

**Can family-to-work enrichment decrease anxiety and benefit daily effectiveness in remote workers? The unlocking effect of work-life balance**

Federico Magni

fmagni@connect.ust.hk

Hong Kong University of Science & Technology

Ganqi Tang

GTang@iese.edu

IESE Business School, University of Navarra

Beatrice Manzoni

beatrice.manzoni@unibocconi.it

SDA Bocconi School of Management

Leonardo Caporarello

leonardo.caporarello@unibocconi.it

SDA Bocconi School of Management

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As the Covid19 pandemic has been forcing many organizations to let employees work from home, the boundary between personal and professional life has become increasingly blurred for remote workers. The Covid19 context is indeed characterized by a reduced physical separation between work and private life and by unprecedented levels of uncertainty about both personal life, health, and job security (among others). At the same time, the blurring of boundaries between domains possibly amplifies the passage of resources across domains. It is thus more important than ever to understand how employees transfer resources from the personal life domain to the work domain and how this transfer of resources relates to their work performance.

In this regard, work-family enrichment theory argues that people transfer resources such as knowledge, affect, social capital, and material assets across life domains, e.g. between family and work domains (Greenhaus & Powell, 2006). Boundaries between domains are generally permeable and allow for the transfer of such resources (Kossek, Lautsch, & Eaton, 2006), even if people generally enact strategies to manage this passage. We posit that in the Covid19 context, such barriers would be even more permeable due to the lack of physical separation between work and personal life for remote workers. Nonetheless, we expect that one's involvement with family and with work, i.e. one's work-life balance, will impact the relationship between family-to-work enrichment and work performance.

We further identify anxiety as a mechanism linking family-to-work enrichment and work performance. The Covid19 pandemic has spread unprecedented levels of uncertainty across the globe (Dietrich, Kuester, Müller, & Schoenle, 2020; Lazzerini & Putoto, 2020). Millions and millions of people have been compelled to stay at home for prolonged periods of time, with little information about the future development of the pandemic situation and unclear expectations of a possible return to "normality" (Lazzerini & Putoto, 2020). Moreover, countless jobs have been lost and countless others disrupted by the pandemic, adding to the uncertainty regarding the economic situation of individuals, families, communities, and whole countries (Coibion, Gorodnichenko, & Weber, 2020; Nicola et al., 2020). In addition, being suddenly forced to work from home, in a different environment than the one they were used to, pushed many people to rely on new tools and to necessarily develop new skills, especially concerning digital proficiency. In circumstances of great uncertainty, such as the ones engendered by the Covid19 pandemic, many people develop feelings of anxiety related to work, which impair their ability to cope with the situation and to carry on daily tasks, as suggested by uncertainty and anxiety theories (Gudykunst, 1993, 1998; Hirsh, Mar, & Peterson, 2012).

We expect that when people receive resources from their family, such resources help them cope with the uncertain situation, and they negatively relate to anxiety. We further expect that decreased anxiety will be positively linked to work effectiveness. Finally, we posit that the more one's work-life balance is leaning towards the family side, the stronger the relationship between family-to-work enrichment and work effectiveness through decreased anxiety. This because a higher amount of time and energy spent with family amplifies the creation and flow of resources from the family domain to the work domain, strengthening the link between family-to-work enrichment and work outcomes. The theoretical model is shown in Figure 1.

**Hypothesis 1:** *Family-to-work enrichment is positively related to work effectiveness.*

**Hypothesis 2:** *Anxiety negatively mediates the positive link between family-to-work enrichment and work effectiveness.*

**Hypothesis 3:** *Work-life balance moderates the mediated relationship in Hypothesis 2, such that the more work-life balance leans towards the family, the stronger the positive relation between family-to-work enrichment and work effectiveness mediated by anxiety.*

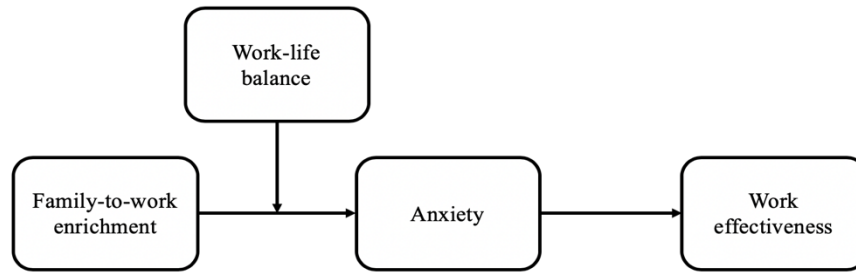


Figure 1 - Theoretical Model

To test our hypotheses, we collected survey data from 134 educational workers, (40% female, age mean 46.14 and standard deviation 9.98, 87% based in Italian universities). We submitted a questionnaire to our participants, and then a daily experience sampling for a week (5 working days), obtaining a total of 376 daily responses (56% response rate). The education sector is a relevant context to study our theoretical model, as educators have been largely operating remotely during the pandemic peak because of the impossibility of bringing classes of students physically together. At the same time, for most educators teaching online has been a disruption to their usual working style: more than half of our participants (42%) had never taught online before the Covid19 situation.

