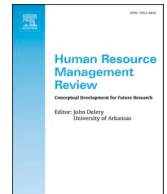




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## Human Resource Management Review

journal homepage: [www.elsevier.com/locate/hrmr](http://www.elsevier.com/locate/hrmr)

# Work and non-work-related antecedents of expatriates' well-being: A meta-analysis

Tania Biswas<sup>a,\*</sup>, Liisa Mäkelä<sup>b</sup>, Maike Andresen<sup>c</sup>

<sup>a</sup> University of Vaasa, School of Management (Human Resource Management), Wolffintie 34, 65200 Vaasa, Finland

<sup>b</sup> University of Vaasa, School of Management (Human Resource Management), Tervahovi C310, Wolffintie 34, 65200 Vaasa, Finland

<sup>c</sup> University of Bamberg, Chair of Human Resource Management and Organisational Behaviour, Feldkirchenstraße 21, Room FMA 1.08, 96045 Bamberg, Germany

## ARTICLE INFO

## Keywords:

Meta-analysis  
Expatriate  
Work well-being  
General well-being

## ABSTRACT

Studies show a reduction in expatriates' well-being while abroad which entails a risk of low performance or even termination of the assignment abroad. To extend the knowledge of antecedents of expatriates' well-being, this meta-analytic review combines the empirical results from 24 studies. Concerning the conservation of resources theory, we distinguish between work-related and non-work-related antecedents (resources) and expose their relationship with expatriates' work well-being and general well-being. The meta-analysis shows that work well-being is positively antecedented by organizational support, work adjustment, and spousal support, whereas job factors and work-family interference are associated with decreased work well-being. General well-being negatively relates to work-family interference factors. The antecedents with the highest relative effect size are job factors on the negative side (resource loss) and organizational support on the positive side (resource gain). Work-family interference has the broadest impact on both work well-being and general well-being.

## 1. Introduction

The outlook on the global labor force has changed significantly over the last few decades. The economy continues to become ever more globalized and the workforce must attempt to become more culturally sophisticated and agile (Caligiuri, 2013). With the escalating trends in internationalization of the business world, the need for skilled workers relocating abroad for work, called expatriates, has seen a dramatic upsurge (e.g., Brookfield, 2015; Käsälä, Mäkelä, & Sutari, 2014). Relocation to a new country causes many changes for expatriates in their work circumstances and life in general that have numerous effects on them including, for instance, poor adjustment to the host country (Harari, Reaves, Beane, Laginess, & Viswesvaran, 2018), risk of underperforming (Kawai & Strange, 2014), failure to cope with cross-cultural differences (Okpara, 2016; ), as well as a negative impact on the expatriates' well-being (Kempen, Pangert, Hatrup, Mueller, & Joens, 2015).

The research interest in expatriates' well-being has recently been growing, shedding light on it from multiple perspectives. Well-being in this study refers to both positive and negative evaluations of cognitive reflections (such as life satisfaction, work satisfaction, work engagement, burnout and stress) and affective reactions (such as depression and anxiety) that people make in their life (Diener, 2006). In addition, well-being is often seen as positive and negative phenomena in different life domains, such as work and

\* Corresponding author.

E-mail addresses: [tania.biswas@uwasa.fi](mailto:tania.biswas@uwasa.fi) (T. Biswas), [liisa.makela@univaasa.fi](mailto:liisa.makela@univaasa.fi) (L. Mäkelä), [maike.andresen@uni-bamberg.de](mailto:maike.andresen@uni-bamberg.de) (M. Andresen).

<https://doi.org/10.1016/j.hrmr.2021.100889>

Received 21 October 2021; Received in revised form 10 November 2021; Accepted 23 November 2021

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non-work (Cho & Tay, 2016; Sirgy & Wu, 2009), and the distinction between general well-being and work-related (or professional) well-being is utilized in earlier studies (Maggiori, Johnston, Krings, Massoudi, & Rossier, 2013; Warr, 1994, 1999). Well-being is an important topic to study as it provides individuals with a sense of achievement in terms of quality of life and success in terms of performance at work (Cotton & Hart, 2003). For instance, it has been shown that strong employee well-being leads to lower employee turnover and better performance (Page & Vella-Brodrick, 2009). Therefore, the well-being of employees, and especially of those who are critical to an organization's competitive advantage, such as expatriates (Varner & Palmer, 2002), should be of utmost interest to employers.

One widely adopted theory focusing on well-being is the conservation of resources (COR) theory (Hobfoll, 2002). It states that individuals' well-being is related to the resources they have—resources being things people value, and what they strive to gain and maintain in different areas of their lives (Hobfoll, 2011). The aim to identify resources that affect well-being motivates much of the recent research (e.g., Michel, O'Shea, & Hoppe, 2015) and the current study adopts COR as its theoretical framework and explores how resources in different life spheres are linked to expatriates' general well-being and work well-being.

In this review, we will show that with an increasing research interest in expatriates' well-being we find that a great number of different constructs are subsumed under the well-being construct and that a large variety of different antecedents have been analyzed in previous studies. The extant literature on expatriate well-being studying a range of variables makes it difficult to maintain an overview of general trends in results and, thus, requires integration to identify the main findings.

Therefore, in this review, we adopt a new framework that helps us to conceptualize expatriate well-being by distinguishing between expatriates' work well-being and general well-being and by differentiating between negative and positive aspects in both. To understand the factors that impact expatriate well-being, we applied COR theory to theoretically categorize the antecedents of well-being raised in expatriate research (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014; Hobfoll, 2002; Hobfoll, Halbesleben, Neveu, & Westman, 2018).

Our literature review makes the following contributions. First, since the current empirical knowledge of expatriates' well-being is fragmented, this meta-analysis of the findings of the existing empirical studies contributes to creating a broader understanding of the factors influencing expatriates' well-being. To reach this aim, we conceptually integrate the body of literature on expatriates' well-being and the factors explaining it and perform a rigorous meta-analytic review that provides insights into the relative statistical importance of the various antecedents of expatriate well-being. Second, the results of the meta-analysis serve to outline future research desiderata in the field of expatriate well-being. Our results will allow practitioners and expatriates to focus their actions most efficiently once they know about the strongest factors that support or hinder expatriate well-being.

The remainder of the article is structured as follows. Next, we introduce the underlying theoretical framework based on COR theory and review current knowledge on the antecedents of expatriates' well-being to provide a theoretical categorization of well-being related concepts. We then present the methodology of the meta-analysis as well as the findings. The paper closes with a discussion and conclusions.

## 2. Literature review

### 2.1. General well-being and work well-being: Indicators and antecedents

COR theory (Halbesleben et al., 2014; Hobfoll et al., 2018) states that individuals' well-being is related to the different kinds of resources they have. Resources are things people value and that they strive to gain and maintain in different areas of their lives, specifically at work and in their personal lives (Hobfoll, 2011). Resources are typically classified as object resources (e.g., cars and houses), personal resources (e.g., personality traits), energy resources (e.g., time and money), and condition resources (e.g., employment and prevailing conditions at work and home; Hobfoll, 2012). Possessing various resources is associated with gaining new resources and enhancing well-being (Hobfoll, 1998, 2001; Westman, Hobfoll, Chen, Davidson, & Laski, 2004). Kanstrén and Mäkelä (2020) justify the use of COR theory to explain well-being in the expatriation context with its basic tenet that emphasizes the idea that the resources available and any changes to them affect well-being once an individual relocates abroad. According to COR theory, a lack of resources, such as prevailing conditions at work (e.g., role ambiguity), leads to a sense of ill-being (negative well-being), whereas individuals who have resources, such as social support, enjoy better well-being (positive well-being). However, the effect of lacking or losing resources on individuals' well-being is more severe than having or gaining resources (Boyce, Wood, Banks, Clark, & Brown, 2013; Hobfoll et al., 2018).

