University of Reading

Job exhaustion among assigned and self-initiated expatriates –the role of effort and reward

Article

Accepted Version

Mäkelä, L., Suutari, V., Rajala, A. and Brewster, C. ORCID: https://orcid.org/0000-0001-5314-1518 (2022) Job exhaustion among assigned and self-initiated expatriates –the role of effort and reward. Journal of Global Mobility, 10 (4). pp. 456-475. ISSN 2049-8799 doi: 10.1108/JGM-06-2022-0028 Available at https://centaur.reading.ac.uk/107915/

It is advisable to refer to the publisher's version if you intend to cite from the work. See Guidance on citing.

To link to this article DOI: http://dx.doi.org/10.1108/JGM-06-2022-0028

Publisher: Emerald

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the End User Agreement.

www.reading.ac.uk/centaur

University of Reading

CentAUR

Central Archive at the University of Reading

Reading's research outputs online

JOB EXHAUSTION AMONG ASSIGNED AND SELF-INITIATED EXPATRIATES –THE ROLE OF EFFORT AND REWARD

Journal:	*Journal of Global Mobility*
Manuscript ID	JGM-06-2022-0028.R1
Manuscript Type:	Research Paper
Keywords:	Self-initiated expatriates, Assigned expatriates, Job exhaustion, Effort-reward imbalance, Job demands-resources

SCHOLARONE™
Manuscripts

JOB EXHAUSTION AMONG ASSIGNED AND SELF-INITIATED EXPATRIATES – THE ROLE OF EFFORT AND REWARD

Journal of Global Mobility

Abstract:

Purpose: We explore whether expatriation type (assigned expatriates versus self-initiated expatriates) is linked to job exhaustion via possible differences in required efforts for their jobs and the rewards they gain from them, and/or the balance between efforts and rewards. Adopting effort-reward imbalance and job demands/resources theories, we study the possible role of effort and reward and their imbalance as a mediator between expatriation type and job exhaustion.

Design/methodology/approach: An on-line survey was carried out in co-operation with two Finnish trade unions, providing data from representative data from 484 assigned and self-initiated expatriates. We test our hypotheses through latent structural equation modelling and the analysis was conducted with Stata 17.0 software

Findings: The results show that effort, rewards and the imbalance between them are correlated with the job exhaustion of expatriates in general and there are no direct links between expatriation type and job exhaustion. The required effort from assigned expatriates was higher than that from self-initiated expatriates though no difference was found for rewards, and the match between effort demands and rewards is less favourable for AEs than SIEs. AEs experienced higher job exhaustion than SIEs because of the higher effort demands and greater imbalance between efforts and rewards.

Originality: The study examines the work well-being of two types of expatriates and explores the underlying mechanisms that may explain why they may differ from each other.

Key words: self-initiated expatriates, assigned expatriates, job exhaustion, effort-reward imbalance, job demands-resources.

Journal of Global Mobility

INTRODUCTION

Understanding globally mobile employees, especially different types of expatriates, is vital (McNulty and Brewster, 2019; McNulty and Selmer, 2017). The essential reason for that is organisations need skilled and high-performing employees who may be required to work in a new country due to their work, that is, to become expatriates. Expatriate work has been described as high-density global work (Shaffer *et al.,* 2012) and international relocation and job factors faced when working abroad (e.g. role ambiguity and role novelty) can be stressful and create substantial pressure (Hussain and Deery, 2018; Lapointe, Vandenberghe and Fan, 2020) and negatively affect expatriate work well-being (see for a meta-analysis Biswas, Mäkelä and Andresen, 2021). Nurturing employees' performance involves taking care of their work well-being (Guest, 2017; Kleine, Rudolph and Zacher, 2019) and, therefore, this should be of great interest to employers, especially for those employees that may face additional challenges in their working life, such as expatriates.

