

Identity integration matters: The case of parents working from home during the COVID-19 health emergency

Claudia Manzi, Yasin Koc, Verónica Benet-Martínez & Eleonora Reverberi

To cite this article: Claudia Manzi, Yasin Koc, Verónica Benet-Martínez & Eleonora Reverberi (2022) Identity integration matters: The case of parents working from home during the COVID-19 health emergency, *Self and Identity*, 21:8, 914-938, DOI: [10.1080/15298868.2021.2004217](https://doi.org/10.1080/15298868.2021.2004217)

To link to this article: <https://doi.org/10.1080/15298868.2021.2004217>



© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 02 Dec 2021.



[Submit your article to this journal](#)



Article views: 1898



[View related articles](#)



[View Crossmark data](#)



Citing articles: 2 [View citing articles](#)

ARTICLE



Identity integration matters: The case of parents working from home during the COVID-19 health emergency

Claudia Manzi^a, Yasin Koc^b, Verónica Benet-Martínez^c and Eleonora Reverberi^a

^aDepartment of Psychology, Università Cattolica del Sacro Cuore, Milano, Italy; ^bDepartment of Social Psychology, University of Groningen, Groningen, Netherlands; ^cDepartment of Political and Social Sciences, ICREA & Universitat Pompeu Fabra, Barcelona, Spain

ABSTRACT

Since February 2020, the world has faced a health emergency due to the rapid spread of COVID-19. Two of the first measures adopted by most countries to ensure social distancing were the closure of schools and childcare services, and the mandate to work from home. Millions of parents, while facing the threat of the virus infection, suddenly found themselves locked down in their homes managing workload and care load in single “crowded” spaces. This study tested whether relevant identity structures and individual differences (i.e., work-parent identity integration, identification with family, and identification with work) and contextual factors (i.e., work demands, family demands, and housing conditions) predicted parents’ professional, parental, and mental health outcomes during the lockdown. Data collected in April-2020 from 432 Italian parents working from home during the strict lockdown showed that the main predictor of all outcomes is work-parent identity integration. We provide recommendations for how professionals and organizations can support parents working from home due to COVID-19 or in future lockdowns.

ARTICLE HISTORY

Received 23 December 2020
Accepted 4 November 2021

KEYWORDS

Working from home; working parents; COVID-19; identity integration; health emergency

Introduction

The global impact of COVID-19 has brought radical changes to people’s lives. The rapid and unpredicted spread of the virus forced governments across the world to take measures of containment and public health protection redesigning both work systems and civil society. In particular, the need for social distancing forced the adoption of new methods to continue work. A common measure adopted by most companies, and therefore faced by the majority of workers, has been working from home (WFH). WFH is one of the most effective measures to reduce a pandemic spread (Jones et al., 2020). Indeed, to limit the virus spread, many countries enforced the closure of all non-essential workplaces and encouraged WFH. This measure affected millions of workers across the world; only in the European Union, 36.8% of all employees worked from home during this pandemic, more than double the number of employees working from home before COVID-19 (Eurofound, 2020).

Correspondence to Yasin Koc  y.koc@rug.nl  University of Groningen, Groningen, Netherlands

© 2021 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-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

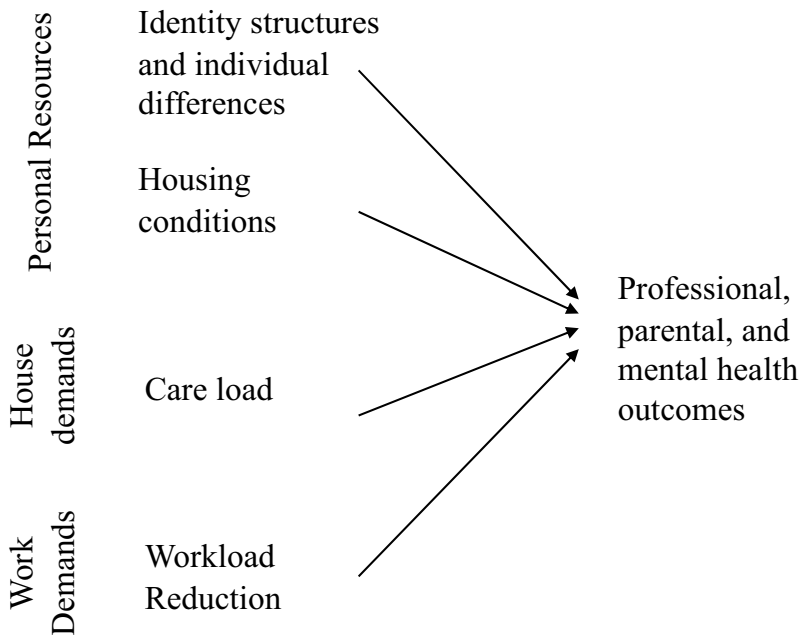


Figure 1. Analyzed predictors and WFH outcomes.

Moreover, in most countries, all schools, including infant and childcare services, were closed to prevent the virus spread. Altogether, those measures have greatly changed working parents' professional and personal lives, and hence, may have important implications for health and well-being (Sinclair et al., 2020). It is, therefore, urgent and necessary to understand the psychological implications of such unprecedented changes in workers' lives (Brooks et al., 2020). This knowledge could then be used to design effective solutions that protect workers' well-being and provide them with appropriate coping tools.

During emergency-induced WFH, many workers were forced to quickly modify their lives, working styles, places, and rhythms, while also managing personal responsibilities. For working parents, this also often brings radical changes in work-family balance and an increase of the care and educational workloads (e.g., having to cook more meals, need to provide home-schooling), resulting in a unique overlap of parental and work roles. Since the specific situation of WFH during an emergency involves a potential conflict between work and family, in this study, we based our predictions on the Ten Brummelhuis and Bakker (2012) Work-Home Resources model (W-R H). This well-established model identifies three aspects as important in determining the well-being of workers in relation to situations of conflict between work and home: Demands from work, demands from home, and the personal resources, both in terms of individual aspects and material properties that the worker can put in place to deal with these requests.

Accordingly, we tested a model (see Figure 1) in which we analyzed the role of personal resources (workers' identity structures and individual differences in combination with other personal resources such as living conditions), work demands (reduced workload) and home demands (care load) on professional, parental, and mental health outcomes.

Personal resources

Workers' identity structures and individual differences

We conceptualized one aspect of personal resources (i.e., identity structures and individual differences) through the multi-level personality perspective (McAdams & Olson, 2010). In McAdams and Pals (2006) model, personality is conceived not only in terms of developing patterns of dispositional traits, but also as self-defining life narratives, complexly and differentially situated in culture and social context (p. 204). As a consequence, it has been argued that identity can be subsumed within the multi-level personality system (Syed, 2017). In this approach, personality provides meaning and a narrative for how situations are perceived and experienced, thus linking personality perspectives to the social psychological approach to identity, which typically focuses on how certain contexts lead to the awareness of social group memberships and the subsequent behaviors that awareness engenders. With the above identity-relevant personality processes in mind, multiple identities and sets of belongings have been here analyzed with an Identity Integration perspective (Benet-Martínez & Haritatos, 2005) to focus not only individuals' multiple identifications but also on how individuals manage them to achieve an integrated and coherent sense of self. Accordingly, to analyze personal resources among working from home parents, we focused our attention on three identity variables: work-parent identity integration, and degrees of identification with family and organization.

A large body of studies has shown that the degree of integration between different identity aspects and multiple social identification are key resources for the individual adjustment. What differentiates this study from the previous literature is that in our approach work-family identity integration and work and family identifications are analyzed jointly to have a more complete picture of how the individual personality system works in favor of the individual's well-being.

On the one hand, identification with social groups contributes to individuals' psychological well-being because one can draw self-esteem, a sense of belonging, and self-clarity from participation in and attachments to these groups (Haslam et al., 2009). For instance, organizational identification has been already found to be linked to positive psychological outcomes such as a sense of safety, self-enhancement, and affiliation (Pratt, 1998), and also strongly related to positive work outcomes such as job involvement, organizational commitment, and job and organizational satisfaction (Koc, Gulseren et al., 2021; Riketta, 2005). Family identification is also an important predictor of individual adjustment outcomes (Flora & Segrin, 2014). Strong family identification has been associated with reduced anxiety, enhanced self-esteem, and overall well-being (Herrera et al., 2011; Naughton et al., 2015; Stevenson et al., 2020). Interestingly, family identification is particularly important when facing stressful situations that require strong social support (Swartzman et al., 2017). Thus, we expect that being strongly identified with work and family domains should benefit WFH parents better professional, parental, and mental health outcomes.

On the other hand, in analyzing identity structures and individual differences, here we argue that the level of integration and synergy (vs. conflict) between one's different identifications should also be taken into account when predicting well-being (e.g., Anderson & Koc, 2020; Chen et al., 2008; Ferrari et al., 2015; Hirsh & Kang, 2016; Koc & Vignoles, 2016, 2018). Indeed, analyzing only work and family identification without

taking into consideration if these identifications are perceived as conflictual and incompatible could lead to a crucial lack of information and to the incorrect assumption that many identifications themselves are beneficial whatever the kind of interrelationship between social domains involved (Brook et al., 2008). Hence, the construct of *identity integration* captures individual variation in the degree to which different identities are perceived as compatible and synergistic vs. disconnected and in conflict to each other (Benet-Martínez & Haritatos, 2005; Benet-Martínez et al., 2002; Sacharin et al., 2009). Individuals with high identity integration incorporate their multiple identities into their self-concept more seamlessly and build more complex identities (e.g., seeing oneself as a “female scientist” vs. just a “scientist” or a female who happens to be a scientist), while less integrated individuals feel caught between their social identities and prefer to keep them separate or minimized (see Benet-Martínez, et al., 2021; Kang & Bodenhausen, 2015). Recent studies have shown that the integration of relevant identifications related to work and other life spheres (e.g., ethnicity and culture) is linked to positive outcomes such as creativity (e.g., Cheng et al., 2008; Saad et al., 2013), job satisfaction and organizational commitment (Manzi et al., 2019; Wallen et al., 2014), and well-being (Chen et al., 2008; Huynh et al., 2018; Manzi et al., 2019; Schwartz et al., 2015). Thus, we expect WFH parents with higher work-parent identity integration to have better professional, parental, and mental health outcomes.

