, methodologically, we also contribute to the literature by demonstrating movement between segmentation and integration as boundary-management strategies in a cross-sectional study, as existing boundary-management literature by Kossek et al. (2012) and Gardner et al. (2021) suggest that this is only possible in longitudinal research.

## **Theoretical background and literature review**

### ***Working from home***

WFH is well established in many organizations and is not a new concept (Straus et al., 2023). Before the Covid-19 pandemic, WFH was volitional, organization-specific, and highly variable based on industry. When carefully planned and executed, WFH can foster flexibility in boundary management to create a good WLB (Mayo et al., 2016). However, studies have also shown that WFH does not always facilitate good WLB (Straus et al., 2023), as blurred work–life boundaries driven by WFH can make boundary management to support good WLB unachievable (Straus et al., 2023). Traditionally, the commute from home to work allows workers to transition between roles, but with WFH, this is not possible since work

is limited to the home (Mann & Holdsworth, 2003), and was solely carried out there during the Covid-19 pandemic.

With the onset of the pandemic, employees were forced to WFH using platforms such as Zoom, FaceTime, and MS Teams, whether or not they had prior WFH experience (Adisa et al., 2022). As a result, work and life domains overlapped significantly in terms of space and time (Adisa et al., 2022). As a result, the characteristics of work arrangements that were termed 'flexible' changed fundamentally, reducing employees' flexibility in managing between work–life tasks (Adisa et al., 2022). Reportedly, the implementation of mandatory WFH during this period, without employees being able to prepare for it, severely blurred the boundaries between work and life, particularly for employees with family members to cater to (Chen et al., 2021). As schools were closed, working parents found it challenging to look after children while working from home. Moreover, employees, whether or not they had families at home, also had to navigate nonlife issues (Kossek et al., 2021), such as receiving phone calls, cooking, and using home gym facilities while working from home.

With this, Shao et al. (2021) contend that the inability to satisfactorily engage with both work and life domains through individual boundary-management styles during periods of WFH in isolation may lead to poor WLB. We know through a recent study by Adisa et al. (2022) that academics who worked from home during the pandemic either segmented work–life domains through micro-boundaries or integrated both domains to enhance WLB, based on their abilities and levels of resilience. While this is known, we do not understand the role played by personality in the boundary-management preferences of these academics in their attempts to enhance their WLB while working from home (Cho, 2020; Gardner et al., 2021; Rapp et al., 2021). Research into this area is required to provide insight into the development of new HR policies and practices to enhance boundary-management behavior and thus WLB (Holder, 2020) in the context of the new normal post-Covid-19.

### ***Work–life balance (WLB)***

WLB is about being mentally engaged, functioning effectively, and experiencing satisfaction in both work and life roles (Casper et al., 2018; Chan et al., 2023). It involves employees' appraisal of how well they combine work and life roles (Casper et al., 2018). WLB defines the activities in the life or nonwork domain as including family and other personal interests (Greenhaus & Allen, 2011). The demands of balancing work and life are a challenge for both employees and their employers, and therefore WLB allows employees to fulfill work- and life-related tasks in a way that benefits them (Adisa et al., 2017). Notably, an employee's

inability to achieve a good WLB can increase their stress levels and hinder their productivity and that of the firm (Adisa et al., 2017).

Recent literature on WFH suggests that the traditional boundaries between work and life changed significantly during the period of mandatory WFH driven by the Covid-19 pandemic (Adisa et al., 2022) and that this impacted WLB. While working from home, employees require more family (and personal) time due to their closer proximity to family life. Work responsibilities related to the job role also demand employees to put in time and effort simultaneously during this period. However, effective effort, time, and commitment distribution to the different domains through boundary management can promote a good WLB (Chan et al., 2023).

The challenges of WLB have received significant attention to date (Adisa et al., 2022). However, as WFH received greater acceptance and attention during the Covid-19 pandemic, it is pertinent to examine WLB by means of a lens that considers this phenomenon (Adisa et al., 2022). To reiterate an earlier view, a recent study by Adisa et al. (2022) suggests that academics who worked from home during Covid-19 either segmented or integrated the work–life domains to enhance WLB. However, we do not know the role of personality in the boundary-management preferences of these academics and how this has enhanced their WLB.

### ***Boundary theory***

BT provides a framework for understanding the interface between unique challenges associated with WFH, boundary management, and WLB (Rapp et al., 2021). BT's focus is on understanding how the borders between work and life domains are managed; creating and maintaining these boundaries is essential to enhancing WLB (Adisa et al., 2022). BT became even more relevant during the period of mandatory WFH driven by Covid-19 because of the associated fundamental overlap between work and nonwork domains (Gardner et al., 2021) and the boundary-management effort required to drive good WLB (Adisa et al., 2022; Gardner et al., 2021).

Boundary management entails an active process of taking actions and making decisions on the part of employees in order to delineate or blend the symbolic, material, social, and temporal demarcations between their work–life domains (Rapp et al., 2021). Boundary management styles refers to employees' different approaches to demarcating boundaries and attending to work–life domains given boundary constraints and identity centralities (Kossek et al., 2012). Drawing on earlier boundary-management literature shows that individuals manage the boundaries between work and life by drawing on two predominant boundary-management styles, integration or segmentation of the work and life domains, to create a

balance (Kossek et al., 2012). To invoke BT, this means that employees socially construct and maintain psychological, temporal, and physical boundaries between work and home to simplify and classify the world around them (Ashforth et al., 2000; Chan et al., 2023). A higher level of integration is far more common during periods of WFH (Ashforth et al., 2000), as the work domain becomes closer to the life domain. A notable benefit of integrating domains is that one can easily change from one domain to the other. However, the incidence of blurring is far greater with integration (Ashforth et al., 2000). In contrast, segmentation has the advantage that it reduces the blurring of roles; however, its limitation is that it creates a high contrast between those roles, which may increase the magnitude of resources required to transition between them. While noting that individuals do not only integrate or segment domains, Kossek and Lautsch (2008) developed a new boundary management style (that of volleyers, who alternate between integration and segmentation) to reflect the growing number of individuals who may have configurations that are dual-centric.

According to Kreiner et al. (2009), employees can use any of the four types of boundary management tactics—temporal, physical, behavioral, and communicative—when segmenting or integrating work and life domains. In a study of how individual personality affects various boundary-management styles, Kossek et al. (2012) note that certain characteristics, such as cross-role interruptions (the extent to which individuals allow interruptions across roles), work-identity centrality, and boundary-control perception are important. Work-identity centrality refers to the value an individual places on one or more of their identities (work or nonwork, e.g. family). At the same time, boundary-control perception describes an individual's perceptions around whether they have control over the ability to cross from one domain to the other (Kossek et al., 2012). Under cross-role perception, interruptions might not necessarily be welcomed but are allowed by the individual (Gardner et al., 2021). Typically, the value an individual places on one role identity over the other is determined by the time and energy invested in that role when looking at role centrality (Kossek et al., 2012). Dual centrality of roles implies that the individual views their work and life (including family) roles as having equal weighting (Gardner et al., 2021). Finally, individuals with high perceived control will believe they can control the direction and frequency of interruptions and the frequency of boundary crossing in line with their needs, and vice versa (Kossek et al., 2012).

Additionally, given contextual restrictions, individual employees may not be able to enact boundary behavior (the actual enacted action an individual takes to manage their boundaries) in direct accordance with their boundary-management preferences (e.g. the way an individual

*desires* to manage their boundaries; Kossek et al., 2012; Gardner et al., 2021). Adisa et al. (2022) contend that the strength of borders between life and work domains is determined by flexibility and the permeability of boundaries. Whereas impermeable/thick role boundaries are closed to influence, more permeable/thin role boundaries are more open to change (Clark, 2000; Rapp et al., 2021). Flexibility is assessed by looking at the extent of an individual's willingness and ability (the degree to which the physical and temporary boundaries are pliable) to modify the temporal or physical restrictions of their work and life domains (Adisa et al., 2022; Ashforth et al., 2000) consistent with their cross-role-interruption, role centrality, and boundary-control perceptions.

### ***BT and personality***

While BT (Ashforth et al., 2000) contends that individuals construct and maintain boundaries between domains, the theory does not articulate how individual personality impacts the maintenance and construction of those boundaries during a crisis such as the Covid-19 pandemic. Prior research (Baer et al., 2016; Gardner et al., 2021) has found that personality characteristics such as neuroticism, conscientiousness, and extroversion (introversion) are related to boundary management, but researchers have not examined the role of personality in the employee's choice of boundary-management styles and tactics (Kroumova et al., 2021) in their efforts to create good WLB while working from home during a crisis. Moreover, studies on boundary management and personality did not address all four personality traits (extroversion, introversion, conscientiousness, and neuroticism) in a single study.

