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# Working From Home as Necessary but Unusual Arrangement: The Case of Croatian Workers During COVID-19 Pandemic

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#### Abstract

We explored the determinants of the psychological experience of working from home (WFH) in a "double" specific context of non-voluntary WFH during the COVID-19 lockdown in Croatia, a country where WFH was a highly unusual arrangement. In two studies, using a nationally representative and a convenient sample, we investigated whether job and personal demands/resources predicted work-life balance (WLB), job performance and well-being of Croatian employees WFH during the lockdown. Our comprehensive operationalization of WLB included work-to-family and family-to-work conflict, the time structure of working days and psychological detachment from work. Both studies showed that WLB, especially time structure, is important for job performance and well-being and that childcare responsibilities act as a personal demand that lowers WLB. Study 2 showed that childcare responsibilities negatively affect job performance and well-being via lower WLB and that conscientiousness, emotional stability and autonomy act as resources that contribute to WLB, job performance, and well-being. We believe that these findings have implications for work organization in circumstances where WFH is necessary but to unusual arrangements such as sudden global or local crises.

Keywords: work from home, crises, work-life balance, job demands-resources

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#### Introduction

Work from home (WFH) is frequently viewed as a form of work organization that helps improve the balance between professional and private life. Implicit in this assumption is that WFH is completely voluntary - a choice made by employees who believe it allows them to better balance their different life roles (Lapierre et al., 2015). However, non-voluntary WFH in "non-ordinary" situations, such as crises, seems largely different and possibly less beneficial. This may be especially pronounced in countries where WFH is an atypical work arrangement, such as Croatia (Eurostat, 2025). Given that both global and local crises seem likely in the future, the determinants of WFH experience in this "double" specific context are an important research topic. In this paper, we describe two studies in which we aimed to investigate the experience of WFH during the COVID-19 pandemic in Croatia, using Job Demands-Resources (JD-R) theory (Bakker & Demerouti, 2007; Demerouti & Bakker, 2023) as a framework.

### Importance of Work-Life Balance in the Work From Home Context

Studies on voluntary WFH indicate that it is related to higher levels of productivity. lower work exhaustion, lower work-role stress, and higher job and life satisfaction (Bloom et al., 2015; Gajendran & Harrison, 2007; Golden, 2006). The positive effects of WFH partially stem from increased flexibility in organizing and combining demands from different life domains (Allen et al., 2015), which, when used to achieve better balance between work and private life demands, leads to improved functioning (Amstad et al., 2011; Gajendran & Harrison, 2007; Van Steenbergen, & Ellemers, 2009). While work-life balance (WLB) is important for all workers, it becomes even more significant for those working from home, as WFH blurs the boundaries between work and personal life (Allen et al., 2015). Findings from Gajendran and Harrison's (2007) meta-analysis indicated that work-family conflict mediated the impact of telecommuting on job satisfaction, turnover intent and role stress, thus supporting this idea.

However, the findings on the overall positive effects of WFH may primarily apply to voluntary WFH in which employees choose to WFH and adjust their home and schedule accordingly. Over time, employees who manage to benefit from WFH are the ones who remain in this type of work. Thus, autonomy in choosing the place of work is likely the precondition for the positive effects of WFH. This is in line with some of the influential (work) motivation theories such as the Job Characteristics Model (Hackman & Oldham, 1976) and Self-Determination Theory (Ryan & Deci, 2000), which stress the importance of responsibility/self-determination for work motivation and well-being.

When WFH is a non-voluntary arrangement imposed on employees by sudden global emergencies, workers lose the autonomy to choose their place of work, and

many may be unprepared (e.g., lacking proper WFH conditions in their households). In terms of Conservation of Resources Theory (COR; Hobfoll, 1989), this would be considered a critical event that results in loss of resources and leads to stress and strain (Grandey & Cropanzano, 1999). Therefore, non-voluntary WFH as a response to crises may be associated with various indicators of lower well-being. However, this has been quite an understudied topic.

Among the pre-pandemic studies, Lapierre et al. (2015) compared work-to-family conflict in a sample of sales professionals from a Dutch company before and after the company implemented a new cost-saving policy requiring all employees to WFH. The study showed that switching from voluntary to mandatory WFH somewhat worsened work-to-family conflict. However, the correlation between WFH and work-to-family conflict was non-significant for employees reporting high self-efficacy in maintaining WLB. This suggests that the effect of mandatory WFH on WLB depends on other personal and contextual characteristics.

