

Tania Biswas

# Beyond Borders

Exploring Factors Influencing Well-being and  
Work Outcomes in Expatriates



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## Tiivistelmä

Ulkomailla työskentely tarjoaa mahdollisuuksia ammatilliseen kasvuun, johtamisvalmiuksien kehittämiseen ja kulttuurienvälisen taitojen hankkimiseen. Tällaiset tehtävät voivat kuitenkin olla haasteellisia työntekijän hyvinvoinnille ja työssä menestymiselle. Tässä väitöskirjassa tutkitaan ulkomailla työskentelevien, eli ekspatriaattina toimivien työntekijöiden hyvinvointia ja työssä menestymistä sekä niitä selittäviä taustatekijöitä.

Tämä väitöskirja koostuu johdantoluvusta, yhdestä julkaistusta artikkelista (artikkeli 1) ja kahdesta julkaisemattomasta artikkelikäsitelmästä (artikkelit 2 ja 3). Näissä osatutkimuksissa tutkitaan ekspatriaattien hyvinvoinnin ennustajia (artikkelit 1 ja 2), työhyvinvoinnin kehittymistä (uupumusasteinen väsymys ja tarmokkuus: artikkeli 2) ja työhyvinvoinnin kehittymiseen liittyviä seurauksia (aikomus lopettaa työskentely ulkomailla ja aikomus jättää nykyinen työ: artikkeli 2). Lisäksi tämä väitöskirja tutkii riskialttiin asuin ympäristön sekä työ- ja yksityiselämän välisen ristiriidan vaikutuksia työssä menestymiseen (itsearvioitu työssä suoriutuminen ja aikomus lopettaa työskentely ulkomailla: artikkeli 3).

Väitöskirjassa tehdään meta-analyttinen kirjallisuuskatsaus (artikkeli 1) ja hyödynnetään kvantitatiivisia tutkimusmenetelmiä. Artikkeleissa 2 ja 3 käytetty aineisto on kerätty kyselylomakkeilla. Artikkelissa 2 hyödynnetään pitkittäisaineistoa (n=416), ja artikkelissa 3 poikkileikkausaineistoa (n=416). Teoreettisina viitekehysinä käytetään resurssien säilyttämisen (COR) teoriaa ja työn vaatimusten ja -voimavarojen (TV-V) teoriaa.

Väitöskirjan tulokset osoittavat että työn piirteiden, työn ja yksityiselämän vuorovaikutuksen ja asuin ympäristön huomioiminen on tärkeää, kun halutaan tukea ja kehittää ekspatriaattien hyvinvointia ja työssä menestymistä. Tieteellisen kontribuution lisäksi tutkimuksen tulokset tuottavat käytännön ehdotuksia. Tutkimuksen tuloksia voidaan hyödyntää esimerkiksi kansainvälisten työntekijöiden hyvinvointia henkilöstöpolitiikkojen ja -prosessien kehittämisessä.

**Avainsanat:** kansainvälinen työ, ulkomailla työskentely, ekspatriaatti, hyvinvointi, uupumusasteinen väsymys, tarmokkuus, työnvaihtoaikeet, itsearvioitu työssä suoriutuminen, työ- ja yksityiselämän ristiriita, haastava asuin ympäristö.

## Abstract

Expatriate assignments offer opportunities for professional growth, managerial competency development, and cross-cultural skill acquisition. However, such assignments pose challenges to well-being and the work outcomes of those involved. This dissertation focuses on investigating the well-being and work outcomes of employees on international assignments.

This compilation dissertation consists of an introductory chapter, one published article (Article 1) and two unpublished article manuscripts (Article 2 and 3). These articles investigate the antecedents of well-being among expatriates (Articles 1 and 2), and study the development of work well-being (exhaustion and vigor: Article 2) and associated work outcomes (intention to quit working abroad and intention to leave the job: Article 2). Furthermore, this dissertation examines direct and interaction effects of a risky living environment and work-to-private life conflict on outcomes of expatriation work (self-perceived job performance and intention to quit working abroad: Article 3).

The dissertation adopts meta-analytic literature review and quantitative research methods. Data is collected through survey questionnaires administered to members of Finnish trade unions representing high-skilled academic engineers, architects, and business school graduates. Article 2 utilizes longitudinal data (n=416), and Article 3 uses cross-sectional data (n=416). As theoretical frameworks, Conservation of Resources (COR) theory and Job Demands–Resources (JD-R) theory are adopted.

This research contributes in international human resource management and expatriation by enhancing our understanding of expatriate well-being and its evolution over time, shedding light on factors that shape work outcomes in international settings. The dissertation underscores the importance of considering the domains of work, private life, and living environment in predicting well-being and work outcomes for expatriates, providing insights crucial for both academia and practitioners. The findings of the research are expected to inform effective human resource processes, and contribute to the development of HR policies that support the well-being of international employees.

**Keywords:** Expatriates, Expatriate work well-being, Exhaustion, Vigor, Turnover intentions, Self-perceived performance, Work-personal life interference.

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## Contents

TIIVISTELMÄ.....	V
ABSTRACT .....	VI
ACKNOWLEDGEMENT .....	VII
1 INTRODUCTION.....	1
1.1 Background of the study.....	1
1.2 Purpose of the dissertation and research questions .....	4
1.3 Intended contributions .....	7
1.4 Key concepts of the study.....	8
1.5 The structure of the dissertation.....	9
2 THEORETICAL BACKGROUND.....	10
2.1 Theoretical lenses adopted to explain expatriates' Well-being and Work outcomes .....	10
2.1.1 Conservation of Resources Theory .....	12
2.1.2 JD-R Theory.....	13
2.2 Well-being at work .....	15
2.3 Well-being in the International work context.....	16
2.3.1 Antecedents of Expatriate Well-being .....	17
2.4 Work outcomes (Turnover intention and Self-perceived job performance) prevalent in Expatriates.....	24
2.4.1 Antecedents of Expatriate Turnover intention.....	25
2.4.2 Antecedents of Expatriates Self-perceived job performance .....	28
3 METHODOLOGICAL CONSIDERATIONS .....	32
3.1 Philosophical foundations.....	32
3.2 Research data and analysis .....	33
3.2.1 Strategy and Design .....	33
3.2.2 Data Collection .....	34
3.2.3 Measures .....	36
3.2.4 Data Analysis .....	39
3.2.5 Reliability of Indices .....	42
3.2.6 Construct Validity .....	42
4 RESEARCH PAPERS: SUMMARY OF THE ARTICLES.....	44
4.1 Article 1 "Work and non-work-related antecedents of expatriates' well-being: A meta-analysis".....	44
4.2 Article 2 "Exploring Vigor and Exhaustion Profiles among Expatriates: Examining the Influence of Meaning Making, Workplace Ostracism, and Effect on Turnover Intentions" .....	47
4.3 Article 3 "Self-perceived Job Performance and Intention to quit working abroad among expatriates: The role of accumulative demands from Risky living environment and Work-to-Private Life Conflict" .....	50

5	DISCUSSION AND CONCLUSIONS .....	52
5.1	Theoretical contribution .....	52
5.2	Limitations and future research recommendations.....	56
5.3	Practical Implications.....	58
	REFERENCES .....	62
	APPENDIX 1. SUMMARY OF THE WELL-BEING INDICATOR LEVELS REPORTED IN PRIOR LITERATURE .....	76
	ARTICLES.....	78

## Figures

<b>Figure 1.</b>	A visual representation of the core themes studied in the three research articles included in the dissertation.....	5
<b>Figure 2.</b>	Overview of all of the core variables studied in the three research articles included in the dissertation. Articles 1, 2 and 3 have been marked using logic pathways in the figure.....	31
<b>Figure 3.</b>	Flow diagram of the systematic literature search (Biswas et al., 2021) .....	33
<b>Figure 4.</b>	An overview of expatriates' well-being: Concept, indicators, and antecedents. ....	45
<b>Figure 5.</b>	Estimated means of the “Stable” profile. ....	48
<b>Figure 6.</b>	Estimated means of the “Unenergized” profile. ....	48
<b>Figure 7.</b>	Estimated means of the “Risky” profile. ....	49
<b>Figure 8.</b>	Plot of the two-way interaction effect of Risky environment and WLC .....	50

## Tables

<b>Table 1.</b>	Summary of the research premises of articles included in the dissertation .....	5
<b>Table 2.</b>	Key concepts and their definition in the context of the dissertation .....	8
<b>Table 3.</b>	Keywords by their respective cluster .....	35

## Publications

This dissertation is based on three appended papers:

[1] Biswas, T., Mäkelä, L., & Andresen, M. (2021). Work and non-work-related antecedents of expatriates' well-being: A meta-analysis. *Human Resource Management Review*, 100889.

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[2] Biswas, T., Mäkelä, L., & Kempainen, S. (in progress). Exploring Vigor and Exhaustion Profiles among Expatriates: Examining the Influence of Meaning Making, Workplace Ostracism, and the Effect on Turnover Intentions.

[3] Biswas, T., Mäkelä, L. and Andresen, M. (in progress). Self-perceived Job Performance and Intention to quit working abroad among expatriates: The role of accumulative demands from Risky living environment and Work-to-Private Life Conflict.



# 1 INTRODUCTION

## 1.1 Background of the study

Utilizing expatriate assignments is a crucial strategy for multinational corporations (MNCs) to prosper in the current era of globalized economies. The use of expatriation by MNCs has long been recognized as a pivotal approach to achieving strategic objectives (Baruch et al., 2016; Caligiuri & Bonache, 2016; Kraimer et al., 2016). Consequently, the mobility of global talent holds the utmost significance for efficient corporate management, business advancement, innovation, and the enduring viability of organizations. This evolution can be attributed to increased foreign direct investment, the expansion of businesses to achieve diverse competence, the systematic transformation of the global economy, and emerging sociocultural shifts (Brookfield, 2016; Haile & White, 2019). Despite temporary disruptions caused by the COVID-19 pandemic (Airinc, 2020), as international business trends surge, the demand for skilled professionals relocating abroad (known as expatriates) has witnessed a remarkable upswing (Ridgway & Langinier, 2023).

It is widely recognized that expatriates are engaged in high-density global (Shaffer et al., 2012) and international work that involves elements that consume their energy, for instance, role ambiguity (Kawai & Mohr, 2015; Naumann, 1993), role novelty (Bhaskar-Shrinivas et al., 2005; Kawai & Mohr, 2015), and role conflict (Bhanugopan & Fish, 2006). However, several positive elements of international jobs such as job autonomy (Naumann, 1993; Visser et al., 2016), social support from a supervisor and co-workers, and being adjusted at work are also associated with expatriate work (see Aryee & Stone, 1996; Kawai & Mohr, 2015; Stoermer et al., 2017).

Furthermore, international relocation not only impacts the professional aspects of expatriates' lives, but also extends its influence to their personal sphere (Shaffer & Harrison, 2005). The geographical transitions experienced by families trigger significant changes, including increased job responsibilities, extensive travel, and the challenges of navigating cultural differences, all of which reduce the time and energy available for family members. McNulty (2015) reports a meticulous examination of the role of international work on marital stress, domestic violence, and expatriate spouses' and children's health and well-being. This challenging context blurs the boundaries between work and family domains, leading to an increased dependence on each other's support (Dimitrova, 2018; Lazarova et al.,

2010; Shaffer & Harrison, 2001). Existing research supports the conflict perspective, indicating that expatriates face new challenges at work while also coping with stresses related to family relocation (Shaffer et al., 2001a; Van der Zee et al., 2005; Lazarova et al., 2010). This dual challenge can lead to higher permeability between work and family boundaries, impacting the balance between both spheres (Caligiuri & Lazarova, 2005; Van der Zee et al., 2005). However, from a work-family interface perspective, this higher permeability may not only result in negative transfer effects, but also positive ones, and the personal sphere has been seen to have the potential to enrich expatriates' working lives (Takeuchi et al., 2002; Van der Zee et al., 2005; Schutter & Boerner, 2013; Kempen et al., 2015).

Notably, expatriates not only grapple with maintaining a work-life balance (Kempen et al., 2015), but they also contend with demanding environmental factors specific to the host country (Fee, 2017). Many of these host country-related demands can be characterized as broader macro-contextual issues that extend beyond the workplace, particularly when living in precarious situations involving human-related or natural physical threats.

Thus, on one hand, global assignments present opportunities for growth, encompassing the development of managerial competencies and the cultivation of cross-cultural skills, both frequently essential for advancing to higher-level management roles (Stahl et al., 2009; Suutari & Brewster, 2003; Stroppa & Spieß, 2011). On the other hand, expatriate assignments are resource-intensive and come with challenges such as adverse effects on well-being (Kempen et al., 2015), high rates of premature returns and suboptimal productivity (Teague, 2015; Wang & Varma, 2019), and performance-related risks (Kawai & Strange, 2014). Even though employee well-being in a domestic setting has been widely studied, relatively less is known about the well-being of international professionals and the global work context (Bastida et al., 2023). A limited number of empirical investigations have examined the predictors of well-being (for a review, see Biswas et al., 2022) or the potential impact of expatriate well-being on work outcomes like the retention of employees or performance (Silbiger & Pines, 2014; Silbiger et al., 2017; Abdalla et al., 2023). Furthermore, working in such a high-risk environment depletes individual resources and heightens the risk of negative organizational consequences (Bader & Berg, 2013; Shi & Franklin, 2014). However, there is still a need for a thorough comprehension of the antecedents of expatriate well-being and work outcomes, considering that different types of resources may be more relevant for certain outcomes than for others (Hobfoll et al., 2018).

Therefore, this dissertation aims to fill this gap in the literature, and increase our understanding of the work-related and non-work-related antecedents influencing

expatriate's well-being and crucial work outcomes predominantly observed in the international context. This is done through one published research article (article 1) and two article manuscripts (sub-studies 2 and 3; hereafter, all three are referred to as articles). The first article focusses on the identification of antecedents of expatriate well-being through a meta-analytic literature review, with the second and third articles being empirical investigations of the development of work well-being among expatriates, and related antecedents and outcomes (Article 2) and contextual antecedents for work outcomes (Article 3).

This dissertation builds on the existing literature by examining expatriate well-being within specific life domains, differentiating between general well-being and work well-being, and considering positive and negative aspects in each domain (Cho & Tay, 2016; Ilies et al., 2007; Sirgy & Wu, 2009; Rath & Harter, 2010). Article 1 addresses the fragmented understanding of expatriate well-being and organizing this knowledge into a coherent framework. It highlights the significance of both work-related and non-work-related antecedents to well-being and introduces meaning-making through international work as a novel positive feature of expatriate work. Additionally, the article identifies workplace ostracism as a potential negative factor influencing expatriates' work well-being, filling a gap in the literature.

Article 2 focuses on the development of expatriate well-being over time, addressing the limitations of previous cross-sectional studies (Silbiger & Pines, 2014; Silbiger et al., 2017). It contributes by examining the dynamic nature of work engagement and burnout, with a longitudinal approach that explores changes in exhaustion and vigor among expatriates. Furthermore, the article adopts a person-centered approach to identify distinct well-being profiles within the expatriate population, acknowledging diverse experiences and trajectories. Additionally, it extends the focus beyond well-being development by studying individual-level work outcomes, specifically expatriates' intentions to quit working abroad and to leave their job.

Article 3 explores the contextual antecedents of expatriates' intention to quit and self-perceived job performance, expanding the understanding of organizational outcomes within the expatriate context. It examines the effects of work-life conflict (WLC) and high-risk living environments, both significant sources of demands on expatriates (Fisher et al., 2009; Fee, 2017). The article addresses the interaction effects of these demands, which have been underexplored, and investigates their impact on expatriates' job performance and turnover intentions (Mäkelä & Suutari, 2011; Shih et al., 2010). By focusing on the combined effects of diverse demands, Article 3 contributes to a more nuanced understanding of expatriates' work outcomes in challenging environments.

To understand the complex relationship between employee well-being, work outcomes and their antecedents, expatriate research draws upon various theoretical frameworks, including person-environment fit theory (Cerdin & Pargneux, 2014; Stoermer et al., 2018), the Crossover-Spillover model (Van der Zee et al., 2005; Takeuchi, Yun, & Tesluk, 2002), Conservation of Resources (COR) Theory (Hobfoll, 1989, 2001, 2002, 2011), and the Job Demand and Resources (JD-R) Theory (Taris & Schaufeli, 2016; Bakker et al., 2014; Demerouti et al., 2001).

This dissertation particularly relies on the principles of COR and JD-R theory. In essence, COR theory suggests that individuals are motivated to acquire and safeguard resources, and experiencing resource loss can lead to stress. The conservation of resources theory is a general motivation theory (Hall et al., 2006) that describes individuals' decisions to obtain, retain, protect and foster the resources necessary to manage their current demands and to guard against further resource depletion (Hall et al., 2006; Hobfoll, 1989, 2002; Wright & Hobfoll, 2004). Hobfoll (2001) specified that resources comprise a variety of elements, including objects, conditions, personal characteristics, and energy resources. The theory underscores individuals' efforts to maintain a balance in their resources to effectively manage their roles both in the workplace and at home (ten Brummelhuis & Bakker, 2012). Additionally, the Job Demands-Resources (JD-R) theory posits that employees encounter various work-related demands and resources which influence positive or negative organizational outcomes, with well-being playing a crucial role in this mechanism (Bakker & Demerouti, 2007; Demerouti et al., 2001).

## 1.2 Purpose of the dissertation and research questions

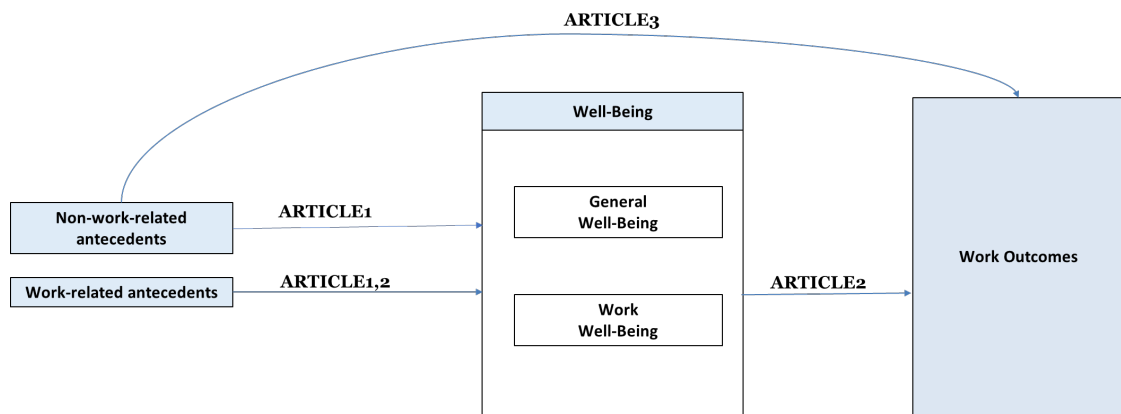
The aim of this dissertation is to contribute to the current understanding of expatriate well-being, work outcomes, and the different antecedents for both. First, the dissertation highlights different work-related and non-work-related antecedents of well-being in expatriates through a rigorous review of the existing literature. Second, it contributes to existing knowledge by investigating how expatriates' well-being evolves over time, and identifies the factors that shape these trends. Finally, it extends the understanding of work well-being and other contextual factors as antecedents for expatriates' work outcomes (self-perceived job performance, intention to quit working abroad, and intention to leave the job).

The goal of the dissertation is tackled through the following questions raised in the three articles that form the basis of this dissertation:

**Article 1:** What are the work and non-work-related antecedents of expatriates' well-being that have been studied in the expatriation literature thus far?

**Article 2:** How does work well-being develop in expatriates over time? How do meaning-making and workplace ostracism predict development of expatriate well-being? How do turnover intentions (intention to quit working abroad and intention to leave the job) vary, depending on expatriates' work well-being development?

**Article 3:** How do contextual factors like living environment predict expatriates' self-perceived job performance and their intention to quit working abroad? Does work-to-private life conflict moderate the relationship?



**Figure 1.** A visual representation of the core themes studied in the three research articles included in the dissertation.

Table 1 presents information regarding the research objectives, theoretical grounding, and the type of research applied in each of the articles.

**Table 1.** Summary of the research premises of articles included in the dissertation

	Article 1	Article 2	Article 3
<b>Title</b>	Work and non-work-related antecedents of expatriates' well-being: A meta-analysis	Exploring Vigor and Exhaustion Profiles among Expatriates: Examining the Influence of Meaning Making, Workplace Ostracism, and Effect on Turnover Intentions	Self-perceived job Performance and Intention to quit working abroad among expatriates: The role of accumulative demands from High-risk living environment and Work-to-Private Life Conflict

	<b>Article 1</b>	<b>Article 2</b>	<b>Article 3</b>
<b>Research objective</b>	To accumulate knowledge on predictors of well-being among expatriates	To study how work well-being develops over time among expatriates, its predictors, and outcomes	To study the effects of high-risk environment and conflict from the work to life domain on expatriates' job performance and intention to quit working abroad, highlighting the role of an accumulation of both demands on work outcomes.
<b>Theoretical grounding</b>	Job Demands and Resources Theory (JD-R) (Taris & Schaufeli, 2016; Bakker et al. 2014, Demerouti et al. 2001) Conservation of resources theory (COR) (Hobfoll 1989, 2001, 2002, 2011)	Job Demands and Resources Theory (JD-R) (Taris & Schaufeli, 2016; Bakker et al. 2014, Demerouti et al. 2001)	Conservation of resources theory (COR) (Hobfoll 1989, 2001, 2002, 2011)
<b>Type of Research</b>	Empirical: Meta-analytic literature review	Empirical: Quantitative survey data (longitudinal data)	Empirical: Quantitative survey data (cross-sectional data)
<b>Source of data</b>	24 articles addressing different work-related and non-work-related antecedents of well-being in expatriates.	416 Finnish expatriates with 3 measurement points over one-year time-lag.	416 Finnish expatriates.

The author has been appointed as a doctoral researcher by an EU funded research initiative - GLOMO project. As encouraged by the GLOMO project, two of the articles included in the dissertation (Articles 1 and 3) are co-authored with supervisors from the GLOMO project - Liisa Mäkelä, University of Vaasa, and Maike Andresen, University of Bamberg. The author has taken the lead role in all of the research articles - primary duties included selecting theoretical foundations, devising research methodologies, gathering and analyzing data, composing and organizing articles, and overseeing the review procedures. Liisa Mäkelä has been involved in survey data collection, providing supervision during the drafting and review process for all the articles. Maike Andresen was responsible for reviewing and editing the written drafts for articles mentioned above. Vesa Suutari has provided expert guidance towards shaping the research topics and offering valuable feedback throughout the preparation of the introduction chapter of the dissertation.

Article 2 is co-authored with Liisa Mäkelä and Samu Kemppinen, a colleague from the Human Resource Management research group, University of Vaasa. The data analysis for Article 2 was conducted by Samu Kemppinen with the dissertation author overseeing research planning, preliminary data processing, writing, and manuscript composition. Liisa Mäkelä contributed to data collection, article review, and editing.

Article 1 from the dissertation has been published in the Human Resource Management Review journal, with Articles 2 and 3 currently undergoing preparation to be submitted to peer-reviewed journals.

### 1.3 Intended contributions

This dissertation makes contributions to the existing body of knowledge concerning the factors associated with well-being and work outcomes in the expatriation context. This research aims to identify relevant work related (job characteristics, work adjustment, organizational support, work ostracism, meaning making through international work) and non-work-related (high-risk environment, work-to-private life conflict, partner related issues) predictors of well-being. Second, it examines associations of the above listed predictors with expatriate well-being and work outcomes (self-perceptions on job performance and intention to quit working abroad or the job itself), prevalent in the expatriate context. Consequently, this research intends to broaden the knowledge of expatriates' well-being by also examining change patterns of vigor and exhaustion observed over time.

This dissertation provides a comprehensive synthesis of the existing literature concerning the well-being of expatriates and the factors that can predict it (Article 1). The study conducts a meta-analytic examination, shedding light on the comparative statistical significance of different determinants influencing the well-being of expatriates. Following on, two empirical studies (Articles 2 and 3) grounded on the JD-R and COR theories in an international work context were performed. This dissertation (Article 2) contributes to the expatriation literature by showcasing the coexistence of multiple subgroups in the expatriate population with different well-being development patterns. Although the suggestion for longitudinal research in management scholarship (Bhaskar-Shrinivas et al., 2005: 273) is made frequently, it is still relevant given that a miniscule proportion of current expatriate studies adopt a longitudinal approach (see Takeuchi et al., 2019). Thus, examining and identifying the differential impact of expatriates' demands and resources in predicting expatriate well-being profiles provides new

insights. The dissertation seeks to enrich the current understanding by delving into the temporal aspects of expatriates' well-being and elucidating the elements that mold these trajectories. Furthermore, the dissertation strives to advance the comprehension of work outcomes among expatriates, and their potential associations with well-being and other contextual factors. Finally, the dissertation (Article 3) broadens the discussion on expatriate resource management by emphasizing the prioritization of work goals in response to resource scarcity and the optimization of available resources to achieve goals while compensating for resource shortages. Drawing on COR theory (Hobfoll et al., 2018), this article links resource transfers among expatriates across work, personal life, and contextual factors such as the living environment.

## 1.4 Key concepts of the study

This section focuses on introducing the fundamental concepts employed in this dissertation in a table format to help the reader understand them in better detail. The definitions offered here demonstrate how these concepts have been understood in the context of this research. Further elaborate explanations feature in the literature review, discussed in Chapter 2.

**Table 2.** Key concepts and their definition in the context of the dissertation

Concept	Definition
<b>Expatriates</b>	<b>Expatriates</b> can be defined as individuals who are employed legally in a foreign country where they are not citizens, residing there temporarily with the relocation motivations specifically being career-oriented. The individual needs to be employed and relocated stem either from an employing organization or self-initiation, or they can receive direct employment within the host country (McNulty & Brewster, 2017).
<b>General well-being</b>	<b>General well-being</b> is understood as the facets that individuals deem significant when considering their life experiences, looking at an individual's overall welfare (Rath & Harter, 2010). This broader perspective on well-being delves into aspects that are not exclusively tied to work, but rather encapsulate various dimensions of an employee's overall wellness. Previous research examining general well-being has explored constructs including, but not limited to, distress, life satisfaction, anxiety, depression, and mental health (Maggiori et al., 2013; Warr, 1994, 1999).
<b>Work well-being</b>	<b>Work well-being</b> refers to the comprehensive assessment of an employee's experience and functioning within the workplace setting (Grant, Christianson, & Price, 2007). Work well-being can be observed by exploring burnout and work engagement (Demerouti, Mostert, & Bakker, 2010) along with more obvious factors like job satisfaction and work stress.
<b>Job demands</b>	<b>Job demands</b> encompass quantitative, emotional, physical, and cognitive elements within a job that consistently necessitate both physical and

Concept	Definition
	psychological effort (Bakker & Demerouti, 2007; Demerouti et al., 2001). Examples of typical job demands include workload, time constraints, or an unfavorable work environment.
<b>Job Resources</b>	<b>Job Resources</b> refer to all aspects (physical, psychological, social, and organizational) that serve to accomplish work objectives, or foster personal growth and development (Demerouti et al., 2001, 2002). Job resources are known to have motivational potential, and lead to positive outcomes such as organizational commitment, better performance, and demonstrate associations with enhanced employee well-being (Bakker et al., 2014; Bakker & Demerouti, 2017).
<b>Intention to quit working abroad</b>	<b>Intention to quit working abroad</b> refers to the expatriate's intentions to terminate their international position early or prematurely (Naumann, 1992).
<b>Intention to leave the job</b>	<b>Intention to leave the job</b> refers to the extent to which an employee shows inclination towards leaving the organization (Stahl et al., 2009).
<b>Self-perceived job performance</b>	<b>Self-perceived job performance</b> is defined as the extent to which individuals believe they are effectively fulfilling their core job responsibilities (Campbell et al., 2015).

## 1.5 The structure of the dissertation

The primary body of this dissertation comprises of five distinct sections, each serving a specific purpose. To commence, the Introduction section delves into the contextual backdrop and positioning of the research, elucidating the research inquiries and intended contributions. Herein, readers are provided with an understanding of the existing research landscape, and an outline of the current dissertation's objectives. Furthermore, readers are presented with a comprehensive overview of the dissertation's structure. The theoretical background section engages in an exhaustive examination of pertinent literature pertaining to well-being and work outcomes in expatriates. Subsequently, the Methodology section positions this dissertation within its research philosophical framework by expounding upon the underlying ontological, epistemological, and axiological suppositions. This section further elaborates on the choices made regarding research strategy, design, data collection, and data analysis. The next section summarizes the findings encapsulated within Articles 1-3, which collectively forms the research findings for this dissertation. These summaries reiterate the findings derived from the articles, without delving into the theoretical or methodological underpinnings or evaluating the research's value. The ensuing discussion section embarks on a thorough exploration of the theoretical contributions, as well as the practical and societal implications stemming from this dissertation.

## 2 THEORETICAL BACKGROUND

Expatriate work is high-density global work (Shaffer et al., 2012; Mello et al., 2022), with considerable challenges associated with international relocation and job-related factors. Expatriation is known to be an enriching experience for individuals, but it also poses significant challenges due to numerous stressors in the host country (Silbiger & Pines, 2014). Well-being and a wide range of work outcomes like organizational commitment and productivity are often explained using different stress theories and models concerning work demands or stressors, predominantly through the COR theory (Hobfoll, 1989) and JD-R models (Demerouti et al., 2001; Bakker 2011; Bakker & Demerouti 2014) that have been adopted as the theoretical basis for this dissertation. The remainder of this section will discuss the theoretical perspectives utilized in previous expatriate studies, and then move to the details of the above-mentioned theoretical perspectives adopted in this dissertation. The Chapter also reviews the antecedents for well-being, turnover intentions and performance studied in previous expatriation literature.

### 2.1 Theoretical lenses adopted to explain expatriates' Well-being and Work outcomes

This study identified various theoretical perspectives that are especially relevant when studying well-being and work outcomes in expatriates. Several studies have employed the **Person-Environment fit** theory to elucidate how an individual's desires and abilities align with the resources and demands of their surroundings to anticipate specific outcomes (Cerdin & Pargneux 2014; Stoermer et al., 2018). This theory holds particular significance in analyzing the interplay between work characteristics and expatriate outcomes. A strong match between requirements and resources leads to significant person-environment fit, boosting organizational commitment, and resulting in better overall performance and reduced turnover intentions (Bretz & Judge, 1994; Zimmerman, 2008; Haslberger et al., 2013). When working in overseas positions, expatriates often face expectations inherent to various roles that they associate with, and this has been explained using role theory in expatriate literature (Kawai & Mohr, 2015; Shaffer et al., 2016; Aryee & Stone, 1996). Role theory suggests that individuals, based on their social positions, are required to fulfill multiple roles. These roles are influenced by the expectations of others, necessitating individuals to constantly adapt their behavior according to changing environmental demands and audience expectations (Sarbin & Allen, 1968). Sometimes, conflicting expectations within these roles can create pressure on individuals. Each role encompasses specific expectations that dictate the behaviors expected from the person occupying that role (Biddle, 1986). These

expectations may include tasks, responsibilities and activities anticipated by others in similar roles (Katz & Kahn, 1978). Role theory emphasizes that certain role characteristics, such as role ambiguity and novelty, contribute to stressful conditions. In international work settings, expatriates often experience pressure as they must align with headquarters' objectives, address local requirements, and adhere to diverse cultural norms (Au & Fukuda, 2002). Therefore, overseas assignments typically involve high levels of both role ambiguity and novelty, which can ultimately impact expatriate work outcomes, specifically managers' job satisfaction, task performance, and their adjustment to their work environment (Kawai & Mohr, 2015).