One important (negative) indicator of employee work well-being is job 'burnout' (Maslach and Leiter, 1997; Maslach, 2018), and emotional exhaustion is a core component of burnout: it refers to continuous feelings of strain and experiences of emotional resources being fully consumed by work. Typical symptoms are a lack of energy and chronic fatigue (Maslach, 2018; Salmela-Aro *et al.*, 2011). Job burnout has been explained using different work stress theories, most typically using job demands and resources theory (JD-R;), arguing that that every job has its specific demands and resources which affect employee well-being (Bakker, *et al.*, 2014; Bakker, *et al.*, 2022), and effort-reward imbalance (ERI) theory, building upon the idea of social reciprocity and highlighting the importance of balance between the amount of effort required or expected from an employee compared to the rewards gained (Siegrist, 2002).

Exhaustion or burnout has been studied as an indicator of expatriates' work well-being (Bhanugopan and Fish, 2006; Cavazotte, *et al.,* 2021; Silbiger *et al*., 2017; Silbiger and Pines,

Journal of Global Mobility

2014) and earlier studies concerning antecedents for expatriate burnout have shown that different job characteristics, in particular, role conflict, role overload and role ambiguity (Bhanugopan and Fish, 2006) increase the risk of burnout. General stress does the same (Silbiger and Pines 2014). Moreover, leader cultural intelligence (Cavazotte *et al.*, 2021) and higher levels of work adjustment and interaction adjustment lead to reduced expatriate burnout (Silbiger *et al.,* 2017). So far, studies have focused on assigned expatriates (AEs) who have been sent abroad by their employer, or the type of the expatriation has not been specified in publications.

This century has seen a rapid increase in studies of those who have found themselves a job abroad on their own (Andresen, *et al*, 2021), referred to as self-initiated expatriates or SIEs (Suutari *et al.,* 2018). In general, expatriation research has tended to concentrate on one or the other category, either AEs or SIEs, and there are still relatively few studies that directly compare the two (Selmer *et al.*, 2022) although it is likely that they differ from each other, for instance, because of level of personal agency of finding and accepting a job abroad, and job embeddedness when relocating. As the work situation of AEs and SIEs seems to differ, we might expect that the efforts, rewards, and the balance between these two factors and related outcomes, such as job exhaustion, would differ too. Therefore, we rely on both JD-R and ERI theories to get more nuanced understanding about possible risk and protective factors for different types of expatriates. So, to better understand the work well-being of assigned and self-initiated expatriates, our research aims to answer to following question: is expatriation type related to the pressure for job effort and to rewards and balance between them, through them, to emotional exhaustion as a core component of burnout?

The contribution of this study is threefold. First, our contribution to the current expatriation literature is that we use JD-R and ERI to compare the work well-being of two types of expatriates and our findings reveal the underlying mechanisms explaining how the difference in job exhaustion is different for AEs and SIEs. Second, this study contributes on work stress theories JD-R and ERI by testing them in a same study and in a novel context, international

Journal of Global Mobility

relocations. Third, this study contributes to work stress theories by highlighting the value of taking account of the diversity of employee groups (here two types of expatriates) when the antecedents of work well-being outcomes are being studied.

EFFORTS, REWARDS AND EFFORT-REWARD IMBALANCE AMONG ASSIGNED AND SELF-INITIATED EXPATRIATES

The ERI model was originally developed for studying the health effects of effort-reward imbalance at work (Siegrist *et al.*,2019). Nowadays, however, it is a widely adopted model for studying psychological well-being at work, including workplace stress and burnout (for a review, see Pennie *et al*., 2016). Effort refers to the physical, emotional and psychological demands of the work and considers, for instance, the level of responsibility the work involves and the pressure to work overtime (Siegrist *et al*., 2004). Reward refers to money, esteem (the respect and support that the employee receives at the workplace from superiors and colleagues), career opportunities (whether the employee feels their current position reflects their education, and perceptions about opportunities for promotion) and job security (feelings of confidence in the continuation of the job, and the unlikelihood of undesirable changes at the work). The balance between effort demands and rewards is key to employee well-being since, if the required effort is not reciprocated with rewards, it elicits strong negative emotions and leads to impaired health. ERI has proved useful in different work contexts, especially in the world of modern, globalised business (Siegrist *et al*., 2009; Mäkelä, *et al.*, 2015) and is, therefore, adopted in this study where we focus on expatriates.