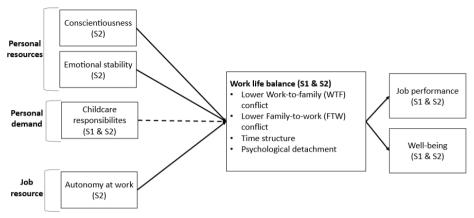
A much more interesting study was conducted by Donnelly and Proctor-Thomson (2015) after the 2011 earthquake in Christchurch, New Zealand, on workers who were WFH in response to the disaster. Their findings showed that the benefits of post-disaster WFH outweighed its costs, enabling employees to better address WLB. The positive effect of WFH was linked to increased flexibility in scheduling obligations from different life domains.

Most pertinent for our research, Shirmohammadi et al. (2022) reviewed 48 studies that examined antecedents and outcomes of WLB among remote workers during the COVID-19 pandemic and found that non-voluntary WFH during the pandemic was associated with many shortcomings that were not apparent under normal circumstances. For example, the personal demand most specifically related to pandemic WFH was childcare, considering that institutions that usually provide childcare services closed during the lockdown. However, most studies in the review were conducted in developed countries in which workers were probably better prepared for WFH, and the authors indicated that more research is needed on workers from middle- and low-income countries, such as Croatia.

#### **Our Research**

The goal of our research was to explore the determinants of job performance and well-being among Croatian workers who suddenly and involuntarily WFH during the COVID-19 lockdown. The conceptual model of our research (Figure 1) is based on the extended JD-R theory (Demerouti & Bakker, 2023) which holds that job-related (e.g., job performance) and personal (e.g., well-being) outcomes result from the interplay of various job and personal/private demands and resources which exert their influence indirectly through more proximal psychological processes.





*Note.* S1 = Study 1, S2 = Study 2; To keep the diagram readable, we do not show the hypothesized direct effects of resources and demands on job performance and well-being. Solid lines indicate hypothesized positive relationship and dashed lines indicate hypothesized negative

relationship; parentheses indicate which study included which variables.

As a proximal outcome of demands/resources, we focused on WLB as probably the most important factor for maintaining high levels of functioning while WFH in this double specific context. Similar to other studies (e.g., Allen et al., 2015, Wang et al., 2020), we conceptualized WLB as the absence of conflict between work and family roles (Clark, 2000) and measured how work interferes with family (work-to-family conflict; WTF) and how family obligations interfere with work (family-to-work conflict; FTW). However, we also expanded our conceptualization of WLB to include effectiveness in handling work and non-work roles (Casper et al., 2018; Hill et al., 2001) and identified two additional constructs which we believe reflect this component of WLB and are specifically important for WFH. The first is the time structure of working days (Jahoda, 1981), which simply denotes how well organized a persons' days are. The other is psychological detachment from work - a sense of mental disengagement from work and not thinking about work-related problems and opportunities during private time (Sonnentag & Fritz, 2007).

As for the distal outcomes reflecting the adjustment to WFH, in all studies we focused on two main JD-R outcomes – job performance and psychological well-being. We expected that better WLB, indicated by lower WTF and FTW conflict and higher time structure and psychological detachment from work, would be related to job performance (Hypothesis 1a) and well-being ( $H_{1b}$ ).

In addition to the central part of the research model, we aimed to investigate personal demands, as well as job and personal resources, that should be most important for WLB and general functioning during WFH in these unusual circumstances.

On the demand side, we focused on childcare responsibilities as a personal demand that is salient during crises affecting a community or society as a whole (Ahmad et al., 2022). We expected that *childcare responsibilities while WFH will be related to lower WLB, indicated by higher WTF and FTW conflict and lower time structure and psychological detachment from work,*  $(H_{2a})$ , and lower job performance  $(H_{2b})$  and well-being  $(H_{2c})$  and that the negative effect of childcare responsibilities on job performance  $(H_{3a})$  and well-being  $(H_{3b})$  would be mediated by aspects of WLB.

Among personal resources, we focused on two personality dispositions from the Big Five that have been shown to be among the most important personality determinants of WLB, work motivation and job performance: conscientiousness and emotional stability (Allen et al., 2012; Barrick et al., 2001; Judge & Ilies, 2002).

Regarding job resources, we focused on *autonomy at work* (Ryan & Deci, 2000). Greater autonomy in choosing when and how employees perform their tasks should make balancing their work and private life easier than when they are closely monitored and micromanaged (e.g., by managers using monitoring software tools; Ahmad et al., 2022). Therefore, autonomy at work should be an important resource, especially in the case of non-voluntary WFH.