While COR theory was initially mainly applied in studies focusing on individuals' general well-being (e.g., stress, life satisfaction), it is now very popular to apply the theory to work-related well-being too (e.g., burnout, job satisfaction; Hobfoll et al., 2018; Hobfoll & Shirom, 2001; Maggiori et al., 2013; Westman et al., 2004). The COR theory is also a suitable framework for this particular study focusing on expatriates' well-being related to both their private and working lives.

This study focuses on conditional resources that are assumed to be crucial in international mobility contexts (Kanstrén & Mäkelä, 2020; Mäkelä, Kinnunen, & Suutari, 2015). Employees on overseas assignments are expected to adjust to novel work roles in a new working environment while coping with a foreign culture and at the same time find a balance with roles at home. In this situation, the role of condition resources, which includes social support (e.g., (Andresen, Goldmann, & Volodina, 2018); van der Laken, van Engen, van Veldhoven, & Paauwe, 2019) and organizational support (Kraimer & Wayne, 2004) can be important in reducing strain in expatriates. Similarly, support at home has also been identified as a key factor in dealing with work-related well-being (Kraimer, Wayne, & Jaworski, 2001; Mäkelä, Käsälä, & Suutari, 2011). However, Kossek, Valcour, and Lirio (2014) observe an overall degradation of employees' working conditions and find that at the same time employers reduce organizational initiatives that support employees'

well-being and expect individuals to take more responsibility for their own well-being. Multiple studies suggest that resources even in the form of tangible support (e.g., arranging for language classes, appropriate relocation assistance, etc.) and concern expressed for expatriates' health and work and personal life balance by the employer play a crucial role during international assignments (Shaffer, Harrison, Gilley, & Luk, 2001). Grant-Vallone and Ensher (2001) stress that organizations should be concerned about how an expatriate's personal life interferes with their work (e.g., family adjustment including employment for spouses and education of children in the host country) as well as how work interferes with expatriates' lives outside work (e.g., long work hours). There is therefore a need to see the impact of condition resources on expatriates' well-being and to discuss the employers' responsibilities in the expatriation context.

Reviewing existing research about expatriates' well-being, we find multiple different approaches not only in defining well-being but also in operationalizing it. Moreover, a wide range of antecedents has been considered. To structure the field, we call for a more holistic approach to researching expatriates' well-being and suggest three aspects that should be included in that approach: (1) the distinction between general well-being and work well-being; (2) the separation of positive and negative indicators of general well-being and work well-being; and (3) the distinction of work-related and non-work-related antecedents of general well-being and work well-being (see Fig. 1).

First, expatriate studies have approached well-being from two directions: **general** and **work well-being**. According to COR theory, it is important to take account of the context in which well-being is considered (e.g., the work context or non-work context) because different types of resources may be more relevant in some contexts than in others (Hobfoll et al., 2018). In addition, COR theory considers the role of individuals' different life spheres as competitors for scarce resources (Hobfoll, 2011), thus acknowledging the possibility for differentiation of well-being in different life spheres. The literature on well-being in the domestic context demonstrates that it is necessary to distinguish between different forms of well-being (Warr, 1999) and earlier studies have made a distinction between general well-being and work-related (or professional) well-being (Maggiori et al., 2013; Warr, 1994, 1999). **General well-being** can be defined as the aspects that employees perceive to be important when thinking about experiences in life (Rath & Harter, 2010). As such, general well-being addresses issues that do not directly refer to work but to employees' overall well-being. General well-being has been studied, for instance, via concepts such as distress, life satisfaction, anxiety, depression, and mental health (Maggiori et al., 2013; Warr, 1994, 1999). **Work well-being** is defined as the overall quality of an employee's experience and functioning at work (Grant, Christianson, & Price, 2007) and has been studied through, for instance, job satisfaction, job-related stress, and burnout (Maggiori et al., 2013; Warr, 1994, 1999). In the present study, we have compiled several attributes of well-being relating to general life under general well-being and job-specific or professional well-being under work well-being, respectively.

In expatriation research, general well-being has been studied by focusing on expatriates' anxiety, depression, health or illness (Grant-Vallone et al., 2001; Van der Zee, Ali, & Salome, 2005), but also adopting concepts such as subjective well-being, psychological well-being, non-work well-being (i.e., expatriates' perception of life outside of work; see Nicholson & Imaizumi, 1993) and work-life balance satisfaction (Ballesteros-Leiva, Poilpot-Rocaboy, & St-Onge, 2017; Grant-Vallone et al., 2001; Nicholson and Imaizumi, 1993; Visser, Mills, Heyse, Wittek, & Bollettino, 2016).

Another stream of research focuses on phenomena directly related to work under the heading *work well-being*. Typical indicators associated with expatriates' work well-being include burnout and stress (Shaffer et al., 2001; Silbiger, Berger, Barnes, Renwick, & D.,

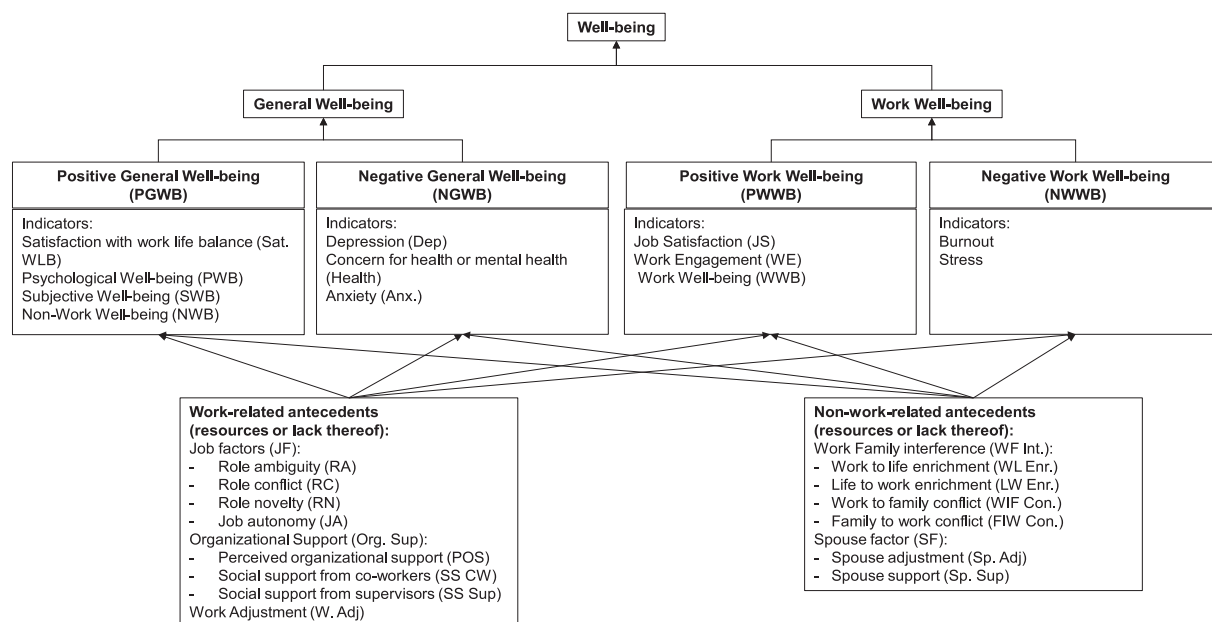


Fig. 1. Overview of expatriates' well-being: Concept, indicators, and antecedents.

