# The Influence of Work-Family Conflict and Enhancement on the Wellbeing of the Self-employed and Their Spouse: A Dyadic Analysis

Safiya Mukhtar Alshibani<sup>1</sup>, Doina Olaru<sup>2</sup>, and Thierry Volery<sup>3</sup>

Published in Work, Employment and Society

# Abstract

This study examines the effect of work-family conflict (WFC) and work-family enhancement (WFE) on the wellbeing of the self-employed and their spouse. Adopting a dyadic perspective, our analysis focuses on three dimensions of wellbeing: physical health, mental health, and life satisfaction. Using the Spillover and Crossover Model as theoretical framework and the Actor Partner Interdependence Model as an estimation technique, investigating how work-family conflict and enhancement among the self-employed and their spouses were associated to their individual and mutual wellbeing. The analysis revealed a strong actor and partner effect, such that one's own perception of WFC undermined the wellbeing for both the self-employed and their spouses. Further, WFE was associated with an improvement in wellbeing, mainly for the self-employed, and not their spouses. The results partially supported the "crossover hypothesis", suggesting that launching a new business is a stressful endeavour at the dyadic level of the self-employed and their spouse.

# Key words

Entrepreneurship, wellbeing, life satisfaction, mental health, physical health, spillover and crossover model, HILDA, self-employment.

**Corresponding Author:** 

Safiya Mukhtar Alshibani Princess Nourah Bint Abdul Rahman University Email: smalshibani@pnu.edu.au

<sup>&</sup>lt;sup>1</sup> Princess Nourah Bint AbdulRahman University, Riyadh, Saudi Arabia. (ORCID: 0000-0001-5868-8053)

<sup>&</sup>lt;sup>2</sup> University of Western Australia, Perth, Australia. (ORCID: 0000-0002-8750-9656)

<sup>&</sup>lt;sup>3</sup> Zurich University of Applied Sciences (ZHAW), Winterthur, Switzerland. (ORCID: 0000-0003-4087-9294)

This is the Accepted Manuscript of an article published online by Sage. You may cite and find the published version as following: Alshibani, S. M., Olaru, D., & Volery, T. (2023). The Influence of Work–Family Conflict and Enhancement on the Wellbeing of the Self-Employed and Their Spouses: A Dyadic Analysis. Work, Employment and Society, 0(0). https://doi.org/10.1177/09500170231175769

Today, both men and women spend a significant part of their life at work. While work is at the core of contemporary life, family remains equally important for most people. Pursuing a 'dual career' as a jobholder, while fulfilling family (e.g., parental, marital) roles can lead to both conflict and enhancement between these roles. Given the increasing prevalence of dual-breadwinner families and the growing pressure in the workplace, most of the initial research focused on the negative spillovers between work and family domains (French et al., 2022). Workfamily conflict (WFC) typically represents an impediment to successfully meeting family-related demands and responsibilities. A substantial body of research has shown the negative impact of work-family interference on mental health (Frone et al., 1997; Gisler et al., 2018). Individuals who need to 'square the circle' between family and work display reduced mental wellbeing and life satisfaction. One of the most consistent findings in the literature is the strong correlation between work-family interference and stress (Brough et al., 2018).

More recently, scholars have begun to examine the positive spillover between work and family dynamics (Greenhaus & Powell, 2006; Lapierre et al., 2018). Work-family enhancement (WFE) suggests that the participation in multiple roles and a well-balanced role system, which incorporates all roles (i.e., marital, parental, and work roles), provides more opportunities and resources to enhance individual growth and lead to better functioning (Grzywacz & Marks, 2000). WFE then results in higher levels of mental health (McNall et al., 2010).

While it is widely recognised that combining work responsibilities with family demands proves a challenge for many working people, there is evidence that the self-employed experience heightens WFC because of the higher levels of uncertainty, more intense time pressures, longer working hours, and financial stress (Annink et al., 2016; Stephan, 2018). Self-employment typically induces a "boundaryless lifestyle" (Hagqvist et al., 2018) where the work domain has an impact not only on the self-employed themselves, but also on their spouses. Because of the immersion in their business, the self-employed find it difficult to "switch off" when they go home. In this context, the life partner can influence the self-employed in non-visible ways, for example by providing spousal support and fulfilling a "stress-buffering role" (Danes, 2011). Given the increasing prevalence of couple businesses as an important social and economic phenomenon (El Shoubaki et al., 2022), it is crucial to examine the crossover effect between the self-employed and their spouses in the context of work-family nexus.

In this study, we use the Spillover and Crossover Model (Bakker & Demerouti, 2013) as theoretical foundation, and the Actor Partner Interdependence Model (Kenny & Ledermann, 2010) as an analytical approach, to evaluate the extent to which the self-employed and their spouses' WFC and WFE are associated with their individual and mutual wellbeing during new venture creation. We draw on 16 waves of household-based panel study, to conduct a dyadic analysis of 341 couples where one of the partners became self-employed.

We contribute to the burgeoning literature on entrepreneurial wellbeing (Wiklund et al., 2019) and to the family embeddedness perspective in self-employment (Aldrich & Cliff, 2003) in two ways. First, by examining the spillover effect, we contribute to the wider literature that documents the impact of self-employment on various measures of wellbeing (Nguyen & Sawang, 2016; Hagqvist et al., 2018; Schjoedt, 2013). How self-employment relates to fulfillment and wellbeing is of utmost importance because people enter self-employment for deeply personal, idiosyncratic reasons (Wiklund et al., 2019), and not solely for financial realization. In addition, wellbeing is a critical resource in self-employment: the self-employed become less innovative, persistent, and productive when their wellbeing suffers (Stephan, 2018), leading to lower economic output and fewer jobs (Stephan et al., 2022).

Second, we shed some light on the crossover influence between the self-employed and their spouses during the first year of entry in self-employment. In doing so, we contribute to the family embeddedness perspective in entrepreneurship and sociology (Aldrich & Cliff, 2003) by answering scholarly calls to investigate crossover effects in couples when life partners are facing a major stressor (starting a new business). Wiklund et al. (2019, p. 583) recently remarked that "In ongoing businesses, there can be work and family spillover and crossover effects, yet entrepreneurship research has overlooked work and family effects to date." By investigating the issue of work-family (WF) balance at the dyadic level, we move towards a new paradigm that considers WF balance as a "couple-level phenomenon" (Burch, 2020).

#### Literature review and hypothesis development

The work-family literature has long understood the bi-directional relationship between work and family, where family could interfere with work (family-work conflict, FWC) and work could impinge on the family life (work-family conflict, WFC). This intraindividual transmission of strain between the work demand and family roles, or spillover effect, has been studied across many contexts and among different occupations (for a review of the WFC and FWC literature, see Gisler et al., 2018). However, the crossover effect which is a dyadic, interindividual transmission of strain beyond the individual to his/her social network has attracted less attention (Bakker et al., 2008). Specifically, the perception of inter-role conflict between family and work responsibilities between partners is a central question in the crossover literature.