To examine the intra- or inter-domain effects of certain experiences among expatriates, several scholars have used the **Crossover-Spillover model** (Van der Zee et al., 2005; Takeuchi, Yun, & Tesluk, 2002). The spillover model posits that the experiences of individuals at work can influence their non-work life, and vice versa, leading to a convergence in the patterns of both domains (Staines, 1980, p. 111). According to this model, strain encountered in one aspect of life can result in strain in another aspect within an individual (Westman, 2001). In contrast, crossover refers to the transmission of characteristics and resulting stress between closely related individuals (Westman, 2001). This process occurs when psychological strain experienced by one person impacts the strain level of another person in the same social setting (Westman, Etzion, & Chen, 2009). While work-family spillover involves stress or strain transmission within an individual, crossover entails stress or strain transmission between individuals within a dyad, for example partner-employee (Bakker, Demerouti, & Dollard, 2008). The expatriate scenario offers a unique opportunity for studying spillover and crossover effects (Eisenhardt, 1989), due to the significant life changes experienced by both the expatriate employee and their partner. These transitions amplify the volatility of the resources drawn from their immediate social environment, emphasizing the importance of personal resources in this context. Moreover, psychologically healthy workplaces actively promote resources at different levels (individual, group, leader, and organizational) to foster employee well-being and performance (Day & Nielsen, 2017). It has also been found that resources in terms of organizational support often play a critical role in explaining well-being (see Biswas et al., 2021 for a meta-analytic review), performance and retention (see van der Laken et al., 2019 for meta-analytic review) among expatriates.

All of the above-mentioned theoretical lenses that have been utilised in previous expatriate literature are relevant for this dissertation, at least to some extent. However, this dissertation adopts two theoretical frameworks as grounding

principles –the *Conservation of Resources (COR) Theory* (Hobfoll 1989, 2001, 2002, 2011: Articles 1 and 3) and inspired by the underpinnings of COR theory, the *Job Demand and Resources Theory* (Taris & Schaufeli, 2016; Bakker et al. 2014, Demerouti et al. 2001: Article 2). Both are widely used in studying mechanisms linking well-being, work outcomes and their antecedents in employees, mainly among domestic employees, but also within the expatriate population (Visser et al., 2016; Kempen et al., 2015; Stroppa & Spieß, 2011). The following sections will delve deeper into the COR and JD-R theory utilized in this dissertation, in order to enhance the understanding of expatriate well-being and work outcomes.

### 2.1.1 Conservation of Resources Theory

The theory of resource conservation is a comprehensive motivational framework (Hall et al., 2006) that elucidates how individuals make decisions regarding the acquisition, retention, safeguarding, and cultivation of resources essential for managing their current needs, while safeguarding against resource depletion (Hall et al., 2006; Hobfoll, 1989, 2002; Wright & Hobfoll, 2004). Hobfoll (2001) further defines resources as encompassing various elements, including tangible possessions, situational conditions, personal attributes, and energy reserves. The utilization of resources becomes especially critical in demanding circumstances such as avoiding stress or preventing conflicts between work and personal life (Pennbrant & Dåderman, 2021). The COR theory rests on several foundational principles. According to the primary principle of resource loss primacy, the loss of resources triggers more pronounced emotional and behavioral responses compared to resource gains (Hobfoll, 1989, 2001). This principle helps to explain why employees often stay with their current employer, as their fear of losing accrued resources outweighs the expectation of regaining them elsewhere (Kiazad et al., 2015). Nevertheless, in the context of expatriation, individuals' inclinations to retain resources can be less predictable due to the dispersion of their resource stocks across different nations (Faist, 2010). The second principle, known as resource investment, posits that individuals must invest resources to secure gains and avert losses (Hobfoll, 1989, 2001). Those who possess abundant resources are more likely to accumulate additional ones, and less likely to experience losses. Conversely, individuals with fewer initial resources are more susceptible to resource decline. This scenario sets the stage for a cycle of resource gains and losses, where losses perpetuate further losses, and gains stimulate additional gains (Hobfoll, 2001; Hobfoll et al., 2006; Hobfoll & Lilly, 1993; Wells et al., 1997, 1999; Wright & Hobfoll, 2004).

The principles of COR theory have been vastly used to examine stress at work through empirical studies investigating forms of well-being and other occupational and psychological outcomes (Halbesleben et al., 2014). The expatriation experience is often viewed as a valuable opportunity for individuals, providing them with new skills, knowledge, and a global perspective that is highly sought after by multinational companies, emphasizing the importance of international exposure to long-term career success. Studies often affirm that employees embarking on international assignments anticipate gaining skills and expertise that will lead to increased salaries and improved marketability (Benson & Pettie, 2008; Ramaswami et al., 2016). On the other hand, individuals on expatriation assignments are also prone to resource loss cycles as they often face resource depletion when transitioning to a new job and relocating to a foreign country. This could be attributed to challenges such as inadequate proficiency in the new country's working language, limited social networks, misalignment with the host culture, or insufficient knowledge of local healthcare systems and safety regulations. All of these challenges may coincide with new job responsibilities. Breaking free from the resource-loss cycle necessitates expatriates to reduce their resource consumption (e.g., leisure time) and ideally invest in resources (e.g., learning the local language) to secure the necessary resource gains to address the challenges they encounter overseas. These challenges may arise in the workplace or in the surrounding environment (see Hobfoll, 1989, 2001), and situations demanding resources are typically associated with physiological and psychological costs, along with adverse work outcomes such as reduced performance and job retention difficulties (see Schaufeli & Taris, 2014).

This dissertation invokes COR theory to better articulate the underlying mechanisms of expatriate's well-being and associated resource gain or loss processes based on previous literature exploring expatriate work role engagement, work family interface, life domain interactions, well-being (Reiche et al., 2023; Ballesteros-Leiva et al., 2017; He et al, 2019) as well as work outcomes including turnover intentions (Andresen et al., 2018; Davies et al., 2019; Fu et al., 2022).

### 2.1.2 JD-R Theory

The JD-R theory serves as a theoretical framework for understanding employee well-being and associated antecedents and work outcomes in different types of occupations and work environments (Bakker et al. 2004). The basic proposition for the JD-R theory states that every occupation presents two overarching categories of job characteristics, each having a distinct impact on employee well-being: job demands and job resources (Bakker et al., 2014; Bakker & Demerouti,

2007; Bakker & Demerouti, 2017). Job demands are physical, psychological, social, or organizational aspects of work that require energy and cognitive or emotional effort, and can present challenge and/or obstruction in reaching a goal (Bakker, 2015).

In contrast, job resources are aspects of work that help to mitigate job demands and achieve work goals or foster personal growth and development (Bakker et al., 2014; Bakker & Demerouti, 2017). It is evident that job demands and resources play an instrumental role in predicting employee well-being and work outcomes, triggering two distinct processes (Bakker et al. 2014). Job resources initiate a motivational process in employees, so that the higher the job resources available at work, the greater the energy and motivation employees invest in their work (i.e., work engagement), and consequently, they are more likely to exhibit productivity and show commitment in their roles (Schaufeli, 2017). At the same time, job demands may initiate a health impairment process, and a risk path occurring due to chronic job demands combined with a lack of job resources may lead to burnout (Bakker & Demerouti, 2007; Schaufeli, 2017). As a natural progression of such a negative pathway, concurrent contextual demands can accumulate, and together have an exacerbating effect on work outcomes. The Job Demands-Resources (JD-R) model has undergone significant theoretical maturation, as evidenced by the prevalence of several meta-analyses on the subject (Crawford et al., 2010; Halbesleben, 2010; Nahrgang et al, 2011; Mazzetti et al., 2023). These comprehensive reviews confirm the model's robustness and broad applicability in understanding the dynamics of work-related demands and resources, as well as their impact on employee well-being and organizational outcomes (Bakker & Demerouti 2017, Van Veldhoven et al. 2020).

The JD-R theory was originally developed to understand work environments within specific national contexts. However, findings from studies examining the JD-R model's application in predicting burnout and engagement across different countries have garnered substantial support (see Rattrie, 2013; Rattrie & Kittler, 2014; Rattrie et al., 2020). In the context of expatriation, the JD-R model can be used as a framework where different types of demands pertinent to international work (e.g., cultural novelty, identity transformation, career transition concerns, work-life conflict, etc.) and resources (e.g., pre-departure knowledge, spouse adjustment, etc.) can be related to the adjustment, performance or engagement of expatriates (Shaffer et al., 2012). Several studies have used JD-R theory to explore expatriate's embeddedness, expatriate retention and turnover (Fee, 2020; Nahrgang et al, 2011; Abdalla *et al.*, 2023; Yunlu et al., 2018).

Next, we will review different aspects of employee well-being, and the body of literature examining well-being in an expatriate context.

## 2.2 Well-being at work

In general, well-being encompasses both the affirmative and adverse assessments of cognitive reflections, encompassing facets like life contentment, job satisfaction, work engagement, burnout and stress, as well as affective responses including manifestations of depression and anxiety, encountered by individuals in their life journeys (Diener, 2006).

The differentiation between well-being in general and well-being specific to one's professional sphere (work well-being) has been a pivotal aspect explored in prior research efforts (Maggiori et al., 2013; Warr, 1994, 1999). General well-being can be defined as a state of satisfaction with an employee's overall life experiences (Rath & Harter, 2010). Work well-being refers to concepts such as job satisfaction, job-related stress, work engagement, and job burnout. Job satisfaction can be understood as 'a positive emotional state resulting from the appraisal of one's job or job experiences' (Locke 1976, p. 1300).

Work engagement is a positive indicator of work well-being (Bakker & Demerouti, 2008; Cole et al., 2012), and is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). Vigor constitutes the central component of work engagement (Shirom, 2010) and signifies a high level of energy and mental resilience at work. Dedication refers to the state characterized by significance, enthusiasm, inspiration, pride, and the inherent challenges associated with one's work (Schaufeli, 2017). Absorption refers to the feeling of having full concentration towards work, experiencing a state where time swiftly elapses, and detachment from the work becomes challenging (Maslach et al., 2001, Schaufeli et al., 2002). Research indicates that employees tend to consistently experience vigor and dedication in their work, with these levels remaining stable over time (Mauno et al., 2007).

On the other hand, the negative indicator of work well-being is observed by job burnout (Leiter et al., 2014; Maslach et al., 1996; Schaufeli et al., 2009), defined as a syndrome stemming from work-related stress. Burnout is characterized by three core dimensions: (1) work exhaustion, which entails feeling strained due to one's job and involves emotional depletion and a state of fatigue (Maslach et al., 1996); (2) cynicism, characterized by distancing oneself from work with a negative outlook on one's job; and (3) a sense of incompetence at work, indicating feelings of incapacity to fulfill job responsibilities (Feldt et al., 2014).

## 2.3 Well-being in the International work context

This dissertation studies demands and resources (Bakker et al., 2014; Bakker & Demerouti, 2007; Bakker & Demerouti, 2017) that would predict different indicators of general and work well-being in expatriates. In expatriate literature, general well-being has been studied as satisfaction with work-life balance, psychological well-being, subjective well-being, and non-work well-being from the positive spectrum (Nicholson & Imaizumi, 1993; Ballesteros-Leiva et al., 2017). In turn, phenomena like depression, concerns for health and mental health, and anxiety have been reported in the literature, which can be categorized at the negative end of the general well-being spectrum (Grant-Vallone & Ensher, 2001; Van der Zee et al., 2005). Scholars have explored various facets of work well-being among expatriates, including job satisfaction and work engagement from the positive perspective (Naumann, 1993; Aryee & Stone, 1996; Shaffer & Harrison, 1998; Shaffer et al., 2001; Takeuchi, Yun, & Tesluk, 2002; Shih et al., 2010; Stroppa & Spieß, 2010; Kempen, Pangert, Hatstrup, Mueller, & Joens, 2014; Kawai & Mohr, 2015; Silbiger, Berger, Barnes, & Renwick, 2017; Stoermer et al., 2017; Selmer & Luring, 2016; Nicholson & Imaizumi, 1993), and burnout or stress from the negative perspective (Bhanugopan & Fish, 2006; Silbiger et al., 2017; Visser et al., 2016; Stroppa & Spieß, 2011; Silbiger & Pines, 2014).

Since expatriates face high demands and uncertainties inherent to the nature of their work, they are often at risk of resource loss (Hobfoll, 1989, 2001) leading to stress and burnout (Andresen et al., 2018; Shaffer et al., 2012; Silbiger & Pines, 2014), thus threatening their well-being (Pinto et al., 2017). Even with these stress-inducing factors, expatriates who receive an abundance of internal and external resources from work, family and the environment can turn a cycle of resource losses to a situation of resource caravans, in which the gain of resources can stimulate additional gains (Hobfoll, 2001; Hobfoll et al., 2006; Hobfoll & Lilly, 1993; Wells et al., 1997, 1999; Wright & Hobfoll, 2004). This would help expatriates to effectively cope with demands and obligations and maintain their psychological well-being (Hong Ren et al., 2014), and through that, potentially improve organizational outcomes.

To provide an overview of the status of indicators used to examine expatriates' well-being, the mean values of general and work well-being levels are next reviewed. In light of the previous literature concerning expatriates' general and work well-being, the concept most often studied seems to be job satisfaction. Acknowledging that a comparison of mean values from different studies is challenging, one can consider that if the mean values of the studies are either over the midpoint of the scale or close to it, the phenomena can be assumed to be on

the higher level. In our review, except for one study (Shaffer et al., 2001), all other researchers have reported a fairly high level of job satisfaction among expatriates (see Appendix 1). Other studies reporting subjective well-being, psychological well-being, work well-being and satisfaction with work-life balance were also found to be quite high among the respondents (see Appendix). Negative indicators of well-being like stress and dimensions of burnout were found to be at medium to moderately higher levels in all of the studies. General and mental health levels were found to be medium as well. Overall, the review of research suggests a generally positive subjective experience for expatriates, but with notable levels of stress and burnout.

Next, the review will focus on the antecedents for expatriate well-being that have been studied in Article 1 and 2, focusing on the potential associations with the well-being indicators.

### 2.3.1 Antecedents of Expatriate Well-being

Expatriates are anticipated to adapt to unfamiliar job responsibilities within a new professional setting while navigating a foreign culture. Simultaneously, they must strive to strike a balance between their responsibilities at work and those within their non-work domain. Accordingly, aligned with a principle from COR theory (Hobfoll, 2001), there are several factors that can play an important role in expatriates' abilities and possibilities to conserve their resources, thus affecting their well-being or ill-being.

Article 1 forms a comprehensive synthesis of the existing literature concerning the well-being of expatriates, and identifies all predictors shown to be associated with general and work well-being. Based on the observations in Article 1, additional antecedents (work ostracism and meaning-making through international work) can be seen that concern expatriates' experience working abroad and can potentially be associated with expatriate's well-being – these are examined in Article 2. This dissertation categorizes all of the antecedents of general and work well-being into two broad groups, viz; non-work-related antecedents and work-related antecedents. The following section offers a detailed examination specifically centered on the factors related to expatriate well-being as reported in extant literature.

### 2.3.1.1 Non-work-related antecedents for Expatriate Well-being

#### **Work-Family Interference**

Expatriation poses a formidable challenge for individuals in both their professional and personal lives. Empirical investigations reveal that challenges associated with the non-work life sphere such as work-to-family or work-to-private life conflicts are pervasive and recurring issues encountered by expatriates (Ballesteros-Leiva et al., 2017; Mäkelä & Suutari, 2011; summarized in Mäkelä et al., 2022). This challenge is particularly predominant among expatriates because addressing such issues runs the risk of depleting the available resources which are already scant in many cases (for a metanalytic review, see Biswas et al., 2021). Employees assume various responsibilities, allocating their time and energy across distinct domains of life such as work and family, or more broadly, work and private life pursuits. Striking a balance between these two spheres can prove to be a formidable challenge for expatriates, due to increased demands and decreased resources in related roles (Lazarova, Westman, & Shaffer, 2010). For instance, expatriates often take on higher responsibilities than they have in their previous positions, and at times their proficiency and expertise may not align completely (Bonache, Brewster, Suutari, & Cerdin, 2018; Firth, Chen, Kirkman, & Kim, 2014). Additionally, in their personal life roles such as being a partner or parent, expatriation can lead to heightened demands such as the necessity to support family members who have relocated with them, coupled with reduced resources like a diminished social support network for practical assistance (Shaffer, Reiche, Lazarova, Chen, & Wurtz, 2016). Personal resources such as time and energy are viewed as finite, and their depletion can lead to strain on the individual. Consequently, the dynamic interaction among these life domains creates conflicting expectations, which ultimately give rise to psychological conflict and role overload (Greenhaus & Beutell, 1985).

However, the interplay between work and personal life is a bi-directional phenomenon, wherein the influence of the professional life on personal life and vice versa is evident (Guttek, Searle, & Klepa, 1991). The prevalence of work-to-private life conflict outweighs private life-to-work conflict among expatriates, as indicated by previous studies (Grant-Vallone & Ensher, 2001; Kempen et al., 2015), underscoring its significant impact on individuals' lives (Fischer, 2011).

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 have also been 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 a diminished confidence in their ability to maintain a work-life balance (Kempen et al., 2015). Furthermore, 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 a diminution of subjective well-being (Ballesteros-Leiva et al., 2017). Research has shown a strong link between work-life factors and job satisfaction in expatriates (Kempen et al., 2015; Shih, Chiang, & Hsu, 2010), and work-family interactions have been found to be significantly related to expatriates' levels of work stress (Carragher, Sullivan, & Carragher Jr, 2004).

Researchers have emphasized the importance of focusing on the positive aspects of the work-life interface among expatriates (Barnett & Hyde, 2001; Frone, 2003). When positive effects from work impact the personal life, expatriates experience work-life enrichment (Caligiuri & Lazarova, 2005), feeling the benefits not only for themselves but also for their families (Greenhaus & Powell, 2006). Although studies on the positive spillover from work to personal life spheres among expatriates are less common compared to studies on negative spillover, there have been reports of positive relationships between work-to-nonwork enrichment and nonwork-to-work enrichment on expatriate well-being (Kempen et al., 2015). Kempen et al. (2015) further demonstrate that work-private life enrichment predicts job satisfaction among expatriates.

### **Spousal support**

Although many expatriate spouses view their time abroad as a potential source of benefit, reality often presents them with significant challenges when it comes to adjusting to the new host country (Jones-Corley & Van Oudenhoven, 2002). Frequently, these spouses have sacrificed their careers in their home country, assuming a more traditional role as caregivers and homemakers, which can lead to decreased well-being and reduced self-esteem. In many cases, the spouse has given up their career to support the expatriate, placing a greater burden on the expatriate. It has been reported that spousal support is instrumental in expatriates' immediate careers, and influences their opportunities upon repatriation that indirectly benefit the intra-family relationships and boost their general well-being (Lauring & Selmer, 2010).

### 2.3.1.2 Work-related antecedents for Expatriate Well-being

#### **Job Factors**

Several characteristics of the expatriate job are found to be a potential predictor of work stress and impaired well-being. *Role ambiguity* is characterized by a lack of adequate information necessary for individuals to effectively fulfill their roles (Kahn et al., 1964, p. 21), and has been shown to have a negative correlation with the job satisfaction of expatriates (Kawai & Mohr, 2015). Within the context of overseas assignments, expatriates tend to encounter higher levels of role ambiguity compared to employees in domestic roles (Black, 1988). Notably, among various job factors, role ambiguity emerged as the most significant predictor of job satisfaction among expatriate managers (Naumann, 1993). *Role novelty* refers to the degree of difference between an employee's current job role (in a foreign setting) and their past responsibilities in the home country, leading to a stressful work environment (Bhaskar-Shrinivas et al., 2005). Employees on international assignments typically have less knowledge about the assignment's content and context than those on new domestic assignments, resulting in increased uncertainty, psychological strain, and work stress (Bhaskar-Shrinivas et al., 2005; Shaffer et al., 2013). However, role novelty has also been found to positively influence expatriates' job satisfaction (Kawai & Mohr, 2015). *Role conflict* is defined as a condition that derives from a clash between the role-sender's expectation for role performance, and that experienced within the focal person's subjective role (Kahn et al., 1964, p. 20). Bhanugopan and Fish (2006) show that role conflict, particularly in expatriate job roles, significantly contributes to various dimensions of job burnout, such as emotional exhaustion, depersonalization, and reduced personal accomplishment. This can be attributed to the unclear expectations about the roles that expatriate employees encounter during their assignments. *Job autonomy* is defined as the level of freedom and independence provided to an employee to execute their assigned job responsibilities (Hackman & Oldham, 1974, 1975). Job autonomy has been investigated in relation to expatriates' job satisfaction, reporting that increased autonomy in task execution may enhance expatriates' job satisfaction (Naumann, 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).

#### **Work Adjustment**

Black et al. (1991) proposed three dimensions of expatriate adjustment – work, interaction with host country nationals, and general culture – with work adjustment representing a key facet among them. Expatriate work adjustment primarily refers to the degree to which expatriates acclimatize to their daily work

responsibilities in the host location. Over time, empirical studies involving U.S. expatriates and their partners, conducted by Black and Gregersen (1990, 1991a, 1991b) as well as Black and Stephens (1989), have lent continual support to Black et al.'s sociocultural adjustment framework. Specifically, within the context of international relocation, the aspect of adjustment in work settings has demonstrated a positive correlation with the job satisfaction of expatriates (Aryee & Stone, 1996; Kawai & Mohr, 2015; Shaffer & Harrison, 1998). Studies also show that the better expatriates' work adjustment, the better their mental health (Nicholson & Imaizumi, 1993).

### **Organizational Support**

Research suggests that resources encompassing social support (Andresen, Goldmann, & Volodina, 2018; van der Laken, van Engen, van Veldhoven, & Paauwe, 2019) and support from the organization (Kraimer & Wayne, 2004) become pivotal in maintaining well-being. Support received from supervisors within the workplace has been indicated as a predictor for increased job satisfaction and indicative of a decrease in job-related stress among expatriates during their assignments (Stroppa & Spieß, 2011). Research shows expatriates perceived organizational support is crucial to achieve higher levels of psychological well-being (De Paul & Bikos, 2015). Moreover, social support from colleagues in the host country aids in expatriate assimilation, organizational commitment, and job satisfaction, consequently exerting a positive influence on the well-being of expatriates (Sonesh & DeNisi, 2016; Hajro et al., 2019).

However, the review of the antecedents for expatriate well-being showed that the address of a possible negative side of the social work context was lacking from earlier studies. Therefore, workplace ostracism is studied as potential antecedent for the work well-being of expatriates in this dissertation (Article 2), and is introduced next.

### **Workplace Ostracism**

Workplace ostracism can manifest in two ways: either through an employee's perception that they are being excluded, or through observable inaction where employees are intentionally left out of various activities or interactions (Ferris, Brown, Berry, & Lian, 2008). For expatriates, workplace ostracism poses a considerable risk to their work well-being due to the unique challenges associated with international relocations. International assignments are typically of limited duration, and expatriates often have distinct cultural backgrounds and may not be fluent in the local language, which can exacerbate their feelings of exclusion and isolation (Chen, 2019). To be specific, having the proficiency to communicate in a

foreign language (host country language) can impact expatriates' vigor and overall work well-being both directly and through increased support from host country nationals (Fu & Charoensukmongkol, 2021). This proficiency facilitates the development of supportive relationships with locals, which in turn positively affects work engagement. Additionally, support from organizations and host country nationals plays a crucial role in expatriates' work engagement, performance, and retention (Arokiasamy, 2021; Sahoo et al., 2022).

In this study, workplace ostracism has been explored using the expatriate's experiences of perceived ostracism. Work Ostracism can be a form of mistreatment towards employees and as incivility in the workplace, depending on the situation (Ferris et al., 2017; Robinson et al., 2013; Scott & Duffy, 2015). However, it is essential to distinguish that not all instances of mistreatment or incivility should be categorized as workplace ostracism. A recent meta-analysis in a domestic context has identified various aspects of employee well-being as potential outcomes of workplace ostracism (see Howard et al., 2020). Empirical research has consistently demonstrated a positive association between workplace ostracism and employees' psychological distress, leading to issues such as increased work-related stress, depression, and emotional exhaustion (Wu et al., 2011). A recent meta-analytical review on the workplace ostracism of domestic employees has emphasized its detrimental impact on employee health and overall work outcomes (Bedi, 2021). In migrants and asylum seekers, social exclusion in the form of ostracism has been found to be detrimental towards psychological health and well-being (Marinucci et al., 2021; Jiang et al., 2020). Ostracism experienced by expatriates during their assignments has been discussed in the current literature (Dang et al., 2022; Harrison et al., 2004), but no empirical examinations have been reported to-date.

### **Meaning making through international work**

The review of the current knowledge regarding expatriate well-being showed that there are very few studies concerning positive aspects of expatriate work as antecedents for well-being. Therefore, in this dissertation, meaning-making through international work is studied as a novel positive feature of expatriate work, and as an antecedent for work-well-being.

Meaningful work is the term used to refer to the positive sense of significance and personal growth that individuals derive from their work and its connection to the broader world. As a key job resource, meaningful work has been extensively studied for its impact on employee well-being (Allan et al., 2019; Arnold et al., 2007; Steger et al., 2012). Steger et al. (2012) have conceptualized meaningful work into three key aspects: 'positive meaningfulness' where individuals feel their

work is important, 'greater good motivation' where work is seen as a higher calling with an impact beyond oneself, and 'meaning-making' which is work that allows individuals to gain a deeper understanding of themselves and their surroundings, fostering personal growth (Magnano et al., 2022). This dissertation centers on meaning making through international work, which focuses on how international work can help individuals gain a broader perspective on life. In the context of expatriation, meaningful work experiences have been associated with several positive aspects, such as learning and personal development (see Paik et al., 2002) or engaging in tasks with greater responsibilities than in one's home country, and some studies show evidence that these kinds of experiences are related to positive outcomes such as career success (Suutari et al., 2012).

Meaning making is a valuable job resource that has shown positive effects on work engagement in studies within a domestic setting (Bailey et al., 2017; Steger & Dik, 2010). As defined by Kahn (1990), work's psychological meaningfulness is positively linked to engagement (May et al., 2004), and recent research (Jiang, 2021; Autin et al., 2021; Van Wingerden & Van der Stoep, 2018) supports this position, stating that employees with highly meaningful work are more likely to be deeply engaged in their tasks. A strong sense of purpose leads individuals to view their work as meaningful, and this is associated with higher levels of engagement (Tan & Yeap, 2021; Kahn & Heaphy, 2014). Meaningful work has been found to strongly correlate with positive work outcomes like work engagement, commitment and job satisfaction, and moderately with personal outcomes like life satisfaction, life meaning, general health, and reduced intentions to withdraw from work (for a comprehensive review, see Allan et al., 2019). As a job resource, meaningful work is also predictive of lower job burnout (Hamama-Raz et al., 2021; Fairlie, 2011). Importantly, higher levels of meaningful work are linked to reduced job stress (Allan et al., 2020) and lower levels of exhaustion (Rasmussen et al., 2016). Additionally, meaningful work significantly mitigates the adverse impacts of job burnout by offering psychological support and aiding in the management of work-related pressure (Haar Mowat, 2022; Lips-Wiersma & Wright, 2012).

Furthermore, both COR and JD-R theories suggest that there are mechanisms and processes linking work well-being and its antecedents and consequences (Bakker & Demerouti, 2007, 2014; Demerouti et al., 2001), and therefore this dissertation focusses on work outcomes in the international work context. The next section will review the work outcomes in an international work context studied in this dissertation.

## 2.4 Work outcomes (Turnover intention and Self-perceived job performance) prevalent in Expatriates

There are several work-related outcome factors that seem to be extremely relevant for expatriation work. Traditional literature on expatriation has primarily examined these outcomes from two distinct angles: the organizational perspective tied to strategic management, and the individual expatriate viewpoint. This dissertation primarily centers on individual expatriate work outcomes, specifically, turnover intentions (i.e., intention to quit working abroad and intention leave job) and self-perceived job performance.

One noteworthy aspect is the expatriates' intention to stay with the employer (van der Heijden et al., 2009; Reiche et al., 2011; Ritchie et al.). Organizations have identified turnover and retention as critical problems when dealing with foreign employees (Nguyen et al., 2014). These challenges are magnified for expatriates since their recruitment typically incurs higher costs than hiring local employees (Velocity Global, 2019). Retention cognition or turnover intentions in an international environment may be different from those in a domestic context, at least to some extent. This differentiation can encompass various aspects, including expatriates' inclinations to prematurely conclude their overseas assignments and their desire to leave the job. While most studies focus on the turnover related to expatriates' intentions to leave the organization (see Hussain & Deery, 2018; Davies et al., 2019; Pattie et al., 2013), some research has identified the existence of turnover tendencies such as job changing or terminating the international assignment (Pinto et al., 2012; Goede, 2020; Shen et al., 2021). In this dissertation, turnover intentions are approached as an intention to quit working abroad (Article 2 and 3) and as an intention to quit the job (Article 3).

Another critical factor assessed at a general level in expatriate work is job performance (for a meta-analysis, see van der Laken et al., 2019). Job performance generally pertains to how well an employee fulfills their assigned tasks in alignment with their organization's expectations. Job performance encapsulates various behaviors, reflecting an employee's skills, knowledge, behavior, and values (Darvishmotevalia & Ali, 2020). The concept of expatriate performance can be understood by evaluating job accomplishments such as overall performance, contextual or managerial performance, and expatriate-specific performance (Caligiuri, 1997). It also includes factors like job effectiveness (Chen et al., 2010), successfully completing the assignment (Reiche & Harzing, 2011), or adapting to the host country's culture to facilitate a desire to prolong the assignment (Bhaskar-Shrinivas et al., 2005; Harrison & Shaffer, 2005; Takeuchi et al., 2019). In this dissertation (Article 3), the individual perspective on performance has been

adopted. Using the understanding of performance proposed by Campbell and Wiernik (2015), this dissertation defines expatriates' self-perceived job performance as the extent to which they themselves believe they are effectively fulfilling their core job responsibilities, and examines it in Article 3.

Next, the review will focus on the antecedents for work outcomes; specifically, in relation to turnover intentions and job performance that have been studied in Article 2 and 3 of this dissertation.

#### 2.4.1 Antecedents of Expatriate Turnover intention

This dissertation examines crucial work outcomes, viz, intention to quit (Article 2: intention to quit working abroad and intention to quit the job; Article 3: intention to quit working abroad) and job performance (Article 3), predominantly reported in expatriates and studies antecedents for these work outcomes. The following section briefly reviews current knowledge about the antecedents for expatriates' turnover intentions, then focusses on the antecedents empirically studied in this dissertation, in particular, those related to work well-being and the contextual demands of the expatriate job.

Scholars argue that difficulties in adapting to the stressors associated with the uncertainties and demands of residing in a foreign country signify distress, ultimately leading to strain such as contemplating an early return (e.g. Hechanova et al., 2003; Bhaskar-Shrinivas et al., 2005; Pinto et al., 2012; Siers, 2007). Research indicates that expatriates who possess a strong sense of on-the-job embeddedness, defined as feeling integrated within the employing organization through a secure job and positive relationships with colleagues, are less likely to entertain thoughts of leaving their positions (Hussain & Deery, 2018). Another study reported the role of perceived career support is negatively associated with intentions to leave (van der Heijden, 2009). Furthermore, a recent study underscores the critical role of psychological resilience as a key resource for expatriates in maintaining their intention to stay (Gao et al., 2024). In the same line, Ritchie et.al, (2015) showed cultural adjustment in expatriate to be an important predictor of lower levels of premature turnover intention.

In the context of expatriation, it can be inferred that an individual in an optimal state of well-being is more likely to have an emotional inclination to continue their international assignment in the host country and demonstrate a strong commitment to their job within the organization (see Koveshnikov et al., 2022) although empirical studies focusing on the link between work well-being and intention to quit are rare (Bhanugopan & Fish, 2006; Silbiger and Pines, 2014;

Silbiger et al., 2017). In domestic literature, several studies have linked work engagement and burnout with turnover intentions (Du Plooy & Roodt, 2010). Therefore, this dissertation focuses on exhaustion and vigor as indicators of expatriate work well-being as possible antecedents for their turnover/ retention intentions (Article 2).