2017; Stroppa & Spieß, 2011), job satisfaction, work engagement (Bhanugopan & Fish, 2006; Kempen et al., 2015; (\*Nicholson and Imaizumi, 1993); Shaffer et al., 2001) and expatriates' perceptions of how often they felt tense, miserable, cheerful, and suchlike at work (\*Nicholson and Imaizumi, 1993).

Second, well-being is not only a lack of ill-being (e.g., a low burnout) but also a distinct positive phenomenon (e.g., high work engagement; Bakker, Demerouti, & Sanz-Vergel, 2014). One of the central principles in COR theory is that resource loss is more salient than resource gain. Resource loss leads to impaired or negative well-being (Hobfoll, 2002), whereas resource gain leads to positive well-being (Hakanen, Schaufeli, & Ahola, 2008; Hobfoll, 2002, 2012). The existing body of literature predominantly highlights the severe impacts of resource losses (Hobfoll et al., 2018).

Accordingly, the effects of the antecedents can differ based on whether the focus is on positive or negative indicators of well-being. Drawing from positive and negative aspects of well-being in earlier literature and recommendations to study negative and positive well-being as separate concepts (Bakker et al., 2014), we find the need to differentiate further between positive general well-being (PGWB) and negative general well-being (NGWB) and between positive work well-being (PWWB) and negative work well-being (NWWB). In this study, we consider indicators for both positive and negative general well-being and work well-being (see Fig. 1).

Third, different kinds of resources represent important antecedents of well-being in COR theory (Chen, Westman, & Hobfoll, 2015; Halbesleben et al., 2014). Resources exist in both the personal and work-life spheres and can be lost or gained in both arenas too, thus affecting individuals' well-being (Hobfoll, 2011). Several expatriate studies have reported that there has been a rise in interest in studying the impact of the work and non-work spheres of employees and how these two domains can contribute to the well-being of expatriates (Ballesteros-Leiva et al., 2017; Waibel, Aevermann, & Rueger, 2018). Therefore, we categorize the antecedents of general well-being and work well-being in the non-work and work domains. In earlier expatriation studies, for example, role ambiguity, role novelty, job autonomy, social support from a supervisor and coworkers, and work adjustment have been studied as antecedents in the work domain (Aryee & Stone, 1996; Kawai & Mohr, 2015; Stoermer, Haslberger, Froese, & Kraeh, 2017). Moreover, non-work-related factors such as work-family interference and spousal support have been examined (Ballesteros-Leiva et al., 2017; Grant-Vallone & Ensher, 2001). Fig. 1 provides an overview of expatriates' well-being related antecedents studied in the earlier literature.

Next, we review the literature on expatriates' general well-being and work well-being and show how non-work and work-related antecedents have been found to relate to both.

## 2.2. Non-work- and work-related antecedents of expatriates' general well-being

The studies focusing on the general well-being of expatriates mainly cover several non-work-related antecedents, but also some work-related antecedents. The *non-work-related* factors were quite often linked to the interface of work and family/personal life roles. Family and work are the two most important focal points for an adult (Netemeyer, Boles, & McMurrian, 1996). Interference between work and home roles is experienced when an individual's actions and behaviour pertaining to one domain is influenced by demands from another domain (Greenhaus & Beutell, 1985; Wagena & Geurts, 2000) resulting in role spillover. Googins (1991, p. 9) explains spillover as "positive and negative feelings, attitudes, and behaviors that might emerge in one domain and are carried over into the other."

In general, the interface of two life domains can be positive (e.g., in terms of enrichment) or negative (e.g., resulting in interference or conflict), and the direction can be from work to family/ personal life or vice versa (Parasuraman & Greenhaus, 2002). According to Netemeyer et al. (1996, p. 401) work to family/personal life conflict can be understood as a form of role interference where the "general demands of, time devoted to, and strain created by the job interfere with performing family-related responsibilities." Similarly, family/personal life to work conflict is a form of role interference in which the "general demands of, time devoted to, and strain created by the family interfere with performing work-related responsibilities" (Netemeyer et al., 1996, p. 401).

Earlier studies have shown that home-to-work interference and high demands at home are negatively correlated with expatriates' general health and also impair their subjective well-being (Van der Zee et al., 2005). Expatriates are also found to be more concerned about their health when they experience personal life to work conflict (Grant-Vallone & Ensher, 2001). Research focusing on mental health has shown that expatriates facing work to personal life conflict experience higher levels of depression and anxiety (Grant-Vallone & Ensher, 2001) and diminished confidence in their ability to maintain a work-life balance (Kempen et al., 2015). However, quite recently negative interference between personal life and work has been found to adversely affect expatriates' psychological well-being, irrespective of the direction of interference (Ballesteros-Leiva et al., 2017). Expatriates experiencing negative work-life interference report diminution of subjective well-being (Ballesteros-Leiva et al., 2017).

Furthermore, *work-related antecedents* of general well-being have also been reported, albeit less frequently. Studies show that the better expatriates' work adjustment, the better their mental health (Nicholson & Imaizumi, 1993). It has also been found that high levels of job autonomy positively relate to work-life balance satisfaction among expatriates (Visser et al., 2016). In addition, while on assignment, employees tend to achieve higher levels of psychological well-being when the perceived organizational support from the host organizations is strong (De Paul & Bikos, 2015). In general, perceived organizational support refers to employees' beliefs about how their contributions are recognized by their employer and how the resources and rewards for each individual are controlled by those organizations (Eisenberger, Huntington, Hutchison, & Sowa, 1986).

## 2.3. Non-work- and work-related antecedents of expatriates' work well-being

Numerous studies focus on expatriates' work well-being and its non-work- and work-related antecedents and a selection are reviewed below.

In terms of *non-work-related antecedents* of expatriates' work well-being, reports abound of a strong link between work-life factors and job satisfaction in expatriates (Kempen et al., 2015; Shih, Chiang, & Hsu, 2010). Kempen et al. (2015) report work-private life enrichment is a predictor for job satisfaction in expatriates. Another study found work-family interactions to be significantly related to expatriates' levels of work stress (Carraher, Sullivan, & Carraher Jr, 2004).

Furthermore, spousal support has been found to be instrumental in expatriate husbands' immediate careers and to influence their opportunities upon repatriation that indirectly benefit the intra-family relationships and affect their general well-being (Lauring & Selmer, 2010).

The next topic in focus is *work-related antecedents* of work well-being. Role ambiguity, defined as "the absence of satisfactory information which is required in order for persons to accomplish their role in a satisfactory manner" (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964, p. 21) is found to be negatively linked to expatriates' job satisfaction (Kawai & Mohr, 2015). In an overseas assignment context, the role ambiguity levels for expatriates proved higher than for employees on domestic assignments (Black, 1988). Role ambiguity was found to be the best predictor of job satisfaction among all other job factors in a study conducted among expatriate managers (Naumann, 1993).

Role novelty describes the extent to which an employee's current job role (abroad) differs from the past duties and requirements (in the home country), thus creating a stressful work environment (Bhaskar-Shrinivas, Harrison, Shaffer, & Luk, 2005). Employees on international assignments typically know less about the content of an assignment and its context than employees on new domestic assignments and are thus subjected to more uncertainty and accumulated psychological strain and work stress (Bhaskar-Shrinivas et al., 2005; Shaffer, Singh, & Chen, 2013). It has been found that role novelty influences expatriates' job satisfaction positively (Kawai & Mohr, 2015).

Bhanugopan and Fish (2006) claim that in expatriate job roles role conflict in particular contributes significantly to all the dimensions of job burnout (emotional exhaustion, depersonalization, and reduced personal accomplishments). This can be accounted for by the different and unclear roles expatriate employees are exposed to during their assignments.