Several studies have examined the crossover effect or "emotional transmission", primarily among dual-earner couples (Fellows et al., 2016). Nevertheless, the effects generated when partners experience common stressors, such as launching a new business venture, is under researched. Entry into self-employment can potentially have a significant impact on the family harmony, and the stress the self-employed and their spouse face during the start-up process differ to paid employment inference with family (Wiklund et al., 2018).

We acknowledge that self-employment is not a separate construct from society, but an aspect of the society as a whole. The recent post-structural critical evaluations of entrepreneurial discourses revealed the profoundly gendered nature of self-employment by highlighting the social practices and representations associated with femininity or masculinity (Henry et al., 2016). Social norms affect work-family relationship in general and inter-role conflict between partners in a couple when it comes to family and work responsibilities. Drawing on social role theory (Eagly, 1997), Boz Semerci and Volery (2018) suggested that, because of traditional gender stereotypes, parenting stress is significantly different between female and male self-employed. The conservative view that housework and raising children rests primarily with women is likely to generate greater parenting stress for women who internalize such beliefs, especially if they are working in paid employment or in self-employment, as the need to juggle with constant, pressing work and family demands.

#### The spillover and crossover model

The SCM (Bakker & Demerouti, 2013) has integrated two important lines of research. The SCM spillover and crossover perspective is a coherent framework which provides a holistic approach to study the work-family inference at a dyadic level. This integrative framework suggests that: 1) a spillover caused by a high work demand occurs at the individual level; and 2) a crossover of this conflict will affect the partner and his/her wellbeing (Bakker et al., 2008). The usefulness of SCM as a basis for crossover research is that it emphasizes the role of high job-stressor effects, both at the individual and at the dyad level.

In terms of crossover, the model is based on Westman's crossover process work (Westman, 2001; Westman & Etzion, 2005), which recognizes three possible mechanisms. First is the direct empathetic crossover, where stress and strain are transmitted from one partner to another directly through empathic reactions (Westman & Etzion, 2005); for example, an entrepreneur may bring home worries about a deal s/he needs to close, causing their partner to feel distressed as well. Second is the indirect crossover, where stress and strain are transmitted through social undermining behaviours, mediated by personal attributes and the interaction between the partners (e.g. specific coping strategies and interpersonal transactions, such as social support, communication style) (Westman & Etzion, 2005); for example, an entrepreneur may feel irritable about a supplier who failed to deliver goods in time, leading to criticism towards their partner. The third mechanism is the spurious crossover effect, where both partners experience common stressors in a shared environment; for example, if the business venture faces liquidity problems, the couple may struggle to make ends meet.

## Work Family Conflict (Negative Spillover and Crossover)

The negative spillover of WFC on the entrepreneur's wellbeing is well documented. There is an extensive body of evidence on the causes of WFC and the adverse effects it generates on career performance (Parasuraman et al., 1996), exit intention (Hsu et al., 2016), and general wellbeing (Nguyen & Sawang, 2016). This conflict perspective is based on the "scarcity hypothesis", suggesting that higher demand in one role, either family or work, will affect the time, money and energy of the entrepreneur, which creates tension between competing demands and inter-role conflicts (El Shoubaki et al., 2022).

Accordingly, psychologists classified three types of conflict: time-based, strain-based and behavioural-based (Gisler et al., 2018). First, time-based conflicts occur when time spent in work activities results in less time spent with family or vice versa. Second, strain-based refers to the process where an individual uses his energy in one role and cannot meet the demand of the other role. Third, behavioural-based is an attitudinal consequence that is the result of work conflicting with family or the other way around (e.g. absenteeism) (König & Cesinger, 2015).

Various studies identified evidence of WFC crossover in different occupations. For example, Westman & Etzion (2005) found in their study of 1,250 Russian army officers and their spouses, that one partner's WFC accounted for variance in the other partner's WFC beyond the within-individual factors. Similarly, Bakker, Demerouti, & Dollard (2008) found in their study of 168 couples that one partner's WFC had a crossover effect on the other partner's emotional exhaustion. Adopting a diary study methodology, Lu, Lu, Du, & Brough (2016) demonstrated that one partner's WFC crossover negatively impacted on the partner's satisfaction and health. Similar findings were recently reported by: Brough et al., 2018. Together, past empirical findings suggest that WFC increases time and energy scarcity for both partners. Such deficit stems from multiple demands in both roles that produce increasing feelings of distress, and this will crossover between partners.

Reviewing the literature in entrepreneurship and occupational health, we found limited research on the effect of self-employment on the self-employed spouse. Dahl, Nielsen, and Mojtabai (2010) found a significant relationship between self-employment entry and the prescription of sedatives, both among the self-employed and their spouses, suggesting that selfemployment entry may be associated with increased stress for the couple businesses. In a similar vein, Sanchez-Ruiz and colleagues (2018) found that business-related stressors significantly increase the rate of divorce within American family firms. It has also been argued that the conflict between the business and the family in the early stages of self-employment might create "an incomplete family experience and the possibility of permanent emotional scars" (Liang & Dunn, 2009; p. 168). More recently, Wiklund et al. (2019) remarked that factors such as spouse and family member work relationships, and role relationships in the business can influence the wellbeing for the family involved or uninvolved with the business.

Collectively, these arguments suggest that the self-employed high work demand will interfere with their personal life (spillover) as well as their partners' life (crossover). Therefore, we hypothesize:

*Hypothesis 1:* For the self-employed and their spouse, WFC will be negatively related to (A) one's and (P) their spouses' life satisfaction.

*Hypothesis 2*: For the self-employed and their spouse, WFC will be negatively related to (A) one's and (P) their spouses' physical health.

*Hypothesis 3*: For the self-employed and their spouse, WFC will be negatively related to (A) one's and (P) their spouses' mental health.

### Work Family Enhancement (Positive Spillover and Crossover)

In contrast to the conflict perspective, the enhancement or enrichment argument proposes that the rewards (e.g. skills utilization, greater self-esteem, positive moods, social capital), which accrue in one role experienced by an individual, will have a positive impact on other roles (Gisler et al., 2018). This positive work-family interdependency highlights the importance of synergies between work and family life. Work family enhancement/enrichment (WFE) is defined as "the extent to which experiences in one role improve the quality of life in the other role" (Greenhaus & Powell, 2006; p.73). WFE has the capacity to generate a range of positive employee and organizational outcomes, including job satisfaction, family satisfaction, affective commitment, as well as physical and mental health (McNall et al., 2010). This can be achieved through instrumental and/or affective paths. Instrumental enrichment exists "when resources gained in a role have a direct instrumental effect on performance in the other role" (Lapierre et al., 2018; p. 386), while affective enrichment occurs "when resources gained in one role produce positive affect which then increase performance in the other role" (Lapierre et al., 2018; p. 386). The recognition of the positive spillover has been documented in the self-employment literature. For example, Powell & Eddleston (2013) found that affective family-to-business enrichment, and family-to-business support are positively related to entrepreneurial success. There is evidence that WFE moderates the negative effect of WFC on wellbeing among the self-employed (Nguyen & Sawang, 2016).