Housing conditions

We conceptualized the other aspect of personal resources through housing conditions. Effective WFH requires the need for extended periods of concentration and avoiding interruptions. While WFH during an emergency, this aspect may be particularly at risk since working parents have to work in their house sharing space and time with their partners and children. In analyzing personal resources of working parents, we thus decided to incorporate this important aspect. Konradt et al. (2003) showed that the presence of other people, their number, and the size of the house could all be obstacles to good work performance while WFH. Donnelly and Proctor-Thomson (2015) found that the availability of a dedicated workspace at home positively predicts employees' productivity and their capacity to return to work in the case of WFH employees following a series of earthquakes in New Zealand. Another study analyzed the role of housing conditions on workers' well-being and work performance among software developers across 18 countries WFH during the COVID-19 (Ralph et al., 2020). This study provided some initial evidence for the impact of housing conditions on the well-being and perceived productivity of WFH employees (Ralph et al., 2020). We thus expect that having better housing conditions will positively predict professional, parental, and mental health outcomes for WFH parents.

Care load

In WFH during an emergency, family context may become particularly demanding. A study conducted during the COVID-19 outbreak with 3,055 working parents from the US, UK, Italy, Germany, and France found that 60% of respondents had no external help in

caring for their children. Moreover, parents spent an additional 27 hours each week on household chores, childcare, and education – nearly the equivalent of a second job (Krents et al., 2020).

Previous studies have shown a negative link between the size of the *family care load* and workers' well-being. For instance, working mothers report higher perceived distress and strain than women without children (Bekker et al., 2000; Hibel et al., 2012). Moreover, careload can also disrupt the career of workers if they are not supported by the workplace (Bainbridge & Broady, 2017). Thus, we expect working parents with higher careload to suffer more in the current WFH situation and to display lower levels of well-being and productivity.

Workload reduction

Workload is a significant determinant of workers' outcomes. Workload variables such as amount of work hours, job demands, and work control are linked to distress and low job satisfaction (Noor, 2003), and these associations are stable across different types of working populations, such as rail industry (Smith & Smith, 2017), physicians (Aalto et al., 2018), university professors (Pace et al., 2021), and nurses (Holland et al., 2019). These studies collectively show that higher workload negatively impacts workers' well-being and increases the likelihood of developing mental health problems, including burn-out, anxiety, and intention to quit work. Thus, we expect that for WFH parents during an emergency, a significant reduction of working hours will act as a protective factor in terms of professional, parental, and mental health outcomes.

Outcomes: Professional, parental and mental health

We analyzed the impact of these four factors on three domains: professional, parental, and mental health.

For the professional domain, we focus on job satisfaction during WFH. *Job satisfaction* is particularly important to examine when workers face a chronic stressful situation. Nirel et al. (2008) found in a group of paramedics that their satisfaction with work was negatively predicted by the experiences of burnout and work overload, such as time-pressure, lack of administrative support for coping with the stressful situation, imbalance between work and family life, and low salary. These stressors might have also characterized the working conditions of WFH parents during the pandemic and affected their job satisfaction.

For the parental domain, we focus on parental self-efficacy during lockdown. *Parental self-efficacy* is defined as the beliefs that parents can influence their children's behavior and the surrounding environment to foster their successful development (Ardelt & Eccles, 2001). Parents high in parental self-efficacy perform their parental role better in the face of challenging and difficult situations caused by pandemic.

For the mental health domain, we focused on stress and posttraumatic growth. *Perceived stress* is the feeling that a situation is threatening or demanding to face, compound with the sensation of not having sufficient resources to face it (Cohen et al., 1983). We chose a subjective measure instead a more "objective" one (e.g., kind or number of stressful events during a period) since an event can be cognitively and

emotionally mediated by personal and contextual factors. Further, we considered it important to focus on individuals' perceptions of life and work changes as a result of the outbreak, instead of the quantification of these changes.

Posttraumatic growth (Tedeschi et al., 1996) occurs when a person who experiences particularly stressful or negative events (e.g., violence, disasters), which usually produces negative consequences, still manages to draw positive aspects from the experience. Posttraumatic growth can involve changes in the perception of the self (Affleck et al., 1985; Joseph et al., 1993; Pals & McAdams, 2004), one's relationships with others (Dakof & Taylor, 1990; Schaefer & Moos, 1998; Swickert & Hittner, 2009), or in the philosophy of life (Linley & Joseph, 2011; Shaw et al., 2005).

Assessing gender differences

In this study, we paid a particular effort in assessing gender differences in response to the health emergency, as WFH during an emergency can be particularly costly for working mothers.

Social role theory (Wood & Eagly, 2012) postulates that the stereotype of a "typical" man or woman arises primarily from the distribution of men and women into social roles within their society. According to this theory, gender roles have formed these stereotypes over a long history of division of labor and socialization. Traditionally, women took care of household and children, whereas men took the role of providers of money. Indeed, we could argue that in this particular moment, working mothers, while being always present at home and having children there with them, could have felt the expectation of conforming to the gender role prescription and the drive to dedicate themselves more on the family side and find it difficult to preserve their work.

Data on the impact of the COVID-19 epidemic already shows that WFH has a differential effect on women, with women reporting lower levels of productivity and job satisfaction (Feng & Savani, 2020). Many studies reported an increase in unpaid care work for working mothers during the lockdown (e.g., Craig & Churchill, 2021). Moreover, according to the UCL Institute of Education (2020), the quality of work for mothers has declined in that they are far more likely to be interrupted during working hours than fathers, and have reduced their working hours substantially more than fathers. This gender gap in childcare tasks is likely to have long-term implications. Indeed, studies have already shown that women are more likely than men to have stopped working during lockdown (e.g., Adams-Prassl et al., 2020).

Thus, in line with these findings, we expect WFH mothers to report higher levels of careload, lower levels of job satisfaction, and lower levels of well-being. Moreover, we will also test whether gender moderates the association between our predictors and outcomes. In particular, we anticipate that WPII could be particularly important in predicting WHF mothers' outcomes in that the ability to preserve harmony between work and parental could be a crucial aspect in facing this demanding and stressful period.

The context of this study

We studied WFH parents by surveying workers in Italy, the first Western country to face the rapid spread of COVID-19. The pandemic in Italy had its first manifestations on 31 January 2020. On 23 February 2020, following the increase in the number of

infected people, the Council of Ministers approved a decree-law implementing the first closings, including schools. Due to the rapid and dramatic increase of positive cases and deaths (more than 30.000 cases and 3.000 deaths by the beginning of March), on March 11 the decree-law “#IoRestoInCasa” was established which suspended all non-essential activities across the country. In a matter of a few days, the number of Italians WFH increased from 8.2% to 40.8% (Eurofound, 2020). Data for this study were collected in March-April 2020 following the March 11 lockdown, thus during this very first period of dramatic life change. Thus, the working parents participating in this study were living the shocking moment of having their lives completely upside down, suddenly finding themselves carrying out their work at home, having to take care of their children without counting on external help for the household or child-care and schooling needs. Moreover, Italy has been the very first Western country where the COVID-19 has spread and this caused a lot of confusion on the understanding of what was happening. Many western governments at this time judged the Italian restrictions as fair to strict.

In December 2020 while writing this paper, the working parents' situation has not changed much. Some schools (e.g., secondary schools) have been closed until May 2021. Furthermore, most workers are still WFH (ISTAT, 2021).

As for the gender differences, it is important to note that the situation of working women in Italy is particularly dramatic. “Normally” Italian women perform a disproportionately large share of the unpaid work at home: according to the World Economic Forum (2018) around 62% of Italian women's work each day is unpaid, as compared to 30% for Italian men. For instance, the study of Del Boca et al. (2020) on Italian couples revealed that most of the extra work caused by the crisis has fallen on women. Forced to reduce work hours or unable to deliver properly while teleworking affected not only working women's wellbeing but also their longer-term labor market prospects to suffer in the future (Cannito & Scavarda, 2020). Indeed, in Italy, the decline in female employment during the Covid emergency was double the EU average. In general, during these last months, more than 90% of those who lost their employment in Italy are women (ISTAT, 2021). This scenario is particularly bleak as the gender gap in Italy is already among the widest in the world.

Overview of the study

To understand the experiences of WFH parents, we tested a model using personal resources (i.e., work identification, family identification, work-family identity integration, and housing conditions), reduced work demands (i.e., reduced workload) and home demands (i.e., care load) as predictors, and parental efficacy, job satisfaction, and stress and posttraumatic growth as outcome variables. We also tested the role of gender trying to differentiate these effects for working from home mothers and fathers.