Thus, ERI-theory builds on the idea that balance between demands and rewards is optimal for work well-being and JD-R theory suggests that demands and resources have independent effects on it (Bakker, *et al.,* 2014; Bakker, *et al.,* 2022), JD-R theory does not specify what are the job demands and resources that should be studied and very similar job characteristics have been

Journal of Global Mobility

named as job demands that are called efforts in ERI theory and resources, similarly, are often referred to as rewards (Schaufeli and Taris, 2014). Therefore we adopt these two perspectives in order to gain a more holistic view of work well-being and its antecedents among different types of expatriates.

Assigned and self-initiated expatriates

In the management literature, expatriates are foreigners working legally in the receiving country for what is intended to be a finite term (McNulty and Brewster, 2017). From the existing studies focusing on different types of expatriates, we know that SIEs are driven by different motivators than AEs (Doherty, *et al.,* 2011; Linder, 2019), their career paths (Peltokorpi and Froese, 2009) and psychological contracts are different (Casado and Caspersz, 2021), and their commitment to their current employer seems to be different (Casado and Caspersz, 2021; Hussain and Deery, 2018; Lapointe, *et al.,*, 2020; Linder, 2019). Furthermore, AEs' generally have higher levels of authority at work, being usually in managerial or senior technical roles, and they are more likely to work for larger organisations (and, by the definition of AEs, for multinational enterprises), than SIEs (Meuer *et al., 2019;* Andresen, *et al.,*, 2015). In turn, they get more organisational and financial support from their employer, while SIEs rely more on their own resources (Hussain & Deery, 2018).

Expatriates have to learn how to work in a new country, and how to work in a new foreign unit of the employer organisation if they are AEs, and in a totally new organisation if they are SIEs. AEs may have been enthusiastic about the opportunity to move abroad but most will be following a suggestion from the company: they often have little time to prepare for the move (Doherty, *et al.,* 2011). SIEs, by contrast, make their own decision to go to a certain country. Hence, due to the limitations in their choice of host country and in preparation time, AEs may experience greater adjustment gaps and have a greater cognitive difference to the host country

Journal of Global Mobility

(Haslberger and Brewster, 2009), and this may trigger more substantial knowing-why changes (Dickmann, *et al*., 2018). AEs also develop more organisational knowledge and knowing-whom career capital, though in most areas both groups experience similar development (Dickmann, *et al*., 2018). Finally, SIEs' tend to be abroad longer than AEs (Alshahrani and Morley, 2015; Farcas and Gonsalves, 2017), have more interest in considering more permanent global careers (Doherty, *et al*., 2011) and to have higher level of on-the-job embeddedness in the host country than AEs (Meuer, *et al.,* 2019). Despite this, it has recently been reported that SIEs' repatriation adjustment may be an easier process than might be expected (Ellis, *et al.,* 2020).

Expatriation, the Effort-Reward Bargain and Exhaustion

Expatriate work has been described as high-density global work (Shaffer *et al.,* 2012; Mello *et al.,* 2022) with three different characteristics: physical mobility (i.e. the work role is conducted in a different country), cognitive flexibility (i.e. expatriates have to adjust their thought patterns and scripts to effectively interact with people and adapt to situational demands across cultures), and non-work disruption (i.e. the work role requirements disrupt or interfere with the employee's normal activities and routines outside work). Expatriates leave behind most of their connections and support networks and have to adjust to living in a new context (Haslberger, *et al.,*, 2014; Lapointe, *et al.,*, 2020).