#### 2.4.1.1 Well-being Indicators as antecedents of Expatriate Turnover intention

##### **Exhaustion**

In general, burnout has been identified as a factor contributing to employee turnover (Lingard, 2003; Bartrum et al., 2012; Ali et al., 2012; Staufenbiel & König, 2011; Jung & Kim, 2012; Mauno et al., 2014). As a core indicator of burnout, emotional exhaustion is highlighted as a significant predictor of turnover intentions among employees (Sims, 2007; Rothmann & Joubert, 2007; Knudsen, Ducharme, & Roman, 2006; Swider & Zimmerman, 2010). Additionally, there are a handful of studies that provide evidence showing job burnout as a significant predictor of turnover among expatriates (Bhanugopan & Fish, 2006; Silbiger & Pines, 2014; Silbiger et al., 2017).

##### **Vigor**

Several studies have documented a correlation between work engagement and positive work-related behavior such as increased attachment to the organization and a reduced tendency to leave the organization (Schaufeli & Bakker, 2004; Mauno et al., 2014; Tricahyadinata et al., 2020), and work engagement has been linked to reduced intentions to quit (Koyuncu et al., 2006; Saks, 2006; Schaufeli & Bakker, 2004). Numerous investigations have indicated a negative relationship between work engagement and employees' turnover intentions (Agarwal & Gupta, 2018; Babakus et al., 2017; Caesens et al., 2016; Lu et al., 2016; Memon et al., 2015, 2016; De Simone et al., 2018). One study identified a nonlinear association between work engagement and turnover intentions, proposing that moderate levels of work engagement are linked to decreased turnover intentions, but further increases may not yield additional desirable effects (Caesens et al., 2016). It is plausible that individuals experiencing optimal well-being are emotionally predisposed to continue working on an international assignment in the host country and show an organizational commitment to their job (see Koveshnikov et al., 2022). Thus, higher levels of vigor may correlate with reduced intentions to end the period of working abroad and a decreased likelihood of leaving the job, although empirical studies of this relationship were not found.

#### 2.4.1.2 Contextual factors as antecedents of Expatriate Turnover intention

International job assignments for expatriates often entail significant changes in both work and non-work environments, as well as living conditions (Harrison et al., 2004). This dissertation specifically studies work-to-private life conflict and high-risk environment as antecedents of expatriate work outcomes, specifically an intention to quit working abroad.

##### **High-risk environment as an antecedent of expatriate intention to quit working abroad**

In expatriate literature, organizational and community embeddedness has been observed to influence expatriate experiences, specifically with regard to retention cognitions (Yunlu et al., 2018; Kraimer et al., 2012; Ren et al., 2014, 2021). As a significant facet of the social context, the host country's surroundings significantly influence expatriates, encompassing aspects such as living conditions, healthcare, food quality, and public safety. Diverse host countries naturally present varying environments, leading to differing impacts on expatriates (Naumann, 1992). For instance, in contrast to developed nations, the comparatively challenging conditions in developing countries tend to diminish expatriates' comfort and satisfaction, subsequently impacting their work outcomes like their intention to leave the assignment (Birdsee & Hill, 1995).

While many expatriates are assigned to destinations with relatively hospitable conditions, a significant number find themselves in difficult environments characterized by various challenges. Expatriates face challenging environmental pressures unique to the host country (as highlighted by Fee (2017)). These host country-related pressures predominantly fall under the category of broader, macro-contextual issues that extend beyond the workplace's boundaries such as political instability, security concerns, and limited access to essential resources. These are basically situations marked by potential human-related or natural physical threats. Consequently, dealing with such demanding living conditions depletes an individual's resources and elevates the likelihood of adverse outcomes for the organization (Bader & Berg, 2013; Shi & Franklin, 2014).

##### **Work-to-private life conflict (WLC) as an antecedent of expatriate intention to quit working abroad**

Alongside the environmental factors, issues related to family responsibility are also connected with expatriate work attitudes (Nicholls et al., 2002). Consequently, expatriation poses challenges not only for the expatriate, but also for various

stakeholders, including the expatriate's family members (Takeuchi, 2010). Earlier in the dissertation, work-to-private life conflict has been discussed as a predictor for expatriate well-being (see section 2.3.1). Apart from being a critical predictor of expatriate well-being, positive correlations between employees' capacity to balance the demands of their work and private life domains have been associated with the successful execution of international assignments, especially though predicting turnover intentions in expatriates (Kempen et al., 2015). The conflict between work and private life domains is regarded as one of the foremost factors contributing to the breakdown of international assignments (Fischlmayr & Kollinger, 2010; Mäkelä & Suutari, 2011). Understandably, expatriates might experience pressure from both life domains, and thus, a negative spill over (especially from work to private life) is possible. Conversely, excessive demands stemming from the private life domain can diminish expatriates' dedication to their work and their overall assignment success (Lin et al., 2012). Research further shows that conflicts between work and private life among expatriates can contribute to a premature termination of their assignments (Andres et al., 2012; Shaffer et al., 2001).

After discussing the potential antecedents of expatriate turnover intentions empirically studied in Articles 2 and 3, the dissertation reviews findings from expatriate literature that highlights the contextual antecedents of self-perceived performance (article 3).

#### 2.4.2 Antecedents of Expatriates Self-perceived job performance

The significance of various factors impacting employee's job performance varies between domestic and international work contexts, such that while some factors hold similar importance across both contexts, other factors such as local language ability and cultural sensitivity are more critical for the successful completion of international work. Selmer (2006) underscores the crucial role of expatriate performance for the success of multinational organizations.

Researchers have identified multiple factors influencing the job performance of expatriates, and categorized them broadly into individual, organizational, and social/environmental (contextual) factors (Krishnaveni & Arthi, 2015; Bhatti et al., 2013). Individual level factors encompass personal traits and characteristics (gender, age, cultural intelligence, previous international experience), organizational level factors that involve contextual characteristics of the organization and HR practices in place specific for expatriates (cross-cultural training, selection process, mentorships in the workplace), and finally social level

factors that include broader cultural aspects influencing effective job performance in expatriates (Krishnaveni & Arthi, 2015).

Previous research has extensively explored various factors influencing expatriate job performance, including goal orientation, self-efficacy, self-monitoring, task and people orientation, relational ability, and international experience (Shaffer et al., 2006; Wang & Kanungo, 2007). One stream of research emphasizes the significance of expatriate adjustment, positing that maladjustment to the foreign environment may lead to pressure, resulting in negative attitudes towards the overseas assignment and dissatisfaction (Bhaskar-Shrinivas et al., 2005). This dissatisfaction can lead to fatigue that diminishes expatriate performance (Kraimer et al., 2001; Kraimer & Wayne, 2004; Bhaskar-Shrinivas et al., 2005). Intercultural adjustment also has strong positive associations with job performance among expatriates (Tucker et al., 2004). Additionally, research further argues that the alignment of psychological contracts between expatriates and employers and perceived career support can impact expatriate performance abroad (Yan et al. 2002; van der Heijden, 2009). Furthermore, a meta-analysis examining the predictors of expatriates' job performance highlighted that the 'Big Five' dimensions (i.e., extraversion, emotional stability, agreeableness, conscientiousness [with the exception of openness]) along with language ability and cultural sensitivity can positively affect expatriate's job performance (Mol et al., 2005). In this dissertation, expatriates' self-reported ratings of performance have been measured instead of objective performance measures (evaluating how well an individual accomplishes tasks or goals as per the key performance indicators- KPIs) rated by managers. Importantly, research suggests that peers or managers tend to rate an employee's performance on the basis of their general impression of the employee (Dalal, 2005; Viswesvaran et al., 2005), creating a halo effect. However, in this dissertation, the intention is to use a construct that captures the expatriates' own perception of their personal capability at work.

The following sections review the literature on two specific contextual antecedents of self-perceived performance empirically studied in Article 3 – namely high-risk environment and work-to-private life conflict.

#### 2.4.2.1 Contextual factors as antecedents of Self-perceived Performance of Expatriates

##### **High-risk Environment as an antecedent of Self-perceived Performance of Expatriates**

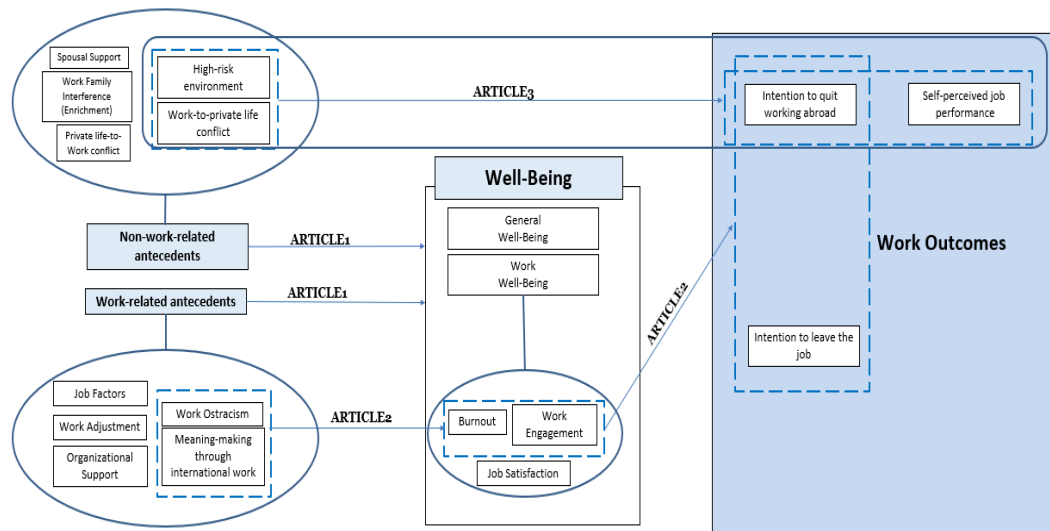
The performance of expatriates in risky environments cannot be solely explained by individual or organizational factors, since the environment they live in can play a crucial role. Some researchers have also examined the role of the unfamiliar environment in predicting performance. For instance, a proficiency in the local language and a familiarity with the local culture have been found to positively correlate with the performance of expatriate employees (Claus et al., 2011). Research has shown that tensions concerning safety issues have been found to impede expatriates' adjustment and limit their performance potential (Bader et al., 2015). In challenging environments, expatriates are understandably concerned about hostile conditions, leading to heightened psychological strain (Takeuchi, Wang, & Marinova, 2005) which in turn is likely to negatively impact expatriate performance.

##### **Work-to-private life conflict (WLC) as antecedent of Self-perceived Performance of Expatriates**

Expatriates often experience high levels of involvement at work which can positively impact performance, but may also be detrimental when the expatriate's family is involved. Research indicates that balancing demands across various life domains is particularly challenging for individuals with international careers, compared to those with traditional careers (Mäkelä & Suutari, 2011, p. 373). Conflicts between work and personal demands create sub-optimal work situations for expatriates, making it challenging for them to focus entirely on their work or to dedicate themselves fully to it (Shih et al., 2010). In such scenarios, the work-family conflict among expatriates heightens, leading to a decline in expatriate performance (Shih et al., 2010), and therefore, a direct relationship between work-to-private life conflict and performance can be expected.

Furthermore, given the tricky circumstances expatriates operate in, expatriates might experience cumulative demands such as living in a high-risk environment and experiencing work-to-private life conflict at the same time. Thus, in addition to the direct negative relationship between high-risk environment and WLC on performance, their co-existence also increases the risk of resource deprivation, resulting in heightened stress and other negative reactions that may impair the effective functioning of employees (see also Voydanoff, 2005).

In sum, the aim of this doctoral dissertation is to examine the role of several work-related factors, non-work-related factors and contextual antecedents in explaining expatriate well-being and work outcomes. Figure 2 illustrates how different antecedents and work outcomes mentioned in the sections above are theoretically/empirically connected to build the premise of the dissertation.



**Figure 2.** Overview of all of the core variables studied in the three research articles included in the dissertation. Articles 1, 2 and 3 have been marked using logic pathways in the figure.

### 3 METHODOLOGICAL CONSIDERATIONS

In this section, the methodological choices of the research, as well as the research settings are discussed in more detail. The discussion starts with an exploration of the philosophical underpinnings guiding the research methodology employed in this doctoral dissertation. Following, the empirical approaches adopted in the studies are explained, including the research process, data collection, data analysis, and research quality aspects.

#### 3.1 Philosophical foundations

This subsection delves into the paradigmatic positioning of the research and the foundational presumptions underpinning this doctoral dissertation, that support the methodological choices made in the present investigation (Burrell & Morgan, 1979; Saunders et al., 2019). The research philosophy encompasses the researcher's ontological, epistemological, and methodological perspectives, shaping the approach to knowledge creation and the conduct of the study. Ontology delves into the nature of reality, and ontological considerations reflect on whether the reality is objective or subjective. Epistemology is the study of what knowledge is and how an individual can acquire knowledge of reality. It is important to note that epistemological considerations significantly impact decisions regarding data collection and analysis methods.

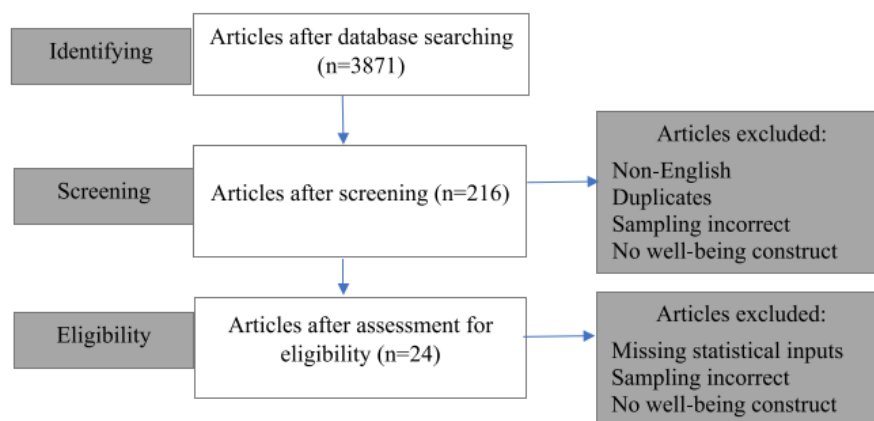
Research philosophy in business studies draws from diverse theoretical approaches which lead to the coexistence of multiple research philosophies, paradigms and methodologies (Saunders et al., 2019). Thus, it is important to closely examine the philosophical framework and guiding assumptions shaping the research methodology for the dissertation (Alvesson & Sköldbberg, 2009).

The chosen research paradigm for the dissertation aligns with positivism. A positivist approach is characterized by an ontological belief in an objective reality that exists independently of human observation, and an epistemological viewpoint that emphasizes empirical evidence, causality, and generalizable knowledge (Saunders et al., 2019). A positivist approach influences the selection of research methods, data collection techniques, and data analysis procedures in this study. In this case, quantitative research methods are central to this study, leveraging structured surveys with standardized instruments, and statistical tools to facilitate the systematic examination of relationships, patterns, and causal links between variables, adhering to the principles of positivist inquiry.

## 3.2 Research data and analysis

### 3.2.1 Strategy and Design

This dissertation approaches the research aim primarily through empirical examinations. The first part of this dissertation (Article 1) takes the form of an empirical literature review that identifies work and nonwork related antecedents of expatriate well-being. This study presents the existing literature through a systematic review, and thereafter adopts a meta-analytic approach to conduct a quantitative review of the body of relevant literature. A 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” (pg 579, Ferrer, 1998). A meta-analysis technique focusses on the data as reflected by the operationalization of variables in the selected studies, instead of only summarizing the conclusions drawn in the included 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 & Fitzgerald, 2001). Therefore, the findings on the reported relationships between antecedents and expatriates' well-being from previous studies can be aggregated to establish a trend and estimate the size of the relationship (Hunter & Schmidt, 2004), while controlling for artifacts such as sampling and measurement errors, thus providing a more accurate estimate of the strength of the relationship (Combs, Ketchen Jr, Crook, & Roth, 2011; Hunter & Schmidt, 2004). The approach made it possible to include variations of specific items identified in individual studies in the meta-analysis, so as to capture a holistic understanding of well-being.



**Figure 3.** Flow diagram of the systematic literature search (Biswas et al., 2021)

Article 2 examines the development of exhaustion and vigor as indicators of work well-being among expatriates, and potential predictors (workplace ostracism and meaning-making through international work) and associations with work outcomes (intention to leave the job and intention to quit the working abroad) using longitudinal data collected from a sample of 416 Finnish expatriates. Furthermore, Article 3 examines the role of high-risk environment and work-to-private life conflict on work outcomes (i.e., self-perceived performance and intention to quit working abroad) by employing a quantitative survey approach, with cross-sectional data collected from 416 Finnish assigned and self-initiated expatriates.

### 3.2.2 Data Collection

The data collection for Article 1 was collected by conducting a comprehensive literature review of pertinent articles published in scholarly journals featuring empirical studies sourced through a combination of manual and computer-assisted searches. Specifically, electronic databases germane to the domains of management, psychology, and social sciences, namely Business Source Premier (EBSCO), PsycINFO, Web of Science, and Scopus, were meticulously scrutinized. Additionally, manual scrutiny of the reference lists of articles was performed via automated searches to identify any potentially germane articles that might have been inadvertently omitted in prior searches. Each structured search was meticulously tailored to encompass various combinations of keywords, each incorporating at least one descriptor associated with expatriates (see table 3) and another descriptor related to well-being (see table 3). Each of the aforementioned keyword permutations was queried twice: once within the title and subsequently within the abstract section of the articles under review. Table 3 shows a complete list of keywords used in the literature search process.

The initial search process yielded a total of 3,871 matches. Following the removal of duplicate entries and articles unrelated to the focus of our study, a subset of 216 articles emerged as an initial pool for the subsequent selection process. The ultimate screening process was implemented in accordance with standardized inclusion criteria. To be retained, studies were required to satisfy the following criteria:

- a) Concentration on international employees residing in host locations for a longer period (more than a year).
- b) Presentation of original empirical analysis (literature reviews were excluded from consideration).

- c) Inclusion of at least one antecedent of well-being reported to be correlated with one or more well-being indicators.
- d) Publication in a peer-reviewed scholarly journal with English serving as the principal language of communication.

**Table 3.** 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 x 15) keyword combinations were used	

The 216 publications selected for further examination were then subjected to individual scrutiny based on their titles and abstracts. Thereafter, the definitive inclusion or exclusion of these publications was determined by reading the full article and considering its relevance to the present study. Publications that examined employee performance, employee turnover intention, and company retention are conceptualized as outcomes of expatriates' well-being and were considered to be beyond the scope of this study because the primary focus was to assess different antecedents of well-being. Furthermore, articles that did not report relevant statistics were also excluded from the study (the original authors of such articles were contacted but they either did not respond or were unable to fulfill our request for additional data). The final count for relevant studies with quantitative data reporting was twenty-four.

The data for articles 2 and 3 was collected in 3 waves over the period of 2015-2017, as part of a larger research project "work well-being of international experts in a modern working environment". Potential study respondents were identified by two labor unions within the boundaries of Finland. The trade unions had registered information on whether the union members have listed non-Finnish

addresses, and as we were investigating expatriates, questionnaires were sent to those potential participants who were living abroad. The labor unions represented two distinct professional groups: academic engineers and architects (TEK) and business graduates and economists (Suomen Ekonomit). There was roughly an equivalent time lapse of approximately six months between each data collection point. It should be noted that the initiation dates for data collection were not synchronous for these two samples. The project started with data collection from the Ekonomit union. However, to ensure a large data pool for the longitudinal research design, similar data collection was conducted among TEK union members immediately after.

The data collection for the economist sample was conducted during the years 2015 and 2016 and consisted of 222 respondents at T1 (6/2015), 83 at T2 (1/2016), and 82 at T3 (6/2016). The engineer sample was collected during 2016 and 2017 and consisted of 305 respondents at T1 (3/2016), 184 at T2 (11/2016), and 153 at T3 (5/2017). In the final sample, a total of 527 expatriates completed the questionnaire at time point 1 (T1), 250 expatriates participated at time point 2 (T2), and 177 expatriates engaged at time point 3 (T3). Data from all three time-points (T1, T2, T3) has been used in Article 2, whereas only T1 data has been used in Article 3.

To maintain the focus of our study which examined work and non-work-related factors in relation to expatriate work, we exclusively considered expatriates who were not retired or on leave from their employment during the study period.

### 3.2.3 Measures

Established multi-item measurement scales are adopted in the empirical studies to bolster the robustness of results. Through strategically segmenting the questionnaire into separate domains for predictor variables and outcome measures, the studies mitigate the issue of potential common method variance. Moreover, to enhance the reliability of responses, the study safeguarded the anonymity of respondents and encouraged them to provide candid and spontaneous answers (Podsakoff et al., 2003).

**Exhaustion** was measured by a three-item dimension taken from the Bergen Burnout Inventory (BBI) scale (Salmela-Aro et al., 2011). The measure had a scale ranging from 1 (completely disagree) to 6 (completely agree). Examples of the items are “I am snowed under with work”, “I often sleep poorly because of the circumstances at work”, and “I constantly have a bad conscience because my work forces me to neglect my close friends and relatives”. The validity of the BBI scale

has been found to be good with Finnish managers (Salmela-Aro et al., 2011). In the current study, Cronbach's alpha values for exhaustion were .75 (T1), .73 (T2), and .72 (T3) which indicated an acceptable reliability.

**Vigor** was measured by a three-item dimension subscale (validated in Finland by Seppälä et al., 2009), derived from the UWES-9 scale measuring work engagement (Schaufeli et al., 2006). The validity of the UWES-9 scale has been determined to be good with Finnish white-collar workers across different occupational groups and over time (Seppälä et al., 2009). Vigor was measured with a scale ranging from 1 (never) to 7 (every day). Example items are "At my work, I feel that I am bursting with energy"; "At my job, I feel strong and vigorous" and "When I get up in the morning, I feel like going to work". In the current study, Cronbach's alpha values for vigor were .87 (T1), .90 (T2), and .93 (T3) which indicated a high reliability.

**Intention to quit working abroad** has been measured using a modified version of the same scale as listed above (Cao et al., 2013). The items for this scale were 'I wouldn't want to continue working abroad', 'I would like to return to working to my home country', and 'I would like to stop working abroad'. The items were rated on a similar five-point scale as the previously mentioned intention to leave the job. The Cronbach's alpha for this scale was .88 (T3) which indicated a high reliability.

**Intention to leave the job** was measured using a three-item scale. The items were 'I have thought about quitting this job', 'I have searched for other employment opportunities', and 'I have thought about switching this job'. The items were rated on a five-point scale ranging from 1 (completely disagree) to 5 (completely agree). The Cronbach's alpha for this scale was .91 (T3) which indicated a very high reliability.

**Self-perceived job performance** was measured with a three-item scale developed by Farh et al. (1991). The items included "What do you think of your quality of work?" (very low = 1, excellent = 5), "What do you think of your work efficiency?" (very low = 1, excellent = 5), and "What do you think of your work performance?" (very poor = 1, excellent = 5). The Cronbach's alpha for this scale was .83 which indicated a high reliability.

**Workplace ostracism** was assessed using a nine-item scale adapted from the validated ostracism at work scale (Ferris et al., 2008). The items included "*When you think of the following statements, how often has this happened to you in the last 12 months working abroad / in your workplace? If you have not been working abroad for a further 12 months, think of replying to the period during which you have been there. Answer the questions according to the following*

*response options*: “Others ignored you at work”; “Others refused to talk to you at work”; “Others left the area when you entered”; “Your greetings have gone unanswered at work”; “You involuntarily sat alone in a crowded lunchroom at work.”; “Others avoided you at work”; “Others at work shut you out of the conversation”; “Others refused to talk to you at work”; “Others at work treated you as if you weren’t there” and “Others at work did not invite you or ask you if you wanted anything when they went out for a coffee break”. Expatriates were asked to rate the ostracism items using a scale ranging from 1 (never) to 7 (constantly/always). The Cronbach’s alpha for the ostracism scale was .86 (T1) and indicated a high reliability.

***Meaning-making through international work*** was measured using a three-item sub-scale from the ten-item Work as Meaning Inventory scale (WAMI; Steger, Dik, & Duffy, 2012). The items were rated on a five-point scale ranging from 1 (completely disagree) to 5 (completely agree). The instrument items read “*Now that I am working as an expatriate*: “I feel that my work contributes to personal growth”, “My work helps me to better understand myself”, and “My work helps me to better understand the world around me”. In the current study, the Cronbach’s alpha value for meaning making was .80 (T1) which indicated a high reliability.

***High-risk environment*** was measured with three items on a 5-point Likert scale anchored by strongly disagree (1) and strongly agree (5), using an international context-risk scale specific to international business travellers developed by Mäkelä et al. (2015). The items were modified to suit the expatriation context. Sample items read “When working abroad, I face security risks”, “When working abroad, I am exposed to health risks”, and “The country I am currently working in is culturally very different from my home country”. The internal consistency (Cronbach’s alpha,  $\alpha$ ) was .78. (refer to section 3.2.5 for details about Cronbach’s alpha).

***Work-to-private life conflict (WLC)*** was measured using the five-item scale developed by Fisher et al. (2009). Sample items read “I come home from work too tired to do things I would like to do”, “My personal life suffers because of my work”, “My job makes it difficult to maintain the kind of personal life I would like”, “I often neglect my personal needs because of the demands of my work”, and “I have to miss out on important personal activities due to the amount of time I spend doing work”. The responses were assessed on a 5-point Likert scale anchored with never or hardly never (1) and always or almost always (5). The internal consistency (Cronbach’s alpha,  $\alpha$ ) was .89.

### ***Control variables***

In Article 2 and 3, demographical, work-related and expatriation-related characteristics were controlled in the prediction of the profiles. Gender, age, the length of stay, weekly working hours, children, expatriation type, and respondent's relationship status were included as control variables in all the analyses as these are likely to affect expatriate's experiences abroad (e.g., Cavazotte et al., 2021; Wurtz, 2022). Gender was measured as 0 = man or 1 = woman. Age was measured chronologically in years. The length of stay in the current country of the expatriate was measured in months. Weekly working hours were measured as hours per week. Children were measured as 0 = has no children or 1 = has a child/children. Expatriate type was measured as 0 = self-initiated expatriate (SIE) or 1 = assigned expatriate (AE). Lastly, relationship status was measured as 0 = not in a relationship or 1 = in a relationship.

Article 2 had an additional control variable – sample indicator. The sample indicator contained the professional group information from the separate samples as 0 = engineers or 1 = economists.

#### **3.2.4 Data Analysis**

This subsection presents the rationale for selecting meta-analysis, structural equation modelling (SEM) and latent profile analysis (LPA) to investigate the experiences of well-being in expatriates.

#### **Meta-analysis**

A meta-analysis reports the quantitative estimate of the results included in a systematic literature review, and has been used in Article 1 to statistically aggregate the body of literature on antecedents of well-being in expatriates. To ensure statistical independence within the meta-analysis, the following guideline has been followed: for 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).

It is important to note that the unit of measurement was not the quantity of studies incorporated into the analysis, but rather the cumulative count of effect sizes derived from these studies. To estimate the associations between various antecedents and indicators of both work and general well-being, the article

employed the psychometric meta-analysis methodology introduced by Hunter and Schmidt (1990). 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 an  $\chi^2$  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 and were thus judged 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.

### **Structural equation modelling**

Articles 2 and 3 use SEM to investigate the influence of several theoretically relevant antecedents with well-being and work-related outcome variables. The SEM-method is generally employed in situations where the research investigates whether an existing theory finds support through the hypothesized research models. SEM represents a potent statistical method for both estimating and scrutinizing intricate associations among observed factors and latent constructs. Latent constructs refer to unobservable theoretical concepts that are deduced from the observable variables. The present study is particularly amenable to SEM due to its capacity for simultaneous examination of multiple outcome variables (Hair et al., 2019). SEM was used as a primary analysis method in Article 2 studying the connections and temporal correlations between the predictors and work outcome of well-being among expatriates. For Article 3, SEM was used to find the correlation associations between high-risk environment and job performance and intention to quit, while accommodating for the moderation effects of work to private life conflict.

### **Latent profile analysis**

Article 3 utilizes the LPA method to examine whether there were homogenous subpopulations in the level and development of the exhaustion-vigor continuum in expatriates. LPA is a type of finite mixture modeling (McLachlan & Peel, 2000), which allows latent subpopulations to be identified from the observed data (McLachlan & Peel, 2000). LPA is usually a very data-driven method, but it can be used in a more confirmatory fashion if the theory allows for specific hypotheses to be made about the number and structure of the underlying profiles. As the theories in the expatriate field were not very specific about the development of vigor and exhaustion in expatriates or even about the possible existence of different subgroups, we chose a more exploratory approach. LPA was conducted using a standard stepwise approach (Nylund et al., 2007): 1) the number of groups was investigated and determined according to theoretical and statistical criteria; 2) the covariates and predictors at T1 were added to the model and tested with the R3STEP procedure (Asparouhov & Muthén, 2014) which utilized multinomial logistic regression on the profiles; and then 3) the outcomes at T3 were investigated by utilizing the BCH approach (Asparouhov & Muthén, 2014), which compares the means of the outcomes between the profiles.

### 3.2.5 Reliability of Indices

The internal consistency of each of the constructs is tested through an examination of Cronbach's alpha to ascertain consistent measurement of the same concept. Often, Comrey and Lee (1992: as referenced by Meyers et al., 2006), have categorized reliability coefficients in the following manner: .70 as excellent, .63 as very good, .55 as good, .45 as fair, and .32 as close to minimal. These broad standards were applied when assessing the reliability outcomes.

### 3.2.6 Construct Validity

Several steps were undertaken to ensure that the measures accurately reflect the concepts they intend to gauge in terms of construct validity. Initially, a Confirmatory Factor Analysis (CFA) was carried out to validate the measurement models in Articles 2 and 3, with a specific focus on assessing both convergent and discriminant validity. CFA employs a range of statistical indicators, which include the chi-square test, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR), to assess how well the proposed model fits the data.

To determine whether the model aligns with the data in an acceptable manner, we followed established guidelines (e.g., Hu & Bentler, 1999). The model is considered to have a satisfactory fit if it meets the following criteria: the chi-square test of model fit yields a non-significant result, CFI equals or exceeds .90 (preferably .95), TLI equals or exceeds .90 (preferably .95), RMSEA is less than .08 (preferably less than .06), and SRMR is less than .08.

The chi-square test is employed to evaluate how well a model fits a given dataset. When the chi-square test yields a significant result (i.e., a p-value less than 0.05), it indicates that the model is not a good fit for the data. Essentially, this means that the observed covariance matrix (the one derived from the actual data) is significantly different from the expected covariance matrix (the covariance matrix predicted by the model). It is important to note, however, that the chi-square test can be overly sensitive to sample size and might reject models even when the differences are relatively small, especially with large samples. Therefore, researchers often complement the chi-square test with additional fit indices, such as CFI, TLI, RMSEA, and SRMR, explained as follows:

- CFI (Comparative Fit Index): CFI compares the fit of the model under study to a null or baseline model. Its values range from 0 to 1, and higher values, closer to 1, suggest a better fit.

- TLI (Tucker-Lewis Index): Similar to CFI, TLI also compares the fit of the model being examined to a null model. Its values also range from 0 to 1, with higher values indicating a better fit.
- RMSEA (Root Mean Square Error of Approximation): RMSEA provides a measure of the difference between the hypothesized model with optimally estimated parameters and the population covariance matrix. Lower RMSEA values, typically less than 0.05 or 0.06, indicate a better fit.
- SRMR (Standardized Root Mean Square Residual): SRMR quantifies the standardized difference between the observed and predicted correlation matrices. Lower SRMR values signify a better fit, with values less than 0.08 generally considered acceptable.