According to Costa and McCrae (1997, p. 270), personality refers to '... dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings, and actions.' Baer et al. (2016) and Gardner et al. (2021) suggest that Big Five personality traits, such as extroversion (introversion), conscientiousness, and neuroticism, are related to boundary management. Similarly, prior research links conscientiousness to boundary enactment (Kroumova et al., 2021). According to this literature, conscientiousness is related to greater perceived control, fewer cross-role interruptions, and work-identity centrality (Gardner et al., 2021). Conscientious individuals are hardworking, methodical, and deliberate in their actions and thus effectively manage their time, responsibilities, and tasks across roles, particularly for roles with high work centrality (Gardner et al., 2021). Moreover, conscientious individuals are high in emotional stability, which is associated with the tendency to stay on course and minimize social and emotional interruptions. Consequently, conscientious workers high in emotional stability may build strong

work–life boundaries to separate the two domains (Kroumova et al., 2021) in highly integrated work–life environments such as the WFH environment created by the Covid-19 pandemic. Thus, we argue that conscientious workers may be more open to segmentation in favor of the work domain to enhance their WLB. While conscientious workers may attend to interruptions that still fall within the work domain, they may be more diligent in preventing interruptions from other domains (Gardner et al., 2021).

Another personality characteristic likely to be related to boundary management is neuroticism (Kroumova et al., 2021). Employees who are high in neuroticism tend to be emotionally reactive and worry a lot. In the context of WFH during a pandemic like Covid-19, they may be less efficient with their time due to concerns about aspects outside their critical tasks (Gardner et al., 2021; Kroumova et al., 2021). Employees who are high in neuroticism will be more emotionally reactive during conditions such as those of the pandemic, because of worry about how best to do their job well under the circumstances. As a result, they may experience more cross-role interruptions, as they may be too worried to refuse interruptions and draw boundaries (Gardner et al., 2021). Employees who are high in neuroticism are more likely to experience less perceived boundary control based on emotional instability and emotional reactions. However, they may lean toward segmentation as their boundary-management style to enhance good WLB while working from home (Gardner et al., 2021). Employees who are neurotic, therefore, tend to see family as central (Gardner et al., 2021).

Research (Baer et al., 2016; Kroumova et al., 2021) has also linked extroversion and introversion to boundary management while WFH, albeit not during a crisis. According to the account by Baer et al. (2016), extroverted workers, due to their ability to conserve and deploy resources (adaptability) during boundary violation, can manage work–life boundaries better (than introverted workers) to enhance their WLB while WFH in a highly integrated work–life environment. Extroverts are high in plasticity (the need for exploration and new experiences) and are likely to adapt to many new situations (DeYoung, 2015). Conversely, the authors argued that due to resource depletion during periods of boundary violation, while working from home, introverts compromise their work domain in favor of the life (family) domain, as they are not comfortable with interruptions in either domain (Baer et al., 2016). According to this account, introverts prefer to spend time alone and may be more sensitive toward feelings of invasion when the work domain encroaches on the life (family) domain.

The current study contends that, generally, the WFH environment during the Covid-19 pandemic is understood to have been different

from WFH pre-Covid-19. Thus, we may expect to see different boundary-management behavior from extroverts and introverts WFH during these two periods. Due to its association with high plasticity, extroversion can be related to perceived control and fewer disturbances caused by cross-role interruptions, which supports segmentation as a boundary management style in a Covid-19-induced WFH context that can be used to enhance good WLB. The current study argues that employees who are high in extroversion may elevate their family identity (segmenting in favor of family) over their work identity as they are low in emotional stability (Kroumova et al., 2021), which may make it difficult for them to stay on course and minimize social interruptions while working from home, perhaps with family members around. Conversely, employees who are high in introversion can be related to the characteristics of perceived control, allowing fewer disturbances caused by cross-role interruptions, and dual-identity centrality due to their high level of emotional stability, which is useful for staying on course and minimizing social and emotional interruptions while working from home. Thus, employees who are high in introversion may prefer segmentation (in favor of both work and family, due to their high level of emotional stability, which helps them to minimize social interruptions such as those from family members) as their boundary-management style while working from home.

We note that boundary-management preference and strategy can also be considered in relation to environmental conditions (such as family circumstances) (Allen et al., 2021). Prior research by Adisa et al. (2022) found that those living alone may find it easier to segment domains to enhance their WLB than those living with others while working from home. This is likely because family members who are at home while employees work from home can interrupt those workers with nonwork activities as well as help them in getting the job done (Donnelly & Proctor-Thomson, 2015). Within the boundary-management literature, research has focused on workplace environment resources such as supervisor support in boundary management (Allen et al., 2021). Research is yet to address the social and physical features within the home environment that may promote boundary integration or segmentation (Allen et al., 2021). The current study will provide insights into how family circumstances can interact with personality in employee boundary-management experiences when WFH.

To summarize, the present study is a response to recent work (Gardner et al., 2021, Rapp et al., 2021) calling for research on how WFH during a pandemic influences individual employees' boundary-management experiences and how personality impacts their boundary-management styles, and its aim is outlined here: to investigate how WFH during the

Covid-19 lockdown impacted individual employees based on their personalities and the role those personalities played in their boundary-management styles during this period. With the increasing overlap between work and nonwork due to WFH during the lockdown, more research is required to understand which types of employees work well from home during a crisis (Kramer & Kramer, 2020; O'Neil et al., 2014). This leads us to pose the following questions:

- What key factors differentiate WFH pre-Covid-19 from WFH during the Covid-19 pandemic?
- How do the complexities associated with WFH during Covid-19 impact individual employees differently based on their personality?
- How do employees working from home manage work–life boundaries consistent with their personality?

### ***UK higher education context***

The context of this study is higher education in the UK. WFH was a common practice in this context before the pandemic and was usually done voluntarily and by agreements between academic staff and their managers, like in other sectors (Beauregard et al., 2019). When mandatory WFH began in March 2020, this required UK academics to rapidly convert their existing teaching materials into a format suitable for online delivery (Oseghale et al., 2023; Pepple, 2022). This was followed by the need to deliver these materials online from the various homes of academic staff. These online teaching and learning activities have continued up to the time of writing, consistent and beyond the government's social distancing policy. There were also academic staff members whose job roles involved research and enterprise in addition to teaching, whose jobs were also affected by the WFH policy. These roles were structured differently. For example, although teaching and learning activities were done remotely, academics did not have the flexibility to determine tasks, priorities, and goals. Classes were timetabled online, and assessment deadlines were set. This was different for those involved in research roles, whose tasks were unstructured. Hence, Gardner et al. (2021) suggests that the work structure when WFH influences how academics manage boundaries to maintain good WLB. We also acknowledge that some roles in the UK education context were not affected by the WFH mandate (e.g. some nonacademic staff working in maintenance and security). These employees were classed as key workers, and continued to work as normal during the pandemic (Apouey et al., 2020).

As elsewhere, mandatory WFH during the Covid-19 environment was highly associated with WLB issues. Academics faced the challenge of

limited flexibility in the WFH arrangements they were used to. The physical and psychological borders demarcating work and life domains were blurred by the government's Covid-19 WFH guidelines, which limited both domains to the same space 24 hours a day (Adisa et al., 2022). While academics have, at least relative to other sectors, more autonomy to choose WFH, recent WFH increased the workload of academics in the context of increasing student numbers in the UK (Ogbonna & Harris, 2004), making UK academics a good population in which to study WLB issues while working from home.

## **Method**

This study draws on a qualitative approach followed by the International Personality Item Pool (IPIP) questionnaire analysis to understand the subjective views of academics on how they were impacted by WFH consistent with their personalities during Covid-19, and the role of personality in their choice of boundary-management style. Following Shiyabola et al. (2021), the use of mixed methods (in an exploratory sequential design where qualitative approach comes before IPIP questionnaire administration) enabled the use of IPIP questionnaire data to corroborate qualitative findings on personality. A qualitative approach was used initially in order to obtain the participant's subjective views and 'rich' contextual information on various concepts (Ogbonna & Harris, 2004), including personality. IPIP questionnaire data was then used to corroborate the qualitative personality data. This mixed-methods approach also enabled the use of the IPIP questionnaire to offset any limitations associated with the use of one measurement approach (qualitative interviews) in measuring personality (Busetto et al., 2020; Shiyabola et al., 2021). According to McDonald (2008) and Tupes (1950), incorporating multiple methods is more reliable for measuring personality, as more comprehensive psychological data will enable valid personality ratings.

## ***Sampling and interview procedure***

Based on the exploratory sequential approach, the study commenced with qualitative data collection. Following Busetto et al. (2020), an exploratory sequential design was selected to enable initial in-depth and rich qualitative interview data to inform and enable the identification of a questionnaire instrument (IPIP in this case).

Given the exploratory nature of this study and the need to understand the research context, purposive and snowballing sampling strategies were used. Purposive sampling enables researchers to identify and select key participants with expert knowledge of the phenomenon under study

(Ogbonna & Harris, 2004). First, a purposive sampling strategy enabled us to contact and select lecturers across different UK universities to understand how they were impacted by WFH and the role of personality in their choice of boundary management styles. Initially, the authors contacted academics in their network who were working from home strictly only because of the government's social distancing regulations in response to Covid-19. Academics from both old and new universities in the UK were deliberately selected to provide wider insight and improve generalizability. A limitation of this sampling strategy is that it enhances internal validity, but it may limit external validity (Andrade, 2021). Nonetheless, the experience of academics was similar to that of professionals in other sectors working from home during the mandatory WFH period. Second, and in line with a snowballing strategy, after their interviews, colleagues (interviewees) teaching from home gave the authors access to their peers who were also teaching from home due to the government's stay-at-home regulations. Our participants were selected from different academic positions, genders, and family backgrounds. Table 1 provides an overview of the details of the participants' demographics (including their personality-test scores). Participants were contacted again by telephone to arrange a mutually convenient interview date, location, and time.