Job autonomy can be defined as the degree of freedom and independence provided to an employee to carry out the assigned job responsibilities (Hackman & Oldham, 1974, 1975). Naumann (1993) investigated the impact of job autonomy on expatriates' job satisfaction and reported strong links between the two, indicating that more autonomy over the task at hand might help expatriates experience satisfaction at work.

Furthermore, social support from supervisors in the workplace predicts an increase in job satisfaction and a reduction in job stress for expatriates during their assignment (Stroppa & Spieß, 2011).

Especially in the international relocation context, work adjustment has been shown to positively relate to expatriates' job satisfaction (Kawai & Mohr, 2015; Shaffer & Harrison, 1998). Furthermore, social support from host country colleagues facilitates expatriate socialization (Sonesh & DeNisi, 2016) and thus can positively affect expatriates' well-being. Kawai and Mohr (2015) found role novelty to be positively associated with job satisfaction for expatriates reporting greater organizational support. The same study also reports that supervisor support can buffer the negative impact of role ambiguity on job satisfaction. Studies also report that expatriates experiencing positive interpersonal relationships at work tend to describe being satisfied with their job (Jonasson, Lauring, Selmer, & Trembath, 2017).

#### 2.4. Literature review: Concluding remarks

The literature review and meta-analysis serve to provide a more holistic understanding of the role of domain-specific antecedents on expatriates' general well-being and work well-being. The goal of the literature review, in a first step, was to identify and link all possible connections between non-work related and work-related antecedents of general well-being and work well-being (see Fig. 1). In sum, the existing studies propose that (1) expatriates' general well-being is more strongly predicted by non-work-related antecedents; (2) expatriates' work well-being is more strongly predicted by work-related antecedents; (3) a spillover from expatriates' family to work life is expected, in that non-work-related antecedents are likely to also predict work well-being; and (4) negative antecedents (lack of resources) are more strongly correlated to expatriates' negative general well-being (NGWB) and negative work well-being (NWWB) than positive general well-being (PGWB) and positive work well-being (PWWB).

Findings (1) and (2) are aligned with the matching principle suggesting that it is relevant to consider similar domains influencing antecedents and outcomes (Chrisopoulos, Dollard, Winefield, & Dormann, 2010). Finding (3) reflects the idea within COR theory that resources spill over between different life spheres (Halbesleben et al., 2014). Regarding finding (4), as mentioned above, COR theory states that the effect of lacking resources is even more severe than having or acquiring resources leading to negative well-being outcomes (Hobfoll et al., 2018) and therefore negative antecedents may have a more important role in expatriates' well-being than positive ones.

### 3. Methods

#### 3.1. Characteristics of the meta-analysis

This study adopts a meta-analytic approach to conduct a review of the body of relevant literature. Meta-analysis is a statistical tool used "to combine the results of a number of different reports into one report to create a single, more precise estimate of an effect" (Ferrer, 1998). Meta-analysis procedures combine results from many different yet related studies "to increase statistical power; to deal with controversy when individual studies disagree; to improve estimates of size of effect, and to answer new questions not previously



posed in component studies” (Hunter & Schmidt, 1990).

A quantitative meta-analysis technique is adopted to focus on the data as reflected by the operationalization of variables in the selected studies instead of only summarizing the conclusions drawn in those previous studies. It should be noted that a meta-analysis result is generated directly from the data reported in the studies reviewed and utilizes a more standardized and less subjective procedure to provide meaningful and robust findings (Rumrill Jr & Fitzgerald, 2001). Therefore, the findings on the reported relationships between antecedents and expatriates' well-being from previous studies can be aggregated to find a trend and estimate the size of the relationship (Hunter & Schmidt, 2004), while controlling for artifacts like sampling error and measurement error, thus providing a more accurate estimate of the strength of the relationship (Combs, Ketchen Jr, Crook, & Roth, 2011; Hunter & Schmidt, 2004).

Scholars propose that it is acceptable to figuratively mix apples and oranges as long as the primary focus of the research is fruit (Cheung & Vijayakumar, 2016; Glass, 1976; Hunter & Schmidt, 2004; Schmidt & Hunter, 2015). Therefore, because the independent and dependent variables included in this meta-analysis correspond to major constructs recognized by scholars in this area of research, the inclusion of the broad range of variables to understand each antecedent is reasonable.

Our study follows the practice of “multiple operationism” (Campbell and Fiske, 1959) characterized by the use of multiple measures sharing a common conceptual definition while having different patterns of irrelevant components (Webb, Campbell, Schwartz, & Sechrest, 1981). The approach made it possible to include variations of specific items identified in individual studies in the meta-analysis to capture a holistic understanding of well-being. A multidimensional operationalization of well-being, its indicators, and international employee-related antecedents are considered in this meta-analysis (see Fig. 1).

### 3.2. Literature search strategy

The current study reviews relevant articles published in academic journals with empirical studies harvested through manual and computer-aided searches. We searched electronic databases relating to management, psychology, and social sciences, that is, Business Source Premier (EBSCO), PsycInfo, Web of Science, and Scopus. We also manually reviewed the reference lists of the articles identified through computerized searches to add any relevant article omitted from earlier searches. Each structured search had been programmed to contain different combinations of keywords containing at least one term corresponding to expatriates (e.g., international assignees, global employees, international workers, etc.) and another related to well-being (e.g., stress, job satisfaction, health issues, burnout, etc.). A complete list of keywords in the literature search step is provided in Table 1. Each of the above-mentioned keyword combinations was searched for twice; once in the title and again in the abstract section of the article. The initial search function provided a total of 3871 hits. After excluding duplicate results and unrelated topics, 216 papers were isolated to provide a starting point for the selection process.

The final screening process was set with standardized inclusion criteria. Retained studies had to meet all of the following criteria: a) a focus on international employees staying in the host location on a long-term basis, b) reporting empirical analysis of their own (literature reviews were excluded), c) at least one of the antecedents of well-being should have been reported to have correlated with one or more indicators of well-being, d) publication in a peer-reviewed scholarly journal with English being the primary language of reporting. Consistent with some systematic literature review articles (Jooss, McDonnell, & Conroy, 2020) conference papers, editorials, books, and book chapters were excluded to maintain the quality of the peer-review process of the original articles. Egger, Juni, Bartlett, Hohenstein, and Sterne (2003) and Petticrew and Roberts (2008) explain that an attempt to perform an exhaustive literature search in certain cases might introduce weaker evidence. In practice, this would mean that the inclusion of articles with lower threshold for methodological quality might increase the risk to introduce publication biases within the assessments of the effect sizes.

The 216 selected publications were then individually reviewed through their titles and abstracts. At this point, the final eligibility was determined by reading the full paper and considering its relevance for the present study. Those articles testing, for example, employee performance, employee turnover intention, and company retention are conceptualized as outcomes of expatriates' well-

**Table 1**  
Keywords by their respective cluster.

Sample related keywords:	Well-being related keywords:
Expatriate	Well-being
Global career	Work-life balance
Global worker	Job satisfaction
International assign	Burnout
Internationally mobile employee	Exhaustion
Global employee	Work engagement
Overseas assign	Psychological well-being
Self-initiated expat	Depression
Assigned expat	Anxiety
Company expat	Subjective well-being
International worker	Health issues
	Stress
	Absorption
	Dedication
	Vigor

165 (11 × 15) KEYWORD COMBINATIONS WERE USED.

being and were considered to be beyond the scope of this study, because the primary focus is to assess different antecedents of well-being. Articles that did not report relevant statistics were also excluded from the study (the original authors of such articles were contacted but they did not respond to or were unable to fulfill, our request for additional data). The final count for relevant studies with quantitative data reporting was twenty-four (see Table 2 for the list of journals in which they were published). Fig. 2 provides an overview of the literature search process.