Expatriates work involve a wide diversity of tasks and with a variety levels of autonomy (Bossard and Peterson, 2005; Suutari and Mäkelä, 2007), leading to high demands on their competence. As an outcome, expatriation is a transitional experience which develops assignees' self-awareness/confidence, competences and networks (Dickmann, *et al.,* 2018), and may also lead to identity changes (Kohonen, 2005). In turn, these challenges and learning requirements - in an unfamiliar context - lead to increased stress and overload, and therefore the well-being of assignees may be impacted (Ali *et al*., 2020; Carraher *et al*., 2004; Van der Zee, *et al.,*, 2005;

Journal of Global Mobility

Wang and Kanungo, 2004). We therefore examine the job effort demands and rewards balance for this group of internationally mobile workers.

Following the ERI model, if an employee perceives that the efforts demanded for work are continuously higher than is merited by the rewards received, negative consequences such as emotional exhaustion are likely to follow (Dai *et al*., 2008; Willis, *et al.,*, 2008; Kinman, 2019). Furthermore, following the argumentation in JD-R theory, both efforts (job demand) and rewards (job resource) may have individual effects on employee well-being. If employee are required to invest a lot of effort in their job, that will be associated with stressful short-term experiences (Ilies, *et al.,*, 2007) and with declining well-being over time, predicting, for example, emotional exhaustion (Hakanen, *et al.,*, 2008), which is the primary symptom of burnout (Maslach, 2018). Gaining rewards may reduce the likelihood of burnout (Landolt *et al*., 2017).

To date, we know little about expatriates' job-related well-being, burnout and its core dimension of job exhaustion, but studies have shown that expatriates experience role conflict and role ambiguity, which may increase requirements for effort, and these are related to higher levels of burnout (Bhanugopan and Fish, 2006). And positive experiences at work, such as successful work adjustment or meaningful expatriate jobs, or 'rewards' in our terminology here, are linked to a lower likelihood of burnout (Silbiger, *et al*., 2017; Silbiger and Pines, 2014). There is no empirical evidence of the effects of imbalance between effort and rewards among expatriates.

Therefore, using ERI and JD-R theories and the existing empirical evidence, we hypothesise that:

H1a) higher imbalances between effort demands and rewards are associated with higher job exhaustion;

H1b: High effort demands are positively associated with expatriates' job exhaustion

H1c: High rewards are negatively associated with expatriates' job exhaustion

Job Effort and Reward Differences between AEs and SIEs

Journal of Global Mobility

Job effort demands: Given the differences identified so far between the situation of AEs and SIEs, we examine how job effort demands and rewards may differ between these two types of expatriates. There is relatively little empirical evidence about the differences between AEs and SIEs in terms of job characteristics and job demands. Studies comparing the work of these two types of expatriate report generally support the view that AEs are more likely to work in more challenging roles than SIEs (Doherty, *et al*., 2011), typically being in higher organisational positions and working at higher organisational levels (Alshahrani and Morley, 2015; Froese and Peltokorpi, 2013) – though there are studies that show no difference between them in terms of their being staff or managers (Froese and Peltokorpi, 2011) or CEOs or non-CEOs (Lauring, *et al.,*, 2019). Reflecting the difference in jobs, AEs weekly working hours are longer than SIEs (Ballesteros-Leiva *et al.,*, 2017, 2018). For instance, Andresen and her colleagues (2015) found that even with the same levels of education and at the same phase in life, AEs' level of authority in organisations was higher than SIEs. This probably reflects the fact that, due to the high costs of sending an assigned expatriate, multinational enterprises commonly use them only for positions that are strategically important. SIEs may be less interested in high-pressured, high-status jobs abroad or they need more experience than AEs to reach the higher level positions. For example, SIEs working as CEOs have spent a longer time in their host location, in their current job and they had worked longer abroad as an expatriate when compared to their AE counterparts (Selmer *et al.,* 2016). Although all these results are linked on objective measures of job characteristic, we expect them also to be linked on demands for effort at work as a subjective perception, here, demands for effort being higher for AEs compared to SIEs.