Method

Participants

The sample initially included 545 Italian WFH parents collected as a part of a large study. Only 432 who worked from home were included in the final analysis ($M_{\text{age}} = 49.25$, $SD_{\text{age}} = 8.16$; ranging from 29 to 67; 72% females), and the others were excluded because they continued to go to work ($n = 110$) and did not respond to the question ($n = 3$). Various means were used to recruit adults including a snowballing technique among the researchers' social networks, through community groups and non-governmental organizations, and with the help of university students. Most participants were married (84%), and living in the North-West of Italy (67%), where the COVID-19 pandemic hit the hardest. 48% were employed in the private sector and 32% in the public sector, while 9% were self-employed. The majority had full time contracts (84%). Most parents had been WFH for 2 weeks or more (92%). In most cases, the working hours had not been reduced (74%). We used home ownership as an indicator of SES (Robert & House, 1996). Most of the participants own a house without having a mortgage (50%) for the rest 39% do have a home with a mortgage (but having the mortgage affecting the total income of the household less than 30%). Only 10% do not own a property.

With regard to family structure, 25% had at least one child under 6 years-old, 30% had at least one child of 6–10 years of age (primary school age), and 39% at least one child of 11–14 age (secondary school). Further, 10% had at least one child with a learning disability, and 4% had a non-child dependent. 41% of the parents declared that they were taking the care load alone, 33% were sharing the care load with the partner and/or relatives, friends and babysitter, and 26% declared that they were not taking the care load. The sensitivity power analysis with 80% power at p -value of .05 with 432 participants and 12 predictors required a minimum effect size of $f^2 = 0.04$, which was met with all dependent variables.

This study was approved by the ethical committee of Catholic University of Milan. Anonymized raw data is stored in authors' institutional Qualtrics accounts. Data belongs to Catholic University of Milan and access can be requested via the first author.

Measures

Care load

We used six dummy coded indicators: 1) having at least one child under 6 years old 2) having at least one child in primary school 3) having at least one child in secondary school 4) having at least one child over 18 years old, 5) having at least one child with disabilities or 6) having an elderly to take care of. Moreover, we asked participants to indicate who in the family was mainly in charge of taking care of children. Response options were "We have a babysitter"; "We resort to the help of grandparents or relatives"; "We resort to the help of friends or neighbors"; "I'm taking care of it personally"; "My partner is taking care of it". Participants could answer with more than one option. The variable was then recorded as an ordinary variable: 1 = those who did not take the careload (participants who did not choose the option "I'm taking care of it personally"); 2 = those who shared the care load with the partner, family and friends (participants who choose the option "I'm

taking care of it personally” and one of the other options); 3 = those who take the careload alone (participants who choose *only* the option “I’m taking care of it personally”). Overall, although this was an ordinal scale, we constructed it in a way that higher scores indicated higher care load on the participant.

Workload reduction

We asked participants if their work time changed during the pandemic (e.g., whether the time dedicated to their work either as dependent workers or freelancers was reduced) as a direct consequence of the health emergency. In Italy the Presidential Decree of 22 March 2020 required the closure of all production and commercial activities not considered strategic or related to basic needs, while at the same time providing unemployment benefits for those workers that had to quit their job. Even if it was possible to organize remote working modes for those activities permitted, many companies and public offices took time to reorganize the work from remote and provide workers with technological tools. This has caused an initial reduction of workload for many Italians. Thus, considering their previous work time, participants rated if they are still working 100% or less. (“Your working time: has not changed; has been reduced by 25%; has been reduced by 50%; has been reduced by 75%”). Although this was an ordinal scale, we constructed it in a way that higher scores indicated higher workload reduction.

Housing conditions

We measured two aspects of housing conditions: 1) workroom (“Do you have an independent room to carry out your work?”), and 2) living space (house size in square meters) divided by number of people cohabiting in the household during this period).

Family and work identification¹

We used the single item social identification scale (Postmes et al., 2013) to measure each type of identification: “I identify with my company” or “I identify with my professional category” in the case of self-employed workers; “I identify with my family”. Participants were asked to rate this question on a Likert scale from 1 (completely disagree) to 7 (completely agree).

Work-Parent Identity Integration (WPII)

To measure the degree of the integration of the parental and worker roles, we adapted four items from the Bicultural Identity Integration Scale (Benet-Martínez & Haritatos, 2005): one measuring identity synergy vs. dissociation (i.e., “I keep my work identity and my parental identity separate” (reversed)) and three measuring identity harmony vs. conflict (i.e., “I feel that there is no conflict between my identity as a worker and being a parent”, “I find it easy to reconcile my identity as a worker and being a parent” and “My identity as a worker and being a parent are incompatible” (reversed)). Participants were asked to rate these questions on a Likert scale from 1 (completely disagree) to 5 (completely agree). Reliability was acceptable ($\omega = .78$).

Outcomes

Posttraumatic growth

We used the 10-item short version of Post Traumatic Growth Inventory (Tedeschi et al., 1996) except for one item (i.e., “I established a new path for my life”), which we found hard to apply to the pandemic, and replaced it with an item from the long version (i.e., “I have a greater compassion for others”). Participants were asked to rate these questions on a Likert scale from 1 (completely false) to 5 (completely true). Reliability was acceptable ($\omega = .85$).

Stress. We used five items from the Perceived Stress Scale (Cohen et al., 1983): “I felt nervous and stressed.” Participants were asked to rate these questions on a Likert scale from 1 (never) to 4 (always). Reliability was acceptable ($\omega = .76$).

Parental Efficacy. We used an adapted version of the Parental Efficacy Scale (Caprara, 2001). Respondents were asked to rate four items on how capable they felt in carrying out parental tasks such as “Helping your child to cope with the life changes that the health emergency requires” on a Likert scale from 1 (not at all) to 5 (very much). Reliability was acceptable. ($\omega = .71$).

Job Satisfaction. We used single item “How satisfied are you with the way you are working during this period?” rated on a Likert scale from 1 (not at all) to 5 (very much).

Results

Correlations between the variables are presented in Table 1. Higher care load negatively correlated with job satisfaction and parental efficacy, and positively correlated with stress. Having one’s own workroom positively correlated with job satisfaction and negatively correlated with stress. WPII positively correlated with job satisfaction, post-traumatic growth, and parental efficacy, and negatively correlated with stress. Moreover, taking the careload correlated with gender in that women had higher careload alone, and it also positively correlated with workload reduction implying that those who higher careload alone might have reduced their workload. Finally, identifications with family and work and identity integration positively correlated with one another.

Next, we explored gender differences in the outcomes and predictors through independent samples t-tests and Chi-square tests. As expected, we found working mothers ($M = 2.54$, $SD = 0.64$) to score significantly higher on stress compared to working fathers ($M = 2.15$, $SD = 0.62$; $t(430) = 5.61$, $p < .001$, Cohen’s $d = 0.60$). Contrary to our expectations, working mothers did also report higher levels of post traumatic growth ($M = 3.46$, $SD = 0.68$) as compared to working fathers ($M = 3.31$, $SD = 0.60$); $t(430) = 2.08$, $p = .038$, Cohen’s $d = 0.22$. There were no significant differences between working mothers and father in terms of job satisfaction and parental efficacy ($ps > .52$).

In relation to the predictors, as expected, we found a significant gender difference in the careload variable assessing how much the care load was shared with others, $\chi^2(2) = 48.17$, $p < .001$. In particular, working women were much more represented in the cluster of parents taking the careload alone (51% of women were in this cluster vs 15% of



Table 1. Zero-order correlations between predictors and outcome variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 Job Satisfaction	–																
2 Post-traumatic growth	0.12**	–															
3 Parental efficacy	0.14**	0.07	–														
4 Stress	–0.27***	0.02	–0.15***	–													
5 Gender	0.03	–0.12**	0.01	–0.24***	–												
6 Living space	0.07	0.01	–0.05	–0.10*	–0.09*	–											
7 Work-room	0.13**	0.03	–0.08	–0.19***	0.09	0.26***	–										
8 Children < 6 years old	–0.17***	–0.03	–0.04	0.15***	–0.07	–0.16***	–0.06	–									
9 Children at primary	–0.13**	–0.04	0.10*	0.06	0.06	–0.23***	–0.17***	0.24***	–								
10 Children at secondary	0.02	–0.04	0.05	0.02	0.06	–0.21***	–0.10*	–0.30***	–0.01	–							
11 Children > 18 years old	0.14**	0.07	–0.13**	–0.11*	0.03	0.22***	0.18**	–0.46***	–0.49***	–0.22***	–						
12 Children with special needs	0.01	–0.04	–0.01	0.12**	0.02	–0.13**	–0.02	–0.12**	0.06	0.17***	–0.09*	–					
13 Elderly care	0.01	0.03	–0.06	0.07	–0.02	–0.11*	–0.08	–0.06	–0.01	0.05	0.07	0.16***	–				
14 Taking the care load	–0.05	0.05	0.09*	0.12**	–0.22***	–0.13**	–0.12*	0.01	0.08	0.22***	–0.19***	0.06	0.05	–			
15 Workload reduction	–0.14**	–0.02	0.06	0.01	–0.08	–0.08	–0.01	0.08*	–0.01	–0.01	–0.04	0.08	0.12***	0.08	–		
16 Work identification	0.13**	0.05	–0.03	–0.05	0.10*	0.07	0.07	–0.01	–0.05	–0.02	0.03	–0.04	0.02	–0.04	–0.08	–	
17 Family identification	0.06	0.11*	0.09*	–0.10*	–0.06	–0.05	–0.07	0.05	0.01	0.00	–0.04	–0.03	0.02	–0.01	0.05	0.15***	–
18 Work-parent identity integration	0.22***	0.10*	0.17***	–0.29***	0.08	0.05	0.15**	–0.18***	–0.15***	0.08	0.20***	–0.05	–0.05	–0.03	0.24***	0.08*	0.08*

* $p < .05$, ** $p < .01$, *** $p < .001$.

men), whereas working fathers were more represented in the cluster of those who were sharing the careload with the partner (26% of women were in this cluster vs 52% of men). When we unpacked this further, we observed that both working parents reported a dramatic change in the help received for the care load from babysitter (pre-pandemic 22.8% vs. during the pandemic 1.7%), grandparents or relatives (pre-pandemic 43.2% vs during the pandemic 7.9%) and friends or neighbors (pre-pandemic 9.7% vs. during the pandemic 0%). Interestingly, working mothers reported they could count on their partner less compared to the pre-pandemic period (pre-pandemic 67.5% vs. during the pandemic 56.2%), whereas working father reported they could count on their partner more compared to the pre-pandemic period (pre-pandemic 34.3% vs. during the pandemic 43.8%).