To summarize, we expected that higher levels of conscientiousness, emotional stability, and autonomy at work would be related to better WLB, indicated by lower WTF and FTW conflict and higher time structure and psychological detachment from work,  $(H_{4a})$ , job performance  $(H_{4b})$  and well-being  $(H_{4c})$ . Also, we expected that the positive effects of conscientiousness, emotional stability and autonomy at work on job performance ( $H_{5a}$ ) and well-being ( $H_{5b}$ ) would be mediated by aspects of WLB. We believe that our research significantly adds to the literature on the psychological experience of WFH in several ways. First, we conducted our study in the specific context of the pandemic, in which employees were forced to WFH, and within the cultural context of a middle-income country where most workers were largely unprepared for WFH. In 2019, the year preceding the pandemic, only 2% of Croatian workers regularly and 5.1% occasionally worked from home (Eurostat, 2025), compared to the European Union average of 5.4% (regularly) and 9% (occasionally). The relatively low percentage of WFH in Croatia could partly be explained by the country's focus on industries where remote work is not feasible, such as tourism and hospitality. Yet, the recent Quality of Life in the EU in 2024 report (Eurofound, 2025) indicates that even when considering only jobs suitable for remote work, Croatia still ranks among the lowest in the EU for people working from home (42%) of men and 32% of women). This suggests that there may be cultural reasons for skepticism among people and/or companies in Croatia toward WFH, ranging from inadequate housing for WFH to employers' low trust in employees.

Second, we investigated both job and personal resources, as well as personal demands in an effort to obtain comprehensive information about determinants of the WFH experience. Finally, we used an expanded operationalization of WLB – a key

outcome variable in WFH research, with indicators that could capture specificities of the WFH context (i.e., time structure and job detachment).

# Study 1

#### Method

# Procedure and Participants

We collected responses on a nationally representative sample of 583 Croatian workers during the April 2020 lockdown, i.e., when most strict measures to suppress the COVID-19 epidemic were in place (e.g., most hospitality venues and childcare facilities were closed). Data were collected using the computer-assisted web-interviewing method (CAWI) conducted by a market research agency. Participants were compensated for their participation in the research agency's surveys with points that could be converted into a gift voucher. A link to the survey was sent to the members of the market research agency's on-line panel that has over 65 000 members.

To ensure that the sample represented the Croatian population, the market research agency used quotas based on county of residence, settlement size, age and gender. After data collection was completed, the sample was compared with the Croatian population (Buršić & Štampar, 2013) in terms of geographical location, age, gender and education level.

From the full sample, our study focused on 166 participants that WFH three or more days a week during the lockdown. Sociodemographic characteristics of the sample are shown in Table 1.

**Table 1**Socio-Demographic Characteristics of Samples From Studies 1 and 2

	Study 1 ( $N = 166$ )	Study 2 ( $N = 575$ )
	f(%)	f(%)
Females	84 (50.6%)	339 (59.0%)
Highly educated	123 (74.1%)	442 (76.6%)
Has underage child(ren) in the household	62 (37.3%)	170 (29.6%)
Has kindergarten or elementary school child(ren) in the household	- -	131 (22.8%)
No experience with WFH prior to the pandemic	89 (53.6%)	398 (69.2%)
	M(SD)	M(SD)
Age	40.4 (11.25)	37.10 (9.99)
Years of work experience	-	12.61 (9.71)

*Note.* WFH = work from home.

#### Instruments

The measures used in this study are outlined in Table 2. We asked participants to assess different aspects of WLB for the month preceding data collection (i.e., for the period of strict lockdown measures). For work outcomes, we measured job performance and well-being. We measured childcare responsibilities as a personal demand.

We also controlled for gender, age, education level, WFH prior to the pandemic, and pandemic-related worries (e.g., worries about changes in education and work, loss of civil liberties, and a decline in standard of living).

#### Results

We analyed the data using regression analyses. To further facilitate interpretation of the importance of each predictor, we calculated *relative weights* (RW), which reflect the proportion of explained variance in the dependent variable that can be attributed to a predictor, considering both its unique contribution and its contribution in the presence of other predictors (LeBreton et al., 2007). <sup>1</sup>

We show descriptive statistics and correlations between focal variables in Table 3.