Although considerable progress has been made towards understanding the positive spillover, to date, less attention has been paid to the crossover of WFE. A couple of studies have examined the crossover of WFE on marital satisfaction among dual-earner couples (Lu et al., 2016; Van Steenbergen et al., 2014). This stream of research suggests that WFE accounts for a significant variance in individuals' marital satisfaction, over and above WFC. An individual's WFE tends to be associated to their partner's marital satisfaction either through increased social support or decreased social undermining.

Thus, we propose that WFE will be positively related to the self-employed and their spouses' wellbeing:

*Hypothesis 4:* For the self-employed and their spouses, WFE will be positively related to (A) one's and (P) their spouses' life satisfaction.

*Hypothesis 5:* For the self-employed and their spouses, WFE will be positively related to (A) one's and (P) their spouses' physical health.

*Hypothesis 6*: For the self-employed and their spouses, WFE will be positively related to (A) one's and (P) their spouses' mental health.

#### **Data and Methods**

#### Data source

We draw on 16 waves of the Household, Income and Labour Dynamics in Australia (HILDA) survey, a multipurpose panel focused on income, work, and family. The HILDA survey is described in more detail in Watson and Wooden (2012). The original panel started in 2001 and included 13,969 individuals in 7,682 households, using a probability sampling approach of national private dwellings. A top-up sample was added in 2011 to maintain representativeness. Due to its rigorous sample selection and robust data collection, the response rate ranged between 80% to 92% annually and the attrition between waves was approximately 6%.

In relation to the context, we selected a country (Australia) where entrepreneurship enjoys broad support. As self-employment does not take place in a vacuum and requires a mix of attitudes, resources, and infrastructure, forming the entrepreneurial ecosystem, this support is essential. As highlighted by Thukral (2022), evidence from research suggests that Australia has a good entrepreneurial ecosystem. Specifically, Australia provides favourable framework conditions for start-ups and Australian's perceptions, attitudes, and beliefs towards self-employment are generally positive. Australia, therefore, can be characterized as an "enabling context" (Stephan et al., 2022) for self-employment marked by relative resource affluence, predictability, ease of transactions, and high legitimacy for the self-employed.

#### Analytical sample

We define self-employment entry as a change in occupational status from paid employment to self-employment between two waves. The self-employed are those individuals who started a business venture and remained self-employed for at least one year. They include both, ownermanagers at the helm of their own incorporated businesses, and individuals who operate an unincorporated business. This definition has been used in previous studies (Nikolova, 2018; van der Zwan et al., 2018). We pooled data based on the year of entry and included couples between the ages of 18 and 65 who have at least one child in the household. Initially, 1,020 couples were identified, however 679 couples were excluded for various reasons (unmet eligibility criteria): 170 couples experienced multiple entrepreneurial entries; 109 couples were either divorced, widowed, or separated; 178 couples did not have any children; and 222 couples did not have full information on key constructs. This selection process led to a final sample of 341 couples.

No systematic differences were deducted between the final sample and the original identified sample. This sample size is appropriate to detect a measurable effect size between the dyad members (Kenny & Ledermann, 2010). According to APIMPowerR application, with this sample size, an expected actor/partner effect of at least  $\pm$  0.1, correlation coefficients of 0.3, and the power for the actor and partner effect of 0.789 each will occur (Kenny & Ledermann, 2010). Furthermore, this sample size is consistent with data reported in previous studies about WFC and WFE crossover between dyads (Fellows et al., 2016).

#### Measures

## Work-family conflict and enhancement/enrichment

In HILDA, WFC and WFE were measured using the work-family and work-parenting strains and gains scales originally developed by Marshall and Barnett (1993). Working parents were asked about their agreement or disagreement (1-7 Likert scale) with statements regarding their work and family responsibilities, and their general assessment of work-family balance. The CFA results indicated a two-factor model as appropriate and was significantly superior in goodness-of-fit measures compared to a single factor model ( $\Delta \chi^2$  (1) = 208.8, p< 0.001). Both the Average Variance Extracted (AVE) and the Composite Reliability (CR) were above the recommended thresholds. Appendix 1 details the items used and presents the results of the factor analysis. The scores were calculated according to the CFA results, with a higher score representing a more intense WFC or a higher perception of WFE.

# Wellbeing measures

In each wave of HILDA, respondents were asked to state how satisfied they were with their lives on a 0 (totally dissatisfied) to 10 (totally satisfied) scale. The exact question was: "All things considered, how satisfied are you with your life?" This single item was adopted in several past studies on subjective wellbeing and is considered very similar to more psychometrically established multiple-item scales (Nikolova, 2018; Shir et al., 2018).

HILDA also relies on the Medical Outcomes Study Short Form (SF-36) to measure health. The SF-36, including eight sub-scales, is the standard for measuring self-reported health and has been extensively validated in previous literature (Butterworth & Crosier, 2004). The SF-36 can be grouped into two main dimensions: a Mental Component Summary (MCS) and a Physical Component Summary (PCS). Further details about the scale construction, factor loadings, and convergent and discriminant validity are provided in Appendix 2. The scores in both dimensions range from 0-100 with higher scores representing better health. Following Nikolova (2018), we standardized the score to a mean of 50 and standard deviation of 10.

#### **Covariates**

We controlled for several within-dyad covariates, including age (Allen & Finkelstein, 2014) and income as continuous variables. To measure income, we used the log of 'regular market income', which comprises of the individual's salary, business and investment income, and private pension. Similarly, we controlled for between-dyad covariates, including number of children and location. As the number of children that parents are caring for increases, they are more likely to experience work-life challenges (Allen & Finkelstein, 2014). Equally, self-employed in major urban areas (coded 1, 0 otherwise) face distinct WF balance challenges, as their businesses and lifestyles are likely to be different from those living in rural areas.