Before conducting the interviews, the authors received ethical approval from a UK university. A total of 50 semi-structured interviews were conducted with academics who had delivered teaching and learning activities on campus before Covid-19 and then quickly adapted to online teaching during the lockdown. Saturation, referred to as both the comprehensiveness of data collection and data analysis, was attained (Saunders et al., 2018). The authors stopped interviewing after 50 interviews; data saturation had been achieved after 40 interviews (Bell et al., 2019, p. 399). After the 40<sup>th</sup> interview, no new information was generated. The authors continued data collection for ten more interviews to ensure and confirm that no new information was emerging (Saunders et al., 2018). This evidence supports the adequacy of the sample in relation to theory development.

Semi-structured interviews were preferred, to allow interviewees to frame their experience of WFH and boundary management by explaining events, patterns, and forms of behavior. An interview guide was used to provide a general structure for questioning, allowing the authors to ask a very similar set of questions. However, interesting lines of inquiry were pursued further, to facilitate uninterrupted discussion. The interview guide was developed after an extensive review of the literature on WFH, personality, and work-life balance. Questions around WFH, its impact, boundary management, and WLB were asked to initiate open-ended narratives during the interview. Although the authors did not overtly ask about personality in boundary management so as to

**Table 1.** Demographics of participants.

ID	Personality Test Score IPIP (Goldberg, 1992)	Gender	Living arrangement	Job title
Participant1	(E = 30)	Female	With Family	Lecturer
Participant2	(I = 11)	Female	With Family	Principal-Lecturer
Participant3	(E = 38)	Male	With Family	Principal-Lecturer
Participant4	(E = 36)	Male	With Family	Lecturer
Participant5	(E = 37)	Male	With Family	Lecturer
Participant6	(C = 35)	Female	With Family	Lecturer/Research
Participant7	(E = 38)	Male	With Family	Professor
Participant8	(I = 15)	Female	With Family	Principal-Lecturer
Participant9	(I = 15)	Female	Lives alone	Professor
Participant10	(N = 34)	Male	With Family	Senior-Lecturer
Participant11	(E = 38)	Male	With Family	Senior-Lecturer
Participant12	(C = 33)	Male	Didn't want to share	Lecturer
Participant13	(E = 33)	Male	With Family	Lecturer/Research
Participant14	(N = 34)	Male	Didn't want to share	Lecturer
Participant15	(C = 34)	Male	With Family	Lecturer/Research
Participant16	(E = 36)	Female	With Family	Principal-Lecturer
Participant17	(E = 38)	Male	With family	Senior-Lecturer
Participant18	(I = 11)	Female	With Family	Lecturer
Participant19	(E = 28)	Male	Lives alone	Lecturer
Participant20	(I = 10)	Female	With Family	Lecturer
Participant21	(E = 35)	Female	With Family	Principal-Lecturer
Participant22	(E = 33)	Female	With Family	Lecturer
Participant23	(E = 30)	Male	With Family	Lecturer
Participant24	(E = 31)	Female	Lives alone	Lecturer
Participant25	(E = 37)	Female	With Family	Lecturer
Participant26	(C = 33)	Male	With Family	Principal-Lecturer
Participant27	(I = 14)	Male	With Family	Lecturer
Participant28	(E = 34)	Male	With Family	Senior-Lecturer
Participant29	(N = 36)	Male	With Family	Lecturer
Participant30	(N = 31)	Female	With Family	Lecturer
Participant31	(E = 35)	Female	With Family	Lecturer
Participant32	(E = 30)	Male	Lives alone	Lecturer
Participant33	(C = 37)	Female	With Family	Senior Lecturer
Participant34	(N = 38)	Female	Lives alone	Lecturer
Participant35	(I = 9)	Female	With Family	Lecturer
Participant36	(I = 11)	Female	Lives alone	Lecturer
Participant37	(N = 31)	Female	With Family	Principal-Lecturer
Participant38	(C = 37)	Male	Lives alone	Lecturer
Participant39	(C = 34)	Female	With Family	Lecturer
Participant40	(I = 7)	Male	With Family	Senior-Lecturer
Participant41	(C = 31)	Female	With Family	Senior-Lecturer

Keys: Personality score, E = Extrovert, I = Introvert, C = Conscientiousness, N = Neuroticism.

With family refers to those living with their partners and children.

avoid biasing participants views, participants' narratives during the interview clearly pointed to how their personalities impacted their ability to manage work-life boundaries. Consequently, participants were asked follow-up questions to clarify any gray areas about personality and boundary management. This approach allowed participants to provide personalized narratives and experiences in response to more précised and tailored questions asked by the researchers. Interviews were conducted on MS Teams and Zoom from May to July 2020. The interviews lasted between 45 and 60 min, and followed a broad schedule to ensure that all issues were discussed. Interviews were recorded, with the interviewees' permission.

### **Data (qualitative) analysis step 1**

Following a grounded theory approach (Strauss & Corbin, 1990), the first step of the data analysis consisted of the authors transcribing the recorded video and audio interviews and familiarizing themselves with the interview data. As Strauss and Corbin (1990) noted, grounded theory can be used to uncover new insights where research has largely been silent. The authors followed the two-step coding system (Kreiner et al., 2009) by first deriving codes from the interviews before agreeing on them in analyzing the interviews. Each paragraph, sentence, phrase, and word is considered a viable unit of text to be coded. Two authors read and independently coded each transcript in the first step. Each coder repeatedly read through the entire transcripts, marking up sentences, words, and passages consistent with codes in the WFH, boundary-management/WLB, and personality literature, as well as creating new codes to fit the emerging data.

In the second step, transcripts were analyzed by the first, second, and fifth authors in joint coding meetings. At this stage, the independent codes developed in stage one by the first and second authors were compared, and the final codes to be used for each transcript were agreed upon. Three scenarios often occurred for any given block of text in each transcript: (a) no codes were placed on the text, (b) only one coder marked a certain code on the text, and (c) both coders marked a certain code on the text. The individual who did not code the text with a given code would need to reread the passage in situation b, and the passage was coded accordingly if the individual agreed. A brief discussion about the meaning of the text would normally follow if the individual disagreed. The non-coding author (fifth author) served as the 'judge' whenever the first and second authors wanted a third set of eyes in order to aid the final code assignment. Thus, the judge would read the passage and offer an opinion on the appropriate code. The overall percentage of agreement between the two coders was 80%, which is above the suggested threshold of 70% (Cohen, 1960). See [Table 2](#), which shows codes and qualitative quotes from the transcripts.

A few codes that were found to overlap conceptually were merged, but others were subdivided when the authors saw distinctive patterns emerging whenever they analyzed new transcripts. This coding process ensured that multiple perspectives were offered on each transcript, and this helped to alleviate bias in the data analysis. No new code emerged after coding 40 interviews, indicating some evidence for analysis saturation, the point where subsequent examination of data does not provide any new information (Saunders et al., 2018; Tudor-Locke & Myers, 2001). With this, we evidenced that our data was analysed and interpreted to its full potential (Saunders et al., 2018). Codes were limited in scope and focused

**Table 2.** Supplemental quotes of how WfH impacts individual employees and how they create and maintain WLB based on personality.

WfH impact on WLB due to individual employee personality		
Code	Description	Sample quotes
Dynamics of WfH for academics in UK	Factors responsible for stimulating change in WfH context for academics in UK during Covid-19.	<p>'...with Covid-19 all family members were normally at home when I work from home. With family members at home, especially the young lad, it became a different situation altogether. The dynamics changed immediately'. (Participant13)</p> <p>'I think as social beings, our interaction is very important to us, and only when they are taken away from us that we realize how much they are important. And now I understand why putting someone in prison is such a harsh sentence. Working from home before was a choice, but now it's not a choice. So, it makes it more difficult'. (Participant11)</p>
Impact of WfH on individual employees' WLB based on personality	How WfH impact employees WLB because of their personality	
Introversion & WfH		<p>'I have no issue with working remotely. In fact, I am enjoying it because I enjoy working in isolation in while at the University as I am highly introverted'. (Participant18)</p> <p>'Not really. I am normally alone even in my office doing my research, so now it's the same, just different location. I enjoy been left alone to do my work – I just need to plan my work and life a bit differently'. (Participant40)</p>
Neuroticism & WfH		<p>'I was very worried and that impacted me adversely. Students having to cancel placements, getting furloughed and sitting for very long hours. At some point, I would have to stand up during teaching on Zoom when I found that I was having lower back pains and putting on weight, but I now feel better'. (Participant37)</p>
Extroversion & WfH		<p>'For me personally, I live with my family and you cannot take it away. It has been very positive because if I live alone, I'll probably be very lonely, which would have an emotional effect as I am extroverted. And then, which would then transfer to my productivity. Having people to chat, eat, drink and laugh with helped a lot. However, it has adversely impacted my work and life balance'. (Participant3)</p> <p>'I'm married. I have two other children. Living together was not easy. You know it's never easy with children. I always wanted to chat with my family and have meal with them as working in isolation was very demanding for my social being. However, this did not go very well with my work'. (Participant5)</p>
Conscientiousness & WLB		<p>'...not much impact for me as I just carry on with my work after careful planning of family and work. I stop for occasional coffee, biscuits and lunch with my son and husband as I am very conscientious person'. (Participant39)</p>