The selected articles are tabulated in Table 3 grouped by the indicators of well-being and the measurement scales used in the studies.

According to Borenstein, Hedges, Higgins, and Rothstein (2009), meta-analysts reserve the right to make judgment calls on setting the inclusion criteria for similar studies since meta-analyses typically examine articles that are different in their characteristics and focus.

### 3.3. Analyses

A meta-analysis reports the quantitative estimate of the results included in systematic literature review.

To ensure the statistical independence within the meta-analysis, the following guideline has been followed: cases from our database where multiple publications have used the same dataset a) only one randomly selected effect size was included if the independent and dependent variables used were the same and b) separate effect sizes were maintained if the independent and dependent variables used were different (see Hunter, Schmidt, & Jackson, 1982).

The unit of measurement was not the number of studies included in the analysis, but the total count of effect sizes obtained from the studies. The psychometric meta-analysis method introduced by Hunter and Schmidt (1990) was used to estimate the relationships between different antecedents and indicators of work and general well-being.

The method incorporates several steps to correct for artifacts that attenuate correlations. Effect sizes were estimated by calculating the weighted mean of the sample population. The weighted estimate tends to provide more precise values than the original ones reported in individual studies (Crook, Ketchen Jr, Combs, & Todd, 2008; Hunter & Schmidt, 1994; Schmidt & Hunter, 2015). After correcting for sampling errors, a measurement error was calculated using the reported reliability coefficients for each measure. However, a mean of available reliabilities was calculated to correct  $r$  (correlation coefficient reported in the studies) to  $r_c$  (corrected  $r$  for errors;  $r_c = \frac{r}{\sqrt{r_{xx}}\sqrt{r_{yy}}}$ ), because it is almost impossible to correct each study for measurement error (Wowak, Craighead, Ketchen Jr, & Hult, 2013). Thereafter a  $\chi^2$  test of homogeneity was conducted to test for the presence of heterogeneity in the observed correlations (Schmidt & Hunter, 2015). Confidence intervals were calculated around each  $r_c$  using formulas provided by Schmidt and Hunter (2015). Confidence intervals were used to facilitate the hypothesis testing (Whitener, 1990) and the relationship ranges obtained did not contain zero thus were adjudged to be significant (Lewin & Donthu, 2005).

When studies assessed several specific indices of an antecedent, these were combined to form a general assessment. Accordingly, studies reporting correlations for subgroups of job factors (e.g., role ambiguity, role novelty, role conflict, job autonomy) were weighted by the sub-sample size and combined for statistical analyses. A similar approach was followed to provide an overall assessment of organizational support and work-family interference.

Specific care was taken when analyzing the studies reporting role ambiguity in expatriates due to the use of contrasting measurement scales by the original authors of the articles. While combining different scales, the reviewer must ensure that higher scores for continuous outcomes all have the same meaning for any particular outcome. In this case, one of the scales used to measure role ambiguity was that of Rizzo, House, and Lirtzman (1970) in which items are reverse coded, resulting in higher scores indicating greater ambiguity. This was in direct contradiction with other scales used in the rest of the articles, thus contradictory directionality was observed, and the sign was reversed to ensure the outcomes were consistent.

Attributes categorized as positive indicators were coded such that a higher score on the scale referred to a higher magnitude of well-being and a lower score corresponded to a lower magnitude of well-being. In the Hunter and Schmidt (2004) approach, variability statistics that are not significant are usually taken to imply that variation around the mean is due to one or more sources of error.

**Table 2**  
List of journals.

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International Journal of Intercultural Relations
International Journal of Human Resource Management
Personnel Review
European Journal of Work and Organizational Psychology
British Journal of Management
Academy of Management
Personnel Psychology
Journal of Applied Psychology
Journal of Global Mobility
Nonprofit and Voluntary Sector Quarterly
Journal of International Business Studies
Journal of Management
The Journal of Applied Management and Entrepreneurship

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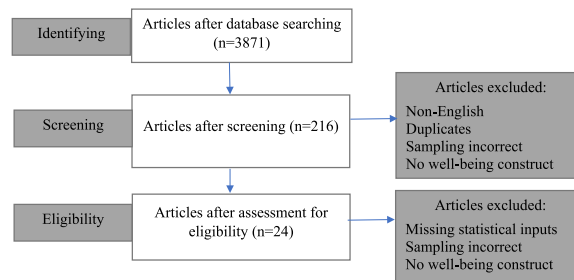


Fig. 2. Overview of the literature search process.

## 4. Results

Details of all the relationships assessed in the process are reported below by each group of antecedents.

### 4.1. Work-related antecedents

#### 4.1.1. Job factors (Lack of condition resources: role ambiguity, role novelty, role conflict, and reverse coded job autonomy)

Five separate articles reported statistical correlations between different components of job factors with work well-being and general well-being. Meta-analytic results from Tables 4 and 5 report a statistically significant relationship with PWWB ( $\bar{r}_c = -0.07$ ) and NWWB ( $\bar{r}_c = 0.53$ ) respectively, indicating that job factors play a crucial role in determining work well-being among internationally mobile employees. It can also be inferred that job factors have a stronger impact on NWWB than on PWWB. Job factors were further studied (not included in the tables) by analyzing the impact of each job role (role ambiguity, role novelty, role conflict, and job autonomy) on expatriates' well-being. The individual analysis of each job factor revealed that, with the exception of role conflict, each of the above-mentioned roles had a significant relationship with the indicators of work well-being.

Only one of the original studies reported a significant statistical correlation between job factors and PGWB ( $r = 0.17$ ). Thus, it can be assumed that job roles impact expatriates' well-being even beyond their work sphere.

#### 4.1.2. Organizational support (Having condition resources: perceived organizational support, social support from supervisors, social support from coworkers)

Nine articles established relationships between different types of organizational support and work well-being and general well-being. Tables 4 and 5 report a positive and significant meta-analytic effect size estimate with PWWB ( $\bar{r}_c = 0.43$ ), however no statistically significant relationship with NWWB ( $\bar{r}_c = -0.24$ ) was evident. Meta-analytic results further indicated that perceived organizational support has the strongest relation with PWWB ( $\bar{r}_c = 0.53$ ) in comparison with social support from supervisors ( $\bar{r}_c = 0.36$ ) and coworkers ( $\bar{r}_c = 0.33$ ), which were not found to be statistically significant when tested separately. Tables 6 and 7 show no statistically significant relationship between the organizational support factors and both PGWB ( $\bar{r}_c = 0.45$ ) and NGWB ( $\bar{r}_c = -0.34$ ), implying that changes in organizational support may not affect general well-being.

#### 4.1.3. Work adjustment (Having condition resources)

Nine articles reported statistical correlations between work adjustment and expatriates' well-being. As Tables 4 and 5 show, work adjustment has a strong positive, and statistically significant relationship with PWWB ( $\bar{r}_c = 0.41$ ) and a negative relationship with NWWB ( $\bar{r}_c = -0.23$ ). Accordingly, it is expected that work adjustment will have a stronger impact on evaluating PWWB than NWWB as understood from the strength of the meta-analytic relation.

Only one study investigated the relationship between work adjustment and general well-being. That original study reported a significant correlation between work adjustment and PGWB ( $r = 0.35$ ) and NGWB ( $r = -0.33$ ).