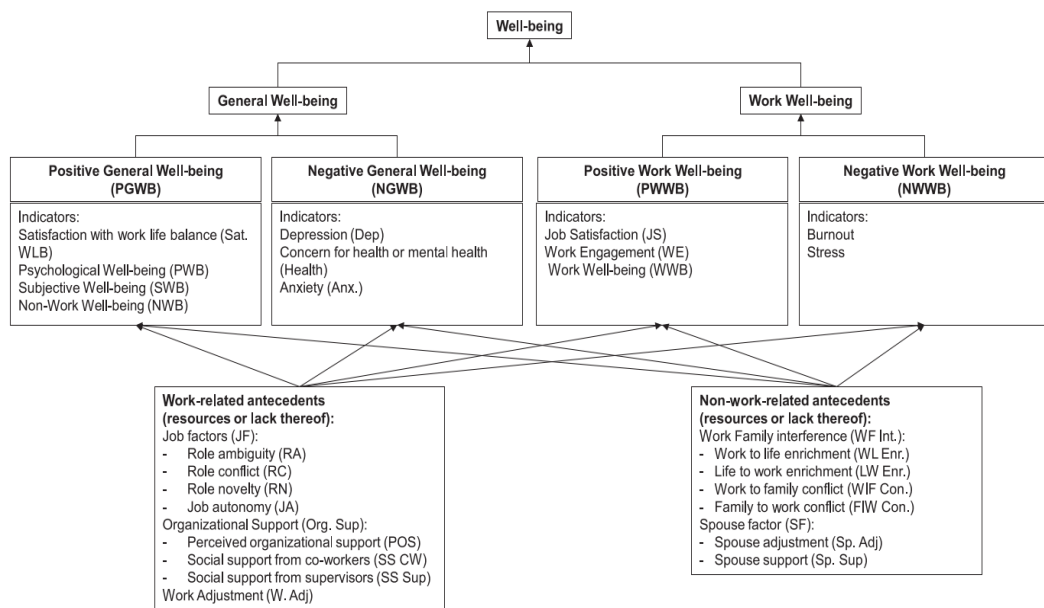
We also assessed discriminant validity during the analysis process to ensure that each construct is unique to avoid issues like multicollinearity, which can distort the analysis outcomes (Sarstedt, 2019).

## 4 RESEARCH PAPERS: SUMMARY OF THE ARTICLES

This dissertation consists of three separate articles that examine how the presence and accessibility of various resources influence well-being and work outcomes in expatriates. This chapter presents an introduction to these articles and offers a synthesis of their findings. Article 1 is a meta-analytic review examining the work-related and non-work-related antecedents of well-being (general and work) in expatriates. Article 2 presents an empirical investigation of the development of work well-being in terms of exhaustion and vigor, predictors of the developmental subpopulation and associated work outcomes. Finally, Article 3 empirically studies different life domains (work, private life, and living environment) and their interactions on expatriates' effective functioning in terms of their job performance and quitting intentions. The full texts of the articles can be found in the Publication section of the dissertation.

### 4.1 Article 1 "Work and non-work-related antecedents of expatriates' well-being: A meta-analysis"

This meta-analytic review aimed to enhance our understanding of the factors influencing the well-being of expatriates. It synthesized data from 24 prior studies from expatriation well-being literature, and adopted the Conservation of Resources theory framework differentiating between work-related and non-work-related factors, and examined their impact on expatriates' work well-being and general well-being. In the study, we focused on both positive and negative aspects of work well-being (PWWB - Positive Work-Related Well-Being and NWWB - Negative Work-Related Well-Being) and general well-being (PGWB - Positive General Well-Being and NGWB - Negative General Well-Being), for better understanding please refer to figure 4.



**Figure 4.** An overview of expatriates' well-being: Concept, indicators, and antecedents.

The work-related antecedents identified in the meta-analysis are listed below -

*Job Factors:* Job factors including role ambiguity, role novelty, role conflict, and job autonomy were investigated in relation to work well-being and general well-being. Statistically significant relationships were found between job factors and both PWWB and NWWB. These findings suggest that job factors play a crucial role in determining work well-being among internationally mobile employees. It was observed that job factors had a stronger impact on NWWB compared to PWWB, except for role conflict which did not show a significant relationship with work well-being. The findings reported a significant correlation between job factors and PGWB, suggesting that job roles can impact expatriates' well-being beyond their work sphere.

*Organizational Support:* Studies reporting different types of organizational support including perceived organizational support, social support from supervisors, and social support from coworkers were examined. A positive and significant relationship was found between perceived organizational support and PWWB, but no statistically significant relationship was evident with NWWB. Furthermore, perceived organizational support was observed to have the strongest relationship with PWWB, followed by social support from supervisors and coworkers. However, no statistically significant relationship between organizational support factors and PGWB or NGWB was observed, implying that changes in organizational support may not significantly affect general well-being.

*Work Adjustment:* The meta-analysis explored work adjustment in relation to work well-being and general well-being. A strong positive relationship with PWWB and a negative relationship with NWWB was observed. This suggests that work adjustment has a stronger impact on evaluating PWWB compared to NWWB. Only one study investigated the relationship between work adjustment and general well-being, reporting a significant correlation between work adjustment and both PGWB and NGWB.

Non-work-related antecedents identified in the meta-analysis include the following:

*Work-Family Interference:* The impact of work-family interference including work-to-family conflict and family-to-work conflict on well-being was studied. Work-family interference factors showed a significant negative relationship with PWWB, implying that reduced work-family interference is associated with higher PWWB. The meta-analytic results showed that Work-to-family conflict had a stronger effect on PWWB than family-to-work conflict. Work-family interference factors also demonstrated strong and statistically significant relationships with both PGWB and NGWB, indicating that increased work-family interference is likely to negatively affect general well-being.

*The Spouse Factor:* The study also examined the relationship between spousal support and well-being. A meta-analytic correlation was found between the spouse factor and PWWB, suggesting a positive association. Only one study reported a strong and significant relationship between spousal support and PGWB, indicating that spousal support is associated with positive general well-being. These findings shed light on the multifaceted factors that influence the well-being of internationally mobile employees, encompassing both work-related and non-work-related aspects. Job factors, organizational support, work adjustment, work-family interference, and spousal support all play varying roles in shaping different dimensions of well-being among this population.

Overall, the findings suggest that a holistic approach is needed to support expatriates' well-being, considering both work and non-work factors and providing appropriate resources and support. In practice, organizations should provide emotional and practical support to expatriates to replenish diminished resources due to relocation. Policies and practices should be developed to help expatriates manage their work and non-work roles effectively. Employment-related resource gains are crucial in mitigating resource losses, so organizations should offer support to address work-to-private life conflict. Open communication within families and preparation for the challenges of expatriation are also

recommended. Finally, organizations can implement support programs and mentoring to help expatriates identify and address problems effectively.

#### 4.2 Article 2 “Exploring Vigor and Exhaustion Profiles among Expatriates: Examining the Influence of Meaning Making, Workplace Ostracism, and Effect on Turnover Intentions”

Article 2 identifies expatriates' well-being development profiles; and examines the associations with two antecedents - *workplace ostracism (job demand related to the social context of work)* and *meaning-making through international work (job resource at a task level)* and outcomes - *expatriate intention to quit working abroad and intention to leave their job (work outcomes)*. Adopting JD-R theory, this study combines longitudinal data from 416 expatriates at T1, 196 expatriates at T2, and 142 expatriates at T3, and examines whether there were homogenous subpopulations in the level and development of the exhaustion-vigor continuum in expatriates. The results of the LPA for simultaneously estimated vigor and exhaustion profiles came up with a three-profile solution. Please refer to figure 5, figure 6 and figure 7 to find the estimated means of each profiles.

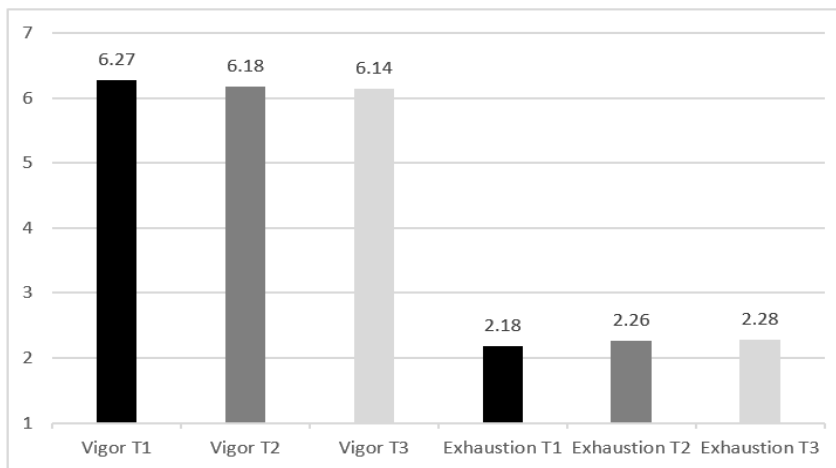
*Energized Profile* (58% of participants): This group, comprising the majority of respondents (n = 240), consistently displayed low levels of exhaustion and sustained high levels of vigor. In other words, they exhibited a pattern of overall high energy and well-being.

*Unenergized Profile* (10% of participants): The second profile, the smallest group (n = 43), demonstrated stable moderate levels of both exhaustion and vigor. This group had relatively balanced levels of energy and fatigue, neither extremely high nor extremely low.

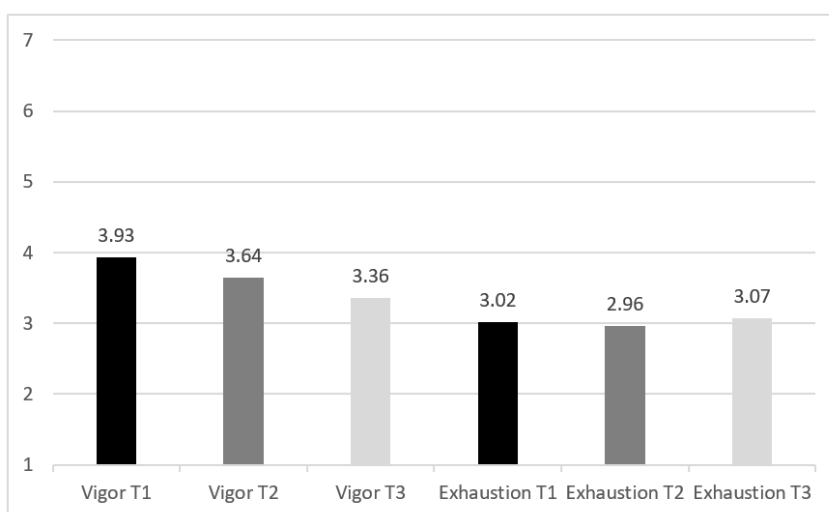
*Risky Profile* (32% of participants): The third profile, which constituted almost a third of the participants (n = 133), exhibited stable high levels of exhaustion along with a declining high level of vigor. This group was characterized by high levels of fatigue and a decreasing sense of vitality over time.

Multinomial logistic regression analysis revealed significant relationships between workplace ostracism, meaning making, and the three profiles. Specifically, individuals experiencing higher levels of workplace ostracism were more likely to be associated with the risky profile or the unenergized profile compared to the energized profile. However, it is important to note that ostracism had a high standard error and wide confidence intervals, likely due to limited variability in

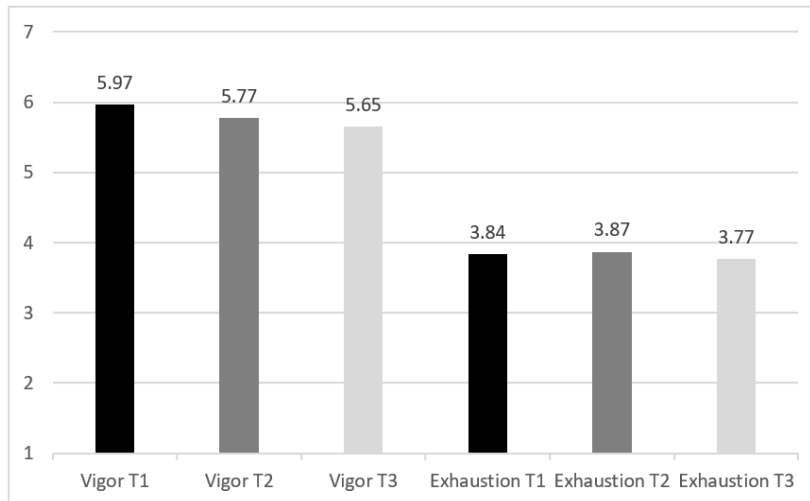
ostracism levels among participants. Conversely, higher levels of meaning making were associated with a reduced likelihood of belonging to the unenergized profile compared to the stable profile, and an increased likelihood of belonging to the risky profile compared to the unenergized profile. However, there was no significant difference in the likelihood of belonging to the risky profile compared to the stable profile among individuals with high meaning making through international work. The study also examined exhaustion-vigor profiles in relation to intentions to leave the job and intentions to quit the current period of working abroad at T3. The unenergized profile had the highest turnover intentions, followed by the risky profile, which was primarily driven by intentions to leave the job rather than intentions to quit working abroad.



**Figure 5.** Estimated means of the “Stable” profile.



**Figure 6.** Estimated means of the “Unenergized” profile.



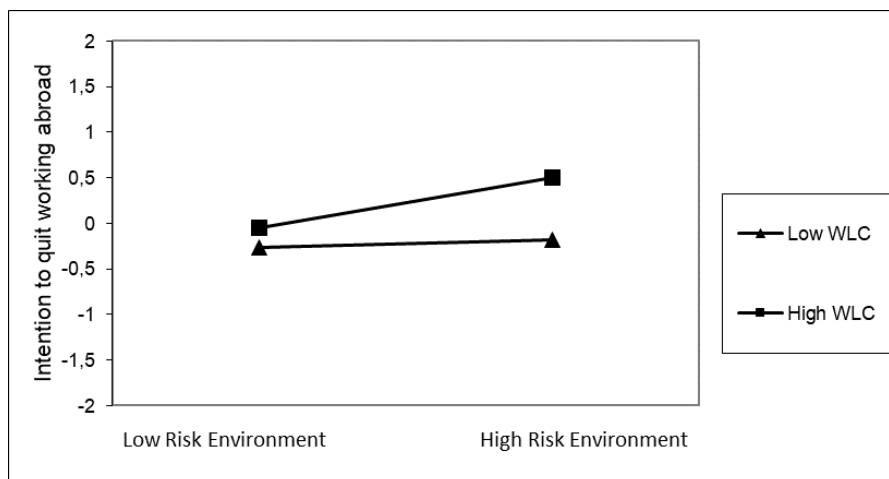
**Figure 7.** Estimated means of the “Risky” profile.

To summarize, this research examines the well-being of expatriates over time, focusing on exhaustion and vigor. It suggests that these well-being aspects can coexist within the same groups, challenging the idea that they are opposites. Most expatriates experience stable well-being, contradicting the belief that expatriation is harmful. Some face higher exhaustion and vigor, potentially causing long-term well-being issues. The study highlighted that workplace ostracism negatively affects well-being, leading to higher exhaustion and lower vigor over time. Furthermore, finding meaning in expatriation work can prevent individuals from experiencing low vigor and high exhaustion. However, beyond a certain level, the benefits of such meaningfulness will cease or potentially lead to a deterioration in overall work well-being. The findings show that younger, female expatriates, and expatriates working longer hours were more likely to experience high exhaustion and vigor. The article further revealed that work well-being affects expatriates' intention to continue working abroad or in their current jobs. In practice, it can be noted that organizations need to identify and support expatriates with different well-being profiles. This can significantly reduce employee burnout incidences and turnover cases. Creating meaningful work assignments, addressing workplace ostracism, and fostering social inclusion are recommended to enhance expatriate well-being and retention.

### 4.3 Article 3 “Self-perceived Job Performance and Intention to quit working abroad among expatriates: The role of accumulative demands from Risky living environment and Work-to-Private Life Conflict”

Grounded in the Conservation of Resources theory, article 3 explores the impact of resource loss on several work outcomes as experienced by expatriates during their work abroad. In particular, this study investigates the role of a high-risk environment and work-to-private life conflict on self-perceived job performance and intention to quit working abroad among expatriates. As mentioned in the previous section (3.2.2), the data for this study was collected from 416 Finnish assigned and self-initiated expatriates as the timeline 1 (T1) response from a 3-wave quantitative data collection procedure.

The findings from this article indicate that WLC brings a significant resource loss that negatively impacts both self-perceived job performance and intention to quit working abroad. The findings suggest that the presence of elevated risk factors in the living environment is associated with an increased likelihood of expatriates expressing an intention to terminate their work abroad. Furthermore, the accumulation of resource losses, i.e., expatriates with a high WLC in high-risk environments experience significantly higher intention to quit working abroad compared to those in non-challenging environments (see figure 5).



**Figure 8.** Plot of the two-way interaction effect of Risky environment and WLC

The main contribution of this article is to highlight the importance of resources in expatriate work, and provide evidence for resource interactions within the international work context. This study highlights the interaction of contextual

demands and demands from the family domain on expatriates' work outcomes, specifically, self-perceived job performance and intention to quit working abroad. The findings emphasize that multiple resource losses can lead to reduced intention to stay. Resources become more critical when they are in short supply, highlighting the importance of resource management for expatriates facing WLC. In such cases, expatriates tend to compensate by acquiring additional resources from their private lives, which can initially help with job demands. However, over time, this compensation strategy can lead to further WLC and decreased job performance. Furthermore, expatriates facing resource loss due to high-risk environments primarily experience a heightened intention to quit working abroad, possibly because losses in a specific domain prompt a coping mechanism within the same domain. Job performance remains unaffected when expatriates compensate for a demanding situation stemming from high WLC and stress from living in risky environments. In practice, organizations need to recognize that expatriates often face significant stress when trying to allocate resources effectively between their family lives and their work responsibilities, and therefore should provide additional support to optimize resource allocation in their work and private life spheres. In the same vein, employers should ensure that expatriates' workloads are reasonable and not overly taxing, preventing the depletion of their resources. Overall, this study sheds light on the complex relationship between work-to-private life conflict, a high-risk environment, and expatriate's work outcomes, offering insights for both theoretical development and practical guidance for organizations and expatriates.

## 5 DISCUSSION AND CONCLUSIONS

This section delineates the comprehensive contributions of the dissertation. It first summarizes and evaluates the findings of the dissertation as a whole. Subsequently, discussions on theoretical contributions from the research findings on the experiences of expatriates are provided. This leads to the formulation of recommendations for future research endeavors, while concurrently addressing the limitations inherent in the dissertation's methodology and scope. The section concludes by discussing the practical implications of the research findings.

### 5.1 Theoretical contribution

This dissertation makes several theoretical contributions to expatriate literature specific to well-being and work outcome related knowledge. Despite the recognition that employee well-being is critical in several aspects of individual work behaviors and organizational outcomes, limited management research can be identified where the phenomenon is studied among global workers such as expatriates (Bastida et al., 2023). Drawing from the concepts of conservation of resources and job-demand resources theory, this dissertation takes a deep dive into both phenomena, providing a review of existing knowledge from prior research, and gives new insights through empirical examinations. The following section presents an overview of the main contributions made through the dissertation, and discusses the contributions made in each of the included articles.

This work broadens the understanding regarding the antecedents influencing well-being and work outcomes - job performance and intention to quit. Employing a comprehensive approach, it integrates both work-related and non-work-related factors particularly prevalent within expatriate contexts (Article 1,2,3). Article 1 conducted a meta-analytic review of 24 previous studies, employing quantitative methods to investigate expatriate well-being and its predictors across work and non-work domains. The empirical studies (Articles 2 and 3) took a quantitative approach using longitudinal and cross-sectional datasets respectively, to study work well-being and work outcomes in expatriates. Article 2 identifies development profiles of work well-being among expatriates, and associates expatriate's membership to each profile with perceptions of ostracism within the expatriate workplace and the feeling of meaning-making through international work. It further highlights how belonging to each of the above-mentioned profiles might predict the intention to quit working abroad or to leave the existing job all together. Article 3 adopts COR theory to examine the extent to which resource

losses due to WLC and a high-risk environment are associated with expatriates' self-perceived job performance and their intention to quit working abroad.

First, Article 1 pulls together well-being indicators from prior studies, distinguishing between general well-being covering expatriates' overall well-being, and work well-being focusing on experiences related to the work-life sphere. This follows the COR theory (Hobfoll et al., 2018) suggesting that different life domains produce and conserve resources which in turn, has effects on individuals' well-being, at work and in general i.e. antecedents of expatriates' well-being. The literature review underscores that non-work-related factors have a more pronounced impact on general well-being, while work-related factors exert greater influence on work well-being. There has been limited research on the link between work-related factors and general well-being, likely due to the prevailing notion of the matching principle (Chrisopoulos et al., 2010), advocating similarities between antecedents and outcomes. For example, work-family interference as a non-work antecedent predicted general well-being (both positive and negative angles), whereas despite being tested in several studies, organizational support did not prove a significant predictor of general well-being. Work-related factors (particularly job factors) emerged as critical predictors of work well-being, predominantly with a strong well-being reduction effect and only a weak well-being enhancement effect.

Second, the research findings from Article 2 find evidence that exhaustion and vigor can coexist within the same individuals, and are not the opposite poles of a single continuum. Instead, both phenomena appear to be independent and merit simultaneous examination. It further contributed to the expatriate literature by exploring the possibility that not all expatriates might have similar experiences in terms of the development of exhaustion and vigor over time, thus challenging the general notion of a uniform growth trajectory of a phenomenon for an entire population (see Hofmans, Vantilborgh, & Solinger, 2018). Most importantly, it provides evidence for the co-existence of multiple well-being development profiles within the study population. The latent profile analysis identifies three development trajectories of well-being among expatriates. The majority of expatriates (58%) belong to the *Energized* group representing a developmentally stable profile, characterized by consistently low exhaustion levels alongside high levels of vigor, echoing reports from prior studies conducted in domestic settings (Mäkikangas et al., 2014, Mäkikangas et al., 2017). This finding challenges the prevalent perception assumed in expatriate literature, that international assignments significantly jeopardize work well-being (Font et al., 2012). Next, a smaller subset of expatriates (10%) is identified as belonging to the *Unenergized* group, marked by persistent moderate exhaustion and low vigor, indicating a risk

of enduring personal distress and adverse work well-being. Contrary to widespread assumptions, while most expatriates do not seem to suffer negative effects on their well-being, about 32% were categorized into the *Risky* group, displaying elevated exhaustion levels alongside initially high but diminishing vigor over time. Notably, domestic studies (e.g., Mäkikangas et al., 2017) found a group with very small proportion of respondents showing similar characteristics as that of the *Risky* group, but in significantly smaller proportions (5%), possibly suggesting that expatriates might experience a more pronounced impact of international work on their energy levels despite deriving satisfaction from their roles.

Taking a person-centered perspective, the study highlights the significant role of work ostracism and meaning-making through international work in assessing how work well-being develops over time among expatriates. This study adopts JD-R theory to examine if it applies to different forms of international work in analyzing and understanding well-being and its antecedents and work outcomes, as has been suggested by researchers in the past (He et al., 2022; Rattrie et al., 2022). The findings showed that those who perceive their expatriate work as meaningful are more likely to belong to the *Energized* group rather than the *Unenergized* group. Thus, finding meaning in expatriate work may deter expatriates from developing low vigor combined with increased exhaustion. Notably, expatriates who perceived that their expatriate work is really meaningful are more prone to belonging to the *Risky* developmental group instead of the *Unenergized* group, bringing in the idea of such a perception as being a 'double-edged sword.' While it initially motivates employees, prolonged involvement in work may drain their energy, causing positive experiences such as vigor to diminish over time. Expatriates experiencing ostracism from their peers tend to fall into *Risky* or *Unenergized* groups, exhibiting heightened work exhaustion over time. Initially, they may display high work vigor, but this diminishes gradually.

Moreover, the study highlights the pivotal role of work well-being in an expatriate's commitment to continuing abroad or within their current role. Expatriates belonging to the *Unenergized* group exhibit higher intentions to quit both working abroad and their current job. Hence, to ensure employees' commitment to their job and organization, a holistic approach to work well-being is crucial. Merely addressing negative experiences in the workplace that might increase employee exhaustion isn't an adequate response, and promoting positive experiences such as vigor is equally essential.

Finally, this research plays an important role in highlighting the importance of the non-work domain playing a crucial role in expatriation outcomes. Following the suggestions made in earlier research (van der Laken et al., 2019), this dissertation

paid much needed attention towards the role of contextual demands, specifically exploring expatriation-specific work antecedents like living in a high-risk environment and the spillover effect from work life to private life on work outcomes among expatriates (Article 3). Through the findings of this study, this dissertation offers several interesting implications for COR theory by expanding it to expatriate research and the literature concerning work and private life.

The findings of Article 3 indicate that work to private life conflict (WLC) may have developed because of individual's tendency to compensate for inadequate workplace resources by drawing from their private lives, which adversely impacts expatriates' self-perceived job performance and their intention to quit working abroad. This compensation, though initially helpful, may eventually lead to WLC becoming a stressor, depleting resources from the private domain (see Hobfoll & Shirom, 2000). As this pattern persists, the capacity for compensatory efforts diminishes with the expatriate adopting accommodative coping, resulting in reduced job performance. Ultimately, if coping mechanisms fail, expatriates experience a heightened intention to quit working abroad. The study further elucidates that resource losses are more likely to be bounded within similar domains as observed in the findings, as a loss of contextual resources resulting from a high-risk environment impacts on expatriates' considerations of whether to stay abroad, but not on their job performance. Expatriates tend to address challenges in the same domain where resources are lost, preferring not to transfer resources from their workplace to their personal life domain. Organizations can play a pivotal role by supplementing resources to tackle challenges faced in the living environment. By enhancing working conditions and aiding expatriates in adapting to stress-inducing living conditions, organizations can bolster job performance. The findings showed that expatriates who are highly motivated to sustain an adequate job performance due to its criticality for continued employment and financial stability, would benefit from optimizing their remaining resources in the organizational environment rather than depleting the resources necessary for job performance while compensating for resource losses in the living environment (see Hobfoll, 2001).

Interestingly, the study findings highlight the cumulative impact of multiple stressors such as WLC and a high-risk environment on expatriates' intention to keep working in foreign host nations. This aligns with COR theory, suggesting that the resource losses resulting from high demands in one domain can weaken the reserves of resources for coping with another type of demand, so triggering a spiral of loss which can potentially reduce retention intention among expatriates.

## 5.2 Limitations and future research recommendations

Despite the various contributions made through the research, it is important to discuss some limitations that should be considered when interpreting the findings.

First, there are some limitations inherent to the meta-analysis methodology applied in Article 1 that should be mentioned. Meta-analyses are often bounded within the premises of systematic reporting from the original studies (Bobko & Stone-Romero, 1998). 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. 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). Future investigations need to re-evaluate the connections documented in this study to ensure the reproducibility of the correlations. Another limitation identified in a meta-analytic review is the limited number of independent samples available for the analyses. More than one construct was referenced from studies sharing common samples, thus raising concerns about potential interdependence, which could lead to an imbalanced influence of certain studies in estimating the relationship between predictors and outcomes.

One of the suggestions made in Article 1 was to encourage future studies to focus on work-family interferences in predicting positive and negative work well-being among expatriates. As per the meta-analysis (for reference see the full article attached below), spillovers between the work domain and the family domain have strong negative effects on employee well-being. It is surprising that only six studies were identified to have explored such relationships. More studies reporting the relationships between work-private life issues on engagement and burnout levels of expatriates could provide a better understanding of family's role in the expatriation process. Expatriate adjustment (maladjustment) can be a critical predictor of subjective well-being and thereby requires special attention (Hippler et al., 2017) in further reviews. Perhaps future researchers can include different forms of expatriate adjustment to perform well-being reviews to produce a better understanding of the predictors.

It has always been argued that expatriate partners play a crucial role in expatriate well-being (Van der Zee et al., 2005), and in particular, spousal support and

adjustment has been associated with job satisfaction and more general aspects of well-being (health concerns and psychological well-being). More studies evaluating the role of the partner's adjustment and well-being in determining the engagement and burnout levels of expatriates are welcomed.

Second, the research offers an exploration of the well-being of employees in highly skilled white-collar jobs with Finnish origins or associated with Finnish workplaces. Based on the assumptions made in earlier research, it can be suggested that the findings might substantially differ in employees from other countries (for example the Global South where the economic and cultural distance is quite wide) and also other sectors (e.g., healthcare employees) (Haak-Saheem et al., 2021; Andresen et al., 2020). Exploring a broader spectrum of demographics may unveil significantly distinct outcomes and insights unexplored in previous studies. Future research endeavors should prioritize diverse representation within study-populations to uncover nuanced findings among these work environments.

Finally, the data for the present study has been collected through self-reports, thus raising concerns about self-report bias and social desirability as some cultures tend to be more modest in answering questions than others (Fay et al., 2012). It is advisable that future researchers utilize more objective or multi-informant reports to avoid any issues in this regard, although all of the studied phenomena in the study were highly subjective in nature and the expatriates themselves were the best persons to evaluate issues such as the meaningfulness of their work, concerns about their living conditions, as well as their subjective experiences of how vigorous or exhausted they felt, or their perceived experiences of work-to-private life conflict (WLC).

The dissertation emphasizes the often-overlooked significance of family in the success of expatriates in high-risk environments (see Faeth & Kittler, 2020). Expatriates often experience spillover effects from the non-work domain to work outcomes while challenged by high-risk circumstances (Bader et al., 2015, 2016). Future studies should delve into family systems theory, and urges a more empirical examination of the experiences of family members. The suggestion is to broaden the research scope by interviewing expatriates' partners, shedding light on intra-family conflicts and exploring factors that contribute to enhanced satisfaction and adjustment within family systems. Overall, the call is for a more comprehensive and nuanced exploration of family dynamics in the context of expatriate assignments.

In a risky environment, expatriates face heightened challenges due to specific contextual factors that introduce additional complexity to performance (Bader & Berg, 2013) and job turnover and country-leaving intentions (Bader et al., 2016).

Creating a classification framework accounting for the varying degrees of risk within specific countries or intra-country locales would enhance our understanding of expatriates' perceptions regarding the challenges and apprehensions linked to uncomfortable living conditions. Future studies should also explore the efficacy of HRM strategies tailored to distinct "risk categories", thereby offering organizations insights into the most suitable HRM approaches.

It might also help to examine organizational registered data of outcomes, like actual turnover rates or statistics on premature return from assignment for future studies.

### 5.3 Practical Implications

The findings of this dissertation offer several practical implications for both organizations and individuals.

Organizations should acknowledge the potential presence of distinct exhaustion-vigor patterns within their workforce (Gillet et al., 2023). Managers must recognize the presence of "risky" and "unenergized" work well-being profiles among their employees, prioritizing additional support to boost available social resources for these employees. For instance, the introduction of cultural intelligence (CQ) training within expatriate management practices (Fu & Charoensukmongkol, 2021) may help to mitigate exhaustion, stress and reduced engagement related to this domain. Identifying expatriates within these profiles holds critical importance, as they may be prone to burnout and diminished work engagement. This training emerges as a potentially indispensable asset for such individuals, given the challenges they might face in establishing meaningful interpersonal connections with local employees in the host country, which in turn could alleviate the risk of being ostracized at work. CQ training stands out as a crucial tool to augment their capacity for making effective cross-cultural adjustments. By honing their cultural intelligence, these professionals not only foster healthy working relationships with their foreign counterparts, but also mitigate the risk of burnout during their overseas assignments. Interventions and workshops to address burnout among expatriate managers has been a popular practice (Wang & Varma, 2019; Wu & Ang, 2011). Specifically, the method involves identifying and comparing pre-assignment expectations with the realities of the work and personal environment, and encouraging maladjusted expatriates to openly express their challenges in meeting both work-related and personal goals during assignments is emphasized. Such an approach is pivotal in averting

expatriate distress and safeguarding organizational success by preventing the loss of key personnel through turnover (Silbiger et al., 2017).

To ensure a supportive environment for expatriates, assigning a mentor from either the home or host country could be beneficial (Carragher, Sullivan, & Crocitto, 2008). For effective expatriate adjustment, it is advisable to implement cross-cultural training and language programs for the employees and dependents prior to international assignments (Forster, 2017).

Given the coexistence of diverse well-being states among expatriates, it becomes essential for organizations to anticipate what could predict burnout or facilitate engagement. This understanding serves as a foundation for developing effective interventions aimed at enhancing employee well-being. By proactively addressing these issues, organizations can mitigate potential burnout, low engagement, and subsequent negative impacts on both individual expatriates and the overall organizational performance. It is also important that employers take proactive steps to support expatriates in discovering meaning and purpose within their international work experiences, and to facilitate connections between the personal values of expatriate employees and the overarching mission and objectives of the company. Employees are more likely to derive a sense of purpose in their work when they perceive that their contributions align with broader societal benefits (see Cardador et al., 2011). For instance, if an expatriate employee is driven by personal aspirations to enhance sustainability practices in business, their supervisor could involve them in international projects focused on environmental initiatives or social responsibility. This direct involvement would not only contribute to the company's mission, but also align with the employee's personal goals, thereby enhancing their sense of purpose and engagement in their work (Erum et al., 2020). This dissertation points out that while expatriates may harbor intentions to leave their current job or terminate working abroad prematurely, they can still retain a strong interest in working abroad. Thus, cultivating employee calling might create a sense of purpose, ownership and engagement, thereby fostering motivation and enthusiasm among expatriate employees within the organization.