*(Continued)*

**Table 2.** Continued.

WfH impact on WLB due to individual employee personality		
Code	Description	Sample quotes
Strategies for boundary management based on personality.	Employees tactics for boundary management to maintain WLB while WfH due to personality	
Introversion & integration		'I am an introvert and so managing stress associated with work from home was not difficult. I try to clearly set out my daily work tasks and home tasks in the morning and I stick with the plan by moving from one to the other when necessary and depending on the urgency of the task. So, it was very easy to manage home and work. I don't want to return to campus'. (Participant18)
Neuroticism & do-nothing behaviour		'...you know that I worry a lot. It was very difficult to manage my job and family with the bad news everywhere, student query and pressure from the department for us to publish. On top of this, my wife is tied down in Singapore and cannot fly back to you UK. So, it was difficult to maintain good work and life balance. Put together, I was very worried and just decided to quit – I will seek employment elsewhere when we return to normal..! (Participant34)
Conscientiousness & integration		'It is a win/win situation. I can plan my day. Overall, it is being positive, going to semester A, I do more planning around my family and work and carry out my plan diligently in such a way that no one will suffer. I try to attend to family issues in between work and that is not a problem for me at all because of careful planning. My partner also knows when and how to help because of my meticulous planning. I am a very hard working. It was good for work life balance'. (Participant26)
Extroversion & Segmentation/integration		'Because of childcare, it was difficult to manage work and the kids as I cannot send my child to day care. I also could not stand the fact that I will not interact with my hubby knowing that he is around in the same flat. I like socialising since I couldn't go out to socialise, I had to complement for that with family. This meant that I could not engage with work sufficiently during the day. I had to mostly do a lot of work at night when the child and my husband is asleep to maintain a balance except, I had to teach or attend timetabled meeting'. (Participant17)

clearly on the researchers' object of analysis to ensure they were not redundant or interchangeable (Attride-Stirling, 2001). Out of 50 transcripts analyzed, four personality factors (codes) emerged as key factors influencing how WFH impacted boundary management and, thus, the WLB of academics. See Table 2 for supplemental quotes. However, to avoid the limitations of using a single method in measuring personality

in studying WLB, the authors had to administer the personality-test questionnaire to all their 50 interviewees so as to validate the qualitative codes developed from the transcripts.

### ***Personality-test procedure***

Following the emergence of personality as a key determinant of how academics managed work–life boundaries during WFH, it was necessary to corroborate the study’s qualitative findings from the interviewees’ personality assessments in another round of data collection. Moreover, this assessment was necessary because personality is a scientifically determined construct (Rothe, 2017). Consequently, in this second phase of data collection, the IPIP personality-test questionnaire by Goldberg et al. (2006) was administered to measure the interviewees’ personality types, authenticate their qualitative comments about their personality types, and thus check for congruency in their answers (Becker et al., 2012); this was done by following a building approach as suggested by Busetto et al. (2020). The building approach enabled the use of themes and concepts in the qualitative data in order to identify suitable personality-test questionnaires. Thus, the IPIP questionnaire was selected because the four identified and selected traits inherent in it were theoretically related to the ability to separate work and nonwork, consistent with recent research (O’Neill et al., 2009). Other studies have examined these trait factors (see Gardner et al., 2021) in order to understand their role in boundary work. No previous study on personality and WLB had combined all four trait factors in a single study (Adams, 2022).

Questionnaires were emailed to the 50 interviewees, and completed questionnaires were returned by email. Personality type was measured with a 19-item scale targeting four of the Big Five personality factors on the questionnaire. All 50 questionnaires were completed and returned, amounting to a 100% response rate. As a result, this paper contributes to the literature methodologically by collecting qualitative data and personality-test results from the same set of informants, which only relatively few studies have done in the past.

### ***Data analysis step 2***

Drawing on Busetto et al. (2020), data integration (using a merging approach) was carried out after receiving the personality test scores, to enable a joint display of interview and questionnaire data. According to Busetto et al. (2020), separate reporting of mixed-methods data in the same paper does not allow readers to gain a full understanding. On receiving the personality test scores, each interviewee’s personality-test score was matched against

their transcript to see whether their personality score supported or refuted the personality claims derived from their interview transcript. The test scores of 41 out of 50 interviewees supported the personality claims derived from their interview transcripts and this rate was high enough to affirm the role of personality factors in how WFH impacts the WLB of academics and their response in terms of creating and managing boundaries. According to McDonald (2008), some interviewees may not be fully conscious of all the dimensions of their personality traits during an interview and thus not able to correctly determine their personality. To further enhance the trustworthiness of our data, 9 of the participant's test scores, which did not match their comments, were not included. As the authors had determined that data saturation was attained at 40 interviews, the sample of 41 used was adequate. The first and second authors contacted the interviewees again to confirm the accuracy of the transcripts. At this stage, the data were anonymized for analysis. See [Table 2](#) for qualitative quotes from the transcripts.

Once the personality codes had been confirmed, the codes were categorized into themes after a critical review of code text segments for commonalities and differences with sensitivity to WFH, personality, and boundary management and WLB. Themes generated from this process include WFH, dynamics of WFH, and effects of WFH on extroverts, introverts, conscientiousness and neuroticism, personality, and boundary management. These were later merged into themes that were both narrow enough to be discrete and broad enough to encapsulate recurrent issues in the data after refining the specifics of each theme and the overall story that the analysis told. Notable themes emerged from this recategorization process, such as the dynamics of WFH, its effects on employees, and boundary management. Analysis at the end of each step was supplemented by an iterative examination (Ogbonna & Harris, 2004). Finally, deductions from the summary of a network of themes and relevant theories were brought together to interpret key themes in the light of the study's research objective and the underpinning theory.

### ***Data analysis step 3***

It is also pertinent to understand the reliability and factorial validity of the personality-test scale used. The reliability and factorial validity of the personality-test scale used in this study was determined with the aid of SPSS software. The results provided evidence of items loading on each construct in the personality scale. Nineteen items were adapted from the scale to measure 4 constructs: extroversion (5 items with a Cronbach  $\alpha$  of 0.98), introversion (6 items with a Cronbach  $\alpha$  of 0.96), neuroticism (2 items with a Cronbach  $\alpha$  of 0.94), and consciousness (6 items with a Cronbach  $\alpha$  of 0.98). All items were retained, as the alpha coefficient

reported reduced scores if items were deleted (Olckers & Zyl, 2016). A principal component analysis was also conducted to determine the reliability of the personal scale used. The results showed that the four variables are distinct constructs with an eigenvalue providing evidence of the items loading on 4 components cumulatively explaining 82.6% of the variance in personality. Although the Cronbach  $\alpha$  reported was within the acceptable range and the Principal Component Analysis (PCA) provided evidence to show that the personality scale had 4 distinct variables measuring different personality types, the results should be taken with caution given the low sample size. The Kaiser–Meyer–Olkin measure of sample adequacy was  $< 0.6$ , suggesting sample inadequacy. However, Bartlett’s test of sphericity was significant with  $p < 0.001$ .

The average variance extracted (AVE) was used to determine the validity of the constructs on the personality scale (Hair et al., 2012). AVE results  $> 0.50$  are considered acceptable (Fornell & Larcker, 1981). AVE values reported in this study ranged from 0.52 to 0.88, thus confirming that the constructs used to measure the different personality traits were valid; see Table 3. The reliability and validity scores of the IPIP scale are consistent with extant studies (Austin et al., 2008). The scale was evaluated on a five-point Likert scale ranging from 1 (Disagree) to 5 (Agree). Scores calculated by interviewees were between 0 and 40 for each personality dimension. The dimension with the highest figure reflects an interviewee’s personality type but a lower score for extroversion would suggest that the interviewee is an introvert, and the cutoff point where one is considered an extrovert is 25 and above. High personality scores for neuroticism and conscientiousness imply that informants are neurotic and conscientious, respectively (Table 3).