## Analytical approach

The APIM shown in Figure 1 is one of the most widely used models for analysing dyadic data (Kenny et al., 2006; Kenny & Ledermann, 2010). The model calculates two types of effects: the *actor effect* (A) which estimates the relationship between an individual's own scores on an outcome variable; and the *partner effect* (P), which estimates the relationship between a partner's score on the individual's own outcome variable. The actor effect captures to what extent individuals' own perceptions of WFC and WFE influence their own level of wellbeing (spillover effects), both for the self-employed and for their spouse. The partner effect indicates how an individual's own perception of WFC and WFE affects their spouse's wellbeing (crossover effects). The APIM also accounts for the degree of correlations between two partners' predictor variables and outcome variables (the double-headed arrows in Figure 1). The correlation between the two partners' predictor variables ensures that the actor effects are statistically independent from the

partner effects and vice versa (Kenny et al., 2006; Kenny & Ledermann, 2010), whereas the correlation between the two partners' outcome variables accounts for the interdependence in the residuals. Therefore, this analytical approach is ideal to capture basic interpersonal effect and the dyad's interdependence of the WFC and WFE on wellbeing between the self-employed and their spouses.



In implementing the APIM, we employed a structural equation modelling (SEM) framework with maximum likelihood (ML) estimation. SEM allows us to correlate the error term and impose restrictions on the possible effects. We used a  $\chi^2$  difference test in examining several nested models to uncover the *empirical distinguishability* (the statistically meaningful difference between the self-employed and their spouse) (Kenny & Ledermann, 2010). We then compared the fully saturated model identified in Figure 1 to models where the two partner effects are forced to be equal.

Subsequently, we estimated the k parameter, which is an index representing the ratio of the partner effect to the actor effect (P/A) derived through phantom variables. These are latent variables, with no meaning or disturbance within the SEM model, used only to reveal the underlying dyadic pattern (Kenny & Ledermann, 2010). The confidence interval for k is computed by means of the parametric bootstrap Monte Carlo sampling with 5,000 samples, to correct for any bias around the deducted effects. Based on the k parameter, there are four possible patterns in the APIM dyadic interaction. First, the *actor-only* effect (k near 0), when the effect of the predictor on the outcome is stronger for a single partner only (i.e., only the entrepreneur's predictor is associated with the entrepreneur's reported outcome). Second, the *partner-only* effect, capturing the situation

where there is a non-significant actor, but significant partner effect (i.e., only the entrepreneur's report on WFC/WFE is associated with the spouses' reported outcome, a very rare pattern according to Kenny & Ledermann, 2010), expected to be associated with high values of k. Third, the *couple-oriented* pattern (k closer to 1) which assumes equal effect between partners (i.e., the effect of the self-employed predictors on their outcomes is the same as the effect that the spouses have on the self-employed outcome). Fourth, the *contrast* pattern (k closer to -1) when an individual's outcome is influenced positively by his/her independent variable and negatively by that of his/her partner (i.e., the entrepreneur's report on WFC is positively associated with the entrepreneur's stated outcome) (Stas et al., 2018). To address the complexity in the selection procedures and to correct for imperfections in the sample, we applied the longitudinal enumerated person weight in all our models. This weight represents the longitudinal population weight for all participants enumerated in each wave of the study.

#### Results

## **Descriptive statistics**

The descriptive statistics in Table 1 indicate that the self-employed and their spouse have similar ages, around 39 years, and educational attainment (half or more with tertiary education). About 62% of the self-employed were men and 66% working in the tertiary sector. Similarly, two-thirds (65%) of the spouses were paid employees. A small minority of both self-employed and their spouses (9.34% and 11.62% respectively) reported long-term health conditions and the differences are significant (t(340) = 4.897, p < 0.001). Self-employed reported higher incomes than their spouse, albeit this difference was not statistically significant (t (318) = 0.866, p = 0.387). Only 2% of the self-employed were emigrant, while 16.37% of the spouses were emigrant. Sixty%

of the couples lived in an urban area, and the average marital duration for these couples was 8.6 years. Many of the couples (44.75%) have at least one child under four years of age at home, and the mean log of the household wealth equal 10.7.

Table 1

Figure 2 displays the means and standard deviations for: WFC, WFE, life satisfaction, physical, and mental health. Self-employed display significantly higher life satisfaction scores (8.07) compared to their spouses (7.90) (t(367) = -2.55, p=0.010). Yet, there were no significant differences between partners, when considering the physical or mental health, with both averages being around 51 to 53. WFC and WFE factor scores were also undistinguishable between the self-employed and their spouse, suggesting positive values.

Figure 2

Figure 3 presents the correlation matrix. As expected, WFC showed a negative relationship with all types of wellbeing for both the self-employed and their spouses. WFE correlated positively with wellbeing indicators, although in several instances this was not statistically significant.

Figure 3

The overall test of distinguishability yields a significant  $\chi^2$  for all the outcomes that depend on WFC: life satisfaction ( $\chi^2$  (36) = 513.009, p < 0.001), physical health ( $\chi^2$  (36) = 498.909, p < 0.001), and mental health ( $\chi^2$  (36) = 506.337, p < 0.001). We found similar results for WFE: life satisfaction ( $\chi^2$  (36) = 466.154, p < 0.001), physical health ( $\chi^2$  (36) = 451.574, p < 0.001), and mental health ( $\chi^2$  (36) = 456.455, p < 0.001). This suggests that the two roles (i.e., self-employed

and spouse) are statistically different and the use of APIM for distinguishable dyads is therefore appropriate.

#### Negative spillover and crossover

As shown in Appendix 3, Model 1, the results of the APIM reveal negative *actor* effects for both self-employed (-0.409, p < 0.001, 95% CI [-0.568, -0.249]) and their spouses (-0.279, p < 0.001, 95% CI [-0.431, -0.126]) on life satisfaction. The results also indicate statistically significant negative *partner* effects on self-employed (-0.250, p < 0.05, 95% CI [-0.391, -0.109]). These findings support H1. For the self-employed, it can be concluded that the *actor-only* pattern is plausible. This can be deduced from the 95% CI for *k* E ([-0.08, 1]). This means there is a strong spillover of WFC onto the self-employed' life satisfaction and this depends solely on this predictor. For spouses, it can be concluded that the *couple-oriented* pattern is plausible. In particular, the confidence interval for *k* indicates that both the *actor* and the *partner* effects are present and in the same direction for the spouses; suggesting that the wellbeing of spouses was affected to the same extent or more by their partner's WFC than their own.

The results presented in Appendix 3, Model 2, indicate a significantly negative *actor* effect on the physical health, for both the self-employed (-1.656, p < 0.001, 95% CI [-2.56, -0.748]) and their spouses (-2.131, p < 0.001, 95% CI [-3.283, -0.979]). However, the *partner* effect was not significant, neither for the self-employed, nor for their spouses. Examining *k* parameter for the self-employed and spouses, the *actor-only* pattern for the self-employed and their spouses emerged. These results partially confirm H2. In other words, there is a spillover effect, but no crossover effect between partners.