Thus, as a response to the pandemic, it seems our female participants reacted more positively (with higher levels of PTG) but were also involved more in the care duties reporting higher levels of stress.

As far as for the identity dimensions, there was only a significant difference related to work identification, with working fathers ($M = 4.78$, $SD = 1.34$) scoring slightly higher compared to working mothers ($M = 4.44$, $SD = 1.49$); $t(429) = 2.22$, $p = .027$, Cohen's $d = 0.24$. No differences were found in relation to WPPI and family identification ($ps > .13$).

Finally, no gender differences were found in the housing condition indices and in the workload reduction ($ps > .06$).

Multiple regression analysis

To test the strength of our predictors on the four outcome variables (i.e., job satisfaction, post-traumatic growth, parental efficacy, and stress), we ran four separate hierarchical multiple regression analyses using the same set of predictors.² **Step 1** included the individual difference variables (i.e., work identification, family identification, and WPPI). In **Step 2**, we added the housing conditions variables (i.e., living space and workroom). In **Step 3** we added care load variables (i.e., dummy coded variables of having children younger than 6 years old, children at primary school, children at secondary school, children older than 18 years old, children with special needs, and elderly living with them and taking the care load variable). Finally, in **Step 4**, we added the workload variable (i.e., whether the workload was reduced). We used several predictors including categorical, ordinal, and continuous predictors in our analysis. Having inspected tolerance and VIF scores and residual plots, we concluded that there were no issues regarding the assumptions of multicollinearity and normality to proceed to the analysis.

Predicting *job satisfaction*, all steps were significant, $F(13, 400) = 3.43$, $p < .001$, accounting for 10% of the variance (see Table 2). In Step 1, only WPPI positively predicted job satisfaction. In Steps 2 and 3, no other variables were significant. In the final model, as opposed to our predictions, reduced workload negatively predicted job satisfaction, whereas WPPI positively predicted job satisfaction in line with our predictions.

Predicting *post-traumatic growth*, all steps were significant although there was no significant increase in model prediction, $F(13, 401) = 2.00$, $p = .019$, accounting for only 6% of the variance (see Table 3). In line with our predictions, WPPI positively predicted PTG, whereas, as opposed to our predictions, taking the careload also positively predicted post-traumatic growth.



Table 2. Multiple regression results for job satisfaction.

Predictors	Step 1		Step 2		Step 3		Step 4	
	B (CIs)	β	B (CIs)	β	B (CIs)	β	B (CIs)	β
Intercept	2.04 (1.41, 2.66)		1.97 (1.32, 2.61)		2.34(1.58, 3.10)		2.49(1.72, 3.25)	
<i>Identity structures and individual difference variables</i>								
Work identification	0.04(-0.02, 0.10)	0.06	0.03(-0.03, 0.10)	0.05	0.03(-0.03, 0.09)	0.05	0.02(-0.04, 0.09)	0.04
Family identification	-0.00(-0.09, 0.08)	-0.00	0.01(-0.08, 0.09)	0.01	0.01(-0.08, 0.09)	0.01	0.01(-0.07, 0.10)	0.02
Work-parent identity integration	0.24(0.13, 0.36)***	0.21	0.22(0.11, 0.34)***	0.19	0.19(0.07, 0.31)**	0.16	0.19(0.07, 0.31)**	0.16
<i>Housing conditions</i>								
Amount of space			0.04(-0.13, 0.21)	0.02	-0.02(-0.20, 0.16)	-0.01	-0.03(-0.21, 0.15)	-0.02
Work-room			0.19(-0.00, 0.39)	0.10	0.18(-0.02, 0.37)	0.09	0.18(-0.01, 0.38)	0.09
<i>Care load</i>								
Children < 6 years old					-0.24(-0.50, 0.02)	-0.11	-0.21(-0.47, 0.05)	-0.10
Children at primary					-0.18(-0.40, 0.04)	-0.09	-0.19(-0.40, 0.03)	-0.09
Children at secondary					-0.03(-0.25, 0.19)	-0.02	-0.04(-0.26, 0.18)	-0.02
Children > 18 years old					-0.01(-0.27, 0.24)	0.01	0.00(-0.25, 0.25)	0.00
Children with special needs					0.05(-0.24, 0.35)	0.02	0.08(-0.21, 0.38)	0.03
Elderly care					0.09(-0.39, 0.57)	0.02	0.14(-0.34, 0.61)	0.03
Taking the care load					-0.03(-0.14, 0.08)	-0.02	-0.01(-0.12, 0.10)	-0.01
<i>Work load Reduction</i>								
Reduced work hours							-0.12(-0.22, -0.03)*	-0.13
Model results								
Model results	F(3,411) = 7.44, $p < .001$		F(5,409) = 5.43, $p < .001$		F(12,402) = 3.12, $p < .001$		F(13,401) = 3.43, $p < .001$	
Modal comparison and ΔR^2	F(2,408) = 2.35, $p = .097$, $\Delta R^2 = .01$		F(7,401) = 1.44, $p = .188$, $\Delta R^2 = .02$		F(1,400) = 6.64, $p = .010$, $\Delta R^2 = .01$		F(1,400) = 6.64, $p = .010$, $\Delta R^2 = .01$	
Final R^2	.05		.06		.09		.10	

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3. Multiple regression results for post-traumatic growth.

Predictors	Step 1		Step 2		Step 3		Step 4	
	B (CIs)	β	B (CIs)	β	B (CIs)	β	B (CIs)	β
Intercept	2.58 (2.13, 3.04)		2.58 (2.11, 3.06)		2.37(1.81, 2.93)		2.40(1.83, 2.96)	
<i>Identity structures and individual difference variables</i>								
Work identification	0.01(-0.04, 0.05)	0.01	0.01(-0.04, 0.05)	0.01	0.01(-0.04, 0.05)	0.02	0.01(-0.04, 0.05)	0.01
Family identification	0.06(-0.00, 0.12)	0.09	0.06(-0.00, 0.12)	0.09	0.06(-0.01, 0.12)	0.09	0.06(-0.01, 0.12)	0.09
Work-parent identity integration	0.12(0.04, 0.20)**	0.14	0.12(0.03, 0.20)**	0.14	0.12(0.03, 0.20)**	0.14	0.12(0.03, 0.20)**	0.14
<i>Housing conditions</i>								
Amount of space			-0.00(-0.13, 0.12)	-0.00	-0.01(-0.14, 0.13)	-0.00	-0.01(-0.14, 0.13)	-0.01
Work-room			0.02(-0.12, 0.16)	0.02	0.03(-0.11, 0.17)	0.02	0.03(-0.11, 0.18)	0.02
<i>Care load</i>								
Children < 6 years old					-0.05(-0.24, 0.15)	-0.03	-0.04(-0.24, 0.15)	-0.03
Children at primary					-0.03(-0.19, 0.13)	-0.02	-0.03(-0.20, 0.13)	-0.02
Children at secondary					-0.08(-0.24, 0.09)	-0.06	-0.08(-0.24, 0.09)	-0.06
Children > 18 years old					0.02(-0.17, 0.21)	0.01	0.02(-0.16, 0.21)	0.02
Children with special needs					-0.12(-0.34, 0.10)	-0.05	-0.11(-0.33, 0.11)	-0.05
Elderly care					0.17(-0.18, 0.52)	0.05	0.18(-0.17, 0.53)	0.05
Taking the care load					0.12(0.04, 0.21)**	0.15	0.13(0.04, 0.21)**	0.15
<i>Work load Reduction</i>								
Reduced work hours							-0.02(-0.09, 0.05)	-0.03
Model results								
Model comparison and ΔR^2	$F(3,411) = 4.01, p = .003$	$F(5,409) = 2.89, p = .014$	$F(2,409) = 0.05, p = .954, \Delta R^2 = .00$	$F(7,402) = 1.59, p = .138, \Delta R^2 = .06$	$F(13,401) = 2.00, p = .019$	$F(1,401) = 0.38, p = .536, \Delta R^2 = .00$		
Final R^2	.03	.03	.03	.06	.06	.06		

* $p < .05$, ** $p < .01$, *** $p < .001$.