In Table 4, we present the results of regression analyses predicting aspects of WLB. The control variables and childcare responsibilities explained 7% to 16% of variance in aspects of WLB. Childcare responsibilities predicted higher WTF (b = 0.57, p < .001) and FTW conflict (b = 0.36, p < .01), but were not related to time structure (b = 0.05, p = .90) or psychological detachment (b = 0.13, p = .49). However, they were a more important predictor than the control variables for these two aspects in WLB, explaining 6% of the additional variance in WTF conflict and 4% in FTW conflict. According to RWs, 5% of variance in WTF conflict and 3% of variance in FTW conflict could be directly attributed to childcare responsibilities.

In Table 5, we present the results of regression analyses for predicting job performance and well-being. Control variables, childcare responsibilities and aspects of WLB did not explain a large proportion of variance in job performance ( $R^2$ = .10, p= .055) and childcare responsibilities were unrelated to the criterion (b = -0.01, p= .55). However, the aspects of WLB explained 5% of the variance beyond control variables and childcare responsibilities. The only aspect of WLB that significantly explained job performance was better time structure (b = 0.23, p < .01). According to the RWs, time structure was also the most important predictor across all variables, explaining a total of 4% of the variance in job performance.

As for well-being, all variables explained 44% of the variance, but most of it was attributable to aspects of WLB, which accounted for 27% of the variance beyond the other variables in the model. Again, the aspect of WLB that was a significant

<sup>&</sup>lt;sup>1</sup> For both studies, we omit the correlation and regression coefficients of control variables from the tables, but they are available in the online supplementary materials.

Table 2
Measures in Study I

Construct group	Measured construct	Instrument	No of items	Measurement scale	Cronbach alpha
Personal demand	Childcare responsibilities	Do you have children younger than 18 years living in your household?	1	1 $0 = \text{no}, 1 = \text{yes}$	ı
	Work-to-family conflict	How often do you feel that demands of your work interfere with your family life?	1	1 (never) to 5 (always)	ı
Work-life	Family-to-work conflict	How often do you feel that demands of your family life interfere with your work?	1	1 (never) to 5 (always)	ı
balance	Time structure	Latent and Manifest Benefits of Work (LAMB) scale (Kovacs et al., 2019)	7	1 (not at all) to 5 (very much)	.83
	Psychological detachment	Recovery Experience Questionnaire (Sonnentag & Fritz, 2007)	2	1 (completely disagree) to 5 (completely agree)	62.
	Job performance	Compared to the time before the coronavirus pandemic, how successful are you in completing work tasks?	1	1 (significantly less effective) to 5 (significantly more effective)	1
Outcomes	Well-being (standardized responses on the two scales were combined into one	WHO-5 Well-Being Index (Topp et al., 2015)	8	1 (at no time) to 6 (all of the time) (time range was during the last month)	.87
	composite measure of well-being)	All things considered, to what degree are you satisfied with your life these days?	1	1 (very unsatisfied) to 10 (very satisfied)	

Means, Standard Deviations, and Zero Order Correlations for Focal Variables in Study I (N = 166)

	M	QS	1	2	3	4	5	9
Childcare responsibilities	0.37	0.49	ı					
WTF conflict	2.84	1.08	.17*					
FTW conflict	2.62	1.05	$.16^*$	.54**				
Time structure	3.60	68.0	.02	31**	33**	1		
Psychological detachment	2.95	1.19	90:	37**	19*	.21**		
Job performance	2.97	0.88	.01	07	60:-	.22**	90:	
Well-being	0.00	0.85	80.	29**	23**	.57**	.17*	.31**

*Note.* WTF = work-to-family, FTW = family-to-work. p < .05. \*\* p < .01.

Table 4

Childcare Responsibilities as Predictors of Aspects of Work-Life Balance While Working From Home in Study  $I\ (N=166)$ 

	WTF		FTW		Time		Describological	atachment
Criteria:	conflict		conflict		structure	n)	ı sycilological u	ctacilliciit
	B(SE)	RW	B (SE)	RW	B(SE)	RW	B (SE)	RW
Childcare responsibilities	$0.57 (0.17)^{**}$	.05	$0.36 (0.17)^{**}$	.03	0.05(0.15)	00.	0.08(0.19)	00.
$R^2$	.16**		$.10^{*}$		20.		<sub>*</sub> 60°	
$\Delta R^2$ over control variables	**90.		*00.		00.		.00	

Notes. RW = relative weights, WTF = work-to-family, FTW = family-to-work.

p < .05. \*p < .01.