Similarly, the results for mental health (Appendix 3, Model 3) reveal a strong negative *actor* effect for the self-employed (-2.242, p < 0.001, 95% CI [-3.205, -1.279]) and their spouses

(-3.079, p < 0.001, 95% CI [-4.253, -1.905]), confirming the spillover effect. The *partner* effect from spouses to self-employed is equal to -0.685, not statistically significant. However, the *partner* effect from self-employed to spouses is equal to -1.598 and statistically significant (p < 0.001, 95%CI [-2.720, -0.477]). Based on *k* parameter it can be concluded that the *actor-only* pattern is conceivable for self-employed. However, arguably both the *actor-only* and *the couple-oriented* pattern were possible for the spouses. These results partially confirm H3, indicating no crossover for the self-employed, yet WFC was affecting their spouses' mental health.

#### Positive spillover and crossover

The results from Appendix 4, Model 4 provide evidence for a strong positive *actor* effect (spillover) on life satisfaction for the self-employed (0.278, p < 0.001, 95% CI [0.136, 0.419]); but not for the spouses (0.060, p = 0.523, 95% CI [-0.091, 0.212]). However, the *partner* effect on the spouses was statistically significant (0.169, p = 0.014, 95% CI [0.045, 0.292]). This means WFE positively crossover to the spouse. *k* parameter points towards either an *actor-only* or a *contrast* pattern for the self-employed. For spouses, the CI for *k* is very wide and the most likely pattern cannot be determined. Thus, H4 is partially supported.

In term of the effect on physical health, the results in Appendix 4, Model 5 suggest that only the *actor* effect for the self-employed is significant (1.208, p = 0.003, 95% CI [0.423,1.993]). None of the other proposed relationships were significant. *k* parameter suggests *actor-only* or contrast effects for the self-employed and no pattern for spouse given the wide CI around *k*. These results partially support H5, suggesting that only the spillover effect of WFE on the self-employed is present.

Finally, the APIM results on the effect on mental health (Appendix 4, Model 6) indicate that the *actor* effect is statistically significant for both the self-employed (1.609, p < 0.001, 95% CI [0.78, 2.438]) and for their spouse (1.416, p = 0.019, 95% CI [0.157, 2.675]). The *partner* effect is not significant for the self-employed, or their spouses. These findings only support the spillover effect of H6. The *actor-only* or *contrast patterns* are thus conceivable for the self-employed, with a clear pattern toward *actor-only* for the spouses. Together, these findings suggest that the association between the self-employed WFE and wellbeing is primarily an *actor* or *contrast* effect, showing that WFE is positively associated with the self-employed own wellbeing, however, it might be negatively associated with the spouses' wellbeing.

Figure 4

These results were confirmed in subsequent analysis (as a robustness check), where the models were re-estimated with different configurations of covariates including: (1) long-term health condition, (2) migration category, (3) wealth, and (4) marital duration. We selected these controls based on their logical and theoretical relevance, as they were expected to have a confounding effect. Despite their inclusion, the results remained unchanged (the results are available upon request).

#### Discussion

Starting a new venture is taxing. The journey into self-employment is associated with long working hours, low job security and uncertain income. The self-employed often invest more of their physical, emotional, and financial resources into their work, compared to paid employees (Wiklund et al., 2018). Given these circumstances, balancing the work and family domains is likely to be a challenge. This motivated us to examine the effect of WFC and WFE on the wellbeing of

the self-employed and their spouses during self-employment entry. In doing so, our study adds to the ongoing research effort on the family embeddedness perspective in self-employment (Aldrich & Cliff, 2003) and to the burgeoning literature on entrepreneurial wellbeing (Wiklund, et al., 2019; Stephan et al., 2022). Specifically, we broaden the traditional scope of work-life balance to consider spillover and crossover effects from the self-employed to their spouses. Our approach sheds some light on the impact of the work-family interface (WFC and WFE) on the entrepreneurspouse wellbeing dyad. Applying the SCM and the APIM to test the actor effect (or spillover) and partner effect (or crossover) on wellbeing at the dyadic level, has revealed new, important insights.

Our findings suggest a significant *actor* effect, whereby one's own experience of WFC negatively affects their own wellbeing. These results align with the previous literature on the topic (Hagqvist et al., 2018; Hsu et al., 2016; Yucel, 2017), as well as with the SCM model (Bakker & Demerouti, 2013). The SCM postulates that high work demands can spill over into the family domain and negatively affect the individual wellbeing.

The results also indicate a strong actor effect of WFE on the self-employed wellbeing, but not their spouses. The nature of the entrepreneur's job characteristics, and in particular high autonomy, variety of tasks, high task identity, and ability to obtain immediate feedback can be a source of personal fulfillment and satisfaction, which, in turn, can energize the self-employed to tackle the challenges in their business and family domain. Indeed, recent research has documented a positive causal effect between entrepreneurial entry and an increase in life satisfaction and health (Shir et al., 2018; van der Zwan et al., 2018). This joy status may translate into a heightened feeling of being competent as a family member, which in turn is positively associated with life satisfaction and health. This suggests that self-employment, as a highly autonomous and flexible career path, could enable the acquisition of internal resources that can enrich family life.

It should be noted, however, that the increase in wellbeing and related WFE for the selfemployed may be temporary. Recent empirical studies indicated that individuals experience a boost in life satisfaction when entering self-employment, followed by a declining trend in the years thereafter (Nikolova, 2018; van der Zwan et al., 2018). This short-lived spike or 'honeymoon effect' seems to capture the effect of a new job in general. More generally, there is a considerable body of data suggesting that subjective well-being is under the influence of a homeostatic system, designed to hold its value within a narrow, positive, set-point-range for everyone.

Unique to the present study was the inclusion of partner effects (crossover), which reveal how an individual's own reported WFC affects their partner's wellbeing. The results confirm the crossover on life satisfaction and mental health from the self-employed to their spouse. WFC can affect self-employed loved ones' wellbeing, especially when the spouse unconsciously mirrors their partners' expressions of emotion, a situation often referred to as 'emotional contagion' (Schoenewolf, 1990). In other words, the self-employed who feel stressed when trying to reconcile their business and family obligations might, in turn, influence their spouses' wellbeing.

Interestingly, the results did not fully support the negative partner effect on the self-employed, except for a very small effect for life satisfaction. This could be attributed to the fact that during the first year, the self-employed are busy establishing the business legitimacy and shaping their founding identity. This identity formation is closely related to 'work centrality' concept (Lapierre et al., 2018), which refers to the relative value the individual places on their work and family identities. For example, individuals with a highly central work identity are likely to prevent family issues from interfering with work and arrange their family life to accommodate their work responsibilities. It is also possible that these self-employed take so much of their time for their

business endeavours, that they are crowding out other domains of life, such as family or social relations (Sanchez-Ruiz et al., 2018).