Organizations should create/foster a strong inclusion climate within the workplace as it significantly influences expatriate job commitment and overall experience while working abroad (Davies et al., 2019). Therefore, it is imperative for managers to endorse practices fostering inclusion and engage in an inclusive leadership style (Dwertmann et al., 2016; Nishii & Mayer, 2009). Workplace ostracism has a detrimental impact on expatriates' work well-being, increasing the likelihood of belonging to negative work well-being profiles, specifically the "Unenergized" and

"Risky" categories. Managers should proactively address issues related to ostracism among foreign workers, and cultivate an environment that is supportive and inclusive, ensuring that all employees, including expatriates, feel valued and integrated.

This dissertation underscores the significance of work-to-private life conflict (WLC) as a crucial determinant that negatively affects both job performance and retention cognition. It highlights how a high-risk environment further exacerbates the negative correlation between WLC and intention to quit working abroad. For organizations with limited resources to offer, the implementation of proper support measures targeting employees' personal lives becomes imperative, in order to enhance performance and retain their foreign workforce operating in demanding living conditions. To effectively support expatriates, employers should facilitate the optimization of resource allocation between their professional and personal spheres. This could involve aiding expatriates and potentially their families in assimilating within the community, such as by providing access to private social networks or leisure activities, thereby fostering a sense of belonging and support beyond the workplace.

The findings from the dissertation could provide expatriates with a critical view of the influence of international work experiences on their work and personal lives. Recommendations can be made on how to prepare themselves for new overseas job roles and the demands associated with them before their departure, in order to develop resilience to unforeseen circumstances. The knowledge derived from the research can be incorporated into core values for various HR policies in order to mitigate the risk of incurring any financial losses involved with the failure of international mobility. The overall contribution of the dissertation research is to analyze empirical data to produce transferable scientific knowledge for organizations to utilize in developing their competitive advantage through employing engaged and committed personnel working in global settings.

The findings of this study are relevant to HR practitioners and organizations, and also to expatriates. The research findings recommend that expatriates should conduct a comprehensive assessment of the tasks and responsibilities associated with the overseas position during the decision-making phase of whether to accept the job offer. For example, if the choice is solely influenced by the financial advantages offered by the overseas position, there might be a lack of consideration of its inherent meaningfulness. Expatriates must be aware of the importance of creating meaningful work assignments and opportunities for personal growth during international assignments before embarking on the journey. It is also important that expatriates understand the possible environmental challenges the

host country will present before accepting an international job offer, especially if there is a risk of high WLC. The dissertation showed that expatriates' self-perceived job performance was not impacted when working in a high-risk environment. However, their intention to carry on working abroad will be weakened, especially when combined with a high WLC. Additionally, expatriates must look to balance their work and private life domains, and pay attention to how they split their time and other resources between those life domains.

In conclusion, this dissertation has delved into the intricate nexus between expatriate employee well-being and their work outcomes, shedding light on a critical aspect of contemporary global workforce dynamics. As organizations continue to navigate the complexities of global talent management, the insights garnered from this study provide valuable contributions for both theoretical understanding and practical implications. Ultimately, by recognizing and addressing the well-being challenges faced by expatriate employees, organizations can cultivate a resilient and thriving global workforce, fostering enhanced individual and organizational success.

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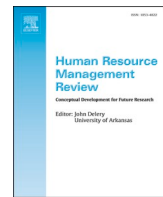
## Appendix 1. Summary of the well-being indicator levels reported in prior literature

Well-being Indicator	Level (Mean)	SD	Scale Range	Reference
Job satisfaction	3.83	0.71	1-5	Aryee & Stone, 1996
Job satisfaction	3.23	0.79	1-5	Stroppa & Spieß, 2010
Job satisfaction	3.26	0.76	1-5	Stroppa & Spieß, 2011
Job satisfaction	3.632	.67	1-5	Kawai & Mohr, 2015
Job satisfaction	1.5	1.28	1-7	Shaffer et al., 2001
Job satisfaction (Intrinsic)	54.4	9.6	1-5 (MSQ scale)	Naumann, 1993
Job satisfaction (Extrinsic)	32.6	6.2	1-5 (MSQ scale)	Naumann, 1993
Job satisfaction	2.86	0.46	1-4	Kempen et al., 2015
Job satisfaction	3.44	0.52	1-5 (MSQ scale)	Takeuchi et al., 2002
Job satisfaction	16.86	3.96	1 - 7	Shaffer & Harrison, 1998
Job satisfaction	4.79	1.03	1 - 7	Shih et al., 2010
Job satisfaction	5.08	1.4	1 - 7	Stoermer et al., 2018
Subjective well-being	3.63	0.70	1-5	Ballesteros-Leiva et al., 2017
Psychological well-being	4.18	0.53	1-5	Ballesteros-Leiva et al., 2017
Psychological well-being	4.46	.50	1 – 5	Van der Zee et al., 2005
Work well-being	3.89	0.66	1 - 6	Nicholson & Imaizumi, 1993
Satisfaction WLB	3.06	1.42	1-5	Visser et al., 2016
Job stress	2.89	0.57	1-5	Visser et al., 2016
Job stress	2.52	.65	1-5	Stroppa & Spieß, 2011
Burnout	2.5	0.86	1 - 7	Silbiger & Pines, 2014
Burnout	2.6	0.9	1-7	Silbiger et al., 2017
Emotional exhaustion	4.77	1.66	1-7	Bhanugopan & Fish, 2006
Personal accomplishment	3.29	1.72	1-7	Bhanugopan & Fish, 2006

Well-being Indicator	Level (Mean)	SD	Scale Range	Reference
Accomplishment of role related expectation	3.47	0.71	1-5	Kempen et al., 2015
Depersonalization	3.31	1.69	1-7	Bhanugopan & Fish, 2006
General health	3.94	.77	1 – 6	Van der Zee et al., 2005
Mental health (GHQ-12)	11.03	4.29	(3-2-1-0) range, So the total can range between 36 to 0	Nicholson & Imaizumi, 1993

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

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## 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 anteceded 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; Kännsälä, Mäkelä, & Suutari, 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, Hattrup, 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

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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 (Maggiore 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 (Maggiore 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 (Maggiore 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.,

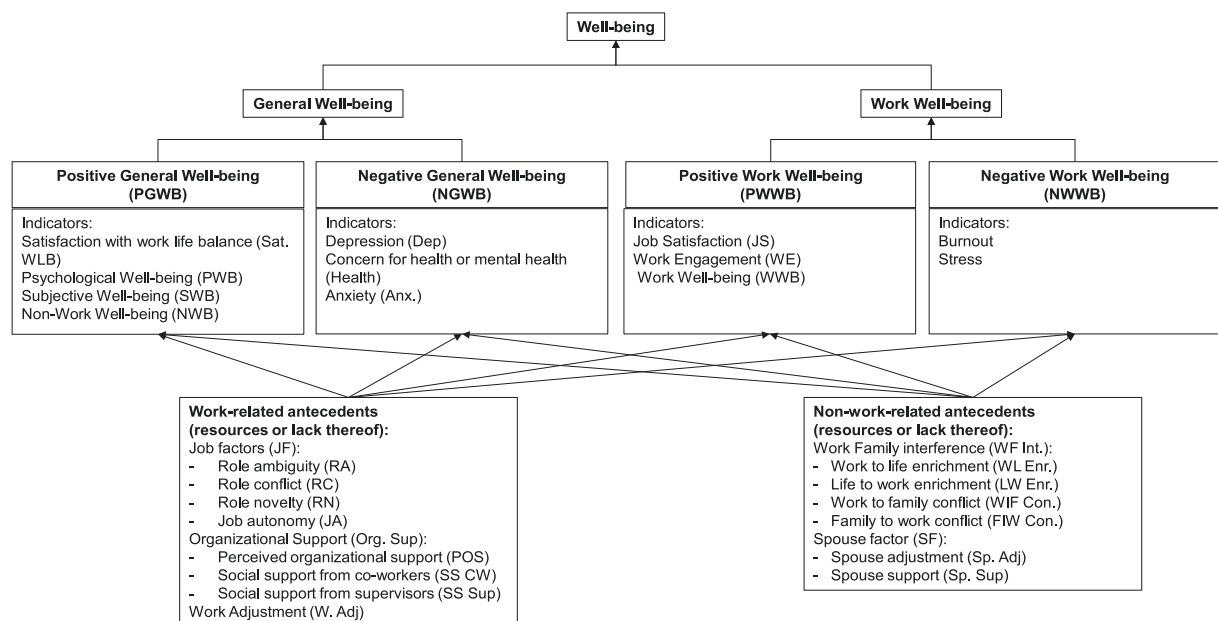


Fig. 1. Overview of expatriates' well-being: Concept, indicators, and antecedents.

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 (PWVB) and negative work well-being (NWVB). 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, & McMurrin, 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 (Carragher, Sullivan, & Carragher 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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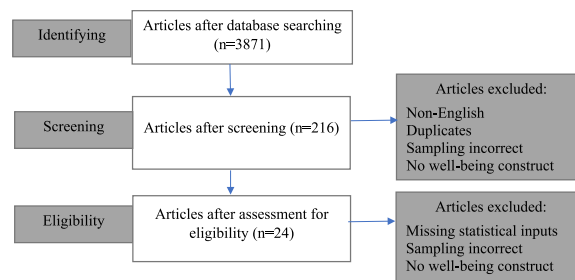


Fig. 2. Overview of the literature search process.

## 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
Kempen, 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	$\bar{r}$	$\sigma^2\bar{r}$	$\sigma^2\bar{e}$	$\bar{r}_c$	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	$\bar{r}$	$\sigma^2\bar{r}$	$\sigma^2\bar{e}$	$\bar{r}_c$	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	$\bar{r}$	$\sigma^2\bar{r}$	$\sigma^2\bar{e}$	$\bar{r}_c$	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	$\bar{r}$	$\sigma^2\bar{r}$	$\sigma^2\bar{e}$	$\bar{r}_c$	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.

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## EXPLORING VIGOR AND EXHAUSTION PROFILES AMONG EXPATRIATES: EXAMINING THE INFLUENCE OF MEANING MAKING, WORKPLACE OSTRACISM, AND EFFECT ON TURNOVER INTENTIONS

### Highlights

- Longitudinal latent class analysis (LLCA) was used to investigate how vigor and exhaustion develop among expatriates over one-year time.
- We found three profiles (Energized, Risky, and Unenergized) of vigor-exhaustion among 416 expatriates.
- Profiles were predicted by meaning-making and workplace ostracism.
- Participants in the Unenergized and Risky groups evidenced higher Workplace ostracism compared to the energized group.
- Participants in Energized and Risky groups showed higher Meaning making than Unenergized groups.
- Participants in the Unenergized groups showed the highest level of both types of turnover intentions (a. intention to quit the expatriation period and b. intention to leave the job)
- Participants in the Risky groups had the second-highest means in both intentions to leave the job as well the intention to quit the expatriation period.

## Abstract

Expatriates' work well-being has been argued to be jeopardized while working abroad. Low work well-being entails a risk for increased turnover intentions, which may harm organizations' success. Investigation of mutual developmental patterns of negative (job exhaustion) and positive (vigor) indicators of work-wellbeing is scarce and nonexistent in expatriate literature. In order to extend the knowledge of the different development paths of expatriates' work well-being, its antecedents, and its relation to turnover intentions, the current study used longitudinal latent class analysis (LLCA), to construct discernable work well-being profiles among expatriates. Longitudinal data were collected over a one-year time period from Finnish expatriates ( $N = 416$ ) working abroad. We identified three work well-being profiles: Energized (stable-low exhaustion and stable high vigor), Unenergized (stable-medium exhaustion and vigor), and Risky (stable-high exhaustion and decreasing-high vigor). These profiles demonstrated differential relations with studied antecedents, and expatriates with higher levels of meaning-making through international work were more likely to belong to the either energized or risky profile of exhaustion-vigor continua rather than the unenergized profile. Expatriates with higher levels of workplace ostracism were more likely to belong to risky or unenergized profiles than energized profiles. Moreover, expatriates belonging to unenergized groups were likely to develop higher levels of both intentions to quit the expatriation period and intention to leave the job. As for expatriates belonging to the risky group, they might have higher intentions to leave their job but still show interest in working abroad. Implications for theory pertaining to developmental patterns of work well-being and effects of resources (or lack thereof) are discussed along with implications for management.

**Keywords:** Expatriates, International careers, Work engagement, Burnout, Meaningful work, Ostracism, Turnover intentions, Longitudinal latent class analysis.

## Introduction

The world of work is continuously changing, forcing organizations to recognize the importance of a global workforce. The increasing demand for skills in globalizing labor markets and the decentralization of work to local bases draw highly skilled talents to diverse destinations. Discussions around managing this international mobility of highly skilled people and accessing the availability of human capital (Roos, 2013; Czaika, 2018) have generated debates of great magnitude across the world (Harvey, 2014). Multinational organizations benefit from highly skilled expatriates, as they bring competitive advantages to the employers (Harvey, 2014; Favell et al., 2015), and the potential of international economic exchange and cross-cultural development (e.g., Solimano, 2008; Riddle et al., 2008; Kotabe et al., 2013). Despite of several challenges in global mobility during recent years, especially those COVID-19 pandemic caused (Végh, Jenkins & Claes, 2023), the use of international assignments within organizations have remained a critical staffing practice for MNCs (see Caligiuri et al., 2020). Even though employee well-being in a domestic setting has been widely studied, relatively less is known about the well-being of international professionals and the global work context (Bastida et al., 2023). A limited number of empirical investigations have examined the predictors of well-being (for a review, see Biswas et al., 2022) or the potential impact of expatriate well-being on work outcomes like the retention of employees or performance (Silbiger & Pines, 2014; Silbiger et al., 2017; Abdalla et al., 2023).

The study of positive psychology has investigated pleasant affects in workers' experiences (Cropanzano & Wright, 2001). Schaufeli (2003) refers to work engagement as a persistent and positive affective-motivational state. Previous studies have explored various facets of work well-being among expatriates, including job satisfaction and work engagement from the positive perspective (Naumann, 1993; Aryee & Stone, 1996; Shaffer & Harrison, 1998; Shaffer et al., 2001; Takeuchi, Yun, & Tesluk, 2002; Shih et al., 2010; Stroppa & Spieß, 2010; Kempen, Pangert, Hattrup, Mueller, & Joens, 2014; Kawai & Mohr, 2015; Silbiger, Berger, Barnes, & Renwick; 2017; Stoermer et al., 2017; Selmer & Luring, 2016; Nicholson & Imaizumi, 1993). On the other hand, Shirom (2003) introduces burnout as an affective reaction to the stress associated with the work environment. In expatriate literature, burnout or stress has been investigated as the negative perspective of well-being (Bhanugopan & Fish, 2006; Silbiger et al., 2017; Visser et al., 2016; Stroppa & Spieß, 2011; Silbiger & Pines, 2014). Since expatriates face high demands and uncertainties inherent to the nature of their work, they are often at risk of resource loss (Hobfoll, 1989, 2001) leading to stress and burnout (Andresen et al., 2018; Shaffer et al., 2012; Silbiger & Pines, 2014), thus threatening their well-being (Pinto et al., 2017). Even with these stress-

inducing factors, expatriates who receive an abundance of internal and external resources from work, family and the environment can turn a cycle of resource losses to a situation of resource caravans, in which the gain of resources can stimulate additional gains (Hobfoll, 2001; Hobfoll et al., 2006; Hobfoll & Lilly, 1993; Wells et al., 1997, 1999; Wright & Hobfoll, 2004). This would help expatriates to effectively cope with demands and obligations and maintain their psychological well-being (Hong Ren et al., 2014), and through that, potentially improve organizational outcomes.

Work engagement refers to a positive attitude toward work (Bakker & Demerouti, 2008; Cole et al., 2012), and is characterized by vigor, dedication, and absorption in work (Schaufeli et al., 2002). Job burnout comprises of three dimensions, viz; exhaustion at work, cynicism, and a sense of inadequacy at work (Salmela-Aro et al., 2011). Research has shown that job exhaustion and vigor are the most essential elements of burnout and work engagement representing the energetic pathway of employee well-being. Job exhaustion and vigor are well-being indicators often adopted in domestic work well-being studies (see Bakker et al., 2011; Maslach, 2011), and have also been found to be relevant when studying expatriates (see Ali et al., 2020). Vigor is the only construct not confounded with others, thus limiting the possibility of multicollinearity (Shirom, 2011). Literature categorizes exhaustion and vigor as conceptually opposite to each other and individually experienced by an individual concurrently (Mäkikangas et al., 2017; Mäkikangas et al., 2012). This study focusses on work-related vigor and exhaustion as positive and negative indicators of occupational well-being as suggested in multiple research (Cece et al., 2022; Mäkikangas et al., 2014).

Expatriation involves challenges but at the same time has been found to be a developmental and joyful experience – personally and professionally (Fitzgerald & Howe-Walsh, 2008), and therefore, it is likely that expatriates may experience both job exhaustion and vigor at the same time, although empirical evidence is lacking. In response, this study uncovers latent profiles with different levels of exhaustion and vigor among expatriates. Furthermore, evidence shows that dimensions of work engagement and burnout have different trends of development over time (Demerouti et al., 2010) which justifies the importance of performing person-centered studies. A handful of person-centered studies considering the development of work well-being among domestic workforce have been highlighted the existence of different levels of vigor and exhaustion (Mäkikangas et al., 2012; Mäkikangas et al., 2017; Oksa et al., 2022).

Research highlights the importance of work characteristics - job demands and job resources in relation to work well-being (Bakker and Demerouti, 2007, Levi,

2010). According to the Job demands-resources theory (JD-R; Bakker, 2015), job demands refer to features of work that cost energy and require cognitive or emotional effort and lead to decreased well-being. Job resources help to deal with job demands and achieve work goals and are linked to better work well-being (Bakker et al., 2014; Bakker & Demerouti, 2017). The social context of work involves elements that can represent either job demands or job resources. For instance, while social support represents a job resource (Bakker et al., 2003), workplace ostracism - is defined as “the extent to which an individual perceives that he or she is excluded and ignored by others at work” (Ferris, Brown, Berry, & Lian, 2008, p. 1348) – can be seen as a job demand (Williams, 2002), a risk factor for work well-being (Ferris et al., 2008; Su, 2011). The expatriation process involves elements that may be challenging in regard to social connections and belonging at work; expatriates enter an organization as a newcomer, their stay is often known to be fixed term and their tasks are typically demanding and time-consuming. In addition, often the expatriates’ cultural background is different from that of their host country colleagues and they may not speak the local language (Shi and Wang, 2014). Therefore, they may find their social context at work demanding and perceive themselves to be ostracized at work. Workplace ostracism is thus studied in this research as a possible job demand.

Meaningful work refers to the state in which people consider their work to be significant, worthwhile, and to provide a positive meaning to life (Rosso et al., 2010), thus representing a job resource. A substantial body of research has examined the impact of meaningful work on employees' well-being (Allan, Batz-Barbarich, Sterling, & Tay, 2019; Arnold, Turner, Barling, Kelloway, & McKee, 2007; Steger, Dik, & Duffy, 2012). Steger et al. (2012) have conceptualized meaningful work in terms of three primary facets: positive meaning (PM) in work, motivations for the greater good (GG), and meaning-making (MM). Meaning-making refers to work that provides a possibility to gain a deeper understanding of employees’ own selves and how their surrounding environment helps to develop their personal growth (Magnano et al., 2022). While earlier studies suggested that financial incentives were the primary source of work-related meaning, recent research in Positive Organizational Scholarship (POS) indicates that the quest for meaningful work is inherently linked to individuals' concern for human values, contributing to the greater good, and promoting human agency within the workplace (Wrzesniewski, 2003). The meaning of work plays a critical role in shaping both work engagement (May, Gilson, & Harter, 2004) and stress levels (Elangovan, Pinder, & McLean, 2010). Despite ongoing progress, the theoretical understanding of the relationship between expatriates' experiences of meaningful work and their levels of work engagement or burnout remains incomplete.

Working abroad provides expatriates with a possibility for personal growth and may even lead to changes in identity (see Paik et al., 2002). It has also been found that work importance is beneficial for expatriates' work well-being (Silbiger & Pines, 2014). Expatriates may draw positive energy from their work if they believe that working abroad helps them to gain a deeper understanding of their own selves and develops their personal growth, and thus meaning making through international work seems a relevant job resource for expatriates and is therefore studied in this research.

According to JD-R theory, deterioration of employee well-being is often associated with negative work outcomes such as lower organizational commitment and higher employee turnover intentions (Demerouti & Bakker, 2011). This is also true in the expatriation context, where poor work well-being might generate a defensive attitude among expatriates resulting in a higher propensity to either leave the international assignment or their job (Bhanugopan & Fish, 2006). Research in domestic work settings highlights the correlation between overall life well-being with high turnover intentions (Wan & Duffy, 2022). But existing literature offers limited insight into the role of well-being indicators such as work engagement or burnout on work outcomes like intention to quit among expatriates (Silbiger & Pines, 2014; Silbiger et al., 2017; Arokiasamy, 2021; Abdalla, Li, & Yang, 2023). This study examines the associations between expatriates' well-being profiles and different turnover intentions (intention to quit the expatriation period and intention to leave the job).

To conclude, this paper aims to contribute to the expatriation literature in several ways. First, the study moves beyond the traditional variable-centered approach in investigating work well-being and explores the possibility to determine how different combinations can exist within a population of expatriates. Second, we aim to study vigor (positive well-being) and job exhaustion (negative well-being) profiles simultaneously to investigate the development of well-being in expatriates. Finally, the research exploring the antecedents and outcomes associated with well-being profiles, namely, workplace ostracism (job demand related to the social context of work) and MMIntW (job resource at a task level) as antecedents, and expatriate intention to quit expatriation period and intention to leave their job as outcomes.

### Burnout and work engagement among expatriates

Wellbeing can be assumed to be a non-uniform experience since not all expatriates necessarily show same level of burnout and vigor. Empirical studies in expatriates have shown that burnout is most often at moderate medium levels as the mean is

below the midpoint of the scale (see Silbiger et al., 2017; Silbiger & Pines, 2014). At the same time, other studies have reported comparatively higher burnout levels with the average value slightly above the midpoint of the scale (see Ali et al., 2019, 2020; Zhang et al., 2021; Wu et al., 2022). Our review of expatriate studies indicates that only few articles have investigated different dimensions of burnout and reported high levels of exhaustion among expatriates (Chao et al., 2019; Bhanugopan & Fish, 2006). However, as researchers have adopted different measurement instruments in their work, it is not possible to compare the mean values for each study. Furthermore, several researchers have investigated work engagement in expatriates and all of them have reported quite strong work engagement levels among the expatriates, with the mean value well above the mean for the scales (see Ali et al., 2019, 2021; Rafiq et al., 2019; He et al., 2021; Selmer and Lauring, 2016; Singh, 2022; Akkan et.al., 2022; Ramalu and Subramaniam, 2019).

All in all, vigor can be seen as a positive indicator of well-being at work, while emotional exhaustion is an indicator of ill-being, although both concepts represent levels of energy at work. Following the bivariate approach (Shirom, 2003), exhaustion and vigor are observed as independent constructs, and not just poles of the energy continuum (Demerouti et al., 2010; González-Romá et al., 2006; Mäkikangas et al., 2012) and are therefore both in focus in this study.

Moreover, job burnout and vigor are considered psychological states that may fluctuate over time. However, previous research has often characterized burnout as a relatively stable experience over time (Brouwers & Tomic, 2000; Hakanen et al., 2008). As for the positive experiences, earlier research in the workplace context has indicated that vigor levels are prone to temporal changes (Isoard-Gauthier et al., 2018). In a two-year study, Mäkikangas et al. (2012) identified varying trajectories of vigor, including stable, decreasing, and increasing levels, among young managers. Our literature review revealed that all studies of burnout and work engagement of expatriates have adopted cross-sectional, variable centered approach instead of a person-centered, and there is an absence of scientific studies examining the development of exhaustion or vigor, and thus, our study fulfills these gaps.

### Person-centered research explaining burnout and work engagement

Researchers have conflicting views on whether the developmental patterns of burnout and work engagement change or maintain stability over time. Burnout change patterns can be dynamic in nature and do not develop similarly among all individuals (Mäkikangas et al., 2016). As such burnout can develop at a constant

rate (i.e., linear increase or decrease), a variable rate (i.e., curvilinear pattern), or a fluctuating combination of rates in change and direction (see Dunford et al., 2012). However, a systematic review compiling the findings from previous burnout trajectory studies in domestic settings reveals that the development of burnout typically follows a stable path over one or two-year follow-up period (Mäkikangas & Kinnunen, 2016), and recently it has been found that only a small population experience significant changes in burnout, even over eight-year time lag (Mäkikangas et al., 2021).

In comparison, work engagement is a manifestation of the affective-cognitive state of mind (Schaufeli et al., 2002), thus in essence relatively stable. This has been reflected in empirical studies where the stability measurements of work engagement are higher than the change statistics (see Mäkikangas et al., 2017; Seppälä et al., 2015). Some studies have identified trajectories for work engagement that developed over several years reporting a rather stable development of work engagement in a majority (from 68 % up to over 80 %), of the population, with some developmental changes within the remaining participants (Mäkikangas et al., 2017; Mäkikangas et al., 2012). Moreover, work engagement is found to vary in the short time frame, within a few days (Sonnentag, 2003) to a few weeks (Bakker & Bal, 2010), but in the longer run, work engagement mainly seems to stay in its established level (Mäkikangas et al., 2017; Mäkikangas et al., 2012; see Seppälä et al., 2015).

In this study, we have adopted the bivariate approach indicating that exhaustion and vigor are obliquely related and may be experienced by individuals simultaneously. Three studies were found that have identified developmental latent groups comprising both burnout or exhaustion and work engagement or vigor (Mäkikangas et al., 2014, Mäkikangas et al., 2017; Oksa et al., 2022). Study designs varied, representing a diary study over one working week among social, health care and service sector employees (n= 256, Mäkikangas et al., 2014), five-wave, eight-year follow-up data consisting of white-collar professionals (n= 168, Mäkikangas et al., 2017) and a five-wave data, collected before and during COVID-19-pandemic between 2019–2021, representing Finnish working population in general (n=733, Oksa et al., 2022, profiles involving also general indicator of well-being: psychological distress). Two studies identified three latent groups (Mäkikangas et al., 2014; Mäkikangas et al., 2017) and one found six groups (Oksa et al., 2022).

In all of these studies, the largest group (71 % of participants in Mäkikangas et al., 2014; 84 % in Mäkikangas et al., 2017; 30 % in Oksa et al., 2022) consisted of employees having a good and stable situation, that is, a high or relatively high level

of work engagement/ vigor and low burnout/ exhaustion with no change over time. Two studies found also other stable groups; labelled 'constantly exhausted' (17 %, Mäkikangas et al., 2014), and 'disengaged' (15%) and 'burned-out' (4%) (Oksa et al., 2022) without statistically significant change over time and characterized by lower levels of work engagement/ vigor and more severe burnout/ exhaustion compared to the groups above. All studies found also profiles with change. In the study with one-week time frame, the smallest of identified groups (12 %) consisted of participants whose exhaustion and vigor were on moderate level. In this group, the levels of vigor remained stable over time, the mean level of exhaustion slightly decreased at the end of the week (Mäkikangas et al., 2014). Furthermore, Mäkikangas and her colleagues (2017) found two groups with change; "stable average exhaustion – decreasing vigor" (5 %), and "fluctuating exhaustion and vigor" (11 %). In this latter profile, the levels of exhaustion were low, but slightly increasing or decreasing within different time points, and vigor was at mean levels, but also to some extent unstable. The third study (Oksa et al., 2022) was conducted in a situation of change in society and working life, as COVID 19-pandemic started during the follow-up period. In that study, a group "engaged" (21 %) was characterized by the high and slightly increasing level of work engagement and the low and decreasing levels of burnout. Negative affect of uncertainty and change can be seen in two other groups. In "fluctuated" group (10%) participants' work engagement increased, and burnout decreased until the pandemic, and opposite development happened during pandemic. In group "declined" (18 %) participants work engagement was high, but its levels started to decrease during pandemic, and levels of burnout increased during pandemic. Thus, drastic changes faced in working life may affect the development paths of burnout and work engagement.

It is possible that working abroad as an expatriate may be more unstable working life situation compared to domestic work context and therefore, development of expatriates' work well-being may differ from domestic employees as well. Attempt to review the literature on developmental patterns of job burnout or engagement among international workers have been surprising since no empirical research on the topic was found. Thus, this study is the first of its kind to investigate exhaustion and vigor simultaneously in expatriates, in order to understand the interlinked development of exhaustion–vigor over time in international work contexts which have been described as challenging. The composition of the subgroups remains largely speculative and will be generated through methodologically inductive person-centered analysis.

Based on this above-mentioned assumption that several subgroups with different combinations of exhaustion and vigor development patterns might exist within an expatriate population, we explored the following research questions:

**Research Question 1A:** *Do different work well-being profiles exist among expatriates?*

**Research Question 1B:** *What patterns of exhaustion and vigor development can be identified within the well-being profiles of expatriates?*

### Predicting work well-being profile membership

The JD-R theory has been a popular approach to understand employee well-being in different types of occupations and organizations. The basic proposition for the JD-R theory states that every occupation presents both general and occupational-specific job demands and job resources (Bakker et al., 2014; Bakker & Demerouti, 2007; Bakker & Demerouti, 2017). Job demands are physical, psychological, social, or organizational aspects of work that cost energy and require cognitive or emotional effort. Job resources, on the other hand, are aspects of work that help to deal with job demands and achieve work goals (Bakker et al., 2014; Bakker & Demerouti, 2017). It is evident that both jobs demand and resources play an instrumental role in predicting employee well-being where job demands may initiate a health-impairment process leading to burnout when being exposed to job demand on a chronic basis and job resources initiates a motivational process that contributes positively towards work engagement (Demerouti et al., 2001; Bakker and Demerouti, 2007). Several cross-sectional and longitudinal studies have validated the JD-R model, demonstrating that job demands contribute to burnout (Hakanen et al., 2008; Schaufeli et al., 2009), while job resources help mitigate burnout and promote work engagement (e.g., Hakanen et al., 2008; Xanthopoulou et al., 2009).

Next, we will look at workplace ostracism and MMIntW as antecedents of work well-being using the lenses of the JD-R theory. We also review empirical studies about antecedents for expatriates' work well-being and focus especially on the antecedents related to social context (i.e., ostracism) and job characteristics (i.e., meaning-making through work) in relation to burnout and work engagement.

### Workplace ostracism and meaning making as antecedents for expatriates' burnout and work engagement

#### ***Workplace ostracism as a job demand***

Workplace ostracism can be observed either by the perception of action - when an employee perceives to be excluded, or by the conduction of behavior, in this case, inaction – when an employee is omitted from being included (Ferris, Brown, Berry,

& Lian, 2008). Workplace ostracism is likely to be a risk factor for expatriate's work well-being (Ferris et al., 2008; Su, 2011) because international relocation involves challenging aspects regarding social work context. For instance, international assignment lasts typically limited length of time and expatriates have different cultural backgrounds than most of the other members of their work community and they may not speak the local language (See Chen, 2019). In our study, ostracism has been examined using the expatriate's perspective, *felt ostracism*.