Predicting *parental efficacy*, all the steps were significant, $F(13,396) = 4.42, p < 0.001$, explaining 13% of variance (see [Table 4](#)). In Step 1, WPPI positively predicted parental efficacy whereas work identification negatively predicted it. In Step 2, WPPI and work identification remained significant, but there were no new significant predictors. In Steps 3 and 4, in line with our predictions, having children younger than 6 years old or older than 18 years old negatively predicted parental efficacy while WPPI continued to positively and work identification continued to negatively predict parental efficacy.

Predicting *stress*, all steps were significant, $F(13,401) = 5.93, p < .001$, explaining 16% of variance (see [Table 5](#)). In Step 1, WPPI negatively predicted stress. In step 2, WPPI remained significant and having a workroom negatively predicted stress. In Step 3, WPPI and having a workroom remained significant, and having children under 6 years old and children at secondary school also positively predicted stress. In the final step, the effects remained the same and in line with our predictions.

Finally, through a path analysis with observed variables, we tested a model including all the predictors and outcomes in a single model where intercorrelations amongst outcome variables were also controlled for. This model showed the same pattern of results with the above described hierarchical multiple regressions.

Moderation by gender

To test the possible moderation effect of gender, we ran multi-group analyses comparing constrained and unconstrained models across men and women using MPlus (Muthén & Muthén, 2018). A significant chi-square difference suggests that the paths are different across compared groups.

Multi-group comparisons for all four outcome variables did not produce any significant χ^2 difference test results when comparing fully constrained models to fully unconstrained models (all p 's $> .11$). However, based on the modification indices which showed that the paths could be freed for WPPI and the model fit could be improved, we decided to allow WPPI to be freely estimated across the two groups. We found a significant moderation effect of gender on parental efficacy, $\Delta\chi^2(1) = 4.73, p = .029$. As shown in [Figure 2](#), the path was only significant for women ($\beta = .33, p < .001$), but not for men ($\beta = .04, p = .66$). No other freed path improved the model fit further.

Discussion

In this study, we investigated the psychosocial factors potentially associated with better professional, parental, and mental health outcomes for WFH parents during emergencies. In particular, moving from W-HR model (Ten Brummelhuis & Bakker, 2012) and endorsing a multi-level personality perspective (McAdams & Olson, 2010), we tested the role of identity structures and individual differences together with housing conditions, home demands (care load) and reduced work demands (workload) on predicting these outcomes. In line with our predictions, we found that having children was related to higher stress and lower levels of parental efficacy. Contrary to our predictions, reduced workload was related to lower job satisfaction, and was not related to other outcomes implying that workload reduction at the time did not function as a protective factor. Moreover, contrary to our expectations, work identification was related to lower levels of parental efficacy

Table 4. Multiple regression results for parental efficacy.

Predictors	Step 1		Step 2		Step 3		Step 4	
	B (CIs)	β	B (CIs)	β	B (CIs)	β	B (CIs)	β
Intercept	2.55 (2.03, 3.07)		2.65 (2.11, 3.19)		2.56(1.94, 3.18)		2.51(1.88, 3.13)	
<i>Identity structures and individual difference variables</i>								
Work identification	-0.07(-0.12, -0.02) *	-0.13	-0.06(-0.11, -0.01) *	-0.12	-0.05(-0.11, -0.00) *	-0.10	-0.05(-0.10, 0.00) *	-0.10
Family identification	0.06(-0.01, 0.13)	0.09	0.05(-0.02, 0.13)	0.07	0.05(-0.02, 0.12)	0.07	0.05(-0.02, 0.12)	0.07
Work-parent identity integration	0.19(0.10, 0.29) ***	0.20	0.21(0.11, 0.30) ***	0.21	0.23(0.13, 0.33) ***	0.24	0.23(0.13, 0.33) ***	0.24
<i>Housing conditions</i>								
Amount of space			-0.07(-0.21, 0.08)	-0.04	-0.05(-0.20, 0.10)	-0.03	-0.04(-0.19, 0.11)	-0.03
Work-room			-0.13(-0.29, 0.03)	-0.08	-0.09(-0.25, 0.07)	-0.05	-0.09(-0.25, 0.07)	-0.05
<i>Care load</i>								
Children < 6 years old					-0.26(-0.47, -0.04) **	-0.15	-0.27(-0.48, -0.05) *	-0.15
Children at primary					-0.12(-0.05, 0.30)	0.07	0.13(-0.05, 0.30)	0.08
Children at secondary					-0.14(-0.32, 0.04)	-0.09	-0.13(-0.31, 0.05)	-0.09
Children > 18 years old					-0.33(-0.54, -0.13) **	-0.21	-0.34(-0.55, -0.13) ***	-0.22
Children with special needs					0.06(-0.18, 0.30)	0.03	0.05(-0.19, 0.29)	0.02
Elderly care					-0.28(-0.66, 0.11)	-0.07	-0.30(-0.68, 0.09)	-0.07
Taking the care load					0.07(-0.03, 0.16)	0.07	0.06(-0.03, 0.15)	0.06
<i>Work load Reduction</i>								
Reduced work hours							0.05(-0.03, 0.12)	0.06
Model results								
			F(5.404) = 5.51, p < .001			F(12.397) = 4.66, p < .001		
			F(2.404) = 2.15, p = .118, $\Delta R^2 = .01$			F(7.397) = 3.86, p < .001, $\Delta R^2 = .06$		
			.05			.12		
			.06			.13		
Final R²								

* p < .05, ** p < .01, *** p < .001.



Table 5. Multiple regression results for stress.

Predictors	Step 1		Step 2		Step 3		Step 4	
	B (CIs)	β	B (CIs)	β	B (CIs)	β	B (CIs)	β
Intercept	3.53 (3.08, 3.97)		3.59 (3.14, 4.05)		3.13(2.60, 3.65)		3.14(2.61, 3.68)	
<i>Identity structures and individual difference variables</i>								
Work identification	0.00(-0.05, 0.05)	0.01	0.01(-0.04, 0.05)	0.02	0.01(-0.03, 0.05)	0.02	0.01(-0.03, 0.05)	0.02
Family identification	-0.04(-0.02, 0.03)	-0.05	-0.05(-0.11, 0.01)	-0.07	-0.05(-0.11, 0.05)	-0.08	-0.05(-0.11, 0.01)	-0.08
Work-parent identity integration	-0.25(-0.33, -0.16)***	-0.29	-0.22(-0.31, -0.14)***	-0.26	-0.21(-0.29, -0.12)***	-0.24	-0.21(-0.29, -0.12)***	-0.24
<i>Housing conditions</i>								
Amount of space			-0.03(0.15, 0.09)	-0.02	0.04(-0.09, 0.16)	0.03	0.04(-0.09, 0.16)	0.03
Work-room			-0.22(-0.35, -0.08)**	0.15	-0.23(-0.37, -0.10)***	-0.16	-0.23(-0.37, -0.09)***	-0.16
<i>Care load</i>								
Children < 6 years old					0.39(0.21, 0.57)***	0.26	0.39(0.21, 0.58)***	0.26
Children at primary					-0.01(-0.16, 0.14)	-0.01	-0.01(-0.16, 0.14)	-0.01
Children at secondary					0.16(-0.00, -0.31)*	0.12	0.16(0.00, -0.31)*	0.12
Children > 18 years old					0.17(-0.00, -0.35) ⁺	0.13	0.18(-0.00, -0.35) ⁺	0.13
Children with special needs					0.19(-0.01, 0.40)	0.09	0.20(-0.01, 0.40)	0.09
Elderly care					0.05(-0.28, 0.38)	0.01	0.06(-0.27, 0.39)	0.02
Taking the care load					0.05(-0.02, 0.13)	0.06	0.05(-0.03, 0.13)	0.06
<i>Work load Reduction</i>								
Reduced work hours							-0.02(-0.08, 0.05)	-0.02
Model results								
Modal comparison and ΔR^2	$F(3,411) = 13.67, p < .001$		$F(5,409) = 10.64, p < .001$		$F(12,402) = 6.42, p < .001$		$F(13,401) = 5.93, p < .001$	
			$F(2,409) = 5.62, p = .0044,$ $\Delta R^2 = .02$		$F(7,402) = 3.14, p = .003,$ $\Delta R^2 = .05$		$F(1,401) = 0.21, p = .664,$ $\Delta R^2 = .00$	
Final R^2	.09		.12		.16		.16	

⁺p = 0.053, ⁺⁺p = 0.051, * p < .05, ** p < .01, *** p < .001.

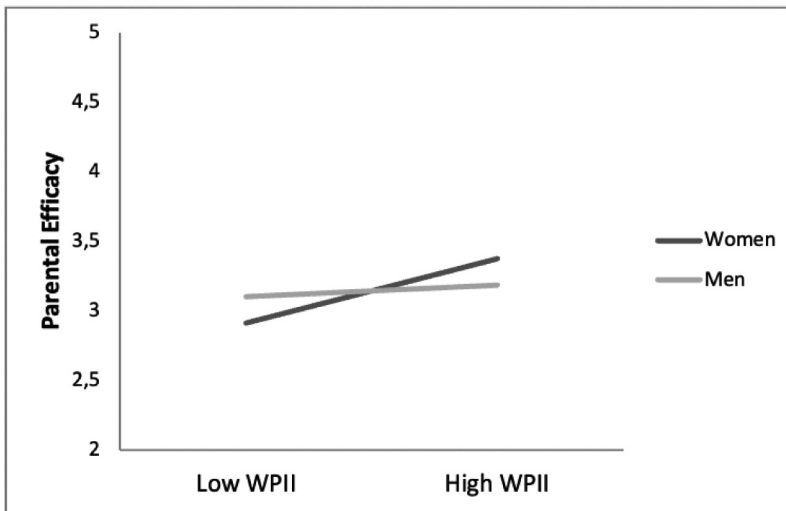


Figure 2. Simple slopes for the interaction between work-parent identity integration and gender on parental efficacy.

implying that higher identification in one domain might have negative consequences on the other identity domain. Finally, as predicted, WPII was positively associated with all outcome variables and functioned as a protective factor.