Furthermore, following recent conceptualizations suggesting that work-family balance is akin to a 'boundary management' strategy (Greenhaus & Ten Brummelhuis, 2013), it is conceivable that self-employed can reconcile their business and spousal demands by setting boundaries to build a better family-work synchronised strategy. In other words, they are on top of segmentation or integration of both their work and personal life domains. The self-employed are known to have a very unique personality structure, characterised by a high internal locus of control, self-efficacy, and high need for achievement (Obschonka et al., 2013). These traits could explain their ability to address external factors that may otherwise affect their family lives.

## Conclusion

This study combines insights from the family embeddedness perspective on self-employment and entrepreneurial wellbeing, thus responding to numerous calls for a more interdisciplinary approach to understanding work-family balance for the self-employed and their spouses. Overall, our results confirm the viewpoint of self-employment akin a 'rollercoaster ride' which offers potential for experiencing both positive and negative wellbeing (Stephan et al., 2022). Crucially, our analysis indicates that the self-employed spouses are also part of this experience, especially when it comes to negative wellbeing (e.g., stress, anxiety, burnout). These results have both theoretical and practical implications.

From a theoretical point of view, this research highlights the importance of overcoming the overly individualistic perspective when studying WFC and WFE. There is a need to embrace the new paradigm in considering work-family issues as a 'couple-level phenomenon' (Burch, 2020).

This recent couple-level conceptualization has also accentuated the multifaceted, complex, and cyclical nature of WFC/WFE spillover and crossover (Burch, 2020; Lapierre et al., 2018).

From a practical standpoint, the self-employed concerned with their family stability, need to understand how WFC may influence the wellbeing of their spouses. Self-employed need strategies to alleviate this interference, to better manage often contradictory business and family demands. Another practical advice addressed to spouses is the importance of recognizing that the complex decision to pursue the lonely and uncertain trajectory of self-employment may substantially affect the family life. Maintaining a healthy work-life balance is challenging for the entrepreneurial partner, but acknowledgment of the problem is often half of the solution.

As with any research, this study has several limitations, while opening us areas that merit further attention. First, it should be noted that our analysis cannot uncover strict causal effects of WFC and WFE on wellbeing between partners. Although we used a suitable technique that caters for the interdependence of the data, rigorous tests of causality considering the temporal dimension are needed. Second, we focused on the cognitive (evaluative) measure of WFC and WFE, not on the behavioural-based components. In that respect, we did not capture the couple's power dynamics and gender differentials which might influence wellbeing. For example, there is evidence that couple businesses often reflect traditional gendered norms of men as "breadwinners" and women as "caretakers" (König & Cesinger, 2015; El Shoubaki et al., 2022). Future research could examine if gendered distribution of power and roles may have a different impact on the entrepreneur's and their spouse's wellbeing. Finally, we do not know exactly when the selfemployed started their business, since the HILDA is conducted on an annual basis. Some selfemployed may have become self-employed just before the survey was conducted and thus they may have not fully experienced the WFC and WFE effects, compared to someone who started earlier in the year. However, we believe that starting a business needs careful planning long before the action is taken. Thus, WFC and WFE issues are likely to be present before start-up, albeit with a different intensity.

# Acknowledgements

Princess Nourah bint Abdulrahman University Researchers Supporting Project number (PNURSP2023R395), Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia.

#### References

- Aldrich, H. & Cliff, J (2003) The pervasive effects of family on self-employment: toward a family embeddedness perspective. *Journal of Business Venturing 18*(5): 573–97. https://doi.org/10.1016/S0883-9026(03)00011-9
- Allen, T. D., & Finkelstein, L. (2014). Work-family conflict among members of full-time dualearner couples: An examination of family life stage, gender, and age. *Journal of Occupational Health Psychology*. 19(3), 376-384. https://doi.org/10.1037/a0036941
- Annink, A., den Dulk, L., & Steijn, B. (2016). Work–family conflict among employees and the self-employed across Europe. *Social Indicators Research*, 126(2), 571–593. https://doi.org/10.1007/s11205-015-0899-4
- Bakker, A., Demerouti, E., & Dollard, M. (2008). How job demands affect partners' experience of exhaustion: Integrating work-family conflict and crossover theory. *Journal of Applied Psychology*, 93(4), 901–911. <u>https://doi.org/10.1037/0021-9010.93.4.901</u>
- Bakker, A., & Demerouti, E. (2013). *The spillover-crossover model*. Retrieved from https://psycnet.apa.org/record/2013-13387-004
- Boz Semerci, A., & Volery, T. (2018). Entrepreneurs as parents: The antecedents and consequence of parenting stress. *International Journal of Entrepreneurial Behavior & Research*, 24(1), 41-58. <u>https://doi.org/10.1108/IJEBR-04-2017-0136</u>
- Brough, P., Muller, W., & Westman, M. (2018). Work, stress, and relationships: The crossover process model. *Australian Journal of Psychology*, 70, 341–349. <u>https://doi.org/10.1111/ajpy.12208</u>
- Burch, T. (2020). All in the family: the link between couple-level work-family conflict and family satisfaction and its impact on the composition of the family over time. *Journal of*

Business and Psychology, 35(5), 593-607. https://doi.org/10.1007/s10869-019-09641-y

- Butterworth, P., & Crosier, T. (2004). The validity of the SF-36 in an Australian National Household Survey: Demonstrating the applicability of the Household Income and Labour Dynamics in Australia Survey to examination of health inequalities. *BMC Public Health*, 4, 1–11. <u>https://doi.org/10.1186/1471-2458-4-44</u>
- Dahl, M. S., Nielsen, J., & Mojtabai, R. (2010). The effects of becoming an entrepreneur on the use of psychotropics among entrepreneurs and their spouses. *Scandinavian Journal of Public Health*, 38(8), 857–863. <u>https://doi.org/10.1177/1403494810375490</u>
- Danes, S. M. (2011). Pillow talk leaks: Integrating couple interactions into self-employment research. *Self-employment Research Journal*, 1(3). <u>https://doi.org/10.2202/2157-5665.1040</u>
- Eagly, A. H. (1997). Sex differences in social behaviour: Comparing social role theory and evolutionary psychology, *American Psychologist*, 52(12), 1380-1383. https://doi.org/10.1037/0003-066X.52.12.1380.b
- El Shoubaki, A., Block, J. & Lasch, F. (2022). The couple business as a unique form of business: a review of the empirical evidence. *Management Review*, 72, 115–147. https://doi.org/10.1007/s11301-020-00206-5
- Fellows, K. J., Chiu, H. Y., Hill, E. J., & Hawkins, A. J. (2016). Work–family conflict and couple relationship quality: A meta-analytic study. *Journal of Family and Economic Issues*, 37(4), 509–518. <u>https://doi.org/10.1007/s10834-015-9450-7</u>
- French, K. A., Allen, T. D., & Kidwell, K. E. (2022). When does work-family conflict occur? Journal of Vocational Behavior, 136, 103727. <u>https://doi.org/10.1016/j.jvb.2022.103727</u>
- Frone, M., Russell, M., & Cooper, M. (1997). Relation of work–family conflict to health outcomes: A four-year longitudinal study of employed parents. *Journal of Occupational*