Work Ostracism can be a form of mistreatment towards employees and incivility at the workplace depending on the situation (Ferris et al., 2017; Robinson et al., 2013; Scott & Duffy, 2015) but not necessarily all incidences of mistreatment or incivility are considered workplace ostracism. A recent meta-analysis study in a domestic context has highlighted several aspects of employee well-being as potential outcomes of workplace ostracism (see Howard et al., 2020) Empirical research has confirmed that workplace ostracism is positively linked to employees' psychological pressure including work tension, depression, and emotional exhaustion (Wu et al., 2011). A recent meta-analytical review on workplace ostracism highlights its detrimental effect on employees' health and work outcomes (Bedi, 2021). In migrants and asylum seekers, social exclusion through ostracism has been shown to negatively impact psychological health and well-being (Marinucci et al., 2021; Jiang et al., 2020). While the literature discusses ostracism experienced by expatriates during their assignments (Dang et al., 2022; Harrison et al., 2004), no empirical studies have been conducted to date.

Although we did not find any studies directly focusing on felt ostracism among expatriates, next we review the studies of antecedents related to social context for expatriates' work well-being. It has been found that perceived organizational support (Arokiasamy, 2021; Sahoo et al., 2022), and support from host-country nationals are positively linked to expatriates' work engagement. In addition, a leader's cultural intelligence (Cavazotte et al, 2021) and expatriates' own cultural intelligence (Ramalu & Subramaniam, 2019) are positively related to their work engagement, the latter relationship partially mediated by psychological needs satisfaction, the concept involving satisfaction with relatedness at work (Ramalu & Subramaniam, 2019). Thus, it is likely that cultural intelligence enhances social relationships at work. Moreover, higher interaction adjustment, referring to "expatriates' psychological comfort with respect to interactions with host country nationals inside and outside work", is found to be linked to lower levels of expatriate burnout (Silbiger et al., 2017, 234). Following the JD-R theory and earlier empirical studies, we investigate the following question:

**Research Question 2A:** *Do workplace ostracism levels predict exhaustion-vigor profiles?*

### ***Meaning making as a job resource***

Meaning making is an important job resource that is often shown to have positive effects on work engagement in studies conducted in a domestic context (Bailey et al., 2017; Steger & Dik, 2010). Meaning making refers to work that provides a possibility to find a deeper understanding of an employee's own self and their surrounding environment, which helps their evolution as an individual (Magnano et al., 2022). This study focuses on the idea of meaning-making through international work that captures the understanding of one's broader life through work context and seems to be an appropriate job resource in the context of expatriation as it has been found to involve several positive elements. In particular, expatriation has been found to encompass learning and development opportunities on a professional and personal level (see Paik et al., 2002), interesting tasks involving wider responsibilities than occur in the home country, and some studies show evidence that these kinds of issues are related to positive outcomes such as career success (Suutari et al., 2012).

The psychological meaningfulness dimension of work (Kahn, 1990) is positively associated with engagement (May et al., 2004), and more recent studies (Jiang, 2021; Autin et al., 2021; Van Wingerden & Van der Stoep, 2018) have reported along the same lines, stating that employees with highly meaningful work are more likely to be engaged and absorbed with their work. A strong sense of purpose makes one perceive their work as meaningful and is linked with higher engagement (Tan & Yeap, 2021; Kahn and Heaphy, 2014). A recent meta-analysis on the outcomes of meaningful work reports strong correlations with positive work outcomes (work engagement, commitment, and job satisfaction), and moderate associations with personal outcomes (life satisfaction, life meaning, general health, and withdrawal intentions) (for a review see Allan et al., 2019). As a job resource, meaningful work has been shown to be a predictor for reducing job burnout (Hamama-Raz et al., 2021; Fairlie, 2011). Importantly, higher levels of meaningful work have been found to be related negatively to job stress (Allan et al., 2020), and to lower levels of exhaustion (Rasmussen et al., 2016). Meaningful work is also important in offsetting the negative impacts of job burnout since it provides psychological support that helps in maintaining work pressure under control and lowers burnout (Haar Mowat, 2022; Lips-Wiersma & Wright, 2012).

Different types of job characteristics are important antecedents for expatriates' work well-being as well, although empirical studies concerning the role of expatriates' work meaningfulness to their work well-being were not found. Role

ambiguity, role overload and most significantly role conflict have been identified as job demands predicting the risk of expatriate exhaustion in cross-sectional research (Bhanugopan & Fish, 2006). Furthermore, adjustment to work-related issues, such as tasks and responsibilities, is linked to lower levels of expatriate burnout (Silbiger et al., 2017). It has also been reported that thriving at work (in terms of learning and vitality) is positively related to expatriates' work engagement (Ren et al., 2015). It has also been found that perceived work importance, concept close to meaningful work, has a critical impact on expatriate burnout, is directly linked to lower burnout, and also buffers the negative effect of general stress on burnout (Silbiger & Pines, 2014).

In the light of above, we assume that if expatriates perceive that their international work provides them with a possibility for meaning-making in life, also aligns with more beneficial work well-being profiles compared to those who don't perceive their work to be meaningful. Therefore, our next research question is the following:

**Research Question 2B:** *Do meaning making levels predict exhaustion-vigor profiles?*

Expatriate turnover intentions and their associations with exhaustion-vigor profiles

JD-R theory and empirical research suggest that burnout and work engagement are associated with attitude-based organizational outcomes, like turnover intentions (Alarcon & Edwards, 2010; see Knudsen, Ducharme, and Roman, 2009; Schaufeli and Bakker, 2004). In the domestic setting, burnout has been associated with higher employee turnover intention (e.g., Bartrum et al., 2012; Ali et al., 2012; Staufenbiel & König, 2011) with exhaustion being the most important predictor of intention to quit (e.g., Swider & Zimmerman, 2010). A number of studies have reported a positive correlation between burnout and employee turnover (Lee & Shin 2005; Maslach et al., 2001; Jung & Kim, 2012).

Studies report an association between work engagement and positive work-related behavior such as increased attachment to the organization and reduced tendency to leave the organization (Schaufeli & Bakker, 2004; Tricahyadinata et al., 2020). Most studies found a negative effect of work engagement on employee turnover intentions (Agarwal & Gupta, 2018; Babakus et al., 2017; Caesens et al., 2016; Lu et al., 2016; Memon et al., 2015, 2016; De Simone et al., 2018). One study observed a curvilinear relationship between work engagement and employee turnover intention suggesting that work engagement at a moderate level is associated with lower levels of turnover intentions, however, beyond that point - any additional

levels of work engagement might not add additional desirable effects (Caesens et al., 2016). Our literature search did not find any research articles focusing on the person-centered approach on work well-being and its link on turnover intentions and our study contributes on that knowledge.

Turnover intentions in an international environment may be different from that in a domestic context at least to some extent. It may involve multiple dimensions, for instance, expatriates' intention to quit the expatriation period and intention to leave the job. Majority of the literature available highlights the turnover related to expatriate's intention to leave the organization (see Hussain & Deery, 2018; Davies et al., 2019; Pattie et al., 2013), some research has identified the existence of turnover tendencies e.g., job changing or terminating the international assignment (Pinto et al., 2012; Goede, 2020; Shen et al., 2021). It can be assumed that an individual with an optimal state of well-being may be emotionally inclined to continue working on an international assignment in the host country and show organizational commitment to their job (see Koveshnikov et al., 2022). Thus, higher levels of vigor may be associated with lower intention to quit the expatriation period and intention to leave the job. Another study has identified job burnout as a significant predictor of turnover of expatriates and can be associated with expatriate failure (Bhanugopan & Fish, 2006). Therefore, we explore if expatriates with different patterns of exhaustion-vigor might experience different levels of intention to quit the expatriation period and intention to leave the job.

**Research Question 3A:** *Are exhaustion-vigor profiles associated with different levels of intention to quit the expatriation period?*

**Research Question 3B:** *Are exhaustion-vigor profiles associated with different levels of intention to leave the job?*

## Method

### Data collection and participants

The longitudinal data for this study was collected between 2015 and 2017 with three online questionnaires. Data was collected from two different trade unions in Finland. The trade unions had registered information of whether the union members were working abroad, and as we were investigating expatriates, questionnaires were sent to those respondents who were working abroad. The trade unions represented academic engineers and architects (TEK), and business graduates and economists (Suomen Ekonomit). The data collection start times

were different for these two samples, but they had approximately the same six-month time lag between each measurement point. The economist sample was collected during 2015 and 2016, and consisted of 222 respondents at T1 (6/2015), 83 at T2 (1/2016), and 82 at T3 (6/2016). The engineer sample was collected during 2016 and 2017, and consisted of 305 respondents at T1 (3/2016), 184 at T2 (11/2016), and 153 at T3 (5/2017). Response rates were 30% at T1, 47% at T2 and 47% at T3 for economists, and 26% at T1, 74% at T2, and 55% at T3 for the engineers. Follow-up surveys were only sent to those who gave permission to contact them with follow-ups at T1. The difference in start times was due to practical reasons, as negotiations with associations proceeded separately and their preferred schedules differed from each other. To increase the statistical power of the study, we combined these samples into one larger sample. In order to adjust for possible differences between the samples due to different start times and different working fields, we tested for possible differences in the results with the union identification variable which was coded as 0 = engineers and 1 = economists.

In the combined sample, a total number of 527 expatriates answered the questionnaire at time 1 (T1), 250 expatriates answered at time 2 (T2), and 177 expatriates answered at time 3 (T3). As we were studying vigor and exhaustion related to expatriate work, we only selected expatriates who were not retired (under the age of 75) or on leave from work during the study period. We also removed those expatriates who had quit working during the study period, as they could not have evaluated issues of work-related vigor and exhaustion at later time points, and these values could not be treated as missing data. Consequently, the final sample used in the analysis included 416 expatriates at T1, 196 expatriates at T2, and 142 expatriates at T3.

Expatriates included in the sample were mostly men (286, 68.8%) and almost a third (124, 29.8%) were women. The mean age was 42.9 (standard deviation, SD = 9.5) years, and participants ranged from 26 years to 65 years of age. Most (352, 85%) were in a relationship, and nearly a fifth (63, 15%) were not. More than half (224, 54%) had children living with them during their expatriate stay, while slightly under half (187, 45%) did not.

All expatriates had previous experience of living abroad, with a mean of 3.1 (SD = 1.3) one-year periods of living abroad, and this previous international experience ranged from 1 to 6 periods. The countries of expatriation have been listed in table 1. Regarding expatriate type, most expatriates (262, 63.0%) were self-initiated expatriates (SIEs), and over a third (146, 35.1%) were assigned expatriates (AEs). The length of their stay in the country was on average 5.5 (SD = 6.3) years, and they worked 45.4 (SD = 8.3) hours per week on average. More than half (243, 58%)

were academic engineers and architects, and slightly less than half (173, 42 %) were business graduates and economists.

**Table 1.** Countries of Expatriation.

<b>Country</b>	<b>n</b>	<b>Country</b>	<b>n</b>
Australia	11	Malaysia	5
Austria	5	Malta	1
Azerbaijan	1	Nepal	2
Belgium	14	New Zealand	2
Botswana	1	Norway	6
Brazilia	6	Oman	1
Cambodia	1	Palestine	1
Canada	4	Poland	4
Chile	1	Ruanda	1
China	34	Russia	9
Czech Republic	3	Saudi-Arabia	3
Denmark	11	Singapore	7
Ecuador	1	South-Africa	1
Ethiopia	2	South-Korea	2
France	9	Spain	6
Germany	61	Sweden	25
Hungary	2	Switzerland	44
India	3	Tadzhikistan	1
Indonesia	1	Thailand	1
Ireland	4	The Netherlands	12
Israel	1	Turkey	2
Italia	2	UAE	12
Japan	3	UK	27
Kazakhstan	1	USA	48
Kenia	1	Vietnam	1
Luxembourg	6	Total (51)	416

## Measures

Vigor was measured by a three-item dimension from the UWES-9 scale (Schaufeli et al., 2006). The validity of the UWES-9 scale has been determined to be good with Finnish white-collar workers across different occupational groups and over time (Seppälä et al., 2009). Vigor was measured with a scale ranging from 1 (never) to 7 (every day). One example item is “At my work, I feel that I am bursting with energy”. In the current study, Cronbach’s alpha values for vigor were .87 (T1), .90 (T2), and .93 (T3) which indicated high reliability.

Exhaustion was measured by a three-item dimension from the BBI scale (Salmela-Aro et al., 2011). The measure had a scale ranging from 1 (completely disagree) to 6 (completely agree), and one example of the items is “I am snowed under with

work". The validity of the BBI scale has been found to be good with Finnish managers (Salmela-Aro et al., 2011). In the current study, Cronbach's alpha values for exhaustion were .75 (T1), .73 (T2), and .72 (T3) which indicated acceptable reliability.

Workplace ostracism was assessed using a nine-item scale adapted from the validated ostracism at work scale (Ferris et al., 2008). The items included 'Others ignored you at work' and 'Others refused to talk to you at work'. Expatriates were asked to rate the ostracism items using a scale ranging from 1 (never) to 7 (constantly/always). The Cronbach's alpha for the ostracism scale was .86 (T1) and indicated high reliability.

Meaning making through international work was measured using a three-item sub-scale from the ten-item Work as Meaning Inventory scale (WAMI; Steger, Dik, & Duffy, 2012). The items were rated on a five-point scale ranging from 1 (completely disagree) to 5 (completely agree). One example item is "I view my work as contributing to my personal growth". In the current study, Cronbach's alpha value for meaning making through international work was .80 (T1) which indicated high reliability.

Intention to leave the job was measured using a three-item scale. The items were 'I have thought about quitting this job', 'I have searched for other employment opportunities', and 'I have thought about switching this job'. The items were rated on a five-point scale ranging from 1 (completely disagree) to 5 (completely agree). The Cronbach's alpha for this scale was .91 (T3) which indicated very high reliability.

Intention to quit the expatriation period was also measured using a three-item scale. The items for this scale were 'I wouldn't want to continue working abroad', 'I would like to return working to my home country', and 'I would like to stop working abroad'. The items were rated on a similar five-point scale as the previously mentioned intention to leave the job. The Cronbach's alpha for this scale was .88 (T3) which indicated high reliability.

### Statistical analyses

As preliminary analysis methods, we used logistic regression for attrition analysis, and structural equation modeling (SEM) for the investigation of the factor structure, dimensionality, and longitudinal measurement invariance in the study. Standard cutoff values (e.g., Hu & Bentler, 1999) were used to determine an adequately fitting model (non-significant  $\chi^2$ ; RMSEA < 0.06; CFI/TLI  $\geq$

0.95/0.90; SRMR < 0.08). For longitudinal measurement invariance, the cutoff points suggested by Chen (2007) were used ( $\Delta\text{CFI} \geq -.01$ ;  $\Delta\text{RMSEA} \geq 0.015$ ;  $\Delta\text{SRMR} \geq 0.03$ ).

SEM was also used as the primary analysis method. Because we were interested about the possible underlying classes, we decided to utilize longitudinal latent class analysis (LLCA) in order to identify possible longitudinal latent classes based on the mean values of exhaustion and vigor. LLCA is a type of finite mixture modelling which allows latent classes to be identified from the observed data (McLachlan & Peel, 2000; Feldman et al., 2009; Nylund-Gibson & Choi, 2018; Herle et al., 2020). In LLCA, the measurements across different times are jointly used to estimate the class mean trajectories (Feldman et al., 2009; Herle et al., 2020). LLCA does not exploit the inherent longitudinal dependency between individual scores, but it instead includes this dependency as information for the class solutions (Herle et al., 2020). LLCA therefore models the patterns of different levels or states across time, characterizing both the within-person variation and between-person differences (Feldman et al., 2009). One advantage for LLCA approach is that it is non-parametric regarding the functional form of longitudinal trajectories, meaning that no specific form of longitudinal development needs to be assumed (Feldman et al., 2009; Herle et al., 2020), which is useful when the functional form of the class-specific trajectories is unknown. Exhaustion and vigor sum scores from each measurement point were jointly used as indicators of a latent categorical variable. Means of the exhaustion and vigor scores were allowed to be freely estimated between different classes and the between-class variances were assumed to be equal. The significance of within-profile mean changes was tested with equality constraints and Wald-tests.

LLCA was conducted using the standard approach to mixture modeling (Nylund et al., 2007). First, the number of profiles was investigated and determined according to theoretical and statistical criteria. Second, the covariates and predictors at T1 were added to the model and tested with the R3STEP procedure (Asparouhov & Muthén, 2014), which utilized multinomial logistic regression on the profiles. Third, the outcomes at T3 were investigated by utilizing the BCH approach (Asparouhov & Muthén, 2014), which compares the means of the outcomes between the profiles. Due to the multivariate non-normality of the data, a robust maximum likelihood (MLR) estimator was selected. The MLR estimator in Mplus utilizes full information maximum likelihood (FIML) estimation, and this was used to account for missing data under the assumption of missing at random (MAR).

The statistical criteria used to determine the correct number of profiles were the recommended Akaike information criterion (AIC), Bayesian information criterion (BIC), sample-size adjusted Bayesian information criterion (ABIC), bootstrapped likelihood ratio test (BLRT), Vuong-Lo-Mendell-Rubin (VLMR) test, adjusted Lo-Mendell-Rubin test (aLMR), and entropy (Spurk et al., 2020). Lower values of AIC and BIC indicate a better model fit compared to other models, and significant BLRT, VLMR, and aLMR tests indicate a better model fit compared to the previous model with one profile less (Nylund et al., 2007). The entropy index resembles the accuracy of a model in classifying individuals into profiles, the closer the value is to 1, the higher the accuracy of the profile solution (Celeux & Soromenho, 1996).

For LLCA, the numbers of random start values, iterations and final stage optimizations were increased to 5000, 200, and 200, respectively. Also, it was inspected that the best loglikelihood solution replicated at least three times. These changes were made to reduce the probability that the LLCA results were converged to a local solution. Attrition and descriptive analysis were conducted using IBM SPSS version 26, and all SEM-related analyses were conducted using Mplus version 8.6 (Muthén & Muthén, 1998–2017).

## Results

### Preliminary analysis results

As a preliminary analysis, we conducted an attrition analysis using logistic regression with the missingness (0 = answered, 1 = missing) at T2 and at T3 as the dependent variable. The attrition analysis revealed that compared to engineers, economists were more likely to drop out at T2 (OR 2.39,  $p < .001$ ) and at T3 (OR 2.52,  $p < .001$ ). Meaning making through international work also predicted missingness at T2, but this association became nonsignificant when the union identification variable was adjusted in the analysis. Other predictors of attrition were not found in the demographic variables or other study variables.

The descriptive results of the analysis are presented in Table 2. Overall, the mean level of vigor was high (5.7 to 5.9) but decreased over time. Additional paired t-test comparisons confirmed that the perceived overall decrease in the mean values of vigor was significant ( $p < .01$ ) when comparing vigor at T1 to vigor at T3. Other comparisons with vigor at different time points were nonsignificant. Mean levels of exhaustion were moderate (2.8 to 2.9) and exhaustion remained stable during the study period as all comparisons between exhaustion values at different time points were nonsignificant.

**Table 2.** Means, standard deviations, and bivariate correlations of the study variables.

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Vigor T1	5.93	0.92	(.87)																
2. Vigor T2	5.76	1.07	.73***	(.90)															
3. Vigor T3	5.67	1.18	.67***	.79***	(.93)														
4. Exhaustion T1	2.82	1.14	-.16**	-.15*	-.13	(.75)													
5. Exhaustion T2	2.91	1.11	-.04	-.15*	-.18*	.70***	(.73)												
6. Exhaustion T3	2.88	1.07	-.08	-.16	-.17*	.60***	.73***	(.72)											
7. Meaning making T1	4.14	0.74	.39***	.30***	.17*	.03	.18*	.21**	(.80)										
8. Ostracism T1	1.35	0.54	-.28***	-.26***	-.21**	.20***	.15*	.03	-.17**	(.86)									
9. Intention to leave a job T3	2.54	1.30	-.27***	-.38***	-.49***	.12	.12	.11	-.07	.21**	(.91)								
10. Intention to quit expatriation period T3	2.00	0.97	-.25***	-.30**	-.39***	.10	.06	.09	-.18*	.35***	.34***	(.88)							
11. Gender <sup>a</sup>	0.30	0.46	.03	.04	.12	.04	.01	.05	.04	.08	-.06	.01	-						
12. Age	42.87	9.54	.08	.06	.10	.03	-.01	-.08	-.18***	-.15**	-.17*	-.08	-.14**	-					
13. Union <sup>b</sup>	0.42	0.49	.05	.12	.17*	.06	-.07	-.08	.08	.03	-.07	-.11	.17**	-.01	-				
14. Length of stay <sup>c</sup>	5.53	6.29	.02	.00	.01	.01	.00	-.02	-.14**	-.06	-.05	-.12	-.02	.48***	.03	-			
15. Working hours <sup>d</sup>	45.40	8.32	.22***	.13	.02	.32***	.38***	.36***	.16**	.01	.11	.04	-.09	.21***	.05	.01	-		
16. Children <sup>e</sup>	0.55	0.50	.14**	.05	.15	.09	.07	.10	-.06	-.07	-.15	-.09	-.20***	.47***	-.02	.21***	.11*	-	
17. Expatriate type <sup>f</sup>	0.36	0.48	.02	-.02	.05	.13**	-.01	.08	.01	.01	.01	.10	-.13*	.11*	.01	-.25***	.25***	.17**	-
18. Relationship status <sup>g</sup>	0.85	0.36	.09	.10	.26***	.03	-.03	.07	.00	-.12*	-.21**	-.14	-.14**	.15**	.03	.02	.03	.33***	.13**

Note: T1 (N=416), T2 (N=196), T3 (N=142), \* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$ . Diagonal values in parenthesis are Cronbach's alphas. <sup>a</sup> 0 = Men, 1 = Women.

<sup>b</sup> 0 = engineers, 1 = economists. <sup>c</sup> Stay in current country measured in years. <sup>d</sup> Per week. <sup>e</sup> 0 = Has no children, 1 = Has a child/children. <sup>f</sup> 0 = Self-initiated expatriates, 1 = Assigned expatriates. <sup>g</sup> 0 = Not in relationship, 1 = In a relationship.

The factor structure and longitudinal measurement invariance of the latent vigor and exhaustion variables were confirmed before conducting the LLCA. Confirmatory factor analysis (CFA) was utilized to confirm the factor structure of meaning making through international work, exhaustion, vigor, workplace ostracism, intention to quit the job, and intention to quit the expatriation period. Additionally, measurement invariance tests for exhaustion and vigor were conducted to confirm the stability of the factor structures across time. The factor model including all of the study variables as separate factors had an acceptable fit to the data ( $\chi^2 = 909.29$ ,  $df = 531$ ,  $p < .001$ ,  $RMSEA = .041$ ,  $CFI = .924$ ,  $TLI = .910$ ,  $SRMR = .071$ ). The results of the longitudinal measurement invariance tests are presented in Tables 3 and 4. The factor structures of both vigor and exhaustion demonstrated strict measurement invariance, indicated by nonsignificant chi-square difference tests and low values of change in CFI, RMSEA, and SRMR.

**Table 3.** Fit statistics for longitudinal measurement invariance tests of vigor.

Model	$\chi^2$	df	p	CFI	TLI	SRMR	RMSEA (90% CI)	BIC	$\Delta\chi^2$ (p)	$\Delta CFI$	$\Delta SRMR$	$\Delta RMSEA$	$\Delta BIC$
Configural	35.18	15	.002	.987	.969	.079	.057 (.032, .082)	5216.18					
Weak	39.25	19	.004	.987	.975	.083	.051 (.028, .073)	5196.24	3.54 (.47)	0	.004	-.006	-19.94
Strong	46.20	23	.003	.985	.977	.084	.049 (.028, .070)	5178.49	6.58 (.16)	-.002	.001	-.002	-17.75
Strict	49.71	29	.010	.987	.984	.085	.041 (.020, .061)	5148.09	4.19 (.65)	.002	.001	-.008	-30.40

**Table 4.** Fit statistics for longitudinal measurement invariance tests of exhaustion.

Model	$\chi^2$	df	p	CFI	TLI	SRMR	RMSEA (90% CI)	BIC	$\Delta\chi^2$ (p)	$\Delta CFI$	$\Delta SRMR$	$\Delta RMSEA$	$\Delta BIC$
Configural	11.87	15	.69	1	1	.022	0 (0, .037)	7320.71					
Weak	15.51	19	.69	1	1	.030	0 (0, .034)	7300.02	3.71 (.45)	0	.008	0	-20.69
Strong	19.27	23	.69	1	1	.030	0 (0, .032)	7279.92	3.77 (.44)	0	0	0	-20.10
Strict	25.68	29	.64	1	1	.047	0 (0, .032)	7249.28	6.75 (.34)	0	.017	0	-30.64

### Longitudinal latent class analysis results

The results of the longitudinal latent class analysis for simultaneously estimated vigor and exhaustion profiles are presented in Table 5. The solution with three profiles was statistically best solution as all criteria agreed that it was an improvement compared to two-profile solution. The solution with four profiles

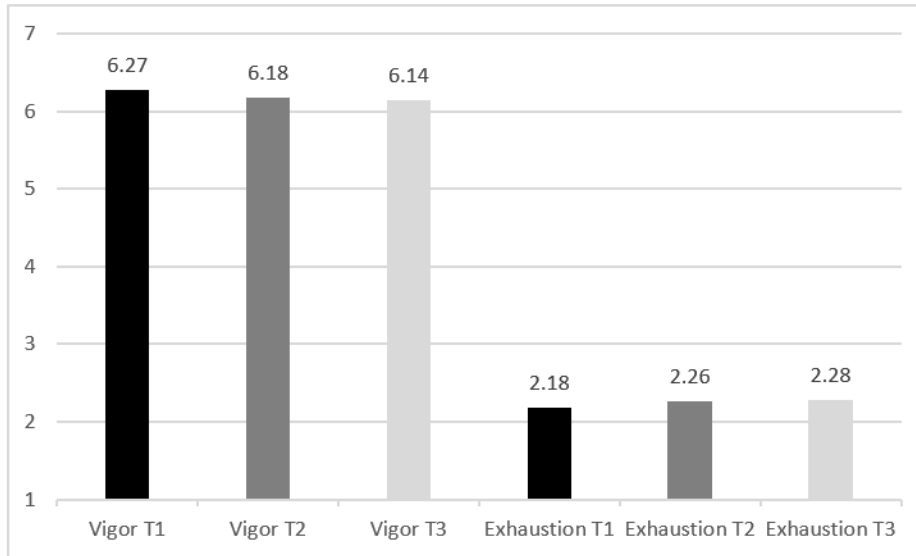
was deemed to be worse than the solution with three profiles by the aLMR-test ( $p = .089$ ). Although all of the other statistical criteria were supported for more profiles, it can be seen that the largest reduction in log-likelihood, AIC, BIC, and ABIC occurred when a third profile was added. In addition, the four and five-profile solutions included very small profiles (e.g.,  $n = 17$ , 4%). A theoretical inspection of the four and five-profile solutions also revealed that the small profiles were not qualitatively different from other profiles as they only included mean-level differences compared to other profiles instead of differences in the longitudinal mean trajectory. Therefore, based on the combined results of theoretical meaningfulness, the statistical criteria, and the small size of the additional profiles, we decided that the three-profile solution was the best model through which to describe the data.

**Table 5.** Fit statistics for different longitudinal latent class analysis solutions.

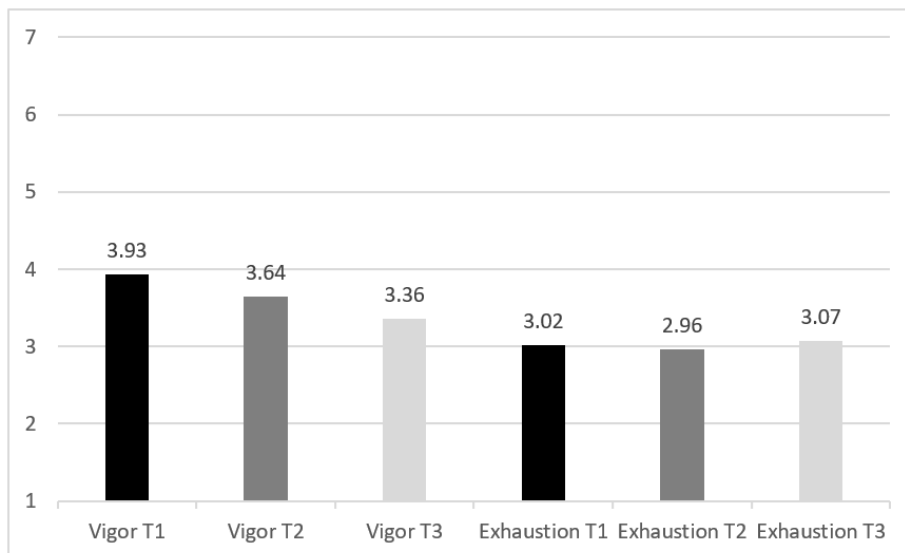
Profiles	LL	FP	BLRT(p)	aLMR(p)	VLMR(p)	AIC	BIC	ABIC	Entropy
1	-2305.77	12	-	-	-	4635.53	4683.90	4645.82	-
2	-2143.50	19	< .001	< .001	< .001	4325.00	4401.59	4341.30	.944
3	-2056.80	26	< .001	.003	.003	4165.60	4270.40	4187.89	.769
4	-2020.67	33	< .001	.087	.082	4107.34	4240.35	4135.64	.803
5	-1996.55	40	< .001	.418	.408	4073.10	4234.33	4107.40	.715
6	-1971.32	47	< .001	.400	.394	4036.64	4226.08	4076.94	.707
7	-1949.47	54	< .001	.086	.082	4006.95	4224.61	4053.25	.758
8	-1930.50	61	< .001	.282	.271	3983.00	4228.87	4035.30	.746
9	-1914.46	68	.002	.648	.645	3964.91	4239.00	4023.22	.743

Note: LL = log-likelihood, FP = free parameters, BLRT = Bootstrapped likelihood ratio test, VLMR = Vuong-Lo-Mendell-Rubin test, LMR = adjusted Lo-Mendell-Rubin test, AIC = Akaike information criterion, BIC = Bayesian information criterion, ABIC = sample-size adjusted Bayesian information criterion.

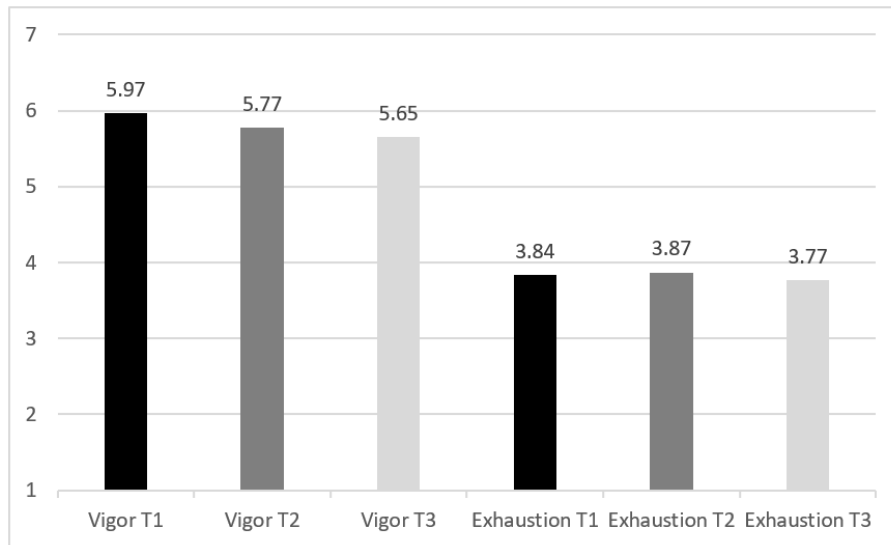
The three-profile solution is presented in Figures 1–3. Profile 1, labeled as “Energized”, was the largest ( $n = 240$ , 58%) and presented stable low levels of exhaustion and stable high levels of vigor. The second profile, labeled as “Unenergized”, was the smallest ( $n = 43$ , 10%) and presented stable medium levels of exhaustion and vigor. The third profile, labeled as “Risky” included almost a third ( $n = 133$ , 32%) of the respondents and presented stable high level of exhaustion and decreasing high level of vigor. The decrease in vigor was significant ( $p < .01$ ) from T1 to T3 in the risky profile.