Fable 5

Childcare Responsibilities and Aspects of Work-Life Balance as Predictors of Job Performance and Well-Being While Working From Home in Study I (N = 166)

'		Job performance			Well-being	
Criteria:	Step 2	Step 3		Step 2	Step 3	
	B(SE)	B(SE)	RW	B(SE)	B(SE)	RW
Childcare responsibilities	-0.06(0.14)	-0.01(0.15)	00.	0.01(0.13)	0.06 (0.12)	.01
WTF conflict		0.06 (0.08)	00:		-0.07 (0.06)	.03
FTW conflict		-0.01(0.08)	00:		-0.01 (0.06)	.02
Time structure		$0.23 (0.08)^{**}$	9.		$0.48 (0.06)^{**}$	.25
Psychological detachment		$(90.0)\ 00.0$	00:		-0.01(0.05)	.01
$R^2$	.07	.12*		$.16^*$	*****	
$\Delta R^2$ over control variables	00.	.05		00.	.27**	

Note. RW = relative weights, WTF = work-to-family, FTW = family-to-work.

p < .05. \*p < .01.

predictor of higher well-being was better time structure (b = 0.48, p < .001), which was by far the most important among all tested predictors, explaining 25% of the variance. Childcare responsibilities were not related to well-being (b = 0.06, p = .59). Given that childcare responsibilities did not predict time structure, and time structure was the only aspect of WLB that predicted job performance and well-being, we did not conduct mediation analyses but concluded that, in Study 1, the effect of childcare responsibilities was not mediated by the aspects of WLB.

# Study 2

In Study 2, we aimed to constructively replicate (Lykken, 1968) the findings from Study 1, using different and psychometrically more advanced indicators of childcare responsibilities, WTF and FTW conflict, and job performance. We also added two additional control variables that we believed were important for the WFH experience: WFH working conditions (e.g., separate working space, adequate IT equipment) and participants' digital literacy. More importantly, in this study, we investigated personal and job resources that might enhance the non-voluntary WFH during a crisis.

#### Method

# **Procedure and Participants**

As in Study 1, we collected our data in April and early May 2020, while most strict lockdown measures were still in effect. We collected a convenient sample of 575 Croatian employees who were WFH at least three days a week. The participants completed an online survey and were given the option to enter a raffle to win a gift card valued at 13.3 euros (100 kunas). We recruited 67.7% of participants through social media channels and 32.3% with the help of undergraduate psychology students. Sociodemographic characteristics of the sample are shown in Table 1.

#### Instruments

The measures used in this study are outlined in Table 6. We again asked participants to assess different aspects of WLB for the month preceding data collection, but here we used more detailed measures of WTF and FTW conflict. We also measured job performance more comprehensively and used the exact number of kindergarten and elementary school-aged children in the household as a measure of childcare responsibilities. Finally, we assessed conscientiousness and emotional stability as personal resources and job autonomy as a job resource.

We again controlled for gender, age, education level, and WFH status prior to the pandemic. Additionally, we asked participants about the working conditions in

1 able 0 Measures in Study 2

Construct group	Measured construct	Instrument	No of items	Measurement scale	Cronbach alpha
Personal resources	Conscientiousness Emotional stability	Mini-IPIP scale (Donnellan et al., 2006)	4 4	1 (completely disagree) to 5 (completely agree).	.75 .77.
Personal demand	Childcare responsibilities	Number of kindergarten and elementary school-aged children in the household	1	1	,
Job resource	Autonomy at work	Need Satisfaction at Work Scale (Tafvelin & Stenling, 2018)	4	1 (completely disagree) to 5 (completely agree)	.83
	Work-to-family conflict Family-to-work conflict	Netemeyer et al. (1996)	e e	1 (completely disagree) to 7 (completely agree)	.94 .86
Work-life balance	Time structure	Latent and Manifest Benefits of Work (LAMB) scale (Kovacs et al., 2019)	2	1 (not at all) to 5 (very much)	.81
	Psychological detachment	Recovery Experience Questionnaire (Sonnentag & Fritz, 2007)	2	1 (completely disagree) to 5 (completely agree)	.83
Outcomes	Job performance	Williams and Anderson (1991)	7	1 (completely false) to 5 (completely accurate) (time range was during the last month)	98.
	Well-being	WHO-5 Well-Being Index (Topp et al., 2015)	5	1 (at no time) to 6 (all of the time) (time range was during the last month)	.87

their home and assessed their digital literacy. We provide more details about the measurement of control variables in the online supplementary materials.

#### Results

We show descriptive statistics and correlations between focal variables in Table 7.