Job rewards: There is little information available comparing the salaries of AEs and SIEs, and it is likely that some elements of the compensation of globally mobile employees may have changed (Mercer, 2021) since they were published. Tornikoski (2011) found that, as might be expected from the differences in hierarchical position, monthly gross salary was higher for AEs than SIEs. However, it has also been reported that there were no significant difference in annual

Journal of Global Mobility

salary between AEs and SIEs (Biemann and Andresen, 2010), though the salaries of SIEs showed a much greater standard deviation, reflecting the range of their status in organisational hierarchies (Suutari and Brewster, 2000). Furthermore, although some SIEs may work for multinational employers, even when they do, they are employed on local terms and conditions and rarely share the same benefits as AEs (Froese and Peltokorpi, 2011, Cartus, 2016).

In terms of the rewards gained in the form of esteem, the evidence is even thinner. SIEs are more likely to work under host-country supervisors than AEs which, in turn, has been found to lead to lower satisfaction (Froese and Peltokorpi, 2013), perhaps linked to AEs gaining more support from their supervisor than do SIEs. Furthermore, AEs gain more social support from their colleagues than SIEs and are provided with stronger organisational support structures and resources (Agha-Alikhani, 2016), reinforcing their perceptions of higher rewards.

Career opportunities and job security are also important elements of reward. SIEs may expect higher benefits from international experience for their future careers than AEs, since they start from a lower base (Biemann and Andresen, 2010) but, when development of career capital due to international work has been reported, development in such areas as organisational knowledge has been higher among AEs than SIEs (Dickmann, *et al*., 2018). Breaches or violations of the psychological contract have resonance with the security element of rewards and occur more frequently among SIEs, often linked directly to uncertainties in their job security and career development opportunities (Zhang and Rienties, 2017). AEs get offers of further work more often than SIEs, both from their own employer and others, even if long-term career outcomes do not differ much between equally qualified AEs and SIEs (Suutari, *et al*., 2018). Further, whilst career sponsorship and support from important people in the organisation has been found to be correlated with career success (Ng *et al*., 2005; Benson and Pattie, 2008), SIEs have neither repatriation agreements nor home country units to repatriate to and, therefore,

Journal of Global Mobility

no such sponsorship (Tharenou and Caulfield, 2010). Putting these factors together, we hypothesise that:

2a: Effort demands are higher for AEs than for SIE;

2b: AEs experience greater rewards than SIEs

Balance between effort demands and rewards: ERI theory suggests that the balance between effort and rewards is important. In particular, if employee perceives that there is no need to devote high effort to their work they do not expect to gain as much rewards back compared to those who experience that they need to put lots of effort into their work (Dai *et al*., 2008; Willis, *et al.*,, 2008; Kinman, 2019). We have noted that whilst AEs may experience higher effort demands than SIEs', they are also likely to gain higher rewards from their job. However, in terms of balance between effort and rewards, it is possible that although SIEs may experience less effort and rewards than AEs, the experience of balance is similar in both groups and thus we set a hypothesis:

2c: AEs and SIEs experience of effort demands-reward imbalance does not differ from each other.

Expatriation type and exhaustion, and the mediating role of effort demands and rewards

Studies of burnout amongst expatriates have, to date, all been conducted among AEs, so we do not have any empirical evidence about whether AEs and SIEs levels of burnout or exhaustion may differ. Therefore, we do not offer a hypothesis suggesting a difference between these two groups of expatriates, but we control our study model (see Figure 1) for a possible direct link from expatriation type for exhaustion.

We know that the requirements imposed on AEs and SIEs for effort, and their rewards, may differ. In addition, JD-R theory suggest that every job has its own kind of demands and resources and this theory does not take into account how diversity of certain group of employees

Journal of Global Mobility

may actually be linked to how similar kinds of job demands and resources are perceived. Thus, it is possible that although the health impairment and motivational paths from job demands and resources to work well-being can be similar for different employee groups, taking one step back in the path and including the employee groups as a first step of the analysis may reveal an underlying mechanism explaining work well-being in more precise ways. Therefore we suggest that AEs benefit from several job resources (rewards), thus we may expect them to become less job exhausted via the positive link from resources to work well-being. However, at the same time, they are under high job demands (expected effort) and thus, via an ill-health process, they may experience higher job exhaustion than SIEs. Therefore, expected efforts and rewards may mediate the link between expatriation type and exhaustion and we hypothesise that:

3) H3: (a) effort demands, and (b) rewards mediate the relationship between expatriates' type and job exhaustion.