## Findings

### *Dynamics of WFH*

Due to the lockdown, enforced WFH during Covid-19 differed significantly from previous pre-Covid-19 remote-working scenarios. Academics were suddenly forced to WFH because of government regulation without having a contingency plan in place, and this sudden, mandatory WFH was challenging for most of them. An interviewee noted:

**Table 3.** Construct reliability and validity.

Variables	Cronbach’s Alpha	Cronbach’s Alpha Based on Standardized Items	Average Variance Extracted (AVE)	N of Items
Extroversion	0.982	0.982	0.88	5
Introvert	0.966	0.967	0.84	6
Neuroticism	0.941	0.941	0.85	2
Consciousness	0.980	0.980	0.88	6

Government lockdown regulation came initially as a relief as I embraced the idea of working from home initially with pleasure. However, it wasn't long before I realized that it wasn't going to be easy without a contingency plan in place as most of us were not prepared to work from home. (Participant 1)

Voluntary and planned WFH before Covid-19 allowed employees working from home to plan their work and their life and acquire the skills and facilities needed to work well before working from home, which led to less boundary blurring. Conversely, efforts to ensure that learning materials were quickly and successfully converted into an online teaching format, and that a high standard be maintained alongside non-work tasks without a contingency plan/preparation led to a severe blurring of boundaries between work and life, which created significant boundary-management issues for academics working from home during Covid-19. Another interviewee commented:

It was tough initially as I had to quickly convert my teaching materials to online. With two kids, it was tough as they were home and not in childcare. (Participant 13)

Having to carry out nonwork tasks (including those associated with their family roles in some cases) alongside intensified academic work during the period of WFH—without having had any preparation—essentially led to distractions, worry, and boundary-management and WLB issues for all academics who worked from home during the Covid-19 lockdown. However, academics were impacted differently due to their personality characteristics and family circumstances.

### ***WFH dynamics and the effects on different employees***

Extroverted and outgoing academics and their neurotic colleagues faced more difficulties handling blurred boundaries associated with WFH during the Covid-19 pandemic when compared to their introverted and conscientious colleagues. Due to their outgoing disposition, driven by a high plasticity trait, it was slightly more difficult for extroverted/sociable academics to WFH in isolation with family members at home. According to one of the interviewees:

Work from home had a negative impact on me as a slightly extroverted person. I mean, there are some days when waking up and being in the same place without having a possibility to leave and change the scene and speak to people did affect me ... (Participant 3)

Another interviewee explained that:

... I am the type who likes to see my colleagues and talk, but all that is no longer possible. At the beginning, I was very stressed due to [the] fact that I had two kids to entertain at home while working. (Participant 11)

This view indicated that mandatory WFH severely blurred work–life boundaries while denying extroverted academics the opportunity to socialize externally, although they were able to socialize internally with family members (for those with family) while working from home. Similarly, those without family had family/friends elsewhere to manage through technology-aided social media while dealing with work and other nonwork issues. Switching between work and nonwork (including family) domains became challenging, although this was the case for all the academics interviewed. Due to the proximity to family life facilitated by mandatory WFH, extroverted academics at intervals withdrew slightly from work-domain activities that were flexible (such as marking and nonessential meetings) to socialize with their family/friends, as they had a low level of emotional stability with which to minimize social interruptions. This view was expressed in the following quote:

I was always leaving my workspace to interact with my wife and kids whenever possible due to my highly extroverted nature. I work better when interacting with colleagues, but since this [is] not possible with the current work from home, I have to make up for this by constantly chatting to my wife and kids where possible. (Participant5)

It emerged that academics who worried a lot (neuroticism) were impacted even more adversely by mandatory WFH, carried out in isolation but in closer proximity to family, during a crisis. Another interviewee observed that:

I worry a lot, and the pandemic came with a lot of fear and anxiety. As a result, I was always worried, and this got worse with all the challenges associated with transferring my module online coupled with dealing with family demands. (Participant 37)

Another neurotic academic added that:

I was always worried due to the increasing number of deaths when you turn on your television. On top of this, there was so much to do in terms of marking, responding to students' queries via several emails, and teaching. I started withdrawing from my job, when possible, just to reflect on whether the world is coming to an end. While worrying about everything, the several calls from my line manager did not help. Hence, I decided to quit my job[,] to return when things are normal. (Participant 10)

These views suggest that academics who are high in neuroticism may become less efficient at handling blurred boundaries between work and life while working from home during a crisis, especially when family members are around, which could make them focus less on either the work domain, e.g. teaching, meetings, and research (Gardner et al., 2021), or family domain, as they are too worried to refuse interruptions and draw boundaries (Gardner et al., 2021). Conversely, introverted academics, who were already used to working in isolation with colleagues around

because of their high emotional stability, which helped them to minimize social interruptions (Taylor, 2020), were not bothered by working in isolation and in proximity with family members as well as doing other non-work activities as such. This view is captured in the quotes below:

I am probably different from a lot of people because the challenges associated with work-from-home in isolation haven't had any effect on me.... You know, I am someone that likes to be on my own as I am a bit introverted. (Participant 18)

... I like working on my own and, as a creative person, my creativity thrives when I am isolated from others. (Participant 27)

Due to the high level of emotional stability that enables introverts to work in isolation with minimal contact with others, introverted academics were not highly impacted (adversely) by the complexities of WFH. Due to their high emotional stability level, it was easy for them to shuttle between nonwork (including family, cooking, and exercising) domains and work domains, such as teaching, online meetings, and marking, as they are already used to working alone, even with family members around.

For conscientious academics, the deciding factor was not whether or not they could work in isolation. For them, being able to successfully work from home was all about personal characteristics such as emotional stability, responsible self-discipline, and perseverance. A senior lecturer stated:

I am very conscientious; hence, although the complexity of work together with the demands of [my] family [are] making work[ing] from home challenging, I can't say it has any adverse effect on me due to my self-discipline and hard work. (Participant 33)

Through self-discipline, conscientious academics could shuttle between work and life domains very effectively while working from home in isolation during the Covid-19 pandemic.

### ***Boundary management***

It emerged that the extroverted, introverted, and conscientious academics interviewed made huge efforts to achieve WLB through various boundary-management styles while working from home. Due to their high plasticity and, thus, their ability to adapt to many situations, nearly all of the 18 extroverted academics investigated made a significant effort to balance work and life domains through a volleying boundary-management style. To achieve WLB, while WFH, during the day extroverted academics withdraw (segmentation) from their work, e.g. non-timetabled tasks such as responding to emails, research, and marking, where possible, to engage with family members. In this way, extroverts elevate the importance of their family identity as a result of their

failure to minimize social interruptions from family due to low emotional stability and the flexible nature of the job. One of the extroverted academics interviewed noted that:

In order to effectively balance work- and life, I had to do most of my work at night. I only had to teach and respond to urgent emails or attend meetings during the day. Every other job responsibility would have to wait for my family to go to bed. (Participant 16)

This quote also illustrates that extroverts deployed an integration boundary-management style due to their high plasticity. When timetabled activities such as teaching and responding to urgent emails could not be postponed to late at night, they combined teaching and nonwork needs (including family time) during the day; however, this was very stressful for the extroverted academics. From an organizational perspective, withdrawing from non-scheduled work during the day to focus more on family demands may not create a good WLB, as the boundary-management strategy of putting one's family ahead of work violates the organization's norms (Thompson et al., 2021). However, extroverted academics maintained good WLB this way, and found it more difficult to do so when they employed integration as their boundary-management style. It emerged that extroverts without family members around adopted a similar boundary-management style (volleying) as they sometimes combined (integration) work, such as timetabled teaching, and nonwork such as social chat with family and friends through FaceTime and MS Teams where possible. Additionally, they moved non-timetabled work to a later period (segmentation). Another extroverted academic commented:

I do not enjoy working in isolation as an extroverted person. So, I try to do FaceTime with friends and family members when my job allows me but engage with aspects of the job that can be done later in the evenings to maintain a balance between work and life. (Participant 28)

Conscientious and introverted academics coped better as a result of their better planning, time management, and ability to multitask, enabled by their high- emotional stability trait, which is also useful for minimizing social disruptions while working from home with family members around. According to an introverted lecturer:

It is easy for me to wake up in the morning and prepare all that the family will need during the day in terms of food. At intervals, I would check on the kids to see how their homeschooling is going and to know when they need food. I can always withdraw back to my workspace without issues as planned due to my nature to ensure there is a balance. (Participant 20)

As this quote illustrates, through effective planning enabled by their high- emotional stability traits, all nine of the introverted academics

investigated integrated work and nonwork domains by carefully executing an effective work–life plan, using effective communication to maintain good WLB. After planning, they clearly communicated their plan to family members and could show up at work at regular intervals due to their high emotional stability, which enabled them to minimize social disruptions caused by checking whether the children had eaten and how they were going about homeschooling; this demonstrated that these academics had a dual central identity. It was possible for them to integrate work and life this way due to the presence of another adult in the house to supervise very small children. In contrast, introverts living alone had no issues with working this way to create a balance. However, unsurprisingly, introverts living with only children (without any other adult in the house) also had to integrate their work and life domains to achieve WLB through careful planning and execution of work (timetabled teaching) and tasks in the nonwork domain (looking after young children, for example). An introverted academic noted:

I plan my day carefully and work hard to make it work. Sometimes I teach with my little girl by my side while teaching and when attending meetings. I also rush back to do some house chores after teaching and then back, but I do not really enjoy this practice. (Participants 35)

This quote suggests that introverted academics with small children were not able to achieve good WLB through integration. For conscientious academics, it was done through careful planning and careful execution of that plan. According to a principal lecturer:

I am a very conscientious person. I plan each day carefully with my wife to work out who is going to focus on the children at what point while the other person is working. However, I would quickly respond to any family issue that [came] up while doing my work. (Participant 26)

With lots of planning and hard work, due to their high-emotional stability traits, the eight conscientious academics investigated in this study integrated the work and life domains during boundary management through effective communication with their partners to maintain WLB. Like many introverted academics, conscientious academics easily integrate the work and life domains when living alone and sharing apartments with others. One of the conscientious academics living alone noted:

I work very hard. Each day I try to wake up early to plan the day and then shuttle between work and other house chores and exercise at intervals to get the job done, but I tend to focus more on my work. (Participant 38)

With this level of balance, introverted, and conscientious academics were integrators who blended work and family life through effective communication to maintain WLB. Academics who constantly worried

about the pandemic had challenges with coping; one hourly-paid lecturer (a neurotic academic) stated:

... the lockdown drove me down. There is pain in my chest as I started smoking. My mental well-being has been affected; it will degenerate more if we stay at home more. (Participant34)

Another neurotic colleague added:

My performance has dropped, that I know for sure. I am just not as productive as I used to be due to excessive worry. Moreover, I just don't see the distinction between home and work anymore. I feel like, you know, there is very little incentive to work hard, and there were times when I just didn't have the motivation. I am planning to quit like two of my other colleagues ... who recently resigned. (Participant 30)

An informant alluded to this position in an interview as follows:

The issue is even worse for colleagues who were anxious and worried. I will give you a practical example. I told you that we are filling three positions in my department because three colleagues resigned their position. Two of those three colleagues resigned their position due to [the] Covid-19 pandemic and the increasing pressure associated with working from home while also trying to manage the family. (Participant 41)

It emerged that all neurotic academics (whether they had a family at home or not) did almost nothing boundary management, which may make WFH a nightmare for them. Sadly, four out of the six neurotic academics interviewed had to resign from their jobs due to excessive worry and the pressure they felt they were under to get their tasks completed. One of them relocated to his country to be with his family. This quote suggests that these sets of academics would either quit their jobs or do very little to enhance their work-life balance if no/or very little support were provided. With this, we add another boundary-management style (quitters) to the already existing three: segmenters, integrators, and volleyers.

## Discussion

The study's primary aim was to gain a more comprehensive understanding of how WFH impacts different academics consistent with their personality, and how different academics manage their work-life boundary to maintain WLB when working from home during a crisis. We found that a major challenge created by mandatory WFH for academics is managing severely blurred work-life boundaries while working with family members around and trying to engage in intensive work. Our data uncovered that WFH created the opportunity to have more family time. However, it also severely blurred the work-life boundary, with increased work for academics to do within a short period. We uncovered that,

while work–life boundary challenges in the study context impacted academics differently based on their personalities, the boundary-management styles they used to achieve WLB also depended on their personality.

We found that due to their high-emotional stability traits—relevant to planning and carefully executing that plan and the ability to minimize social interruptions from family (Kroumova et al., 2021)—introverts and conscientious academics had greater perceived boundary control, more frequent cross-role interruptions, and dual-identity centrality while working from home. Conversely, extroverted (due to their high plasticity trait) and neurotic (due to excessive emotional reaction) academics working from home during the pandemic had fewer cross-role interruptions and lesser perceived control. However, while extroverted academics possessed family identity centrality due to their lack of the emotional stability required to minimize social interruptions from family (Kroumova et al., 2021), neurotic academics did not relate to the centrality of either role (Gardner et al., 2021) due to excessive worries about Covid-19-associated deaths and work intensification. With this finding, we extend boundary theory by highlighting how personality characteristics such as conscientiousness and introversion lean toward boundary-management characteristics (Kossek et al., 2012), such as dual role centrality while WFH during the Covid-19 crisis. This finding contrasts with the extant literature by Gardner et al. (2021) and Baer et al. (2016), who found that conscientiousness and introversion lean, respectively, toward work identity centrality, due to the conscientious individual's highly driven quest for job performance, and family identity centrality, due to the introvert's resource depletion. During the Covid-19 pandemic, we uncovered that introverted and conscientious academics leaned toward dual-identity centrality due to their high-emotional stability traits, relevant to minimizing the social interruptions associated with working with family members at home and accommodating the challenges associated with work intensification.

Beyond the way mandatory WFH impacts different personalities, we also investigated personality's role in boundary management. Building on extant work by Gardner et al. (2021) and Baer et al. (2016), who suggest that conscientious and introverted workers prefer segmentation as their boundary-management style, we found that conscientious and introverted academics (including those with small children and adults living with them) in their boundary-management efforts favor integration to maintain WLB due to their high level of the emotional stability trait responsible for navigating work and nonwork domains, which they managed through effective communication with family members while WFH during the Covid-19 lockdown. Similarly, due to their high emotional-stability trait, it emerged that conscientious and introverted academics with children to care for, without adults to support them, as well as

those living alone, also had to use integration as their boundary-management style by sometimes having to shuttle between timetabled teaching (with their young children by their side) and homeschooling, for example. Introverted academics (with children), however, could not maintain a good work–life balance in this way.

Our study confirms the argument that conscientiousness is associated with a positive WLB during mandatory WFH (Gardner et al., 2021), but added another dimension to the positive relationship between introversion and positive WLB. Academics high in conscientiousness and introversion used better planning, multitasking, and time management techniques to achieve WLB, suggesting a link between both these personality types and integration. For conscientious employees, this is due to their traits of self-management, perseverance, careful planning, and execution (Gardner et al., 2021). This view differs from the perspective of Venkatesh et al. (2021), who found that conscientiousness was positively associated with job strain due to the increasing work pressure associated with working during the Covid-19 period. In contrast, for introverted academics, it is due to their preference for working in isolation, with family members around.

We also found that extroverted academics used volleying as their boundary-management style, which links extroversion to volleying. It emerged that with non-timetabled job tasks, all the extroverted academics interviewed segmented their work–life boundary in favor of family (for those with family members and friends) due to their low emotional stability traits and limited capability to minimize social interruptions. In contrast, with timetabled job tasks they integrated the work and life domains in favor of family, particularly those with young children, by shuttling between work and nonwork domains, like conscientious and introverted academics. Segmentation emerged as the preferred boundary-management style for extroverted academics in view of maintaining a good WLB, but academics tended to face work–life conflict while using integration as a boundary-management style due to job inflexibility. With these findings, this paper contributes significantly to boundary theory as it: (a) links volleying as a boundary management style with the behavior of extroverts when WFH during a crisis, (b) highlights which personality type puts family first as a boundary-management style and why this is the case, in response to calls from Thompson et al. (2021), and (c) demonstrates how extroverts move between segmentation and integration during boundary management, by means of a cross-sectional study.

Additionally, the study uncovered that neurotic academics did not seem to make much effort to manage boundaries between work and nonwork domains due to the excessive worry associated with work intensification, little incentive to work hard, and worries about the deaths

associated with Covid-19. Rather, many of those investigated chose to resign from their jobs. Specifically, the data show that around three academics had to quit their job. Thus, neuroticism is associated with work-life balance challenges when WFH during a crisis, due to emotional instability and worry (Gardner et al., 2021). We refer to this boundary management style as the quitter, and by so doing, we extend the number of existing boundary-management styles from three to four, the originals being segmentation, integration, and volleying (Ashforth et al., 2000; Kossek et al., 2012; Kreiner et al., 2009). This last group of academics may not do anything substantial to satisfactorily manage their work-life boundaries to maintain WLB while WFH during a crisis.

Interestingly, this study's findings also challenge the argument that introverts withdraw from the work domain when confronted with work-life balance issues to focus on the family domain due to resource depletion, while extroverts manage their work-life boundaries better due to resource conservation and their ability to adapt to changing situations (Baer et al., 2016). Notably, the two studies' different contexts are a major possible reason for this reversal in the findings. This study was undertaken during a national lockdown and in a mandatory WFH environment, where work was carried out at home, with family members around—the context of Baer et al.'s (2016) study was very different. According to Taylor (2020), extroverts are highly sociable and function best around colleagues. During the mandatory WFH period, this was not possible. Conversely, introverted and conscientious academics experienced fewer difficulties due to their personality and natural abilities. While the Covid-19 lockdown work environment was not suitable for extroverted and neurotic academics, introverted and conscientious academics thrived in such a work environment.

Finally, in collecting qualitative data and personality results from the same set of interviewees, the current study contributes to the literature from a methodological point of view, as few or no previous studies have taken this approach.

Overall, these findings suggest that while conscientiousness is related to how academics manage work and nonwork roles, introversion is equally important. This finding is interesting and novel as it builds on the current literature on boundary management and work-life balance. The identified relationship between personality and boundary management has some theoretical implications. Other than personality, individual factors such as work knowledge, experience, and motivation may be connected to boundary-management behaviors (Gardner et al., 2021). This study's ability to link personality to boundary management is noteworthy, and is its most important contribution. Its unique contribution lies in linking different personalities to particular boundary-management styles, as identified by Ashforth et al. (2000) and Kossek et al. (2012).

Considering the associations between personality types and boundary-management styles may be helpful for workplace boundary management and WLB intervention design.

### ***Implications of the study***

This study has implications for higher education institutions. Universities intending to design policies to help academics manage their WLB through boundary management while working from home will need to understand their personalities and preferences. A standard boundary-management policy to enhance WLB for all academics may not work due to the individual differences consistent with their personalities or other personal attributes (Rothbard et al., 2021). Hence, there is a need to personalize boundary-management initiatives that are geared toward WLB during a crisis and in the new normal, so that they are consistent with personality characteristics and family circumstances.