**Figure 1.** Estimated means of the “Stable” profile.



**Figure 2.** Estimated means of the “Unenergized” profile.



**Figure 3.** Estimated means of the “Risky” profile.

Workplace ostracism and meaning making through international work along with demographic variables at T1 were investigated as possible predictors for the profile assignment (see Table 6). Multinomial logistic regression revealed that workplace ostracism and meaning making through international work were significant predictors of the profiles. Specifically, expatriates with higher levels of workplace ostracism were more likely to end up in the risky profile (OR = 5.82,  $p < .05$ ) or to unenergized profile (OR = 9.07,  $p < .01$ ) than in energized profile. Thus, individuals experiencing higher ostracism were often at an elevated risk of belonging to a harmful profile of exhaustion and vigor. However, ostracism had a high standard error, and therefore also wide confidence intervals. This was most likely due to low empirical variability in ostracism as only a few experienced higher values of ostracism.

Similarly, respondents with higher values of meaning making through international work were less likely to belong to the unenergized profile (OR = .47,  $p < .01$ ) when compared to the stable profile, and more likely to belong to the risky profile (OR = 1.95,  $p < .05$ ) when compared to unenergized profile. There was no difference in the likelihood of belonging to the risky profile (OR = .91,  $p > .05$ ) when compared to the stable profile. This result indicates that meaning making through international work had a dual role in relation to the developmental profiles of exhaustion and vigor. On one hand, meaning making through international work seems to be important for decreasing the likelihood of belonging to the unenergized profile with stable low vigor and mean-level exhaustion. On the other hand, there was no significant difference in meaning making through international work between energized and risky profiles, which

means that expatriates with high meaning making through international work were as likely to belong to the energized profile as they were to the risky profile.

**Table 6.** Odds ratios for the multinomial logistic regression analysis.

Predictor	Risky vs. Stable		Risky vs. Unenergized		Unenergized vs. Stable	
	OR	95% CI	OR	95% CI	OR	95% CI
Meaning making	.91	.53–1.58	1.95*	1.01–3.75	.47**	.28–.80
Ostracism	5.82*	1.21–27.85	.64	.27–1.51	9.07**	2.33–35.28
Gender <sup>a</sup>	2.31*	1.28–5.21	3.10	.94–10.28	.75	.25–2.27
Age	.95*	.91–.99	.95	.89–1.03	1.00	.94–1.06
Union <sup>b</sup>	.66	.29–1.47	1.11	.40–3.07	.59	.25–1.42
Length of stay <sup>c</sup>	1.09*	1.06–1.17	1.08	.93–1.26	1.00	.88–1.14
Working hours <sup>d</sup>	1.16**	1.08–1.24	1.19**	1.08–1.31	.97	.90–1.04
Children <sup>e</sup>	2.59	.99–6.71	2.79	.65–12.07	.93	.28–3.03
Expatriate type <sup>f</sup>	1.48	.66–3.35	1.60	.49–5.22	.93	.32–2.72
Relationship status <sup>g</sup>	1.44	.42–4.99	1.15	.14–9.51	1.26	.27–5.93

Notes: OR = odds ratio, CI = confidence interval. \*  $p < .05$ , \*\*  $p < .01$ . <sup>a</sup> 0 = Men, 1 = Women. <sup>b</sup> 0 = engineers, 1 = economists. <sup>c</sup> Stay in current country measured in years. <sup>d</sup> Per week. <sup>e</sup> 0 = Has no children, 1 = Has a child/children. <sup>f</sup> 0 = Self-initiated expatriates, 1 = Assigned expatriates. <sup>g</sup> 0 = Not in relationship, 1 = In a relationship.

Demographic and other background variables provide more information about the profiles. Older expatriates were less likely to belong to the risky profile (OR = .95,  $p < .05$ ) compared to the energized profile. When reversed, this also means that the expatriates in the risky profile were younger than those in the energized profile. Expatriates with more working hours were more likely to belong to the risky profile (OR = 1.16,  $p < .01$ ) compared to the energized profile. In addition, gender difference was significant ( $p < .01$ ) between the risky and the energized profiles and based on the odds ratio (OR = 2.31), women were more likely to belong to the risky profile.

The risky profile was also different compared to the unenergized profile. Expatriates with more working hours (OR = 1.24,  $p < .01$ ) were more likely to belong to the risky profile than to the unenergized profile. The unenergized profile did not differ from the energized profile in demographic or other background variables. There were no differences between the profiles in the sample variable regarding expatriate types, length of stay, or relationship status. Furthermore, the sample variable did not reveal any significant differences between the profiles, which indicates that the different starting times and different working fields had no biasing effect on the profile compositions.

Based on all of the comparisons between the profiles, the risky profile consisted of younger expatriates and who did more working hours compared to the energized profile, the unenergized profile had lower values of meaning making through international work than the energized and risky profiles, and had fewer working hours, than in the risky profile. Therefore, the energized profile consisted of older expatriates and expatriates with less working hours than the expatriates in the risky profile. Also, expatriates in the energized profile had higher values of meaning making through international work in their work than expatriates in the unenergized profile.

We also compared the exhaustion-vigor profiles in relation to the intention to leave the job and the intentions to quit the current expatriation period at T3 (see Table 7). Highest mean values were in the unenergized profile, indicating the highest level of both turnover intentions. Similarly, the unenergized profile also differed significantly from the energized profile in terms of both elements of turnover intentions.

**Table 7.** Comparison of profile means in outcomes at T3.

	<u>Stable</u>	<u>Unenergized</u>	<u>Risky</u>	<u>Overall test</u>
<u>Intention to leave a job</u>	<u>2.16<sub>U,R</sub></u>	<u>3.31<sub>S</sub></u>	<u>2.85<sub>S</sub></u>	<u>13.84**</u>
<u>Intention to quit expatriation period</u>	<u>1.77<sub>U</sub></u>	<u>2.85<sub>S,R</sub></u>	<u>2.08<sub>U</sub></u>	<u>13.43**</u>

Notes: \*\*  $p < .01$ . Indicated values are mean scores. Overall test values are Chi-square values with  $df = 2$ . Subscript letters indicate profiles which differ significantly at  $p < .05$ .

The risky profile had the second-highest means in both intentions to leave the job as well the intention to quit the expatriation period. Expats from risky profiles had significantly higher intentions to leave the job than in the energized profile but did not differ from the energized profile in terms of the intentions to quit the expatriation period. It, therefore, seems that the expatriates belonging to the risky profile had more negative views about their current job than the expatriation process as a whole. Regarding the intention to quit the job, the risky profile did not differ significantly from the unenergized profile as they had almost equally high levels of external turnover tendencies.

## Discussion

### Theoretical contribution

This research enhances understanding of how the work well-being of expatriates evolves over time, in particular, exhaustion and vigor. The findings of this study

are in line with earlier developmental profile studies conducted in a domestic setting over varying time frames (Mäkikangas et al., 2021, Mäkikangas et al., 2016; Oksa et al., 2022). Our study showed that exhaustion and vigor can co-exist among the same groups, which supports the view that these are not opposite ends of the same continuum (Mäkikangas et al., 2017; Mäkikangas et al., 2014), but rather independent phenomena which are important to study at the same time (Mäkikangas, Feldt, Kinnunen, & Tolvanen, 2012; Mäkikangas & Kinnunen, 2016). According to Hobfoll's (2010) Conservation of Resources (COR) theory, well-being levels are influenced by individual differences. Therefore, expatriates in comparable work environments do not necessarily experience identical levels of burnout or vigor.

It further contributed to the expatriate literature by exploring the possibility that not all expatriates might have similar experiences in terms of the development of exhaustion and vigor over time, thus challenging the general notion of a uniform growth trajectory of a phenomenon for an entire population (see Hofmans, Vantilborgh, & Solinger, 2018). Most importantly, it provides evidence for the co-existence of multiple well-being development profiles within the study population. The latent profile analysis identifies three development trajectories of well-being among expatriates. The findings revealed that the majority of expatriates (58%) belonged to the developmentally stable profile and experienced stable low levels of exhaustion combined with high levels of vigor. Most of our participants seemed to have a consistent and balanced situation in terms of their work well-being, finding aligned with earlier domestic studies (Mäkikangas et al., 2017; Oksa et al., 2022) but challenging the common view that expatriation is a major risk for work well-being. 10% of the expatriates belonged to the unenergized profile with the most negative outlook. This profile was characterized by stable medium levels of exhaustion and low levels of vigor. This group of expatriates is, fortunately, the smallest one, but may involve a risk of personal suffering and negative development regarding their work well-being in the longer run. Our findings are similar to domestic studies exploring the exhaustion-vigor developmental patterns, as most of the participants were not experiencing change over time in regards to their exhaustion and vigor, it is either positive or representing the worse situation. Thus, contrary to popular belief, working abroad seems not to be harmful for the development of the well-being of most the expatriates (Font et al., 2012) although part of them are constantly not feeling well at work.

However, a quite large number of expatriates (32%) belonged to the risky profile, experiencing relatively high levels of exhaustion combined with high levels of vigor, with the latter decreasing over time. There have been some assumptions that highly engaged employees, due to their deep investment in work, deplete their

psychological resources, leading to work-related strain and eventual withdrawal to prevent further resource loss (Hobfoll, 1989). Research shows that highly engaged employees tend to work longer hours (Schaufeli et al., 2008), have less time for personal activities (Häusser & Mojzisch, 2017), experience greater work–family conflict (Halbesleben et al., 2009), and exhibit a heightened need for recovery (Sonnetag et al., 2008). Recent person-centered studies have confirmed that burnout and work engagement can coexist (Abós et al., 2019; Moeller et al., 2018). Mäkikangas and her colleagues (2017) identified similar kind of group (“stable average exhaustion – decreasing vigor”), but it was much smaller, as only 5 % (n=8) of their population belonged to that group. It is possible that the existence of this kind of profile is higher among expatriates than among domestic employees, that is, expatriates may enjoy their international work, but it also drains their energy. In this study, we only followed them for one year, and thus it is impossible to say what has happened to these expatriates’ work well-being over the long term, so studies with a longer time lag are needed. However, their vigor had already started to decrease during this one-year time, and it is possible that the consumption of their energy (exhaustion) starts to lead to a negative resource loss spiral instead of a positive accumulation of resources (Hobfoll et al., 2018). In addition, because there is some evidence that the drastic changes in working life have a possibility to effect on the development of work well-being (Oksa et al., 2022), future studies following work well-being of employees who face changes in their working life, for instance, move abroad for work are needed. Thus, longitudinal data collections in organizations operating globally could provide a possibility to compare if work well-being develop differently among expatriates and domestic employees.

Moving on to the discussion of antecedents of work well-being profiles and first, to job demand of our study, we found that expatriates who experience higher levels of workplace ostracism are more likely to belong to either the risky group or the unenergized group as compared to the stable group. Individuals who are ostracized from their peers and are cornered by their social network at work would end up in risky or unenergized profiles, essentially, developing high work exhaustion over time and also first experiencing high vigor at work, starting to lose it when time goes by. It is possible that the effect of negative social context especially in international work is not immediate, but over time, people become aware that their social needs are not going to be met at work and distressing feelings of loneliness will follow (Hawkley & Cacioppo, 2010; Pinquart & Sorensen, 2008). This kind of experience increase stress provoking attentiveness to social threat and changing psychological processes that influence people’s functioning (Hawkley & Cacioppo, 2010), here low or decreasing levels of energy at work. International work context, for instance, cultural differences, team diversity, and expatriate’s language

competency may play a role in how long the expatriate keeps up a positive attitude towards his/ her work, i.e. before vigor starts to decrease. They may think that overcoming the complexity of the environment takes time and therefore interpretation of being ostracized may develop slower than in a domestic work context and therefore be reflected in energy levels at a slower pace. However, our study is not able to dig deeper into this, and therefore further research comparing domestic and international work context is needed. Mainly our findings support previous research on domestic employees (Williams, 2001) that observes workplace ostracism as a vessel for resource loss which produces anxiety and depression in work situations. Another study (Wu et al., 2012) reports similar findings by showing employees experiencing prolonged periods of workplace ostracism might experience emotional exhaustion. Thus, the negative effect of ostracism became confirmed in the context of expatriation as well, although our study highlighted the possibility of delayed negative effect of ostracism on work well-being consisting of vigor and exhaustion.

Moreover, those expatriates who perceived that their work was meaningful, and in particular that they were able to make meaning through their expatriate work, were more likely to belong to the energized as compared to the unenergized profile. Hence, we can assume that experiencing meaning-making through expatriate work could prevent expatriates from belonging to the unenergized group, thus preventing their possibility to develop comparably low level of vigor combined with higher levels of exhaustion. Our finding can be partly supported by earlier studies such as Fairlie (2011) where meaningful work has been described as a job resource correlated with job burnout. However, these investigations have considered both job burnout and meaningful work as unidimensional constructs and do not separate the different elements of job burnout and meaningful work nor consider the concurrent development of vigor. This study examines specific dimensions of job burnout and meaningful work, i.e., exhaustion and meaning-making through work respectively, and adds the novel perspective by focusing on international work as a possibility for meaning-making. Moreover, a person-centered approach and taking account of both exhaustion and vigor gives a better understanding of the constructs.

Furthermore, expatriates with higher levels of meaning making through work were more likely to belong to the risky developmental group as compared to the unenergized profile which signifies that MMIntW can become even 'a double-edged sword' in the long run. On one hand, it gives a positive boost and keep employees motivated at work, but in the other hand, it may keep them so busy and involved to work that it consumes their energy and tires them, even so, that the positive experiences -here vigor- starts to diminish over time. This opens up a new

avenue for the research of meaningful work as so far, it has mainly been seen as a job resource, leading to positive outcomes (Allan et al., 2019) and relying on the assumption that the feeling of being involved with one's work - high vigor comes with the experiences of MMIntW (Jiang, 2021; Autin et al., 2021). Although our findings partly support this traditional view, they also indicate that meaningful work may become a resource-consuming element of work in the long run. It has been suggested that individuals might get absorbed in their work and demonstrate higher exhaustion levels all the while being motivated about their accomplishments (McFadden, 2015). Based on this finding, we also suggest that the JD-R theory (Bakker et al. 2014; Bakker & Demerouti, 2017) should incorporate a temporal and more dynamic perspective on the role of job demands and job resources, and acknowledge that their role and effects may not remain the same over time. For instance, activation theory (Gardner, 1986; Scott, 1966) suggests that experiencing activation levels that are too high or too low leads to negative outcomes for employee well-being. Thus, borrowing ideas from this theory, JD-R should involve the idea that increase in psychological stimulation, here via MMIntW, will have beneficial effects for the employee, only to a certain level, after which the benefits of MMIntW will cease or even relate on negative development of work well-being.

Our explorative study also identified other covariates that predicted belonging to certain exhaustion-vigor developmental profiles. We found that younger expatriates were more likely to belong to the risky profile in comparison to the stable profile. It is possible that younger expatriates put lots of effort into their work in order to achieve their career aspirations, and thus drain their energy although enjoying their work at the same time. Older expatriates perhaps have a more settled career situation and have more experience, and are therefore able to cope more easily with possible challenges related to working abroad. Similarly, women and individuals working longer hours were shown to belong in this risky group, compared to the stable group. This finding may reflect the gendered nature of expatriation, and women (who typically are in the minority among expatriates: Shortland, 2014), may feel pressure to prove their competence and put lots of effort into their job abroad. Thus, over time, this may start to harm their vigor at work. In general, if a high effort is needed to be devoted to work, such as long working hours, positive feelings at work are likely to diminish longer the situation lasts.

The study reported the important role work wellbeing might play in expatriate's intention to retain working abroad and/or continue working in their current job. Results showed that expatriates belonging to unenergized profile are more likely to have higher intention to quit the expatriation period as well as leaving the job. This is not surprising and support the earlier findings in domestic context (Alarcon

& Edwards, 2010) and in expatriation context (Bhanugopan & Fish, 2006) – low energy at work leads employees to consider changes in their working life. However, expatriates in the risky group showed higher intention to leave their job even though they had continued interest in working abroad. This finding provides novel understanding relevant for international human resource management and literature concerning international careers by showing evidence that commitment to working abroad is predicted by different situation in individual's work well-being than is the commitment to the job itself. Thus, experiencing both exhaustion and vigor (although latter decreasing over time in risky profile) may keep employees motivated to stay working as expatriates and continue their career abroad in different jobs and organizations, and perhaps become global careerists, people whose careers involve several international jobs and assignment instead of 'once in a life time' experience (see e.g. Suutari et al., 2012). Therefore, in order to keep people staying committed to their job and organization, their work well-being should be considered from a holistic perspective, as the absence of negative experiences (exhaustion) is not enough alone, but also positive experiences (vigor) are needed.

### Practical implications

Several practical implications can be drawn from this study. Organizations value the experiences expatriates gain on their work abroad and ideally retain them and promote good work well-being conditions. There is an abundance of evidence suggesting that employee well-being is an indispensable part of organizations' corporate social responsibility through which they contribute to society, the environment, and their employees (Hediger, 2010; Su & Swanson, 2019; Ahmed et al., 2020). However, working as an expatriate is a unique experience in itself, and understanding employee well-being in this context is one of the grand challenges in the field.

Organizations working with expatriates need to be aware of the various exhaustion-vigor groups that may exist among their workforce. Managers need to be aware of the existence of "risky" and "unenergized" work well-being profiles among their employees and focus on taking additional arrangements for such employees. Identifying expatriates in these profiles is important because they might be at risk of experiencing burnout and low or reduced work engagement. Identifying issues at an early stage and taking prompt action can prevent the ill-being of expatriates and any adverse effects on the organizational success, such as the potential loss of crucial staff due to turnover.

With the co-existence of different states of well-being within expatriates, it might be helpful for organizations to understand the drivers for such levels of exhaustion-vigor to design effective interventions to maintain high levels of work engagement over time.

Our findings highlighted that job resources like MMIntW may be closely related to the levels and changes in exhaustion and vigor in expatriates. Employers must take proactive measures to encourage and support expatriates in finding meaning and purpose in their international work experiences. It is important that employers help expatriate employees connect their personal values with the company's mission and goals. When employees believe that their work contributes to something bigger to the society around them, they are more likely to find purpose in what they do. For example, if an expatriate employee's personal goal is to improve sustainability practices in business, their supervisor could involve them in international projects related to environmental initiatives or social responsibility, directly contributing to the company's mission of promoting sustainable business practices.

For expatriates, we recommend a pragmatic approach: conducting a comprehensive assessment of the tasks and responsibilities associated with the overseas position during the decision-making phase of whether to accept the job offer. For example, if the choice is solely influenced by the financial advantages offered by the overseas position, there might be a lack of consideration for its inherent meaningfulness. Our study suggests expatriates who have higher levels of MMIntW are more likely to belong to the positive work well-being profiles (Energized) rather than the negative ones (Unenergized and Risky). This highlights the importance of creating meaningful work assignments and opportunities for personal growth during international assignments.

Organizational practices that enforce the social inclusion of expatriates into the workplace could help strengthen their commitment to their job and working abroad. Workplace ostracism negatively affects expatriates' work well-being, leading to a higher likelihood of belonging to the negative work well-being profiles (Unenergized and Risky). Managers should actively address the issues of ostracism of foreign workers and foster a supportive and inclusive work environment (Lynn et al., 2019) where all employees, including expatriates, feel valued and included.

Finally, our findings shed light on the complexity of expatriate retention within MNCs. Our research underscores that while expatriates may harbor intentions to leave their current job or terminate their expatriation period prematurely, they can still retain a strong interest in working abroad. Thus, by involving expatriate employees in projects that align with their skills and interests, managers can create

a sense of purpose, ownership, and engagement that keeps them motivated and enthusiastic about their job within the organization.

### Limitations of the study

As is the case with all studies, this study has some limitations regarding the generalizability of the conclusions. This sample primarily included highly skilled white-collar workers and thus was not a randomized sample of expatriates. As a consequence of this, the results of the study might not be generalizable to all expatriates and are best generalizable to expatriates working in the fields of engineering, architecture and business, or another similar kind of expert work. Larger and more diverse samples are therefore needed in order to capture the values of the wider population more accurately. However, this exploratory study does give important information about the developmental profiles of the expatriates, and this information can be used in hypothesis building in future studies which can be more confirmatory in nature. As a second issue, the data for the present study has been collected through self-reports, thus raising concerns about self-report bias and social desirability as some cultures tend to be more modest in answering the questions than others (Fay et al., 2012). It is advisable that future researchers utilize more objective or multi-informant reports to avoid any issues in this regard, although all of the studied phenomena in our study were highly subjective in nature and the expatriates themselves were the best persons to evaluate the meaningfulness of their work, as well as their subjective experiences of how vigorous and exhausted they felt. For instance, organizational register data of actual turnover or premature return from assignment would provide interesting additional data for future studies. That being said, one year was a relatively short time over which to study the development of job exhaustion and vigor, and longer-term panel data collection (for instance, over five to ten years and including repatriates and people changing host countries, and domestic employees in similar jobs) would further increase our understanding about expatriates' work well-being. However, the literature on newcomers in organizations has shown that organizational socialization mainly happens during the first few years (Bauer et al., 2021; Gilmore & Harding, 2022) and thus one to two years could be a relevant time lag if the following expatriate's well-being from the very beginning of expatriation period.

### Conclusion

To conclude, the developmental profiles obtained in this research provide a holistic picture of the change trajectories of work well-being in expatriates over a one-year

period. Our examination of the exhaustion and vigor constructs using a person-centered approach contributes to the body of literature regarding the development of workplace well-being, and particularly in expatriates. Most expatriates belonged to stable, energized group although a high proportion of expatriates belonged to a risky group, experiencing both high exhaustion and high vigor, and so to speak, burning the candle at both ends. Only a minor part of the participants was part of the unenergized group. Thus, we conclude that problems in expatriate work well-being seem not to be very common.

Our results also showed that expatriates experiencing job resources in the form of the possibility of meaning-making through their expatriate work and job demand in the form of workplace ostracism might be associated with membership of specific development profiles of exhaustion and vigor, the risky group being the one in which both of them were related. As for organizational outcomes of well-being profiles, we showed belonging to a certain profile characterized by levels of exhaustion-vigor seems to be related to the likelihood of the individuals developing different turnover intentions.

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## SELF-PERCEIVED JOB PERFORMANCE AND INTENTION TO QUIT WORKING ABROAD AMONG EXPATRIATES: THE ROLE OF ACCUMULATIVE DEMANDS FROM HIGH-RISK LIVING ENVIRONMENT AND WORK-TO-PRIVATE LIFE CONFLICT

### Abstract

This study examines expatriates' self-perceived job performance and intention to quit working abroad as a function of work-to-private life conflict on the one hand and high-risk living environments on the other hand and their interaction effect. The study is theoretically based on the Conservation of Resources theory and empirically based on responses from 416 Finnish assigned and self-initiated expatriates. Structural equation modeling results suggest a significant negative relationship between expatriates' work-to-private life conflict with their self-perceived job performance and a positive association with their intention to quit the working abroad. Thus, expatriates tend to optimize their (depleting) resources in work domain and taps into their private life domain to compensate for loss of resources in the work domain. However, if the cost of this compensation exceeds the benefits, expatriates accommodate by reducing their expectations on self-perceived performance. The results also reveal a positive association between a high-risk living environment and intention to quit the working abroad, and the association gets even more detrimental for expatriates who experienced high work-to-private life conflict. Therefore, the results highlighted that high-risk living environment may contribute to higher intention to leave expatriation work when individuals face high level of work-to-private life conflict in parallel. However, the results did not support the assumption that experiencing high-risk living environment would also affect expatriates self-perceived job performance. Hence, resource losses in the living environment are dealt with in the same domain, i.e. by quitting the living environment (but not by compensating from another domain, such as from work by lowering job performance).

**Keywords:** Expatriation; work-to-private life conflict; high-risk living environment; self-perceived job performance; intention to quit working abroad

## Introduction

Working abroad affects the dynamics between the professional and private lives of expatriates. Achieving a balance between these two life spheres can be difficult for expatriates due to the increased demands and reduced resources in their related roles (Dimitrova, 2018; Lazarova et al., 2010). For instance, the expatriate work role typically involves challenging tasks, high responsibility, and autonomy, and at the same time, their knowledge and skills may not immediately be a perfect fit with the work role requirements abroad (Bonache et al., 2018; Firth et al., 2014). This increases the demands related to their work role, which in turn is likely to limit the resources available in their private life sphere, causing a situation called work-to-private life conflict (WLC; Fisher et al., 2009). It has been found that high levels of conflict between these two life domains negatively affect an expatriate's job performance (Shih et al., 2010) and are related to an expatriate's intention to quit their job (Mäkelä & Suutari, 2011) or return early from an assignment (Kempen et al., 2015; Mäkelä & Suutari, 2011; Shaffer et al., 2001), putting the organization at risk for negative and costly outcomes.

Expatriates not only face a "high-pressure situation" at work (Haslberger et al., 2013, p. 333) and struggle to maintain a work-life balance (Kempen et al., 2015), but also deal with onerous environmental demands specific to the host country (see Fee, 2017). Most of the host country-related demands can be characterized as macro-contextual issues pertaining to the broader environment beyond the limits of the workplace, and especially when living in risky circumstances involving human-related or natural physical threats. Consequently, addressing such a high-risk living environment drains individual resources and increases the risk of negative organizational outcomes (Bader & Berg, 2013; Shi & Franklin, 2014).

According to Conservation of Resources (COR) theory (Hobfoll, 2001), the depletion of energetic resources resulting from managing job demands may diminish one's capacity to cope with another demand, thereby initiating a loss spiral. Consequently, individuals encountering high job demands in one area may deplete their resources in attempting to address them, subsequently impairing their ability to handle additional job demands. For instance, both the negative spillover from work to private life and the high-risk living environment can each in themselves strain the resources that expatriates rely on to meet the demands of their work role. However, they may also reinforce each other's strain if an expatriate works in a highly demanding or even hostile host country environment, and experiences role conflict between different life domains. In this case of double burden, the conflict between work and private life could be a critical factor that exacerbates the negative relationship between a high-risk living environment and

the effective functioning of employees (see also Voydanoff, 2005). Although we already have some earlier evidence about negative organizational outcomes of individual level resource loss situations related to a conflict between different life domains (i.e. work and private life: Andres et al., 2012; Brown, 2008; Kempen et al., 2015; Lin et al., 2012; Shih et al., 2010), and in contextual domains (e.g. host country as a living environment: Bader & Berg, 2013; McGhee et al., 2012; Shi & Franklin, 2014), so far there is no empirical research exploring how accumulative demands can effect expatriates' effective functioning, and our study is the first to contribute to that knowledge.

Several indicators of proper functioning within expatriates' stays abroad have been studied. One is the intention to stay with the employer (Ritchie et al., 2015; van der Laken et al., 2019). Organizations have identified turnover and retention as critical problems when dealing with foreign employees (Nguyen et al., 2014). This is a serious challenge since hiring an expatriate is typically more expensive than hiring a local employee (Velocity Global, 2019). Other indicators address more general-level aspects of expatriate work, such as their job performance (for a meta-analysis, see van der Laken et al., 2019). We therefore address the following research question in this study, employing the tenets of the Conservation of Resources (COR) theory (Hobfoll, 1989, 2002): *How does WLC and high-risk living environment related to expatriates' self-perceived job performance and intention to quit the working abroad?*

Organizations that employ expatriates must be able to manage them successfully, in order to avoid the risk of them leaving the employer before a positive return-on-investment occurs or a knowledge transfer in favor of the organization is completed. As a consequence, the frequent recruitment and training of new (and scarce) workers become necessary, and the company can bear high financial and human costs. Having foreign employees who are highly stressed and performing poorly can also taint relations with business partners (Kempen et al., 2015; Selmer & Laurant, 2014). But, relating to expatriates themselves, a poor expatriation experience can harm their short-term family relationships and have a negative impact on their career success when they eventually return to their home country (Fischlmayr & Kollinger, 2010; Kempen et al., 2015).

Our study makes several contributions. First, by studying different domains (work, private life, and living environment) and their interactions, our study contributes to expatriation research by relying on the core tenets of COR theory (Hobfoll, 2011), which argues that resources "travel in packs" and as caravans that can constrain resource acquisition, and should therefore not always be considered in isolation. Studying how different resources function together has the potential to

reveal whether some of them are more essential than others, or how resources related to different domains may hinder or enhance their utilization. These findings can be used to shape personnel management towards a more optimal balance of cost and benefit. This knowledge is particularly significant considering Conservation of Resources (COR) theory (Hobfoll, 2001), posits that the depletion of energetic resources due to high demands in a domain could compromise the capacity to address other demands, thus initiating a cycle of resource loss.

Second, we respond to Hobfoll et al.'s (2018) call to focus on conditions beyond the individual level, and to consider resources in their larger context. In addition, we highlight the work-private life interface and its critical role when working in challenging foreign environments, and thus help to move the human resource literature beyond traditional domestic work settings.

The remainder of this article is structured as follows. Next, we present the COR theory to frame the theoretical linkages between WLC and high-risk living environments, and expatriates' effective functioning in terms of their self-perceived job performance and intention to quit the working abroad. The methods section outlines the study's methodology and sample approach, and is followed by the presentation of the study's results. The last section is dedicated to the discussion and the implications of our research findings.

## Limited Resources and Expatriate Functioning

### Theoretical Framework: Hobfoll's Conservation of Resources (COR) Theory

The COR theory is a general motivation theory (Hall et al., 2006) that describes individuals' decisions to obtain, retain, protect, and foster the resources necessary to manage their current demands and guard against further resource depletion (Hall et al., 2006; Hobfoll, 1989, 2002; Wright & Hobfoll, 2004). Hobfoll (2001) specified that resources comprise a variety of elements, including objects, conditions, personal characteristics, and energy resources. Having recourse to resources is critical in demanding situations, for example, in order to avoid stress or prevent interference between the work and private life spheres (Pennbrant & Dåderman, 2021).

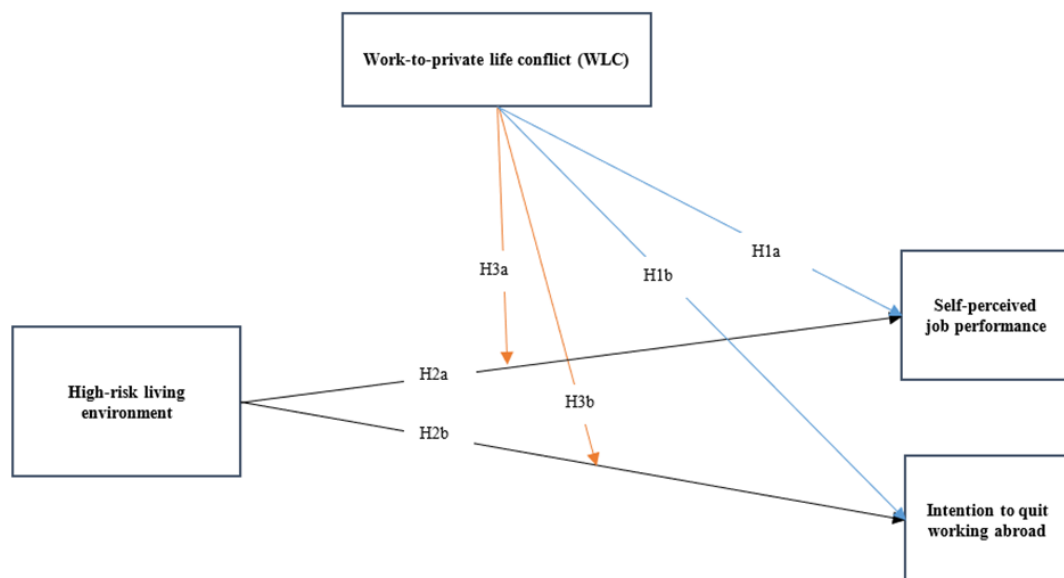
Several principles underpin COR theory. According to the first principle of *the primacy of resource loss*, a loss of resources induces more salient affective and behavioral reactions than a gain in resources (Hobfoll, 1989, 2001). This principle

can explain why employees tend to stay with their employer, whereby their aversion to losing accumulated resources outweighs the expectation that they will regain those resources elsewhere (Kiazad et al., 2015). However, in the expatriation context, individuals' tendencies to quit have been found to be more unpredictable, because their stock of resources can be in different nations (Faist, 2010).