We measured family-to-work enrichment with a 4-item reduced version of the scale developed by Carlson and colleagues (2006), with Cronbach's alpha = 0.81. Two of the items relate to cognitive enrichment ("acquiring competences" and "learning new things"), and two to affective enrichment ("put me in a good mood" and "make me happy"). The four items were selected based on correlational parceling (Little, Rhemtulla, Gibson, & Schoemann, 2013) conducted on the full scale measured on a sample of 125 Italian architects.

Work-family balance was measured with a single item ("*How would you describe your lifestyle?*" with anchors ranging from 1 = "*Very focused on family*" to 7 = "*Very focused on work*"). We asked two versions of this question: one referring to the participant's lifestyle *before* the remote working caused by Covid19, and one referring to their lifestyle *during* the remote working caused by Covid19. We use the latter to test our hypothesis, but also run analyses to test whether results are consistent by using the former to test the contextual impact of Covid19.

Asking participants to report their work-related emotions during Covid19, we measured work-related anxiety with two items ("anxious" and "worried", Cronbach's alpha = 0.84). Finally, we measured daily work effectiveness by asking participants to report at the end of their workday how effective their work had been in a given day. We then aggregated the five daily measures to obtain the mean effectiveness over the week. As the internal reliability of the five measures was not very high (Cronbach's alpha = 0.68), we also tested the hypothesized relationships using the standard deviation, rather than the mean of daily work effectiveness.

We controlled for participants age, gender, Covid19 exposure (whether they or someone close to them had been infected), and baseline self-efficacy for remote working, measured with a 3-item scale adapted from the competence subscale by Spreitzer (1995), Cronbach's alpha = 0.87. To test Hypothesis 1, we ran a linear regression model with SPSS; to test the hypotheses involving mediation, we estimated Monte-Carlo mediation indices with 5000 bootstrapping.

We found that family-to-work enrichment is not significantly linked to anxiety ( $\beta = -.08$ ,  $SE = .08$ ,  $p = .368$ ), but that the interaction between family-to-work enrichment and work-life balance is significantly related to anxiety ( $\beta = .15$ ,  $SE = .05$ ,  $p = .008$ ). Indeed, for people who are more focused on family, family-to-work enrichment is negatively related to

anxiety, whereas for people who are more focused on work, family-to-work enrichment is positively related to anxiety, as shown in Figure 2.

Concerning the whole model, our results indicated that family-to-work enrichment was positively related to daily work effectiveness, but only marginally significantly so ( $\beta = .14$ ,  $SE = .08$ ,  $p = .063$ ), providing limited support for Hypothesis 1. We also found that anxiety did not mediate the linkage between family-to-work enrichment and daily work effectiveness

(bootstrapped  $\beta = -.02$ ,  $CI: [-0.032, 0.084]$ ), not supporting Hypothesis 2. On the contrary, we found that the interaction between family-to-work enrichment and work-life balance significantly related to daily work effectiveness through decreased anxiety, such that the effect was stronger the more focused on family (rather than work) one was (bootstrapped  $\beta = -.04$ ,  $CI: [-0.097, -0.003]$ ). Hypothesis 3 was thus supported.

We ran supplementary analysis substituting work-life balance *during* Covid19 with work-life balance *before* Covid19 and the results did not replicate regarding the interaction's link to anxiety ( $\beta = .05$ ,  $SE = .08$ ,  $p = .566$ ) and indirect link to work effectiveness through anxiety (bootstrapped  $\beta = -.01$ ,  $CI: [-0.067, 0.052]$ ). We also tested the standard deviation of work effectiveness across the week of daily experience sampling as an outcome, and found that it was indirectly related neither to family-to-work enrichment (bootstrapped  $\beta = -.00$ ,  $CI: [-0.023, 0.011]$ ), nor to the interaction of family-to-work enrichment and work-family balance (bootstrapped  $\beta = .01$ ,  $CI: [-0.010, 0.027]$ ) through anxiety.

With this study, we contribute to the work-family balance literature by studying how family-to-work enrichment operates for remote workers, in particular in the context of the Covid19 pandemic. We found that family-to-work enrichment benefits workers by relating to reduced anxiety and better effectiveness only when the worker has a more family-focused work-life balance. Moreover, this relation seems specific to the (Covid19-induced) remote working situation, as we found no moderating role of previous work-life balance on the relationship.