### 4.2. Non-work-related antecedents

#### 4.2.1. Work-family interference (Lack of condition resources: work-to-family conflict, family-to-work conflict, reverse coded work-life enrichment, reverse coded life-work enrichment)

Six articles studied the relationship between work-family interference and well-being. Tables 4 and 5 report that factors representing work-family interference yielded a significant negative meta-analytic relationship with PWWB ( $\bar{r}_c = -0.22$ ) implying less work-family interference will lead to higher PWWB. Further analysis reveals a difference in the impact of work-family interference on PWWB when directionality is considered (not included in the tables). Work-to-family conflict has a stronger effect on PWWB than family-to-work conflict does. Similarly, Tables 6 and 7 state work-family interference factors have a strong and statistically significant relationship with both PGWB ( $\bar{r}_c = -0.20$ ) and NGWB ( $\bar{r}_c = 0.23$ ). This indicates that more work-to-family interference is likely to negatively affect general well-being.



**Table 3**  
Summary of the articles included into the Meta-Analysis.

Author(s), Publication year	Measures	Sample size	Country
<b>1. Job Satisfaction</b>			
Naumann (1993)	Minnesota Satisfaction Questionnaire (MSQ; 1967)	157	US
Aryee and Stone (1996)	(Brayfield & Rothe, 1951)	184	Hong Kong
Shaffer and Harrison (1998)	Hackman and Oldham (1975)	452	Multiple countries
Shaffer et al. (2001)	Hackman and Oldham (1975)	324	Multiple countries
Takeuchi, Yun, & Tesluk (2002)	Minnesota Satisfaction Questionnaire (MSQ; 1967)	215	USA
Shih et al. (2010)	Rothbard, Phillips, & Dumas (2005)	174	China
Stroppa and Spieß (2010)	Agho, Prise, & Mueller, 1992)	90	Germany
Kempfen, Pangert, Hatstrup, Mueller, & Joens (2014)	Copenhagen Psychosocial Questionnaire	112	Multiple countries
Kawai and Mohr (2015)	Au & Fukuda (2002)	125	Germany
Silbiger, Berger, Barnes, & Renwick (2017)	Self-created	233	–
Stoermer et al. (2017)	Cammann, Fichman, Jenkins, & Klesh (1979)	175	Korea
<b>2. Work Engagement</b>			
Selmer and Lauring (2016)	Utrecht Work Engagement Scale	640	Greater China
<b>3. Work Well-being</b>			
Nicholson and Imaizumi (1993)	Warr's (1987, 1990)	91	United Kingdom
<b>4. Burnout</b>			
Bhanugopan and Fish (2006)	Maslach & Jackson (1981)	189	Papua New Guinea
Silbiger et al. (2017)	Burnout Measure Short (Malach-Pines, 2005)	233	–
<b>5. Stress</b>			
Visser et al. (2016)	International Social Survey Programme (2005)	142	–
Stroppa and Spieß (2011)	Sosik & Godshalk (2000)	127	Germany
Silbiger and Pines (2014)	Self-created	233	–
<b>6. Satisfaction Work-life balance</b>			
Visser et al. (2016)	European Social Survey (ESS; 2006)	142	–
<b>7. Psychological Well-being</b>			
Van der Zee, Ali, & Salomé (2005)	RAND-36 (RAND Health Science Program; 1992)	72	Greece, Canada, Netherlands
De Paul and Bikos (2015)	Survey of Perceived Organizational Support (SPOS; Eisenberger et al., 1986)	159	–
Ballesteros-Leiva et al. (2017)	Reduced version of Ryff & Keyes (1995)	284	–
Author(s), Publication year	Measures	Sample size	Country
<b>1. Non-work well-being</b>			
Nicholson and Imaizumi (1993)	Warr's (1987, 1990)	91	United Kingdom
<b>2. Subjective Well-being</b>			
Ballesteros-Leiva et al. (2017)	Diener's Satisfaction with Life Scale (Diener et al., 1985)	284	–
<b>3. Health</b>			
Nicholson and Imaizumi (1993)	GHQ-12 (Goldberg, 1972)	91	United Kingdom
Grant-Vallone and Ensher (2001)	General Well-Being Schedule	118	Switzerland
Van der Zee, Ali, & Salomé (2005)	RAND-36 (RAND Health Science Program; 1992)	72	Greece, Canada, Netherlands
<b>4. Depression</b>			
Grant-Vallone and Ensher (2001)	General Well-Being Schedule	118	Switzerland
<b>5. Anxiety</b>			
Grant-Vallone and Ensher (2001)	General Well-Being Schedule	118	Switzerland

#### 4.2.2. The spouse factor (Having condition resources: spousal support)

Three studies reported statistical correlations between spousal factors and work well-being and general well-being. This study identified a meta-analytic correlation between the spouse factor and PWWB ( $\bar{r}_c = 0.10$ ; see Table 4). A single study examined the relationships between spousal support and general well-being. That original study reports that spousal support has a strongly significant relationship with PGWB ( $r = -0.25$ ).

## 5. Discussion

The aim of this study was to bring clarity to the field of knowledge concerning expatriates' well-being by providing a categorization of studied concepts and based on that, to review and analyze current empirical studies of that phenomenon. Generally, meta-analyses help highlight existing research gaps that can be explored by future scholars (Combs, Liu, Hall, & Ketchen, 2006) and therefore we

**Table 4**  
Work and non-work-related antecedents of PWWB.

	K	N	r	$\bar{r}$	$\sigma^2\bar{r}$	$\sigma^2\bar{c}$	$\bar{r}_c$	95% CI
Work-related antecedents								
Job Factors	10	1515	-0.047	-0.055	0.193	0.007	-0.065	-0.077 and -0.033
Organizational Support	10	1551	0.350	0.360	0.015	0.005	0.425	0.354 and 0.366
Work Adjustment	9	3211	0.420	0.347	0.023	0.002	0.408	0.342 and 0.352
Non-work-related antecedents								
Work-Family Interference	8	1444	-0.241	-0.190	0.0179	0.005	-0.221	-0.197 and -0.183
Spouse Factor	2	542	0.090	0.090	0	0.004	0.103	NA

K = Number of study effects, N = Total sample size, r = correlation coefficients reported in the studies,  $\bar{r}$  = weighted estimate.

**Table 5**  
Work-related antecedents of NWWB.

	K	N	r	$\bar{r}$	$\sigma^2\bar{r}$	$\sigma^2\bar{c}$	$\bar{r}_c$	95% CI
Work-related antecedents								
Job Factors	4	709	0.433	0.459	0.045	0.004	0.531	0.444 and 0.475
Organizational Support	2	254	-0.190	-0.190	0.008	0.008	-0.238	-0.201 and -0.179
Work Adjustment	3	599	-0.227	-0.184	0.120	0.005	-0.230	-0.212 and -0.157

K = Number of study effects, N = Total sample size, r = correlation coefficients reported in the studies,  $\bar{r}$  = weighted estimate.

**Table 6**  
Work and non-work-related antecedents of PGWB.

	K	N	r	$\bar{r}$	$\sigma^2\bar{r}$	$\sigma^2\bar{c}$	$\bar{r}_c$	95% CI
Work-related antecedents								
Organizational Support	2	231	0.355	0.387	0.006	0.006	0.445	0.381 and 0.393
Non-work-related antecedents								
Work-Family Interference	12	2560	-0.189	-0.162	0.011	0.005	-0.199	-0.197 and -0.183

K = Number of study effects, N = Total sample size, r = correlation coefficients reported in the studies,  $\bar{r}$  = weighted estimate.