The second principle of *resource investment* proposes that individuals must invest resources to ensure resource gains and avoid resource losses (Hobfoll, 1989, 2001). Individuals who are rich in resources are more likely to accumulate additional resources, and less likely to lose them. In contrast, the reverse is more likely for those who have fewer resources to begin with. This situation leads to a spiral of resource gains and losses where resource losses beget further losses, and resource gains spur further gains (Hobfoll, 2001; Hobfoll et al., 2006; Hobfoll & Lilly, 1993; Wells et al., 1997, 1999; Wright & Hobfoll, 2004). In the expatriation context, individuals are prone to a resource loss spiral because they tend to lose resources in several domains (work, private life, living environment) after starting a new job and moving to a new country. This might be because of an imperfect command of the (working) language in the new country, a lack of social contacts/networks, a lack of fit with the new organizational or national culture, or a lack of knowledge of healthcare systems or safety regulations, all of which may occur while dealing with new responsibilities at work. Breaking the resource-loss spiral requires expatriates to consume fewer resources (e.g., time spent on hobbies) and ideally invest resources (e.g., in learning the local language) to ensure the gains in resources necessary to address the demands across domains confronting them abroad. Those demands might arise, for example, at work or through the environment (see Hobfoll, 1989, 2001), and demanding situations without resources are typically associated with physiological or psychological costs and negative organizational outcomes such as reduced performance or the willingness to stay in a job (see Schaufeli & Taris, 2014).

Expatriate performance has been measured in different ways in the literature, including achieving job outcomes such as performance (overall performance, contextual/managerial performance, expatriate-specific performance; Caligiuri, 1997), effectiveness on the job (Chen et al., 2010), finishing the assignment (Reiche & Harzing, 2011), or adjusting to the host country culture linked to the desire to continue the assignment (Bhaskar-Shrinivas et al., 2005; Harrison & Shaffer, 2005; Takeuchi et al., 2009). In this study, we adopt an individual perspective on performance as central to the assessment of resources and consequences. Campbell and Wiernik (2015) referenced several multidimensional models of performance constructs that have been discussed in prior literature to define job

performance as actions taken to attain a goal set by the organization. Accordingly, we define expatriates' *self-perceived job performance* as the extent to which expatriates assess they are fulfilling the core duties of the tasks they must attend to. Multinational organizations have designated expatriates' job performance as an indicator of successful strategic implementation (see DeNisi et al., 2021), which has led researchers to study factors affecting expatriate job performance (see Mol et al., 2005a, 2005b). Furthermore, as the premature termination of a job assignment can cause heavy direct and indirect costs for employers (Kataria & Sethi, 2013), a solid understanding of factors boosting the *intention to quit the working abroad* of employees can directly help with organizations' expatriation management. Next, we derive the hypotheses of the study with reference to COR theory and existing expatriate literature. Figure 1 summarizes our research model from the conceptual perspective.



**Figure 1.** Conceptual frameworks.

### Resource Loss Due to Work-to-Private Life Conflict and Expatriate Functioning

One way to interrupt a resource loss spiral involves investing additional resources. An expatriate could, for example, withdraw resources from other areas to invest them in the work area. So, for example, expatriates might significantly reduce the amount of time they spend with their family members (Fischlmayr & Kollinger, 2010; Lazarova et al., 2010; Richardson et al., 2015; Rosenbusch et al., 2015) or the time spent on hobbies (Chao et al., 2019), and make use of the time gained for work purposes (e.g., putting more effort into challenging work tasks, networking,

or attending a language course), with the intent of improving their job performance.

Nevertheless, such a withdrawal of resources from the private life sphere can give rise to conflicts over time (Ramsey & Lorenz, 2020). For example, as a result of the lack of regular social capital compared to that available in the home country, a family moving with the expatriate may expect more involvement (and resources) from them to ease their integration into the new environment. New friends may be lost as a result of an insufficient nurturing of the friendship, resulting in a further loss of social capital. These work-private life interferences refer to a situation in which the demands of work life and those of private life domains become incompatible to the extent that compliance in the work role complicates compliance in the private life domain (Casper et al., 2018, see also Powell et al., 2019). Understandably, expatriates experience pressure in both these domains, and thus, a negative spillover (especially from work to private life) is possible. If expatriates cannot successfully accumulate resources and transfer them between work and their private lives, the risk of resource deprivation is high, resulting in heightened stress and other negative reactions (e.g., emotional exhaustion: see Hobfoll, 2001). From the perspective of COR theory, this kind of conflict, in turn, is likely to further consume expatriates' resources (e.g., energy) and can thus be seen as a resource loss situation that negatively affects their self-perceived work ability and job performance (see the meta-analysis by Hoobler et al., 2010). When resources are exhausted, no further transfers and investments can be made, so people may withdraw from a stressful situation or look for an alternative survival strategy (Hobfoll et al., 2018) such as leaving the employer and the country.

Empirical studies support these theoretical relationships, and show that problems related to the family domain such as work-to-family or work-to-private life conflict are a common and recurring challenge faced by expatriates (Ballesteros-Leiva et al., 2017; Mäkelä & Suutari, 2011; for a review see Mäkelä et al., 2022). Especially, the challenge arises because addressing such problems depletes expatriates' resources (Biswas et al., 2021). It has been found that employees' abilities to balance the demands of work and private life domains relates positively to the successful completion of international assignments (Kempen et al., 2015). In contrast, excessive demands from the private life domain can reduce expatriates' commitment to work and their assignment success in general (Lin et al., 2012). Studies show that work and life conflicts among expatriates can have an impact on them leaving their assignments early (Andres et al., 2012). The conflict between work and private life domains is considered as one of the most important reasons for the failure of international assignments (Fischlmayr & Kollinger, 2010; Mäkelä & Suutari, 2011). Shih et al. (2010) report that work and life conflicts among

expatriates negatively affect their performance. A further study identifies negative work-family interactions as a major antecedent of expatriate stress levels that impact expatriates' organizational performance (Brown, 2008). In particular, a qualitative study by Osland (1995) suggests that international employees' work-life interference can significantly affect their performance levels at work, and also the length of stay on assignment. We therefore hypothesize:

**Hypothesis 1:** High WLC is (a) negatively associated with expatriates' self-perceived job performance and (b) positively associated with expatriates' intention to quit the working abroad.

### Resource Loss Due to a High-risk living environment and Expatriate Functioning

Several studies highlight the role of the specific demands associated with working abroad (see Fernandez de Cueto & Sanchez, 2004) in expatriate effectiveness. Most expatriation-specific or host country-specific demands concern macro-contextual issues related to the broader environment, rather than the workplace. For instance, expatriates face challenging environmental situations (Bader et al., 2019; Bhaskar-Shrinivas et al., 2005; Oh & Oetzel, 2011; Ramirez et al., 2016), including adjusting to a foreign culture, differences in the working language, social values, or cultural norms (see Peltokorpi & Froese, 2014; Selmer & Lauring, 2015), and concerns about health and safety infrastructures in the host location.

If employees such as expatriates find the environment they live in to be challenging, their situation is likely to consume their resources (Hobfoll et al., 2018). Any perceived loss of resources may lead expatriates to experience negative outcomes related to their self-perceived job performance (Mol et al., 2005b), or to develop negative work attitudes resulting in the desire to quit the working abroad (Bader & Berg, 2013, 2014; Naumann et al., 2000). If resources are lost due to challenges faced in the living environment in a host country, the resource loss spiral can be interrupted by a reduction of resource consumption at work. This might be achieved, for example, by means of self-deception, by interpreting their own performance more positively than it is, or also by reducing their actual job performance and withdrawing from some tasks in order to retain balance (Rattrie & Kittler, 2014; Schaufeli & Taris, 2014). In extreme cases, individuals withdraw entirely from the stressful situation so as to halt the resource loss spiral (Hobfoll et al., 2018) and reduce their self-perceived job performance to zero by leaving their current job and country of residence, thus avoiding exposure to the expatriation-specific demands. In this extreme case, the initial resource loss associated with changing organization and country is again perceived to be less

than the resource consumption associated with remaining abroad. Moreover, the prospect of resource gain is perceived to be higher in the home country than abroad.

Nevertheless, there is little empirical evidence on the relationship between a high-risk living environment in the host country and the functioning of expatriates. Some studies report that contextual factors such as cultural distance (Shi & Franklin, 2014) and a stressful environment (perhaps caused by safety regulations, worse living conditions, etc.; Bader & Berg, 2013) impede self-perceived job performance. It can be assumed that when expatriates regularly face stressful situations, their interest in staying in the international job will weaken (Hang-Yue et al., 2005). However, it is also not unusual for expatriates to come to prefer the host country culture to that of their home country, and to remain abroad (Cliff et al., 2015). Furthermore, certain foreign environments may offer expatriates greater social/economic stability and wealth than would be the case in the home country, which reflects low challenges in the living environment and decreases their intention to quit the working abroad (McGhee et al., 2012). We, therefore, hypothesize:

**Hypothesis 2:** A high-risk living environment is (a) negatively associated with expatriates' self-perceived job performance and (b) positively associated with intention to quit the working abroad.

#### Accumulated Resource Losses Due to Interaction effects of Work-to-Private Life Conflict and High-risk living environment

The COR theory also proposes that the accumulation of resource losses (so-called resource loss spirals) in more than one domain can be very harmful to an individual (Hobfoll et al., 2018). Accordingly, it is likely that any resource losses due to WLC, in addition to a resource-consuming living environment, boost the negative relationship with expatriates' effective functioning. In particular, the negative relationship between an excessively demanding living environment and expatriates' self-perceived job performance is likely to become even stronger under conditions of high levels of WLC. Similarly, expatriates are more likely to have an even higher intention to quit the working abroad when they experience considerable demands from their expatriation environment and high levels of WLC at the same time. To preserve their remaining resources, they may want to escape the resource-consuming situations, for example, by leaving the country (see Wright & Hobfoll, 2004). Accordingly, we expect WLC to play a moderating role in the relationship between expatriation-related demands and expatriate

functioning. No empirical evidence exists on this moderation effect. Therefore, the COR theoretical arguments lead us to suppose:

**Hypothesis 3 (a):** WLC will exacerbate the negative effect of high-risk living environment such that self-perceived job performance is low at high levels of WLC.

**Hypothesis 3 (b):** WLC will exacerbate the negative effect of high-risk living environment such that intention to quit the working abroad is high at high levels of WLC.

## Methods

### Sample and Data Collection

The data for the study were collected from the members of the Finnish trade unions, Tekniikan Akateemiset (TEK) and EKONOMIT, which represent educated and highly skilled academic engineers, architects, and business school graduates in Finland. Data were collected between 2015–2016 using a web-based survey questionnaire. Of the 416 participants, 69.8% were male. Respondents reported a mean age of 43 years ( $SD = 9.6$ ). About 64.6 % of the respondents were self-initiated expatriates (SIEs), 35.8 % were assigned or corporate expatriates (AEs), and the average length of an assignment was 5.53 years ( $SD = 6.06$ ). The respondents reported a mean average of 45.4 working hours a week ( $SD = 7.84$ ).

### Measures

*High-risk living environment* was measured with three items on a 5-point Likert scale anchored by *strongly disagree* (1) and *strongly agree* (5), using an international context-risk scale specific to international business travelers developed by Mäkelä et al. (2015). The items were modified to suit the expatriation context. Sample items read “When working abroad, I face security risks” and “When working abroad, I am exposed to health risks.” The internal consistency (Cronbach’s alpha,  $\alpha$ ) was .78.

*Work-to-private life conflict (WLC)* was measured using the five-item scale developed by Fisher et al. (2009). Two sample items were “I come home from work too tired to do things I would like to do” and “My personal life suffers because of my work.” The responses were assessed on a 5-point Likert scale anchored with *never or hardly ever* (1) and *always or almost always* (5). The internal consistency (Cronbach’s alpha,  $\alpha$ ) was .89.

*Self-perceived job performance* was measured with a three-item scale developed by Farh et al. (1991). The items included “What do you think of your quality of work?” (*very low* = 1, *excellent* = 5); “What do you think of your work efficiency?” (*very low* = 1, *excellent* = 5); and “What do you think of your work performance?” (*very poor* = 1, *excellent* = 5). The internal consistency (Cronbach’s alpha,  $\alpha$ ) was .83.

*Intention to quit the working abroad* was measured with a four-item scale adapted from the intention to stay in the host country scale developed by Cao et al. (2013). Two sample items included “I would not like to continue working abroad” and “I have been thinking about terminating this expatriation period as soon as possible.” The answers were recorded with a five-point Likert scale anchored with *fully disagree* (1) and *fully agree* (5). The internal consistency (Cronbach’s alpha,  $\alpha$ ) was .84.

*Controls* included demographic variables such as the *gender* (1=male, 0=female) and *age* (chronological age in years) of the respondent. We controlled for the conditions of expatriation such as *expatriation type* (company-assigned vs. self-initiated expatriate) and the *length of stay* (as the time spent in the country as a continuous variable measured in years). The *weekly average number of work hours* was noted as a continuous variable. We also controlled for *family situation*, that is, if expatriates had a partner (no/yes) and if they had children living at home with them (no/yes).

### Analytical Procedure

To examine the structural model and test Hypotheses 1–3, we employed SEM through Mplus 8.3 (Muthén & Muthén, 1998–2019). We employed Mplus specifically because it can test the hypothesized relationships of a complex moderation model in a single step, with estimations maximizing the likelihood that the process described by the model produced the data observed, and while accounting for any potential measurement errors.

Following Anderson and Gerbing’s (1988) two-stage procedure for structural equation modeling, our first step was to estimate the measurement model. We conducted a confirmatory factor analysis (CFA) to evaluate the structure of the constructs involved in our model. The measurement model showed a good fit to the data:  $\chi^2$  (84, N=416) = 157.89,  $p < .001$ , root-mean-square error of approximation (RMSEA) = .046, standardized root means square residual (SRMR) = .037, comparative fit index (CFI) = .971, and Tucker-Lewis Index (TLI) = .964. All of the scale items loaded significantly and at above .60. Overall,

the goodness-of-fit indices conformed to the set standards and presented a convergent construct validity of the research model (Hu & Bentler, 1999). The measurement model conformed to the acceptable standards required to be tested further during the second step of the structural equation modeling. The assessment of path coefficients outlining the relationships in the model depicted in Figure 1 was estimated using Mplus 8.3 in the subsequent step. The structural model tested our hypotheses and established that most were supported.

## Results

Hypothesis 1a received support as the expected negative relationship between WLC and self-perceived job performance was significant ( $\beta=-0.392$ ;  $p<.05$ ). Hypothesis 1b, suggesting a direct positive association between WLC and *intention to quit the working abroad* was also supported ( $\beta=0.226$ ;  $p<.05$ ).

Hypothesis 2a assuming that a high-risk living environment is negatively related to self-perceived job performance was not supported ( $\beta=-0.025$ ;  $p=.708$ ) by the structural model analysis. Hypothesis 2b, suggesting a high-risk living environment is positively related to intention to quit the

Hypothesis 3a was not confirmed because there was no evidence for a two-way interaction between WLC and high-risk living environment on self-perceived performance among expatriates. However, Hypothesis 3b ( $\beta=0.119$ ;  $p<=0.05$ ) shows a significant two-way interaction between WLC and high-risk living environment on intention to quit the working abroad. Simple slopes revealed the positive association between high-risk living environment and intention to quit the working abroad was more marked at high levels of WLC (see Figure 2). Overall, this provided partial support for Hypothesis 3. As expected, our results show that the accumulation of resource losses was harmful, as expatriates with a high WLC in high-risk living environments had a higher tendency to leave than those in non-challenging environments. However, our result for expatriates whose work did not negatively spill over into their private lives (low WLC) shows insignificant difference in tendencies to leave. Thus, the tendency to quit the working abroad of expatriates with high WLC was strongest when they lived in a challenging environment. The results are shown in Table 2.

**Table 1.** Descriptive statistics and the bivariate correlations between the variables.

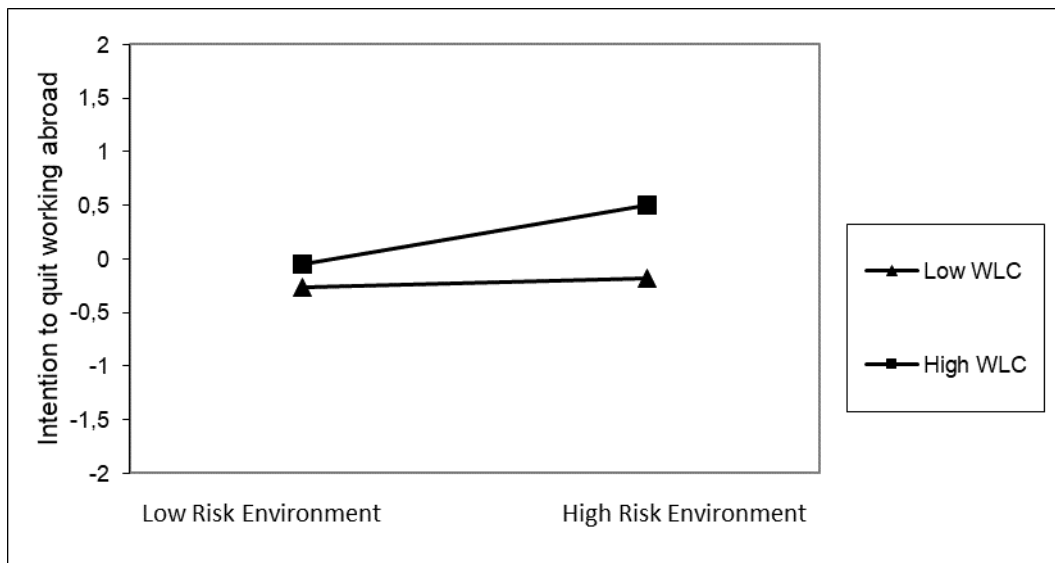
	Mean	Std. Dev	1	2	3	4	5	6	7	8	9	10	11	N
Gender	0.30	0.46	1	-.143**	-.199**	-.137**	-0.022	-0.094	-.128*	-0.052	-0.016	.152**	0.025	410
Age	42.87	9.54	-.143**	1	.471**	.147**	.481**	.206**	.105*	.166**	-0.109	0.052	0.095	409
Children	0.55	.50	-.199**	.471**	1	0.332**	0.208**	0.110*	0.167**	0.151**	-0.069	0.003	0.095	409
Family status	0.85	.36	-.137**	.147**	.332**	1	0.018	0.033	.132**	-0.039	-0.083	0.025	-0.025	409
Length of stay	5.53	6.29	-0.022	.481**	.208**	0.018	1	0.015	-.251**	-.101*	-0.126	0.089	0.008	408
Weekly working hours	45.40	8.32	-0.094	.206**	.110*	0.033	0.015	1	.254**	.240**	0.024	0.034	.381**	408
Type of assignment	0.36	0.48	-.128*	.105*	.167**	.132**	-.251**	.254**	1	.348**	-0.081	-.158**	0.093	402
High-risk living environment	2.39	0.99	-0.052	.166**	.151**	-0.039	-.101*	.240**	.348**	1	.138*	-0.092	.294**	405
Intention to quit working abroad	1.73	0.79	-0.016	-0.109	-0.069	-0.083	-0.126	0.024	-0.081	.138*	1	-.167**	.317**	239
Self-perceived job performance	4.07	0.56	.152**	0.052	0.003	0.025	0.089	0.034	-.158**	-0.092	-.167**	1	-.263**	410
WLC	1.79	0.68	0.025	0.095	0.095	-0.025	0.008	.381**	0.093	.294**	.317**	-.263**	1	409

Notes: \* Correlation is significant at the 0.05 level (2-tailed); \*\* Correlation is significant at the 0.01 level (2-tailed)

**Table 2.** Overall structural model analysis result

	<i>Standardized coefficients</i>	<i>Standard errors</i>
<b>Direct effects:</b>		
Work-private life Conflict → Self-perceived job performance (H1a)	-0.392*	0.065
Work-private life Conflict → Intention to quit work abroad (H1b)	0.226*	0.072
High-risk living environment → Self-perceived job performance (H2a)	0.025	0.708
High-risk living environment → Intention to quit work abroad (H2b)	0.160*	0.072
<b>Interaction effects of WLC:</b>		
High-risk living environment → Self-perceived job performance (H3a)	-0.064	0.056
High-risk living environment → Intention to quit work abroad (H3b)	0.119 *	0.061

Note: \* Significance at the 0.05 level

**Figure 2.** Plot of the two-way interaction effect of Risky environment and WLC

## Discussion

This study adopts COR theory to examine the extent to which resource losses due to WLC and a high-risk living environment are associated with expatriates' self-perceived job performance and intention to quit the working abroad. The results show that WLC seems to be a critical resource loss, as it is negatively related to both self-perceived job performance and intention to quit the working abroad, and also moderates the relationship between a high-risk living environment and intention to quit the working abroad such that the negative effect is acerbated. A high-risk living environment is negatively related to intention to quit the working abroad, but not to job performance.

### Theoretical Implications

The findings of this study offer several interesting implications for COR theory, and for expatriate research and the literature concerning work and private life. Regarding resource management in COR theory, we contribute to the differentiation of compensation and optimization strategies (Hobfoll et al., 2018), and to related resource transfers between working life, private life, and the living environment.

*Resource compensation for insufficient resources in the workplace with resources from private life:* We found that WLC is a significant antecedent that negatively relates to expatriates' self-perceived job performance and positively to intention to quit the working abroad, as suggested by previous research on issues related to the non-work life domain (see Shih et al., 2010; for a review see Mäkelä et al., 2022). When existing resources in the workplace are too depleted or unbalanced to allow for optimization, expatriates appear to resort to an alternative resource strategy of *compensation*, rather than optimization. The compensation strategy means expatriates acquire additional resources from their private lives (e.g., time) that create extra capacity to meet additional responsibilities and uncertainties at work.

However, over time this compensation strategy might lead to WLC, and be seen as a stressor that depletes resources (see Hobfoll & Shirom, 2000). As the resource reserve capacity from private life becomes increasingly insufficient following these ongoing losses, compensatory efforts from the private life to the work domain have a decreased and marginal utility. When the costs of resource investment in the form of WLC begin to exceed the benefits in the form of self-perceived job performance, the expatriate adopts *accommodative coping*. This means that they downgrade their job goals, and self-perceived job performance is reduced. If this goal downgrading is insufficient to cope with the strain, "old battles" (Hobfoll,

2001, p. 351) may even be completely put aside, and the expatriate may stop working abroad altogether, which is reflected in their high intention to quit the period of working abroad.

*Domain boundedness of resource losses in the living environment and related coping mechanisms:* According to COR theory, individuals have resources in multiple domains, such as their private life, living environment, and workplace. Coping can occur within the same domain or across domains. The loss of contextual resources resulting from a high-risk living environment impacts expatriates' considerations of whether to stay abroad, but not their self-perceived job performance. A possible explanation for this difference might be that resource losses in a certain domain are more likely to lead to coping mechanisms adopted in the same domain. Intention to quit the working abroad relates more generally to working and living in a particular social environment. Therefore, the loss of resources due to a high-risk living environment may be more harmful to the decision to stay in this environment than to perform (or not) in the job. In contrast, the job is conducted in an organizational environment that is distinct from the living environment (Hobfoll et al., 2018). Thus, expatriates appear to avoid transferring resources from the workplace to the community domain.

*Resource optimization in the workplace:* Organizations may provide additional resources to address challenges faced in the living environment. For example, employers can provide superior working conditions such as safety and hygiene levels in offices, which enable expatriates to conserve resources and perform well. In addition, expatriates might become resilient to the stress-inducing demands posed by the living environment, and withstand the negative consequences (see Hobfoll, 2011; Hobfoll et al., 2015). If they can do so, they may also be able to prevent stressful situations in the living environment from impairing their self-perceived job functioning. The expatriate could be particularly strongly motivated to ensure that this adaptive strategy succeeds, because an adequate self-perceived job performance is an essential prerequisite for continued employment, for access to alternative jobs both abroad and in the home country (see Shen & Hall, 2009), and for maintaining a certain employment status and level of financial benefits (monetary rewards or bonuses). Accordingly, the result would suggest that expatriates would benefit from *optimizing* their remaining resources in the organizational environment to maintain their self-perceived job performance, rather than countering resource losses in the living environment with a withdrawal of resources necessary to perform well in their job (cf. Hobfoll, 2001).

*Resources traveling in packs:* We showed that the accumulated effects of demands from WLC and a high-risk living-environment affect expatriates' intention to quit

working abroad. To date, expatriate research has commonly examined the independent effects of *single* demands on outcomes such as self-perceived job performance or intention to quit the working abroad (e.g., Bader et al., 2015; Shih et al., 2010), and the focus has particularly been on work-related demands (e.g., Kraimer et al., 2009). The idea that different types of contextual demands might *interact* (see resource caravan; Hobfoll et al., 2018) in ways that weaken self-perceived job performance or the intention to stay among expatriates has, to our knowledge, never been explored. We believe this is a significant omission because COR theory (Hobfoll, 2001) suggests that the resource losses resulting from high demands in one domain can weaken the reserves of resources for coping with another type of demand, so triggering a spiral of loss. The simultaneous accumulation of demands thus increases the likelihood of negative results, as demonstrated in the work context with domestic workers (van Woerkom et al., 2016). Our finding concerning expatriates experiencing high WLC implies that expatriates who are confronted with an accumulation of resource losses (high WLC and high-risk living environment) at the same time tend to exhaust their resources, and thus the demands are more likely to lead to stress and a reduced intention to stay.

One of the assumptions of COR theory is that resources become more important in the context of a loss of resources (Hobfoll, 2002) – that is, their benefits become particularly evident when expatriates need them. When expatriates over-borrow resources from the private life domain (e.g., time with family and for personal recreation) to compensate for a lack of resources in the work domain, as in the case of WLC, they will tend to realize the special value of private life resources (see van der Zee et al., 2005). By disengaging from the assignment, expatriates can attempt to preserve their remaining resources in the private domain (Kossek et al., 2011). This finding extends previous research on predicting employee retention, particularly in regard to job embeddedness theory (Kiazad et al., 2015). While job embeddedness theory, that is based on COR theory, also emphasizes the importance of community (analogous to the living environment) for individuals' intention to quit, *family or other external private resource providers* play no explicit role in embeddedness theory. Cross-domain resource investment is known to occur among domestic workers (Ng & Feldman, 2014; Singh et al., 2021). In the domestic context, spillover effects generally occur when there is a surplus of resources (Ng & Feldman, 2014). However, spillover effects for expatriates also occur in situations of resource scarcity. This is because, in the domestic context, the need for aggregate embedding in multiple domains is not as critical as it is in the expatriation context. For example, newly hired native workers may strategically focus on the work domain as they have less unfamiliar environmental demands to deal with (see Feldman et al., 2012).

We also found that the level of tendency to leave was different for expatriates experiencing low WLC versus high WLC, and that the intention to quit the working abroad was at its lowest level among expatriates indicating a low WLC who were living in an environment with low challenges.

### Limitations and Implications for Future Research

The findings were obtained using a cross-sectional research design; thus, reliable conclusions cannot be drawn on the direction of the effects. Future research with a longitudinal approach might confirm the causal links between the variables of WLC, challenging work environments, self-perceived job performance, and intention to quit the working abroad. In principle, there is a possibility that those who have a firm plan to stay abroad may block out any challenges to reduce their cognitive dissonance. However, this self-deception will not be sustainable in the long run, which argues in favor of our hypotheses.

The present study used self-reported measures reporting the perceptions of expatriates. It is therefore necessary to be cautious about drawing rigid conclusions. For instance, the cultural values of the respondents might have influenced the strength of their responses in the self-assessment format, and it has been noted that data collected from certain cultures might reflect a modest cultural influence when examining self-reported behaviors (Fay et al., 2012). While all of the respondents for this study were from the Finnish culture, their self-assessments might also be influenced by the social norms in the different host countries, and thus limit comparability. Additionally, self-reports from a relatively small dataset might produce common method variance (CMV). However, it has been argued that it is an oversimplification to assume that CMV automatically affects variables that are measured with the same method (Spector, 2006) and that the employee is the most important source of information on their own situation (e.g., Mostert, 2011). For future studies, research designs considering multiple sources for data collection (for example from friends/spouses to evaluate WLC, and supervisors to evaluate job performance) could allow for deeper insights.

While our participants worked in many different countries, they all came from Finland, which is a country that ranks highly on several global scales such as happiness and air quality, and that has the second-lowest risk of humanitarian crises and natural disasters (Statistics Finland, 2019). Finland also ranks as the top OECD country in education leagues and has the world's highest level of human capital (Statistics Finland, 2019). This background might have affected our respondents, and thus our findings. For instance, a strong educational background may be helpful when learning how to cope with high contextual and job demands.

In addition, repatriating to Finland may be an attractive option, especially when the host country context is challenging and presents issues affecting the private-life sphere. Therefore, we suggest that an expatriate's home-country background should be considered, which might, for instance, involve studying expatriates from different backgrounds to determine if they have different levels of functioning in different host country contexts.

### Practical Implications

Our study showed that resources travel in packs, with private life proving particularly conducive to resource transfer towards work and living environments. This study indicates that WLC is a critical factor in both substandard self-perceived job performance and heightened intention to quit the working abroad, and strengthens the negative relationship between a high-risk living environment and intention to quit the working abroad. Organizations with scarce resources that want to promote performance and retain their foreign workers working in high-risk living environments should offer support measures for private life, and take expatriates into account as a whole person, not only as an employee. Accordingly, employers should provide expatriates with opportunities to optimize their resource allocation between work and private life spheres. First of all, their workload should be kept to a reasonable level and not cause a situation where it consumes all of the expatriate's resources. In addition, employers may provide organizational support with a focus on opening access to external resources (e.g., through supporting expatriates and possibly their family members in attaining community embeddedness, for example, by providing them with access to private social networks or leisure time activities). The current trend in companies to reduce financial support for expatriates to save money could be critical when seen against this background (see Tornikoski, 2011). However, if the living environment is perceived as less challenging by expatriates, then organizational support for their private life may be reduced. In this situation, while WLC might be reduced, turnover might also be increased as foreign workers are more likely to consider their further mobility as a result of the surplus of resources. Also, since expatriates' assessments of their living environment are likely to be highly subjective and situational, this requires an ongoing examination and individual tailoring of support measures by organizations.

Our study found that a high-risk living environment is related to expatriate intention to quit the working abroad, but not to their self-perceived job performance. Thus, employers may not recognize the resource-related tensions in expatriates' self-perceived job performance and are then surprised when they

resign. At that point, it will usually be too late for the employer to implement countermeasures to retain the employee (van der Heijden et al., 2009). In order to prepare expatriates and prevent this situation, organizations could provide a holistic picture of the new working and living environment. Organizations recruiting international employees should focus on informing (future) expatriates about societal context and any possible risks related to the living environment, and not only about the organization and the job itself. However, as shown in a range of literature, these measures are often given only secondary consideration.

The findings of this study are relevant to HR practitioners and organizations, and also to expatriates. We showed that expatriates' self-perceived job performance was not impacted when working in a highly challenging environment. However, their intention to carry on working abroad will be weakened, especially when combined with a high WLC. It is therefore important that expatriates understand the possible environmental challenges the host country will present before accepting an international job offer, especially if there is a risk of high WLC. Additionally, expatriates must look to balance the work and private life domains, and pay attention to how they split their time and other resources between those life domains.

## Conclusion

Our research has shown that struggles to balance work and private life and to cope with the challenges posed by the living environment are strongly related to expatriates' self-perceived functioning at work. Expatriates' WLC is negatively related to their self-perceived job performance and positively to their intention to quit the working abroad, whereas living in a challenging environment is exclusively positively associated with their intention to quit the working abroad. Furthermore, WLC plays a critical role in moderating the relationship between a high-risk living environment and intention to quit the working abroad, and thus could be an important predictor of employee retention in an expatriate role. Employers must develop an awareness of the negative associations of high-risk living environments and the conflicts between work and private life with performance and retention, and introduce practices to mitigate them.

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