We also add to past studies on the relation between anxiety and work outcomes, showing that anxiety is linked to impaired effectiveness, and further showing that transferring cognitive and affective resources from the personal domain to the work domain is related to reduced feelings of anxiety and to increased work effectiveness. In particular, we open a new avenue of research, as past studies mostly related anxiety to work-family conflict (Carlson et al., 2006), or to the interaction of work-family conflict and enrichment (Grzywacz & Bass, 2003), but not to work-family enrichment alone (see Michel & Clark, 2009).

Our results are limited, in that the findings are correlational. Given the peculiarity of our research question, it would be harder to replicate these tests in experimental settings, but we hope that future field studies might further validate our findings. We note that we are collecting further survey data on the same sample to study how the evolution of Covid19 is changing the relationships under analysis.

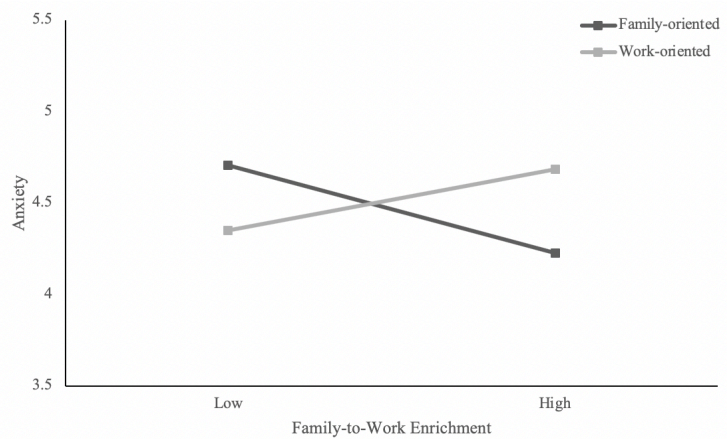


Figure 2 - Interaction of family-to-work enrichment and work-life balance on anxiety

## References

- Carlson, D. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. 2006. Measuring the positive side of the work-family interface: Development and validation of a work-family enrichment scale. *Journal of Vocational Behavior*, 68(1): 131–164.
- Coibion, O., Gorodnichenko, Y., & Weber, M. 2020. Labor Markets During the COVID-19 Crisis: A Preliminary View. *SSRN Electronic Journal*.  
<https://doi.org/10.2139/ssrn.3574736>.
- Dietrich, A., Kuester, K., Müller, G. J., & Schoenle, R. 2020. News and Uncertainty about COVID-19: Survey Evidence and Short-Run Economic Impact. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3573123>.
- Greenhaus, J. H., & Powell, G. N. 2006. When Work and Family Are Allies: A Theory of Work-Family Enrichment. *Academy of Management Review*, 31(1): 72–92.
- Grzywacz, J. G., & Bass, B. L. 2003. Work, family, and mental health: Testing different models of work-family fit. *Journal of Marriage and Family*.  
<https://doi.org/10.1111/j.1741-3737.2003.00248.x>.
- Gudykunst, W. B. 1993. Toward a Theory of Effective Interpersonal and Intergroup Communication: An Anxiety/Uncertainty Management (AUM) Perspective. In R. L. Wiseman & J. Koester (Eds.), *Intercultural Communication Competence*: 33–71. SAGE Publications.
- Gudykunst, W. B. 1998. Applying anxiety\uncertainty management (AUM) Theory to intercultural adjustment training. *International Journal of Intercultural Relations*, 22(2): 227–250.
- Hirsh, J. B., Mar, R. A., & Peterson, J. B. 2012. Psychological entropy: A framework for understanding uncertainty-related anxiety. *Psychological Review*, 119(2): 304–320.
- Kossek, E. E., Lautsch, B. A., & Eaton, S. C. 2006. Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work-family effectiveness. *Journal of Vocational Behavior*, 68(2): 347–367.
- Lazzerini, M., & Putoto, G. 2020. COVID-19 in Italy: momentous decisions and many uncertainties. *The Lancet Global Health*.
- Little, T. D., Rhemtulla, M., Gibson, K., & Schoemann, A. M. 2013. Why the items versus parcels controversy needn't be one. *Psychological Methods*.  
<https://doi.org/10.1037/a0033266>.
- Michel, J. S., & Clark, M. A. 2009. Has it been affect all along? A test of work-to-family and family-to-work models of conflict, enrichment, and satisfaction. *Personality and Individual Differences*, 47(3): 163–168.
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., et al. 2020. The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*. <https://doi.org/10.1016/j.ijssu.2020.04.018>.
- Spreitzer, G. M. 1995. Psychological, Empowerment in the Workplace: Dimensions, Measurement and Validation. *Academy of Management Journal*, 38(5): 1442–1465.