Overall, our results show that individual differences, in particular WPII, play a critical role in predicting positive adjustment in the professional, parental, and mental health domains. Indeed, the effect of WPII was significant for all the outcomes while controlling for the effect of all the other predictors in the models. In particular, from a theoretical and methodological point of view, it is important to underline that, identification with work and family alone does not bring any positive outcome for working parents during this specific phase of the health emergency. Most of the studies referring to the Social Cure perspective (Jetten et al., 2012), when analyzing multiple identifications in relation to individual well-being, often lack incorporating the interrelationship between the identity domains analyzed and just focus on the number of identities or degree of identification with specific social groups or categories. The Identity Integration approach (Benet-Martínez & Haritatos, 2005) instead suggests that when analyzing multiple identifications, it is fundamental not only to assess the degree of importance but also that they are compatible with each other, namely, the integration.

In this study, parents with higher WPII showed higher job satisfaction, parental efficacy, and post-traumatic growth, while also experiencing lower levels of stress. When facing highly challenging situations, like the very first stage of the pandemic, WFH parents who have successfully integrated their work and family identities into their self-concept are more adjusted as workers (higher job satisfaction), as parents (higher parental self-efficacy), and also as individuals (lower stress and higher post-traumatic growth). Contrary to expectations, work identification was found to be negatively associated

with parental efficacy. Theoretically, this is in line with previous research showing that when identities are in conflict, one identity can have negative consequences for the other one whereas identity integration can attenuate these negative effects (e.g., Anderson & Koc, 2020). Although most research focused on the association between work identification and positive and negative work outcomes (Conroy et al., 2017), no effort to our knowledge has been done to broaden the perspective and analyze possible effects of work identification on other life domains such as family. This finding requires further investigation.

The literature on work/non-work identity integration has already shown the importance for workers to be able to integrate different non-work identities with their identity as workers (e.g., Manzi et al., 2019; Wallen et al., 2014), but has mainly focused on integration of work identity with identities related to socio-demographic aspects such as gender and age. Our study, to our knowledge, is the first to focus on integration of work and family identities. Even if the idea of integration between family and work domain is already present on work-family balance literature (see for example, the work-family boundary theory, Ashforth et al., 2000) this has been mainly measured in terms of behaviors reflecting workers' management of work and family boundaries (see Wepfer et al., 2018). Within this literature, the importance to focus on how workers manage these boundaries have been highlighted (Sinclair et al., 2020), and it has been suggested that those who are able to integrate the different domains would perform better in this particular moment, where working from home has blurred work and non-work boundaries. Our findings also provide the first empirical evidence of this assumption and confirm that parents displaying higher levels of WPIL are suffering less in this situation.

Interestingly, we found that gender moderated the link between WPIL and parental efficacy. WPIL seems to be significantly associated with parental efficacy only for women. Thus, less integrated women are particularly affected in their performance as parents. It seems the revolution of the work-life balance caused by the WFH during the emergency affects the less integrated mothers in the domain where the gender role prescription expects them to be more effective (i.e., the family). When women who keep their professional and mother roles separate have to bring their work-world to their homes, then they are more likely to experience a crisis of their gender role prescriptions.

Overall, our findings suggest an effective response to help workers better integrate their family and work identities. But how? Even if WPIL is a worker's personality resource, according to Allen (2001), organizations can do their part in helping workers integrate different domains of their lives through family-friendly benefits and receiving family support from supervisors. Research on family-supportive work environments showed that when employees favor an organizational culture of respect and support of non-work choice of their employees, workers display lower levels of work-family conflict; moreover, they show lower turnover intentions and higher job satisfaction and organizational commitment (Allen, 2001). Interestingly, supervisor support for workers' family commitment is already known to be a crucial aspect for better outcomes while WFH in normal times (Rofcanin et al., 2017). Further research should investigate the possible ways to integrate these identities.

As for the other predictors analyzed, housing conditions, specifically having a workspace at home, emerged as an important predictor. Those with dedicated workspaces reported lower stress and higher job satisfaction. Even if these kinds of resources are

difficult to control, employers should take this into account. Perhaps a possible intervention could be to give employers flexible time to organize their work during the day in order to be allowed to work when the shared place where they work is more accessible and quieter. Additionally, companies could provide subsidies for the purchasing of office furniture and required home modifications, so that WFH parents can have an optimal private workspace. Another possible intervention is to organize meetings taking into account these space restrictions (i.e., a meeting during lunchtime is quite stressful if the worker is working in the kitchen). Further qualitative research should better explore this aspect to find effective solutions. Care load (age of children, in particular), emerged as an important predictor of stress and parental efficacy. WFH parents with children under 6 years-old reported lower levels of parental efficacy and higher rates of stress. This cluster of parents seems particularly at risk. Data also showed higher stress for parents of adolescents and lower levels of parental efficacy for parents of young adults. These findings show that even the mere presence of care load (having children) without incorporating how much parents engage with them can be disruptive. Indeed, parental engagement in the care load seems not to have an impact or rather to have a slight significant impact in improving PTG. These aspects should be further explored in a follow up qualitative study in order to analyze the specific needs of parents and plan effective interventions.

Reduced workload did not have the expected associations with our outcomes. By contrast, we found reduced workload to negatively predict job satisfaction. Turning back to the *W-HR* model (Ten Brummelhuis & Bakker, 2012), it seems that in this specific situation reducing the work demands does not necessarily benefit workers. This finding is important and suggests that policies involving reduction of working hours to help workers with their family responsibilities (e.g., the Italian government allowed working parents to require extra paid parental leave during the outbreak period) do not have an effect on the parents' well-being or sense of efficacy. Instead, it may lead to less job satisfaction perhaps through lower levels of work engagement.

We acknowledge some limitations in this study. First, because the data are correlational, causal statements about the directionality of effects are not possible. Second, our model did not take into account other possible variables such as personality traits, digital skills, available organizational support, quality of family relations, etc. Further studies are needed to have a more comprehensive view of the socio-psychological processes and challenges faced by WHF parents during emergencies. Nevertheless, our data are unique in that they bring a first understanding of WHF parents during the emergency, highlighting the key role played by social identity processes, while also having high ecological validity.

All in all, results supported our hypothesized model in that considering personal resources, and home and work demands as factors related to individual adjustment in this demanding period explained a significant amount of variance in all the outcomes (from 10% to 16%). It is important to underline that our data collection makes it impossible to clarify whether our findings are valid only for the condition of working from home during this specific phase of the health emergency or are valid also in following phases (when individual resources were stressed by exhaustion) or could be generalizable in normal times. However, we argue that the specific situation that parents were experiencing brings uniqueness in blurring the time and space dedicated to work and family, and

this is likely to bring identity integration to the fore as a key aspect related to positive outcomes. Hopefully future studies on working from home in normal times will clarify this aspect.

To conclude, along with other factors, we found WPII to be the most crucial factor for working parents to maintain their professional, parental, and mental health outcomes during the COVID-19 emergency. Building on the literature suggesting that multiple identities are beneficial for positive outcomes, we further suggest that it is important to perceive and experience these multiple identities integrated and in harmony with each other. Working parents can use the benefits of identity integration by seeing themselves as working-parents instead of compartmentalizing their worker and parent identities. Such shifts in one's own identity perceptions can also alter societal perceptions of working-parents (e.g., Koc, Sahin et al., 2021), and ultimately help working parents endorse positively valued and integrated identities.

Notes

1. Although it is impossible to compute the internal consistency of a single-item measure, it was argued that single-item scales have good psychometric properties, especially when the item measures a global or unambiguous construct (Petrescu, 2013; Wanous & Hudy, 2001). This is also the case for single item identification measure shown by Postmes et al. (2013) and it is widely used in the literature.
2. Based on a reviewer request, when we controlled for SES in our models, SES was not a significant predictor of any outcomes, nor did it change any other relationships in the model. Since we had not initially hypothesized for SES, we did not include it in our final models.