**Table 7**  
Work and non-work-related antecedents of NGWB.

	K	N	r	$\bar{r}$	$\sigma^2\bar{r}$	$\sigma^2\bar{c}$	$\bar{r}_c$	95% CI
Work-related antecedents								
Organizational Support	4	426	-0.275	-0.386	0.003	0.009	-0.339	-0.291 and -0.281
Non-work-related antecedents								
Work-Family Interference	10	996	0.171	0.190	0.028	0.010	0.231	0.180 and 0.200

K = Number of study effects, N = Total sample size, r = correlation coefficients reported in the studies,  $\bar{r}$  = weighted estimate.

derive several suggestions for future research.

The model presented in Fig. 1 provides an overview of the relationships between the variables discussed in this paper; and we use that model to anchor a more detailed discussion of the conclusions drawn by the meta-analysis. We find that PWWB (see Fig. 1 for related indicators) is positively anteceded by organizational support, work adjustment, and spousal support, whereas ill-defined job factors and work-family interference are associated with reduced PWWB. Furthermore, increased NWWB (see Fig. 1 for related indicators) also goes along with ill-defined job factors. General well-being (see Fig. 1 for related indicators, negative and positive) relates to work-family interference factors (negative correlation with PGWB and positive correlation with negative general well-being). The antecedents with the highest relative effect size are job factors on the negative side (resource loss) and organizational support on the positive side (resource gain). Work-family interference has the broadest impact on both work well-being and general well-being.

First, this study contributes to a broader structuring of the antecedents of well-being, helping to explain both the negative and positive effects of resources. Research involving both work and non-work aspects typically considers one or more of the following three models: spillover, compensation, and segmentation. Although the occurrence of all three relationships is evident, a spillover model is most commonly used to display the dual dynamics between work and non-work aspects (see Halbesleben et al., 2014; Roehling, Moen, & Batt, 2003). The spillover model is based on the idea that experiences in one life domain spill over to another and that spillover can be either positive or negative, thus supporting our categorization of resources (antecedents) and well-being according to the life domains. Considering the above listed theoretical underpinnings, we classified well-being indicators into positive and negative (1)

general well-being, covering expatriates' overall well-being, and (2) work well-being, focusing on experiences related to the work-life sphere. Furthermore, we classified the antecedents of well-being exhaustively into two categories: work-related and non-work-related antecedents. The COR theory (Hobfoll et al., 2018) suggests that different life domains produce and conserve resources which in turn affect individuals' well-being, both at work and in general. Accordingly, we identified added value from including resources (antecedents) from both the work and non-work domains in the conceptualization of expatriates' well-being (see Fig. 1).

Second, this study contributes to current knowledge by providing evidence of the relative importance of different expatriation-specific antecedents for various well-being indicators. We find work-family interference to be an extremely important antecedent of both work and general well-being in expatriates. Following the idea of resource loss and gain spirals (i.e., resource loss will lead to new losses and resource gain will lead to novel resources and negative or positive effect on well-being; Hobfoll, 2001; Hobfoll et al., 2018) and spillover between different life spheres (Roehling et al., 2003), we can suggest that it is even possible that expatriates who have resources in their non-work life (see Fig. 1: 'non-work-related antecedents') will gain more resources in their working life (see Fig. 1: 'work-related antecedents'), creating a positive spiral and better general and work well-being. More research is needed to understand these resource gain and loss spirals in the expatriation context. Our study also reports a negative relationship between expatriates' work-family interference and general well-being such that any disruption in one domain would lead to disruption in the other which in turn is negatively linked to their well-being. In other words, a poor balance between work-family fronts often impairs subjective and psychological well-being and can lead to conditions like depression and anxiety, and other health concerns. Expatriates facing negative spillover between work and personal life are often more at risk of undermining their mental health. Interference from work to personal life contributes to poor well-being on a higher level as compared to interference from family to work life. We will elaborate on this in the next section. Another important resource highlighted in our study is organizational support. Higher levels of organizational support are linked with better work well-being. Along with COR theory, we suggest that organizational support may replace (Hobfoll, 2011; Hobfoll et al., 2018) some resources that expatriates have lost due to their relocation to a foreign country. Therefore, support gained from organization might be a key resource to support well-being (Kossek, Pichler, Bodner, & Hammer, 2011).

### 5.1. Implications for theory

The literature review indicates that general well-being is more strongly predicted by non-work-related antecedents. For example, work-family interference as a non-work antecedent predicted both PGWB and NGWB, whereas organizational support—despite being tested in several studies—did not prove a significant predictor of general well-being. Very few studies focused on the relationship between work-related antecedents and general well-being, perhaps because of researchers' understanding of the matching principle (Chrisopoulos et al., 2010), suggesting it is relevant to consider similar domains in antecedents and outcomes. However, one study linked work adjustment and general well-being, offering evidence that work adjustment is likely to affect general well-being. In view of the importance of families in instances of successful expatriation (see the meta-analysis by van der Laken et al., 2019), future studies might explore these kinds of expatriation-specific work antecedents and any spillover effect from work life to private life in more detail to test it with different samples and study designs. Furthermore, it was quite surprising that partner-related studies (non-work-related antecedents) were very rare, and only one study was found examining the topic in relation to general well-being. It is clear more research is warranted on that phenomenon.

Furthermore, our second finding based on the literature review, suggesting that work well-being is more strongly predicted by work-related antecedents, was supported by this meta-analysis. Job factors proved the most important antecedents of work well-being, predominantly with a strong well-being reduction effect and only a weak well-being enhancement effect. The last finding suggests the management of expatriates' work roles and job ambiguity in particular merit more research attention. As expatriates navigate their way through new work conditions, they need to transition into new work roles, which are often novel in many respects (Firth, Chen, Kirkman, & Kim, 2014). To perform this novel role, expatriates would need to develop and apply new skills (e.g., Benson & Pattie, 2009). Research suggests the greater levels of role ambiguity and role novelty associated with work abroad can be linked to greater work stress in expatriates and reductions in well-being (Kawai & Mohr, 2015). Expatriates on long-term overseas assignments are normally given considerable autonomy within their roles that can lead to a greater sense of responsibility with potentially harmful effects on their well-being.

In contrast, organizational support predicted only PWWB, but not NWWB. Among the organizational support factors, perceived organizational support appears to be the most important, as interestingly, when sources of support (organization, supervisors, and colleagues) were studied separately, only perceived organizational support was found to significantly contribute to work well-being. As resources are argued to travel in packs (Hobfoll et al., 2018), we suggest that interaction effects of different sources of organizational support are worth studying in the future. Several types of support should also be studied to acquire a better understanding. For example, formal organizational policies (like flexible time, maternity leave, mental health leave, etc.) are worth studying in this regard.

Our third proposition derived from the literature review suggested that spillover from private life to work life is expected in that non-work-related antecedents are also likely to predict work well-being. That proposition gained partial support, because of the non-work-related antecedents, work-family interference (especially work-to-family interference) was negatively linked to PWWB but not to NWWB. The analysis showed work-to-family conflict plays a significant role in expatriates' job satisfaction, in contrast to the impact of family-to-work conflict on that same job satisfaction measure. It can thus be suggested that in an international work context, employees react differentially depending on the directions of the work-family interference; a finding that aligns with similar studies in the domestic context (Greenhaus & Beutell, 1985). This challenges the argument (often made without any empirical evidence) that expatriates' personal lives impact the way they can carry out their work responsibilities. This meta-analysis highlighted that work-to-

personal life interference affects their well-being but not the other way around. This is important for organizations to understand that issues spilling over from personal life to working life do not seem to affect their employees' work well-being that is likely to affect their ability to perform at work.

Again, surprisingly little research investigates how partner-related issues contribute to expatriates' work well-being. That is despite research confirming a crossover effect of well-being from one partner to another (Hobfoll et al., 2018). Therefore, more studies integrating work-family interference and partner-related antecedents would be welcome.