*and Organizational psychology*, 70(4), 325-335. <u>https://doi.org/10.1111/j.2044-</u> <u>8325.1997.tb00652.x</u>

Gisler, S., Omansky, R., Alenick, P., Tumminia, A. M., Eatough, E., & Johnson, R.
(2018). Work-life conflict and employee health: A review. *Journal of Applied Biobehavioral Research*, 23(4), 1-46. <u>https://doi.org/10.1111/jabr.12157</u>

Greenhaus, J. H. & Powell, G. N. (2006). When work and family are allies: A theory of workfamily enrichment. *Academy of Management Review*, 31(1), 72–92. https://doi.org/10.5465/amr.2006.19379625

- Greenhaus, J. H., & Ten Brummelhuis, L. L. (2013). Models and frameworks underlying work – life research. In *Handbook of work-life integration of professionals: Challenges* and opportunities, 14–34. Edward Elgar Publishing. https://doi.org/10.4337/9781781009291
- Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualizing the work–family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5(1), 111.

https://doi.org/10.1037/1076-8998.5.1.111

- Hagqvist, E., Toivanen, S., & Bernhard-Oettel, C. (2018). Balancing Work and Life When Self-Employed: The Role of Business characteristics, time demands and gender contexts. *MDPI Open Access Journal*, 7(8), 1–20. <u>https://doi.org/10.20944/preprints201807.0024.v1</u>
- Henry C., Foss L. & Ahl H. (2016). Gender and self-employment research: A review of methodological approaches. *International Small Business Journal* 34(3): 217–241. <u>https://doi.org/10.1177/026624261454977</u>

Hsu, D. K., Wiklund, J., Anderson, S. E., & Coffey, B. S. (2016). Entrepreneurial exit intentions

and the business-family interface. *Journal of Business Venturing*, 31(6), 613–627. https://doi.org/10.1016/j.jbusvent.2016.08.001

- Kenny, D., Kashy, D., & Cook, W. (2006). Dyadic Data Analysis. Guilford Press, New York, London.
- Kenny, D., & Ledermann, T. (2010). Detecting, measuring, and testing dyadic patterns in the actor–partner interdependence model. *Journal of Family Psychology*, 24(3), 359–366. <u>https://doi.org/10.1037/a0019651</u>
- König, S., & Cesinger, B. (2015). Gendered work–family conflict in Germany: Do selfemployment and flexibility matter? *Work, Employment and Society*, 29(4), 531–549. <u>https://doi.org/10.1177/0950017014545264</u>
- Lapierre, L., Li, Y., Kwan, H., Greenhaus, J., DiRenzo, M., & Shao, P. (2018). A meta-analysis of the antecedents of work–family enrichment. *Journal of Organizational Behavior*, 39(4), 385–401. <u>https://doi.org/10.1002/job.2234</u>
- Liang, C., & Dunn, P. (2009). Entrepreneurial couples in new venture creation: reflections on expectations, reality and family relationships. *International Journal of Management and Enterprise Development*, 6(2), 165–183.
- Lu, C., Lu, J.-J., Du, D., & Brough, P. (2016). Crossover effects of work-family conflict among Chinese couples. *Journal of Managerial Psychology*, 31(1), 235–250. <u>https://doi.org/10.1108/JMP-09-2012-0283</u>
- Marshall, N. L., & Barnett, R. C. (1993). Work-family strains and gains among two-earner couples. *Journal of Community Psychology*, 21(1), 64-78. <u>https://doi.org/10.1002/1520-6629(199301)21:1<64::AID-JCOP2290210108>3.0.CO;2-P</u>

McNall, L. A., Nicklin, J. M., & Masuda, A. D. (2010). A meta-analytic review of the

consequences associated with work-family enrichment. *Journal of Business and Psychology*, 25(3), 381–396. <u>https://doi.org/10.1007/s10869-009-9141-1</u>

- Nguyen, H., & Sawang, S. (2016). Juggling or struggling? Work and Family Interface and Its Buffers among Small Business Owners. *Self-employment Research Journal*, 6(2), 207–246. <u>https://doi.org/10.1515/erj-2014-0041</u>
- Nikolova, M. (2018). Switching to self-employment can be good for your health. *Journal of Business Venturing*, 34(4), 664-691. <u>https://doi.org/10.1016/j.jbusvent.2018.09.001</u>
- Obschonka, M., Schmitt-Rodermund, E., Silbereisen, R. K., Gosling, S. D., & Potter, J. (2013).
  The regional distribution and correlates of an self-employment-prone personality profile in the United States, Germany, and the United Kingdom: A socioecological perspective.
  Journal of Personality and Social Psychology, 105(1), 104–122.

https://doi.org/10.1037/a0032275

- Parasuraman, S., Purohit, Y. S., Godshalk, V. M., & Beutell, N. J. (1996). Work and family variables, entrepreneurial career success, and psychological well-being. *Journal of Vocational Behavior*, 48(3), 275-300. <u>https://doi.org/10.1006/jvbe.1996.0025</u>
- Powell, G. N., & Eddleston, K. A. (2013). Linking family-to-business enrichment and support to entrepreneurial success: Do female and male entrepreneurs experience different outcomes? *Journal of Business Venturing*, 28(2), 261–280.

https://doi.org/10.1016/j.jbusvent.2012.02.007

Sanchez-Ruiz, P., Maldonado-Bautista, I., & Rutherford, M. (2018). Business stressors, familybusiness identity, and divorce in family business: A vulnerability-stress-adaptation (VSA) model. *Journal of Family Business Strategy*, 9(3), 167-179. https://doi.org/10.1016/j.jfbs.2018.03.005 Schjoedt, L. (2013). The influence of work-and-family conflict on male entrepreneurs' life satisfaction: a comparison of entrepreneurs and non-entrepreneurs. *Journal of Small Business and Self-employment*, 26(1), 45–65.