We present the results for predicting aspects of WLB in Table 8. Control variables, demands, and resources explained 15% to 33% of the variance in aspects of WLB. Demands and resources accounted for most of the variance beyond control variables for time structure ( $\Delta R^2 = .23$ ). For other WLB aspects, they explained an additional 9% of the variance. Emotional stability outperformed other personal and job resources/demands and control variables in predicting WLB (b = -0.35 to 0.61, all p < .001). It explained more variance (4% to 15%) in all aspects of WLB except FTW conflict. For FTW conflict childcare responsibilities explained 9% of the variance (b = 0.60, p < .001) and working conditions, a control variable, explained 10% of the variance (b = -0.63, SE = 0.10, p < .01).

In Table 9, we present the results of regression analyses for predicting job performance and well-being. The resources/demands accounted for 5% of the variance in job performance beyond the control variables, while aspects of WLB predicted an additional 8% of the variance over the control variables, resources, and demands. We explained 26% of variance in job performance with the full regression model. Among the focal variables, the most important predictor of job performance was FTW conflict (b = -0.09, p < .001, RW = .06), followed by time structure (b = 0.10, p < .001, RW = .04) and conscientiousness (b = 0.09, p < .01, RW = .03). These variables were also more important predictors of job performance than most control variables, with the exception of working conditions (b = 0.10, p < .01) and digital literacy (b = 0.08, p < .001), which explained the same amount of variance as conscientiousness (3%).

As for the well-being criterion, resources and demands explained 18% of the variance beyond the control variables and aspects of WLB explained an additional 16% of the variance over the other variables in the model. In total, we explained 40% of the variance in well-being among employees who WFH. The most important predictor variable was time structure (b = 0.23, p < .001), which explained 11% of the variance in well-being, followed by emotional stability (b = 0.25, p < .001), which explained 9% of the variance. Psychological detachment (b = 0.12, p < .001) and WTF conflict (b = -0.09, p < .001) explained 7% of the variance each. Compared to the control variables, all focal variables were more important predictors of well-being.

Table 7

Means, Standard Deviations and Zero Order Correlations for Focal Variables in Study 2 (N = 575)

SD
-
01
05
01
.21**
.35**
13**
07
03
11*

Note. WTF = work-to-family, FTW = family-to-work.

# Table 8.

Childcare Responsibilities, Personality Traits, and Autonomy at Work as Predictors of Aspects of Work-Life Balance While Working From Home in Study 2 (N = 487)

	WTF conflict	lict	FTW conflict	lict	Time structure	ture	Psychological detachmen	etachment
Cilicila.	B(SE)	RW	B(SE)	RW	B(SE)	RW	B (SE)	RW
Childcare responsibilities	$0.34(0.12)^{**}$	.03	$0.61(0.10)^{**}$	60:	-0.09 (0.06)	.01	-0.02 (0.08)	00.
Conscientiousness	-0.14(0.10)	.01	$-0.21 (0.09)^*$	.01	$0.28(0.05)^{**}$	90:	0.06 (0.07)	00.
Emotional stability	$-0.61(0.10)^{**}$	80.	$-0.35 (0.09)^{**}$	9.	$0.49(0.05)^{**}$	-	$0.50(0.07)^{**}$	60:
Autonomy at work	-0.04(0.10)	.01	(60.0) 90.0	00:	$0.17(0.05)^{**}$	9.	$-0.16(0.07)^*$	.01
$R^2$	.20**		.26**		.33**		.15**	
$\Delta R^2$ over control variables	**60.		**60.		.23***		**60.	

*Note.* RW = relative weights, WTF = work-to-family, FTW = family-to-work.  $^*p < .05.$   $^*p < .01.$ 

Childcare Responsibilities, Personality Traits, Autonomy at Work, and Aspects of Work-Life Balance as Predictors of Job Performance and Well-Being While Working From Home in Study 2 (N = 486). Table 9

		Job performance			Well-being	
Criteria:	Step 2	Step 3		Step 2	Step 3	
	B(SE)	B (SE)	RW	B(SE)	B (SE)	RW
Childcare responsibilities	0.05(0.04)	$0.10(0.04)^{**}$	.01	-0.07 (0.06)	-0.02(0.06)	00.
Conscientiousness	$0.14(0.03)^{**}$	$0.10(0.03)^{**}$	.03	0.04(0.05)	-0.05(0.05)	00.
Emotional stability	0.02(0.03)	-0.02(0.03)	00.	$0.47 (0.05)^{**}$	$0.25(0.05)^{**}$	60:
Autonomy at work	$0.07(0.03)^{**}$	$0.05(0.03)^*$	.02	$0.10\ (0.05)^*$	0.08(0.05)	.02
WTF conflict		$0.04\ (0.02)^*$	.01		$-0.09(0.03)^{**}$	.07
FTW conflict		$-0.09(0.02)^{**}$	90:		0.00(0.03)	.02
Time structure		$0.10(0.03)^{**}$	9.		$0.24(0.04)^{**}$	.11
Psychological detachment		-0.04 (0.02)	00.		$0.12(0.03)^{**}$	.07
$R^2$	.19**	.26**		.24**	**04.	
$\Delta R^2$	.05**	**80.		.18**	$.16^{**}$	

Note. RW = relative weights, WTF = work-to-family, FTW = family-to-work. p < .05. \*\*p < .01.