Disclosure statement

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

ORCID

Yasin Koc  <http://orcid.org/0000-0002-6727-3842>

Verónica Benet-Martínez  <http://orcid.org/0000-0002-3352-9731>

References

- Aalto, A. M., Heponiemi, T., Josefsson, K., Arffman, M., & Elovainio, M. (2018). Social relationships in physicians' work moderate relationship between workload and well-being—9-year follow-up study. *European Journal of Public Health*, 28(5), 798–804. <https://doi.org/10.1093/eurpub/ckx232>
- Adams-Prassl, A., Boneva, T., Golin, M., & Rauh, C. (2020). Inequality in the impact of the coronavirus shock: Evidence from real time surveys. *Journal of Public Economics*, 198, 104245.
- Affleck, G., Allen, D. A., Tennen, H., McGrade, B. J., & Ratzan, S. (1985). Causal and control cognitions in parents' coping with chronically ill children. *Journal of Social and Clinical Psychology*, 3(3), 367–377. <https://doi.org/10.1521/jscp.1985.3.3.367>
- Allen, T. D. (2001). Family-supportive work environments: The role of organizational perceptions. *Journal of Vocational Behavior*, 58(3), 414–435. <https://doi.org/10.1006/jvbe.2000.1774>
- Anderson, J. R., & Koc, Y. (2020). Identity integration as a protective factor against guilt and shame for religious gay men. *The Journal of Sex Research*, 57(8), 1059–1068. <https://doi.org/10.1080/00224499.2020.1767026>

- Ardelt, M., & Eccles, J. S. (2001). Effects of mothers' parental efficacy beliefs and promotive parenting strategies on inner-city youth. *Journal of Family Issues*, 22(8), 944–972. <https://doi.org/10.1177/019251301022008001>
- Ashforth, B. E., Kreiner, G. E., & Fugate, M. (2000). All in a day's work: Boundaries and micro role transitions. *Academy of Management Review*, 25 3 , 472–491. <https://doi.org/10.2307/259305>
- Bainbridge, H. T. J., & Broady, T. R. (2017). Caregiving responsibilities for a child, spouse or parent: The impact of care recipient Independence on employee well-being. *Journal of Vocational Behavior*, 101, 57–66. <https://doi.org/10.1016/j.jvb.2017.04.006>
- Bekker, M. H. J., Jong, P. F. D., Zijlstra, F. R. H., & van Landeghem, B. A. J. (2000). Combining care and work: Health and stress effects in male and female academics. *International Journal of Behavioral Medicine*, 7(1), 28–43. https://doi.org/10.1207/S15327558IJBM0701_3
- Benet-Martínez, V., & Haritatos, J. (2005). Bicultural Identity Integration (BII): Components and psychosocial antecedents. *Journal of Personality*, 73(4), 1015–1049. <https://doi.org/10.1111/j.1467-6494.2005.00337.x>
- Benet-Martínez, V., Lee, F., & Cheng, C. (2021). Bicultural Identity Integration (BII): Components, psychosocial antecedents, and outcomes. In M. Gelfand, C. Y. Chiu, and Y. Y. Hong (Eds.), *Handbook of advances in culture and psychology*. Oxford University Press 244–284 doi: [10.1093/oso/9780190079741.001.0001](https://doi.org/10.1093/oso/9780190079741.001.0001) .
- Benet-Martínez, V., Leu, J., Lee, F., & Morris, M. W. (2002). Negotiating biculturalism: Cultural frame switching in biculturals with oppositional versus compatible cultural identities. *Journal of Cross-cultural Psychology*, 33(5), 492–516. <https://doi.org/10.1177/0022022102033005005>
- Brook, A. T., Garcia, J., & Fleming, M. (2008). The effects of multiple identities on psychological well-being. *Personality & Social Psychology Bulletin*, 34(12), 1588–1600. <https://doi.org/10.1177/0146167208324629>
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912–920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Cannito, M., & Scavarda, A. (2020) Childcare and remote work during the COVID-19 pandemic. Ideal worker model, parenthood and gender inequalities in Italy. *Italian Sociological Review*, 10 (35),801–820.
- Caprara, G. V. (2001). *La valutazione dell'autoefficacia. Costrutti e strumenti*. Edizioni Erikson.
- Chen, S. X., Benet-Martínez, V., & Harris Bond, M. (2008). Bicultural Identity, bilingualism, and psychological adjustment in multicultural societies: Immigration-based and globalization-based acculturation. *Journal of Personality*, 76(4), 803–838. <https://doi.org/10.1111/j.1467-6494.2008.00505.x>
- Cheng, C. Y., Sanchez-Burks, J., & Lee, F. (2008). Connecting the dots within: Creative performance and identity integration. *Psychological Science*, 19(11), 1178–1184. <https://doi.org/10.1111/j.1467-9280.2008.02220.x>
- Cohen, S., Karmak, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396. <https://doi.org/10.2307/2136404>
- Conroy, S., Henle, C. A., Shore, L., & Stelman, S. (2017). Where there is light, there is dark: A review of the detrimental outcomes of high organizational identification. *Journal of Organizational Behavior*, 38(2), 184–203. <https://doi.org/10.1002/job.2164>
- Craig, L., and Churchill, B. (2021) Working and caring at home: Gender differences in the effects of COVID-19 on paid and unpaid labor in Australia. *Feminist economics*,27(1–2),310–326.
- Dakof, G. A., & Taylor, S. E. (1990). Victims' perceptions of social support: What is helpful from whom? *Journal of Personality and Social Psychology*, 58(1), 80. <https://doi.org/10.1037/0022-3514.58.1.80>
- Del Boca D, Oggero N, Profeta P and Rossi M. (2020). Women's and men's work, housework and childcare, before and during COVID-19. *Rev Econ Household*, 18(4), 1001–1017. [10.1007/s11150-020-09502-1](https://doi.org/10.1007/s11150-020-09502-1)
- Donnelly, N., & Proctor-Thomson, S. B. (2015). Disrupted work: Home-based teleworking (HbTW) in the aftermath of a natural disaster. *New Technology, Work and Employment*, 30(1), 47–61. <https://doi.org/10.1111/ntwe.12040>
- Eurofound. (2020). *Living, working and COVID-19*. [Data set]. <http://eurofound.link/covid19data>

- Feng Z, and Savani K. (2020). Covid-19 created a gender gap in perceived work productivity and job satisfaction: implications for dual-career parents working from home. *GM*, 35(7/8), 719–736. [10.1108/GM-07-2020-0202](https://doi.org/10.1108/GM-07-2020-0202)
- Ferrari, L., Rosnati, R., Manzi, C., & Benet-Martínez, V. (2015). Ethnic identity, bicultural identity integration, and psychological well-being among transracial adoptees: A longitudinal study. *New Directions for Child and Adolescent Development*, 2015(150), 63–76. <https://doi.org/10.1002/cad.20122>
- Flora, J., & Segrin, C. (2014). Family conflict and communication. In L. H. Turner (Ed.), *The SAGE handbook of family communication* (pp. 91–106). Routledge.
- Haslam, S. A., Jetten, J., Postmes, T., & Haslam, C. (2009). Social identity, health and well-being: An emerging agenda for applied psychology. *Applied Psychology: An International Review*, 58(1), 1–23. <https://doi.org/10.1111/j.1464-0597.2008.00379.x>
- Herrera, M., Sani, F., & Bowe, M. (2011). Perceived family continuity: Implications for family identification and psychological well-being. *Revista de Psicología Social*, 26(3), 387–399. <https://doi.org/10.1174/021347411797361275>
- Hibel, L. C., Mercado, E., & Trumbull, J. M. (2012). Parenting stressors and morning cortisol in a sample of working mothers. *Journal of Family Psychology*, 26(5), 738. <https://doi.org/10.1037/a0029340>
- Hirsh, J. B., & Kang, S. K. (2016). Mechanisms of identity conflict: Uncertainty, anxiety, and the behavioral inhibition system. *Personality and Social Psychology Review*, 20(3), 223–244. <https://doi.org/10.1177/1088868315589475>
- Holland, P., Tham, T. L., Sheehan, C., & Cooper, B. (2019). The impact of perceived workload on nurse satisfaction with work-life balance and intention to leave the occupation. *Applied Nursing Research*, 49, 70–76. <https://doi.org/10.1016/j.apnr.2019.06.001>
- Huynh, Q. L., Benet-Martínez, V., & Nguyen, A. M. D. (2018). Measuring variations in bicultural identity across US ethnic and generational groups: Development and validation of the Bicultural Identity Integration Scale-Version 2 (BIIS-2). *Psychological Assessment*, 30(12), 1581–1596.
- ISTAT, (2021) Rapporto annuale 2020 La situazione del Paese <https://www.istat.it/storage/rapporto-annuale/2020/Rapportoannuale2020.pdf>
- Jetten, J., Haslam, S. A., & Haslam, C. (2012). The case for a social identity analysis of health and well-being. In *The social cure: Identity, health and well-being* (Routledge) (pp. 3–19).
- Jones, C. J., Philippon, T., & Venkateswaran, V. (2020). *Optimal mitigation policies in a pandemic: Social distancing and working from home* (No. w26984). National Bureau of Economic Research.
- Joseph, S., Williams, R., & Yule, W. (1993). Changes in outlook following disaster: The preliminary development of a measure to assess positive and negative responses. *Journal of Traumatic Stress*, 6(2), 271–279. <https://doi.org/10.1007/BF00974121>
- Kang, S. K., & Bodenhausen, G. V. (2015). Multiple identities in social perception and interaction: Challenges and opportunities. *Annual Review of Psychology*, 66(1), 547–574. <https://doi.org/10.1146/annurev-psych-010814-015025>
- Koc, Y., Gulseren, D., & Lyubykh, Z. (2021). Masculinity contest culture reduces organizational citizenship behaviors through decreased organizational identification. *Journal of Experimental Psychology. Applied*, 27(2), 408–416. <https://doi.org/10.1037/xap0000351>
- Koc, Y., Sahin, H., Garner, A., & Anderson, J. R. (2021). Societal acceptance increases Muslim-Gay identity integration for highly religious individuals ... but only when the ingroup status is stable. *Self and Identity*, 1–18. Advance online publication. <https://doi.org/10.1080/15298868.2021.1927821>
- Koc, Y., & Vignoles, V. L. (2016). Global identification predicts gay–male identity integration and well-being among Turkish gay men. *British Journal of Social Psychology*, 55(4), 643–661. <https://doi.org/10.1111/bjso.12160>
- Koc, Y., & Vignoles, V. L. (2018). Global identification helps increase identity integration among Turkish gay men. *Psychology & Sexuality*, 9(4), 329–342. <https://doi.org/10.1080/19419899.2018.1496134>