https://doi.org/10.1080/08276331.2012.761802

- Schoenewolf, G. (1990). Emotional contagion: Behavioral induction in individuals and groups. *Modern Psychoanalysis*, 15(1), 49-61.
- Shir, N.,Nikolaev, B. N., & Wincent, J. (2019). Self-employment and well-being: The role of psychological autonomy, competence, and relatedness. *Journal of Business Venturing*, 34(5), 105875. https://doi.org/10.1016/j.busvent.2018.05.002
- Stas, L., Kenny, D. A., Mayer, A., & Loeys, T. (2018). Giving Dyadic Data Analysis Away: A User-Friendly App for Actor-Partner Interdependence Models. *Personal Relationships*, 25(1), 103–119. <u>https://doi.org/10.1111/pere.12230</u>
- Stephan, U. (2018). Entrepreneurs' mental health and well-being: A review and research agenda. Academy of Management Perspectives, 32(3), 290–322.

https://doi.org/10.5465/amp.2017.0001

Stephan, U., Rauch, A., & Hatak, I. (2022). Happy Entrepreneurs? Everywhere? A Meta-Analysis of Self-employment and Wellbeing. *Theory and Practice*.

https://doi.org/10.1177/10422587211072799

Thukral, E. (2022). Self-employment in Australia: Social values and perceptions. In: Ratten, V. (eds) Oceania Self-employment. Palgrave Macmillan, Singapore.

https://doi.org/10.1007/978-981-16-7341-2\_6

van der Zwan, P., Hessels, J., & Rietveld, C. A. (2018). Self-employment and satisfaction with life, work, and leisure. *Journal of Economic Psychology*, 64, 73–88.

https://doi.org/10.1016/j.joep.2017.12.001

- Van Steenbergen, E. F., Kluwer, E. S., & Karney, B. R. (2014). Work-family enrichment, workfamily conflict, and marital satisfaction: A dyadic analysis. *Journal of Occupational Health Psychology*, 19(2), 182–194. <u>https://doi.org/10.1037/a0036011</u>
- Watson, N., & Wooden, M. P. (2012). The HILDA survey: a case study in the design and development of a successful household panel survey. *Longitudinal and Life Course Studies*, 3(3), 369-381. <u>http://dx.doi.org/10.14301/llcs.v3i3.208</u>
- Westman, M. (2001). Stress and strain crossover. *Human Relations*, 54(6), 717–751. <u>https://doi.org/10.1177/0018726701546002</u>
- Westman, M., & Etzion, D. L. (2005). The Crossover of Work-Family Conflict From One Spouse to the Other. *Journal of Applied Social Psychology*, 35(9), 1936–1957. <u>https://doi.org/10.1111/j.1559-1816.2005.tb02203.x</u>
- Wiklund, J., Nikolaev, B., Shir, N., Foo, M. D., & Bradley, S. (2019). Self-employment and well-being: Past, present, and future. Journal of business venturing, 34(4), 579-588. <u>https://doi.org/10.1016/j.jbusvent.2018.05.002</u>
- Wiklund, J., Hatak, I., Patzelt, H., & Shepherd, D. (2018). Mental disorders in the entrepreneurial context: When being different can be an advantage. *The Academy of Management Perspectives*, 32(2), 182-206. <u>https://doi.org/10.5465/amp.2017.0063</u>
- Yucel, D. (2017). Work-To-Family Conflict and Life Satisfaction: The Moderating Role of Type of Employment. *Applied Research in Quality of Life*, 12(3), 577–591. https://doi.org/10.1007/s11482-016-9477-4

# **Author biographies**

**Safiya Mukhtar Alshibani** is an assistant professor at Princess Nourah bint Abdulrahman University (PNU). She is the program director of the BSc business administration at PNU. She holds an MSc in strategic management and innovation and Ph.D. in Entrepreneurship from The University of Western Australia. Safiya's research focus is on the area of entrepreneurial intentions, entrepreneurial well-being, work-life balance, and performance. She participated in many regional and international conferences in the area of entrepreneurship and new venture creation. She is a member in The European Council for Small Business and Entrepreneurship (ECSB) and European Academy of Management (EURAM). (ORCID: 0000-0001-5868-8053)

**Doina Olaru** is Head of the Department of Management and Organisations at UWA Business School and Fellow of the Centre for Business Data Analytics. Her research is multidisciplinary and she uses a wide range of quantitative mathematical models and simulation techniques to address problems in transport and business networks. (ORCID: 0000-0002-8750-9656)

**Thierry Volery** is a Professor of Entrepreneurship and the Director of the Management Department at the Zurich University of Applied Sciences (ZHAW). His teaching and research interests include start-up process, entrepreneurship behaviour, entrepreneurship education, and innovation management. (ORCID: 0000-0003-4087-9294)

Figure 1: The Conceptual Model (Actor-Partner Interdependence Model, APIM)



 $X_1$  explanatory variable for entrepreneurs;  $X_2$  explanatory variable for spouses;  $Y_1$  response variable for entrepreneurs;  $Y_2$  response variable for spouses. Label '*a*' indicates actor effects and '*p*' denotes partner effects. PH<sub>1</sub> = Phantom variable for entrepreneurs; PH<sub>2</sub> = Phantom variable for spouses. The phantom variable  $k_1$  and  $k_2$  for the *k* parameter for the entrepreneurs, and their spouses.  $k_1$  is equal to the ratio p1/a1;  $k_2$  is equal to p2/a2. E residual (unexplained) portion of entrepreneurs' and the spouses' score.

	Entrepreneurs	Spouses
	Frequencies or Mean (SD/%)	Frequencies or Mean (SD/%)
Gender (males)	212 (62.17%)	129 (37.82%)
Age	39.59 (7.38)	39.14 (7.67)
Individual income (log)	10.44 (2.51)	9.15 (3.89)
Long-term health condition (yes)	20 (9.34%)	15 (11.62%)
Education		
Postgrad or higher	102 (48.11 %)	80 (62.01%)
Migration (yes)	6.82(2%)	13.64 (16.37%)
Industry category		
Primary	53(15.63%)	
Secondary	60(17.7%)	
Tertiary	226(66.63%)	
Employment status		
Paid employee		171 (65.27%)
Self-employed		89 (33.97%)
Unpaid family worker		2 (0.76%)
Location (urban area)	200 (58.65%)	
Wealth (log)	10.7 (4.53)	
Marital duration (years)	8.6 (6.14)	
Number of children < 14 years		
One child	152 (44.75%)	
Two children	134 (39.30%)	
Three of more	58 (17.01%)	

# Table 1: Descriptive Characteristics of the Couples

*Note:* N= 341 couples, pooled from HILDA, release 16



Figure 2: Statistics WFC, WFE, and Outcomes

*Note:* N= 341 couples. Significant differences at 0.05 level only for Life satisfaction.

Figure 3: Correlations Between Latent Constructs



*Note:* \* shows significance at the 0.01 level.



# Figure 4: Visual Representation of the Regression Results





Note: Covariates are not included for parsimony.