Finally, we conducted mediation analyses, estimating the indirect effects as significant if their bias-corrected 95% confidence intervals, based on 10 000 bootstrap samples, did not include zero. In all mediation analyses we also added control variables. Here we discuss the most important results of the mediation analyses and present the full results in Table SVII of the online supplementary materials.

For the job performance criteria, the effects of both personality traits were mediated by FTW conflict (b=0.02,95% CI [0.002, 0.04]) and time structure (b=0.03,95% CI [0.01, 0.05]). The effect of autonomy was mediated by time structure (b=0.02,95% CI [0.01, 0.04]), while the effect of childcare responsibilities was mediated by FTW conflict (b=-0.07,95% CI [-0.11, -0.04]). As for the well-being, the effect of childcare responsibilities was mediated through WTF conflict (b=-0.02,95% CI [-0.05, -0.004]) and the effects of conscientiousness (b=0.07,95% CI [0.03, 0.11]) and autonomy at work (b=0.04,95% CI [0.01, 0.08]) were mediated through WTF conflict (b=0.06,95% CI [0.02, 0.10]), time structure (b=0.12,95% CI [0.07, 0.17]) and psychological detachment (b=0.06,95% CI [0.02, 0.10]).

#### Discussion

Our future will likely include more crises such as the COVID-19 pandemic. In line with this and recent calls to advance theoretical understanding of WFH and WLB during crises (e.g., Ahmad et al., 2022), we framed our study using the extended JD-R theory (Demerouti & Bakker, 2023) and aimed to identify important resources and demands related to the WFH experience which influence the key outcome in WFH – work-life balance, as well as more distal outcomes of job performance and wellbeing. More importantly, we conducted our research in Croatia - a country whose workers and organizations were unaccustomed to WFH. Along with other recent research on WFH during COVID-19 (e.g., Wang et al., 2020), insights from our studies should help both employees and organizations manage work in future scenarios that require an abrupt and non-voluntary shift to WFH.

Across both studies, it seemed clear that WLB is important for job performance  $(H_{1a})$  and, especially, for well-being  $(H_{1b})$  while WFH in these specific conditions. Furthermore, our expanded operationalization of WLB enabled us to observe that the most important aspect of WLB seemed to be the time structure of working days. According to Jahoda's model of latent functions of work (1981), in addition to the obvious manifest function of earning a living, employment has five latent psychological functions: time structure, a sense of meaning and participation, social contacts, status, and enforced activity. Deprivation of these functions leads to distress. A sudden switch to WFH should primarily affect the time structure that people receive from work, since WFH erases the physical and temporal boundaries

between work and home. Our research shows that individuals who were able to retain the time structure at home and clearly differentiate between working and free time were most likely to achieve high job performance and well-being. This was the case even after we considered important sociodemographic variables such as WFH conditions, prior experience with WFH, and digital literacy.

We also investigated the effect of childcare responsibilities, a specific personal demand that may be especially important for employees working from home during community-wide crises. The findings were less clear. Across Studies 1 and 2, childcare responsibilities emerged as an important determinant of WLB ( $H_{2a}$ ). However, only in Study 2, where we focused on childcare responsibilities towards kindergarten and elementary-school children, did this demand indirectly negatively affect job performance ( $H_{3a}$ ) and well-being ( $H_{3b}$ ). This suggests that childcare while WFH is especially demanding for employees with young and thus more dependent children. However, childcare did not have a direct impact on job performance ( $H_{2b}$ ) or well-being ( $H_{2c}$ ) in either of the studies.