During hybrid work, interventions seeking to help academics gain control in terms of boundary management should emphasize elements of conscientiousness and introversion. Introverted (even though they may need some stimulation to keep talking) and conscientious academics were more resilient and could work better while WFH during a crisis. Overall, universities seeking to hire academics to WFH during uncertain times and in the new normal should target academics with all types of personalities (as extroverts can communicate with others from a distance) but should emphasize training to provide characteristics associated with introversion and conscientiousness. This will help academics working from home avoid segmentation in favor of family or in favor of work, but instead focus on dual centrality to maintain a good WLB.

However, WFH in the new normal may look very different from WFH during the pandemic. Since then, academics may have had the opportunity to move home or build a dedicated office space; they might now have childcare provisions and access to services that provide other forms of interaction, e.g. gym access, that were not available during the pandemic. Thus, these factors should be considered in applying our recommendations above during the 'new normal'.

### ***Limitations***

Given that the association between personality and boundary management is based on the responses of 41 interviewees with measurement of interviewees' personality scores, future studies should conduct large-scale surveys and test the direct and moderating effects of personality on boundary management for maintaining WLB as well as the direct association between

personality and boundary-management styles. This will test the strength of the current findings and help strengthen our understanding of how mandatory WFH impacts different personalities, the role of personality in boundary management, and the association between personality and boundary-management styles in enhancing WLB. Additionally, this study is focused on the UK higher education sector. Academics are accustomed to having more autonomy in their work than in other occupations. Future studies could be conducted in different regional sectors and countries to assess the generalizability of the current findings. Finally, career level, communication tools, manager/peer support, and academic experience may also influence boundary-management behaviors. Future studies should examine how they interact with personality to determine the choice of boundary-management strategy.

## **Conclusion**

We aimed to explore and understand the relationship between mandatory WFH and the boundary-management styles of academics when they are WFH and attempting to maintain WLB, using a qualitative approach. Our study found that academics differ in how they are impacted by mandatory WFH and how they manage work–life boundaries, due to their personality characteristics. Notably, academics high in extroversion and/or neuroticism may struggle with using boundary management to maintain WLB during crisis, contrary to the findings in the extant literature. Building on boundary theory, this study uncovered that due to their personality makeup, academics who were high in conscientiousness and introversion managed work–life boundaries better and may be better off working from home during uncertain times. However, since all types of personalities are required in the workplace, the high emotional stability associated with conscientious and introverted academics should be emphasized during training for academics working in a hybrid work environment. Understanding these differences in how WFH impacts personality and how personality informs boundary-management styles will inform hiring decisions and work–life management policies in higher education institutions in the context of the ‘new normal’, whereby academics will be expected to undertake some form of hybrid working involving working from home, or during the next crisis when academics are WFH.

## **Acknowledgements**

We appreciate the support of all the academic staff interviewed across universities in the United Kingdom, Professor Yaw Debrah, Dr Ashish Malik, Dr Wendy J. Casper, and Dr Amit Kramer for their very helpful comments.

## Ethical approval

Ethics approval was received from the University of Hertfordshire's Research Ethics Committee. Approval number – BUS/SF/UH/04656.

## Consent form

Informed consent was obtained from all individual participants included in the study.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## ORCID

O. Raphael Oseghale  <http://orcid.org/0000-0001-6557-9488>

## Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## References

- Adams, C. A. (2022). *Using personality traits to predict boundary management strategies* ETD Archive. 1319.
- Adisa, T. A., Antonacopoulou, E., Beaugard, T. A., Dickmann, M., & Adekoya, O. D. (2022). Exploring the impact of COVID-19 on employees' boundary management and work-life balance. *British Journal of Management*, 33(4), 1694–1709. <https://doi.org/10.1111/1467-8551.12643>
- Adisa, T. A., Gbadamosi, G., & Osabutey, E. L. C. (2017). What happened to the border? The role of mobile information technology devices on employees' work-life balance. *Personnel Review*, 46(8), 1651–1671. <https://doi.org/10.1108/PR-08-2016-0222>
- Afota, M.-C., Provost Savard, Y., Ollier-Malaterre, A., & Léon, E. (2023). Work-from-home adjustment in the US and Europe: The role of psychological climate for face time and perceived availability expectations. *The International Journal of Human Resource Management*, 34(14), 2765–2796. <https://doi.org/10.1080/09585192.2022.2090269>
- Allen, T. D., Merlo, K., Lawrence, R. C., Slutsky, J., & Gray, C. E. (2021). Boundary management and work-Nonwork Balance While Working from Home. *Applied Psychology*, 70(1), 60–84. <https://doi.org/10.1111/apps.12300>
- Andrade, C. (2021). The inconvenient truth about convenience and purposive samples. *Indian Journal of Psychological Medicine*, 43(1), 86–88. <https://doi.org/10.1177/0253717620977000>
- Apouey, B., Roulet, A., Solal, I., & Stabile, M. (2020). Gig workers during the COVID-19 crisis in France: Financial Precarity and mental well-being. *Journal of Urban Health*, 97(6), 776–795. <https://doi.org/10.1007/s11524-020-00480-4>
- Ashforth, B. E., Kreiner, G. E., & Fugate, M. (2000). All in a Day's Work: Boundaries and Micro role transitions. *The Academy of Management Review*, 25(3), 472–491. <https://doi.org/10.2307/259305>

- Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. *Qualitative Research*, 1(3), 385–405. <https://doi.org/10.1177/146879410100100307>
- Austin, E. J., Dore, T. C. P., & O'Donovan, K. M. (2008). Associations of personality and emotional intelligence with display rule perceptions and emotional labor. *Personality and Individual Differences*, 44(3), 679–688. <https://doi.org/10.1016/j.paid.2007.10.001>
- Baer, S. M., Jenkins, J. S., & Barber, L. K. (2016). Home is private-do, not enter! Introversion and sensitivity to work-home conflict. *Stress and Health*, 32(4), 441–445. <https://doi.org/10.1002/smi.2628>
- Beauregard, T. A., Basile, K. A., & Canonico, E. (2019). Telework: Outcomes and facilitators for employees. In R. N. Landers (Ed.), *The Cambridge handbook of technology and employee behaviour* (pp. 511–543). Cambridge University Press.
- Bell, E., Bryman, A., & Harley, B. (2019). *Business Research Methods* (5th Edition). Oxford University Press.
- Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research and Practice*, 2(1), 14. <https://doi.org/10.1186/s42466-020-00059-z>
- Casper, W. J., Vaziri, H., Wayne, J. H., DeHauw, S., & Greenhaus, J. (2018). The Jingle-Jangle of Work–non-work balance: A comprehensive and meta-analytic review of its meaning and measurement. *The Journal of Applied Psychology*, 103(2), 182–214. <https://doi.org/10.1037/apl0000259>
- Chan, X. W., Kalliath, P., Fan, S. X., & Kalliath, T. (2023). Examining work–home segmentation as a coping strategy for frontline workers: A mixed method study of social workers across Australia. *The International Journal of Human Resource Management*, 34(4), 693–715. <https://doi.org/10.1080/09585192.2022.2045620>
- Chen, N. Y., Crant, J. M., Wang, N., Kou, Y., Qin, Y., Yu, J., & Sun, R. (2021). Where there is a will, there is a way: The role of a proactive personality in combating Covid-19. *Journal of Applied Psychology*, 106(2), 199–213. <https://doi.org/10.1037/apl0000865>
- Cho, E. (2020). Examining boundaries to understand the impact of Covid-19 on vocational behaviors. *Journal of Vocational Behavior*, 119, 103437. <https://doi.org/10.1016/j.jvb.2020.103437>
- Clark, S. C. (2000). Work/family border theory: A new theory of work/family balance. *Human Relations*, 53(6), 747–770. <https://doi.org/10.1177/0018726700536001>
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20(1), 37–46. <https://doi.org/10.1177/00131644600200104>
- Costa, P. T., Jr., & McCrae, R. R. (1997). Stability and change in personality assessment: The revised NEO personality inventory in the year 2000. *Journal of Personality Assessment*, 68(1), 86–94. [https://doi.org/10.1207/s15327752jpa6801\\_7](https://doi.org/10.1207/s15327752jpa6801_7)
- De Jonge, J., Dormann, C., Janssen, P. P., Dollard, M. F., Landeweerd, J. A., & Nijhuis, F. J. (2001). Testing reciprocal relationships between job characteristics and psychological well-being: A cross-lagged structural equation model. *Journal of Occupational and Organizational Psychology*, 74(1), 29–46. <https://doi.org/10.1348/096317901167217>
- DeYoung, C. G. (2015). Cybernetic big five theory. *Journal of Research in Personality*, 56, 33–58. <https://doi.org/10.1016/j.jrp.2014.07.004>
- Donnelly, N., & Proctor-Thomson, S. B. (2015). Disrupted work: Home-Based Teleworking (HBTW): The aftermath of natural disaster. *New Technology, Work and Employment*, 30(1), 47–61. <https://doi.org/10.1111/ntwe.12040>
- EAE Business School (EAS). (2020). *Due to Covid-19, the number of companies with staff working from home has risen to 88% compared to 4% before the health crisis*. Retrieved