- Konradt, U., Hertel, G., & Schmook, R. (2003). Quality of management by objectives, task-related stressors, and non-task-related stressors as predictors of stress and job satisfaction among teleworkers. *European Journal of Work and Organizational Psychology*, 12(1), 61–79. <https://doi.org/10.1080/13594320344000020>
- Krents, M., Kos, E., Green, A., & Garcia-Alonso, J., (2020). *Easing the COVID-19 Burden on Working Parents*. The Boston Consulting Group. <https://www.bcg.com/it-it/publications/2020/helping-working-parents-ease-the-burden-of-covid-19.aspx>
- Linley, P. A., & Joseph, S. (2011). Meaning in life and posttraumatic growth. *Journal of Loss & Trauma*, 16(2), 150–159. <https://doi.org/10.1080/15325024.2010.519287>
- Manzi, C., Paderi, F., Benet-Martínez, V., & Coen, S. (2019). Age-based stereotype threat and negative outcomes in the workplace: Exploring the role of identity integration. *European Journal of Social Psychology*, 49(4), 705–716. <https://doi.org/10.1002/ejsp.2533>
- McAdams, D. P., & Olson, B. D. (2010). Personality development: Continuity and change over the life course. *Annual Review of Psychology*, 61(1), 517–542. <https://doi.org/10.1146/annurev.psych.093008.100507>
- McAdams, D. P., & Pals, J. L. (2006). A new Big Five: Fundamental principles for an integrative science of personality. *American Psychologist*, 61(3), 204. <https://doi.org/10.1037/0003-066X.61.3.204>
- Muthén, L. K., & Muthén, B. (2018). *Mplus. The comprehensive modelling program for applied researchers: User's Guide*.
- Naughton, C. M., O'Donnell, A. T., & Muldoon, O. T. (2015). Family identification: A beneficial process for young adults who grow up in homes affected by parental intimate partner violence. *Frontiers in Psychology*, 6, 1249. <https://doi.org/10.3389/fpsyg.2015.01249>
- Nirel, N., Goldwag, R., Feigenberg, Z., Abadi, D., & Halpern, P. (2008). Stress, work overload, burnout, and satisfaction among paramedics in Israel. *Prehospital and Disaster Medicine*, 23(6), 537–546. <https://doi.org/10.1017/S1049023X00006385>
- Noor, N. M. (2003). Work-and family-related variables, work–family conflict and women's well-being: Some observations. *Community, Work & Family*, 6(3), 297–319. <https://doi.org/10.1080/1366880032000143474>
- Pace, F., D'Urso, G., Zappulla, C., & Pace, U. (2021). The relation between workload and personal well-being among university professors. *Current Psychology*, 3417–3424. <https://doi.org/10.1007/s12144-019-00294-x>
- Pals, J., & McAdams, D. (2004). The transformed self: A narrative understanding of posttraumatic growth. *Psychological Inquiry*, 15(1), 65–69 <https://www.jstor.org/stable/20447204>.
- Petrescu M. (2013). Marketing research using single-item indicators in structural equation models. *J Market Anal*, 1(2), 99–117. [10.1057/jma.2013.7](https://doi.org/10.1057/jma.2013.7)
- Postmes, T., Haslam, S. A., & Jans, L. (2013). A single-item measure of social identification: Reliability, validity, and utility. *British Journal of Social Psychology*, 52(4), 597–617. <https://doi.org/10.1111/bjso.12006>
- Pratt, M. G. (1998). Central questions in organizational identification Whetten, D. A., & Godfrey, P. J. Eds *Identity in organizations: Building theory through conversations*. Sage Pub 171–208 .
- Ralph, P., Baltes, S., Adisaputri, G., Torkar, R., Kovalenko, V., Kalinowski, M., Novielli, N., Yoo, S., Devroey, X., Zhou, M., Turhan, B., Hoda, R., Hata, H., Robles, G., Fard, A. M., and Alkadhi, R., (2020). *Pandemic programming: How COVID-19 affects software developers and how their organizations can help* *Empirical Software Engineering* 25 4927–4961 . <http://doi.org/10.1007/s10664-020-09875-y>
- Riketta, M. (2005). Organizational identification: A meta-analysis. *Journal of Vocational Behavior*, 66 (2), 358–384. <https://doi.org/10.1016/j.jvb.2004.05.005>
- Robert, S., & House, J. S. (1996). SES differentials in health by age and alternative indicators of SES. *Journal of Aging and Health*, 8(3), 359–388. <https://doi.org/10.1177/089826439600800304>
- Rofcanin, Y., Hoque, K., & Kiefer, T. (2017). Homeworking: Having a closer look on the spillover between work and nonwork domain. [Conference presentation abstract]. In *European Work and Organisational Psychology Abstract Book 2017*. European Work and Organisational Psychology Conference 2017.

- Saad, C. S., Damian, R. I., Benet-Martínez, V., Moons, W. G., & Robins, R. W. (2013). Multiculturalism and creativity: Effects of cultural context, bicultural identity, and ideational fluency. *Social Psychological and Personality Science*, 4(3), 369–375. <https://doi.org/10.1177/1948550612456560>
- Sacharin, V., Lee, F., & Gonzalez, R. (2009). Identities in harmony: Gender—Work identity integration moderates frame switching in cognitive processing. *Psychology of Women Quarterly*, 33(3), 275–284. <https://doi.org/10.1177/036168430903300303>
- Schaefer, J. A., & Moos, R. H. (1998). The context for posttraumatic growth: Life crises, individual and social resources, and coping. In R. G. Tedeschi, R. G., Park, C. L., and Calhoun, L. G. Eds. . In *Posttraumatic growth: Positive changes in the aftermath of crisis* (Lawrence Erlbaum Associates) (pp.99-124) 99–126).
- Schwartz, S. J., Unger, J. B., Baezconde-Garbanati, L., Benet-Martínez, V., Meca, A., Zamboanga, B. L., Soto, D. W., Oshri, A., Sabet, R. F., Soto, D. W., Patarroyo, M., Huang, S., Villamar, J. A., Lizzi, K. M., Szapocznik, J., & Lorenzo-Blanco, E. I. (2015). Longitudinal trajectories of bicultural identity integration in recently immigrated Hispanic adolescents: Links with mental health and family functioning. *International Journal of Psychology*, 50(6), 440–450. <https://doi.org/10.1002/ijop.12196>
- Shaw, A., Joseph, S., & Linley, P. A. (2005). Religion, spirituality, and posttraumatic growth: A systematic review. *Mental Health, Religion & Culture*, 8(1), 1–11. <https://doi.org/10.1080/1367467032000157981>
- Sinclair, R. R., Allen, T., Barber, L., Bergman, M., Britt, T., Butler, A., Ford, M., Hammer, L., Kath, L., Probst, T., & Yuan, Z. (2020). Occupational health science in the time of COVID-19: Now more than Ever. *Occupational Health Science*, 4, 1–22. <https://doi.org/10.1007/s41542-020-00064-3>
- Smith, A. P., & Smith, H. N. (2017). Workload, fatigue and performance in the rail industry. In *International Symposium on Human Mental Workload: Models and Applications* (Springer). https://doi.org/10.1007/978-3-319-61061-0_17
- Stevenson, C., Costa, S., Wakefield, J., Kellezi, B., & Stack, R. (2020). Family identification facilitates coping with financial stress: A social identity approach to family financial resilience. *Journal of Economic Psychology*, 78, 102271. <https://doi.org/10.1016/j.joep.2020.102271>
- Swartzman, S., Sani, F., & Munro, A. J. (2017). The role of social support, family identification, and family constraints in predicting posttraumatic stress after cancer. *Psycho-oncology*, 26(9), 1330–1335 <https://doi.org/10.1002/pon.4304>.
- Swickert, R., & Hittner, J. (2009). Social support coping mediates the relationship between gender and posttraumatic growth. *Journal of Health Psychology*, 14(3), 387–393. <https://doi.org/10.1177/1359105308101677>
- Syed, M. (2017). Advancing the cultural study of personality and identity: Models, methods, and outcomes. *Current Issues in Personality Psychology*, 5(1), 65–72. <https://doi.org/10.5114/cipp.2017.66604>
- Tedeschi, R. G., & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress*, 9(3), 455–471. <https://doi.org/10.1002/jts.2490090305>
- Ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work–home interface: The work–home resources model. *American Psychologist*, 67(7), 545. <https://doi.org/10.1037/a0027974>
- Wallen, A. S., Mor, S., & Devine, B. A. (2014). It's about respect: Gender–professional identity integration affects male nurses' job attitudes. *Psychology of Men & Masculinity*, 15(3), 305. <https://doi.org/10.1037/a0033714>
- Wanous, J. P., & Hudy, M. J. (2001). Single-item reliability: A replication and extension. *Organizational Research Methods*, 4(4), 361–375. <https://doi.org/10.1177/109442810144003>
- Wepfer, A. G., Allen, T. D., Brauchli, R., Jenny, G. J., & Bauer, G. F. (2018). Work-life boundaries and well-being: Does work-to-life integration impair well-being through lack of recovery? *Journal of Business and Psychology*, 33(6), 727–740. <https://doi.org/10.1007/s10869-017-9520-y>
- Wood, W., & Eagly, A. H. (2012) Biosocial construction of sex differences and similarities in behavior. In *Advances in experimental social psychology*, 46,55–123.