Study 2 findings further added to those of Study 1 by identifying some personal and job resources that can help employees adapt more easily to WFH and compensate for endangered resources (e.g., a quiet place for work and focus; Hobfoll, 1989). Among personal resources, conscientiousness and emotional stability were important drivers of WLB ( $H_{4a}$ ). Among job resources, autonomy at work helps employees achieve WLB, but only by enhancing the time structure of the day ( $H_{4a}$ ). The three resources also had a direct effect on job performance ( $H_{5a}$ ) and well-being ( $H_{5b}$ ) while WFH. The mediation analyses indicated that better time structure of working days, achieved by conscientious and emotionally stable employees, as well as those who had more autonomy at work, was the key mechanism through which the three resources indirectly affected both job performance ( $H_{4b}$ ) and well-being ( $H_{4c}$ ).

#### Limitations

Our findings may be limited by common method variance, given that our research design was cross-sectional and relied solely on self-reports. This issue may have been particularly problematic for certain constructs, such as job performance. However, since peers and supervisors would maintain only limited opportunities to observe participants' work behaviour while they are WFH, participants were the only individuals with complete insight into their working behaviour. Furthermore, most of the "known" relationships presented here have been supported by meta-analyses in general populations of workers (e.g., Amstad et al., 2011; Anglim et al., 2020; Barrick et al., 2001; Gajendran & Harrison, 2007), and some of these relationships held with objective indicators of performance and well-being (e.g., Gajendran & Harrison, 2007).

Also, although we suggest that WLB determines performance and well-being while WFH, our research design was not suited to properly test the causality of this relationship. As it seems likely that the causality of these relationships may be bidirectional, future research should investigate the causal dynamics of the WLB relationship with job performance and well-being in more detail, using longitudinal and/or experience sampling methods.

Regarding theoretical limitations, although we expanded our definition of WLB to align with recent theoretical developments in conceptualization (Casper et al., 2018), we still did not capture the full scope of the construct. Future research could further expand both the conceptualization and operationalization of WLB to include its affective (i.e., satisfaction and emotions related to different roles) and involvement aspects (i.e., experience of adequate involvement in different roles).

Finally, future research could also include perspectives from other household members, as spillover effects of job demands and resources are likely to cross over to them and influence their well-being (Bakker & Demerouti, 2013). This may be especially pronounced if more household members are WFH.

# **Practical Implications**

It seems that the most efficient way for employees to improve their WLB and, consequently, job performance and well-being is to structure their days in a way that would enable better balance between work and life demands. This skill appears even more important than digital skills, which are often intuitively associated with successful WFH. Improving time-structuring skills can be done through time management training, where employees can learn optimal goal setting and task prioritization (Fenner & Renn, 2010).

Moreover, managers should invest effort in providing resources such as autonomy or coaching interventions for employees with specific personality profiles and/or greater childcare responsibilities to help them work from home productively and happily.

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# Rad od kuće kao nužan, ali neuobičajen oblik rada: slučaj hrvatskih radnika tijekom pandemije bolesti COVID-19

#### Sažetak

Istražili smo odrednice psihološkoga doživljaja rada od kuće u "dvostruko" specifičnome kontekstu obveznoga rada od kuće tijekom razdoblja prisilnoga zatvaranja zbog pandemije bolesti COVID-19 u Hrvatskoj, zemlji u kojoj je rad od kuće bio vrlo neuobičajen tip rada. U dvjema studijama, koristeći nacionalno reprezentativan i prigodan uzorak, ispitali smo predviđaju li radni i osobni zahtjevi/resursi ravnotežu između poslovnoga i privatnog života (RPPŽ), radnu uspješnost i dobrobit zaposlenih u Hrvatskoj koji su radili od kuće tijekom zatvaranja. Naša sveobuhvatna operacionalizacija RPPŽ-a uključivala je konflikt između posla i obitelji te obitelji i posla, vremensku strukturu radnih dana i psihološko odvajanje od posla. Obje su studije pokazale da je RPPŽ, a osobito vremenska struktura, važan za radnu uspješnost i dobrobit te da obveze povezane s brigom o djeci djeluju kao osobni zahtjev koji smanjuje RPPŽ. Druga je studija pokazala da su obveze povezane s brigom o djeci povezane s nižom radnom uspješnošću i dobrobiti putem smanjenoga RPPŽ-a te da savjesnost, emocionalna stabilnost i autonomija djeluju kao resursi koji pridonose RPPŽ-u, radnoj uspješnosti i dobrobiti. Smatramo da ti nalazi imaju važne implikacije za organizaciju rada u okolnostima kada je rad od kuće nužan, ali neuobičajen oblik rada, kao što je to slučaj tijekom iznenadnih globalnih ili lokalnih kriza.

*Ključne riječi:* rad od kuće, krize, ravnoteža između poslovnoga i privatnog života, zahtjevi i resursi na poslu

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