- October 10, 2020, from <https://www.eae.es/en/news/eae-news/due-covid-19-number-companies-staff-working-home-has-risen-88-compared-4-health-crisis?>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>
- Gardner, D. M., Lauricella, T., Ryan, A. M., Wadlington, P., & Elizondo, F. (2021). Managing boundaries between work and non-work domains: Personality and job characteristics and adopted style. *Journal of Occupational and Organizational Psychology*, 94(1), 132–159. <https://doi.org/10.1111/joop.12339>
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological assessment*, 4(1), 26. <https://doi.org/10.1037/1040-3590.4.1.26>
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality*, 40(1), 84–96. <https://doi.org/10.1016/j.jrp.2005.08.007>
- Greenhaus, J. H., & Allen, T. D. (2011). Work-family balance: A review and extension of the literature. In J. C. Quick, & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 165–183). American Psychological Association.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414–433. <https://doi.org/10.1007/s11747-011-0261-6>
- Holder, A. (2020). New technology, work and employment in the Era of COVID-19: Reflecting on legacies of research. *New Technology, Work and Employment*, X, 1–14.
- Kossek, E. E., Dumas, T. L., Piszczek, M. M., & Allen, T. D. (2021). Pushing the boundaries: A qualitative study of how STEM women adapted to disrupted work–non-work boundaries during the COVID-19 pandemic. *The Journal of Applied Psychology*, 106(11), 1615–1629. <https://doi.org/10.1037/apl0000982>
- Kossek, E. E., Ruderman, M. N., Braddy, P. W., & Hannum, K. M. (2012). Work–non-work boundary management profiles: A person-centered approach. *Journal of Vocational Behavior*, 81(1), 112–128. <https://doi.org/10.1016/j.jvb.2012.04.003>
- Kossek, E. E., & Lautsch, B. (2008). *CEO of me: Creating a life that works in the flexible job age*. Pearson/Wharton School Publishing.
- Kramer, A., & Kramer, K. Z. (2020). The potential input 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., Hollensbe, E. C., & Sheep, M. L. (2009). Balancing borders and bridges: Negotiating the work-home interface via boundary work Tactics. *Academy of Management Journal*, 52(4), 704–730. <https://doi.org/10.5465/amj.2009.43669916>
- Kroumova, M., Mittal, R., & Bienstock, J. (2021). Personality meta-traits and time-based work-family conflict: The mediating role of work-home boundaries. *International Journal of Organizational Analysis*, 2021, 1–12.
- Lippe, T., & Lippényi, Z. (2020). Co-workers are working from home and individual and team performance. *New Technology, Work and Employment*, 35(1), 60–79. <https://doi.org/10.1111/ntwe.12153>
- McCrae, R. R., & Costa, P. T. (1997). Personality trait structure as a human universal. *The American Psychologist*, 52(5), 509–516. <https://doi.org/10.1037/0003-066x.52.5.509>
- McDonald, J. D. (2008). Measuring personality constructs: The advantages and disadvantages of self-reports, informant reports and behavioural assessments. *Enquire*, 1, 1–18.

- Mayo, M., Gomez-Mejia, L., Firfiray, S., Berrone, P., & Villena, V. H. (2016). Leader beliefs and CSR for employees: The case of telework provision. *Leadership & Organization Development Journal*, 37(5), 609–634. <https://doi.org/10.1108/LODJ-09-2014-0177>
- Mann, S., & Holdsworth, L. (2003). The psychological impact of teleworking: Stress, emotions and health. *New Technology, Work and Employment*, 18(3), 196–211. <https://doi.org/10.1111/1468-005X.00121>
- Office of National Statistics. (2020). Coronavirus and Homeworking in the UK: April 2020. Retrieved August 13, 2024, from <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/coronavirusandhomeworkingintheuk/april2020>
- Ogbonna, E., & Harris, L. C. (2004). Work intensification and emotional labor among UK University Lecturers: An exploratory study. *Organization Studies*, 25(7), 1185–1203. <https://doi.org/10.1177/0170840604046315>
- Olckers, C., & Zyl, L. (2016). The relationship between employment equity perceptions and psychological ownership in a South African Mining House: The role of ethnicity. *Social Indicators Research*, 127(2), 887–901. <https://doi.org/10.1007/s11205-015-0972-z>
- O’Neil, T. A., Hambley, L. A., & Chatellier, G. S. (2014). Cyberslacking, engagement, and personality in distributed work environments. *Computers in Human Behavior*, 40, 152–160. <https://doi.org/10.1016/j.chb.2014.08.005>
- O’Neill, T. A., Hambley, L. A., Greidanus, N. S., MacDonnell, R., & Kline, T. J. B. (2009). Predicting teleworker success: An exploration of personality, motivational, situational, and job characteristics. *New Technology, Work and Employment*, 24(2), 144–162. <https://doi.org/10.1111/j.1468-005X.2009.00225.x>
- Oseghale, O. R., Ochei, C., Oyelere, M., & Nyantakyiwaa, A. (2023). Class participation grading and student engagement: The case of a UK university. *Innovations in Education and Teaching International*, 2023, 1–16. <https://doi.org/10.1080/14703297.2023.2279576>
- Palumbo, R., Manna, R., & Cavallone, M. (2021). Beware of side effects on quality! Investigating the implications of home working on work-life balance in educational services. *The TQM Journal*, 33(4), 915–929. <https://doi.org/10.1108/TQM-05-2020-0120>
- Pavani, J.-B., Fort, I., Moncel, C., Ritz, H., & Dauvier, B. (2021). Influence of extraversion and neuroticism on the weekly dynamics of job seekers’ self-regulation. *Journal of Vocational Behavior*, 130, 103618. <https://doi.org/10.1016/j.jvb.2021.103618>
- Pepple, D. G. (2022). An ecological perspective of student engagement through digital technology: Practical application and implications. *British Educational Research Journal*, 48(6), 1216–1231. <https://doi.org/10.1002/berj.3823>
- Rapp, D. J., Hughey, J. M., & Kreiner, G. (2021). Boundary work as a buffer against burnout: Evidence from healthcare workers during the COVID-19 pandemic. *The Journal of Applied Psychology*, 106(8), 1169–1187. <https://doi.org/10.1037/apl0000951>
- Rothbard, N. P., Beetz, A. M., & Harari, D. (2021). Balancing the scales: A configurational approach to work-life balance. *Annual Review of Organizational Psychology and Organizational Behavior*, 8(1), 73–103. <https://doi.org/10.1146/annurev-orgpsych-012420-061833>
- Rothe, J. P. ed. (2017). *The scientific analysis of personality*. Routledge.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality & Quantity*, 52(4), 1893–1907. <https://doi.org/10.1007/s11135-017-0574-8>
- Shao, Y., Fang, Y., Wang, M., Chang, C., & Wang, L. (2021). Making daily decisions to work from home or to work from the office: The impact of daily work-and covid-related stressors on next-day work location. *The Journal of Applied Psychology*, 106(6), 825–838. <https://doi.org/10.1037/apl0000929>

- Shiyanbola, O. O., Rao, D., Bolt, D., Brown, C., Zhang, M., & Ward, E. (2021). Using an exploratory sequential mixed methods design to adapt an illness perception questionnaire for African Americans with diabetes: The mixed data integration process. *Health Psychology and Behavioral Medicine*, 9(1), 796–817. <https://doi.org/10.1080/21642850.2021.1976650>
- Straus, E., Uhlig, L., Kühnel, J., & Korunka, C. (2023). Remote workers' well-being, perceived productivity, and engagement: Which resources should HRM improve during COVID-19? A longitudinal diary study. *The International Journal of Human Resource Management*, 34(15), 2960–2990. <https://doi.org/10.1080/09585192.2022.2075235>
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. SAGE.
- Taylor, M. K. (2020). Personality styles: While they matter in the workplace. *Economic Alternatives*, (1), 148–163. <https://doi.org/10.37075/EA.2020.1.08>
- Tett, R. P., & Burnett, D. (2003). A personality trait-based interactionist model of job performance. *The Journal of Applied Psychology*, 88(3), 500–517. <https://doi.org/10.1037/0021-9010.88.3.500>
- Thompson, M., Carlson, D. S., & Kacmar, K. M. (2021). Putting family first is a boundary management tactic. *Career Development International*, 26(1), 1–15. <https://doi.org/10.1108/CDI-01-2020-0021>
- Tudor-Locke, C. E., & Myers, A. M. (2001). Methodological considerations for researchers and practitioners using pedometers to measure physical (Ambulatory) activity. *Research Quarterly for Exercise and Sport*, 72(1), 1–12. <https://doi.org/10.1080/02701367.2001.10608926>
- Tupes, E. C. (1950). An evaluation of personality-trait ratings obtained by unstructured assessment interviews. *Psychological Monographs*, 64(11), i–24. <https://doi.org/10.1037/h0093629>
- Venkatesh, V., Ganster, D. C., Schuetz, S. W., & Sykes, T. A. (2021). Risks and rewards of conscientiousness during the COVID-19 pandemic. *The Journal of Applied Psychology*, 106(5), 643–656. <https://doi.org/10.1037/apl0000919>