Furthermore, our fourth proposition that we derived from the literature review suggested that negative antecedents (loss of resources) are more strongly related to NGWB and NWWB than positive antecedents (resource gain) to PGWB and PWWB. That proposition was supported by the statistical effects shown in our meta-analytic results and we suggest future research adopt longitudinal study designs and undertake a more precise exploration of the development of resource loss and gain processes related to expatriation.

To conclude, to support expatriates in the maintenance of their resources while abroad and, thus, secure their work well-being, employers should counterbalance expatriates' resource losses—especially those induced by job factors and work-family interference—by providing conditional resources that facilitate resource gains. Expatriates gain resources conducive to their work well-being particularly through organizational support and measures that aid work adjustment.

Moreover, employers could strive to reduce potential resource losses by reducing the job role-related strains faced by their employees and providing support for their families and in their private life, as has been recommended in the expatriation literature (Takeuchi, Wang, Marinova, & Yao, 2009). Work-family-related support from the employer is not only important for work well-being but also expatriates' general well-being, because it counters individuals' perceptions that expatriation is harmful to their health or their ability to be effective parents and partners. Owing to the negative spillover from personal life to work, the employer is likely to profit from any private support provided that allows expatriate staff to handle the demands of their personal life more effectively.

However, we have not looked at spillover effects between the different antecedents nor the interactions between the outcome variables in this study. First, a problematic issue among expatriates can be that although they may benefit from organizational support that provides them with additional resources, that same support could deprive them of some learning opportunities, and thus impede their work adjustment, which over time could be detrimental to their well-being (see Pierce & Aguinis, 2013). Second, greater job autonomy could assist expatriates to manage job role-related strains, affecting an expatriate's ability to restore resources over time and to conserve their level of well-being.

## 5.2. Implications for practice

Several organizational and personal implications can be drawn from our study findings. Organizations employing expatriates should provide support in both emotional and practical forms to their employees whose other resources have been diminished by the effects of relocation and require replenishment. In addition, organizations need to develop their policies and practices in a way that allows expatriates to manage their work and non-work roles and demands to find a balance between them. In addition, employment-related resource gains are more important in the context of resource losses (Halbesleben et al., 2014), hence it can be assumed that support from employers can be effective when expatriates face conflicts between work and family domains. Grant-Vallone and Ensher (2001) and Shaffer et al. (2001) emphasize the effects of organization support on improving expatriates' well-being or reducing conflict within work-life domains. In this regard, organizations might consider implementing actions to monitor work conditions for expatriates. Organizations could create communication channels through which expatriates can report their assignment-related needs and concerns. Such channels should serve as a conduit for the flow of resources in terms of organizational support when there is an identified need for them. On the personal level, expatriates and their dependents (e.g., spouses, children, and elderly family members) should be aware that relocation to a foreign country might affect their condition resources, which if diminished could threaten their well-being. Hence, open dialogue regarding difficulties in life must be communicated within the family to reduce stress and conflict in the family domain. Studies of the working life of expatriates show that various issues including role ambiguity and role novelty can also lead to reduced well-being. Expatriates should plan to prepare themselves for a new overseas job role before their departure. Employees who are aware of the difficulties of the expatriation process can prepare themselves for its challenges and develop their resilience to unforeseen circumstances. Organizations having support programs (like mentoring) to train expatriates to identify indicators of their problems could be helpful as well.

## 5.3. Limitations and implications for future research

This study made a comprehensive effort to analyze the literature on different facets of expatriate well-being and thereby to add to the body of knowledge on the expatriate phenomenon. However, some limitations inherent to the meta-analysis methodology applied in this study should be mentioned. Meta-analyses are often bounded within the premises of systematic reporting from the original studies (Bobko & Stone-Romero, 1998).

First, one of the primary concerns about the reliability of the results reported relates to the relatively small number of published studies (24 studies) that investigated the link between antecedents and expatriates' well-being. Cronbach et al. (1980) assume that a small-scale study might lead to super realization bias, a phenomenon where the researchers can create or control conditions that are often not realized in a large scale study. Future studies should reassess the relationships reported here. Another common problem in this regard is publication bias that can result in the censoring of studies with non-significant results. That said, researchers have performed meta-analytic studies with a smaller number of articles in the past (see e.g., Rajala, 2018; Wowak et al., 2013). Second, another limitation that is often identified in this type of meta-analytic review, is the limited degree of artifact correction achieved in the

process. The researchers involved in this study only took account of the available sampling error and measurement error included in the studies while performing the meta-analysis and could not correct for other potential artifacts.

All the articles included in this meta-analysis harvested their data using self-reported survey research methods and a majority of them used cross-sectional designs. From a methodological perspective, the use of these kinds of data and research methods can lead to self-report bias and common method variance. The use of cross-sectional data inhibits any attempt to find causal relationships between factors. Although Frone, Russell, & Cooper, 1997 claim that the longitudinal nature of the research in their work-family conflict studies did not support any forms of causal interference, it might be interesting to examine if the same holds in the context of expatriate literature. The expatriation context may differ from domestic study contexts because of the major changes happening in the life of the expatriate and his/ her family members due to relocation. Scholars could also learn a great deal more from causal inferences. For instance, expatriates greater job satisfaction could very well lead to better adjustment at work and not vice versa. In addition, longitudinal data would also reveal if aspects such as job factors (e.g., role ambiguity) diminish over time and therefore link differently to work well-being during different phases of expatriation. Further research must be pursued by studying similar issues from multiple perspectives (e.g., self-reporting, co-worker reporting, etc.) using a longitudinal design.

In some cases, it has been difficult for the researchers to make sense of the correlation data reported in some articles because of the use of a variety of scales that vary in terms of direction. Hence, some inconsistencies in results like reverse directional relationships between the same pair of antecedents and a well-being indicator can be traced back to the fact that a variety of measurements have been used to operationalize different indicators. For example, the Minnesota Satisfaction Questionnaire (MSQ; 1967) has been used to measure job satisfaction in some of the articles (Naumann, 1993; Takeuchi, Yun, & Tesluk, 2002) selected for the meta-analysis. The directionality of this scale is not in line with other scales used to measure job satisfaction in other studies. Some studies even reported data measured through self-created instruments. Hence, an effort should be made to replicate results with the same scales to help build a larger body of literature and to maintain the authenticity of the results when another meta-analysis is conducted in the future.

This meta-analytic review attempted to improve the understanding of the impact of condition resources on expatriates' well-being. Future research should attempt to integrate other types of resources and their relationships with well-being among internationally mobile employees to create a holistic view of the field (Hobfoll, 2002).

Finally, researchers should be mindful about choosing their study sample depending on its composition (percentage of men/women, expatriates, spouses, etc.), because differences in sample population appear to contribute to irregularities in the results across studies. Research designs examining a wide sample of countries and types of organizations could provide a comparative understanding of expatriates' experience in different environments. A study with mixed samples of expatriates and native employees can also reveal important information that is not obtained from traditional datasets (same-country data).

## 6. Conclusions

To summarize, our meta-analytic study offers evidence that resources like job factors, organizational support, work adjustment, work-family interference, and spouse factors play important roles in expatriates' well-being. Work-family interference and organizational support proved crucial to expatriates' well-being, of both general and work-specific forms. We also established the existence of spillover effects between expatriates' life-work roles that influence their work well-being.

### Data availability

No data was used for the research described in the article.

### Acknowledgements

The author gratefully acknowledges funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie Actions grant agreement No. 765355 (GLOMO, "Global Mobility of Employees", <https://glomo.eu/>).

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