According to ERI theory, an unfavorable imbalance between job effort demands and rewards (high required effort not being met by rewards) impacts job exhaustion. If an employee perceives that the efforts demanded for work are continuously higher than is merited by the rewards received, negative consequences for their well-being are likely to follow (Dai *et al*., 2008; Willis, *et al.,*, 2008; Kinman, 2019). So, we can assume that AEs' high effort is balanced with high rewards, and efforts expected from SIEs' are balanced with rewards at an equivalent level. Therefore, relying on the ERI theory and earlier expatriate literature, we may assume that effort-reward imbalance perceptions are not mediating the path from the type of the expatriation and on job exhaustion. Thus, we hypothesise:

4): There is no indirect relationship between expatriation type and job exhaustion via mediating effect by the effort demand-reward imbalance.

Our hypotheses and research questions are summarised in Figure 1.

Journal of Global Mobility

[Figure 1 The hypothesised models about here**]**

METHODOLOGY

Data collection

To test these hypotheses, we collected data through an internet survey. The survey was carried out in co-operation with two Finnish trade unions, the Finnish Association of Business School Graduates and the Academic Engineers and Architects in Finland (TEK). Given the high levels of union membership in Finland (Fulton, 2015), it is likely that this is a representative sample of the relevant highly qualified groups of workers in the country. Both unions sent an e-mail invitation to all 1910 (742 + 1168 respectively) members shown by their members' registers as living outside Finland. A total of 527 (222+305) survey responses were returned. 42 responses were excluded because the respondents did not work while living abroad (they were e.g. retired, unemployed or were taking care of home and/or children while living abroad). The final total of eligible responses was 484, giving us a final response rate of 25.3%. Of the respondents, 37.2 % were AEs and 61.6 % were SIEs (1.9 % did not report their expatriation type). 69.1 % were men. The average age of respondents was 42.2 years and 82 % have a Master's degree. 73 % of the respondents were married and 47 % of the respondents did not have children. The data supporting the findings of this study are available from the corresponding author upon request.

Measures

Expatriation type was measured with responses to a single statement: "At the moment, I am on international assignment sent by my employer" OR "I have self-initiated my work abroad". Therefore, expatriation type was coded as 0 (self-initiated expatriation) and 1 (assigned expatriation).

Journal of Global Mobility

Job effort demands and rewards were measured using a Finnish version (Kinnunen, *et al.,*, 2008) of the ERI scale developed by Siegrist *et al*. (2004). We used a five-item version of the *Effort demand* scale (see Siegrist *et al.*, 2004) for measuring demanding aspects of the psychosocial work environment (e.g., "I am under constant time pressure due to a heavy workload"). The items were rated on a 4-point Likert scale (1 = strongly disagree, 4 = strongly agree). The efforts scale showed satisfactory composite reliability (CR=0.75) and Cronbach's alpha (α=0.77) values. Average variance extracted (AVE=0.39) value was a bit lower than the threshold value of 0.4 (see e.g., Fornell, C., & Larcker, 1981; Malhotra, 2010), however, we decided to use the scale as the AVE value is just marginally below the threshold value, and CR and Cronbach's alpha values were satisfactory. Note that what is being measured is not the effort an employee puts in, but the requirement for that effort: it is the 'pressure for effort' that is being assessed here. *Reward* was measured by 11 items, including three subscales: esteem (e.g., "I receive the respect I deserve from my superiors"); career opportunities (e.g., "My job promotion prospects are poor"); and job security (e.g., "My job security is poor"). The rating and scoring were the same as for the effort items. The scale showed good internal consistency (CR=0.84; Cronbach's α=0.83), the AVE value was 0.34, which falls a bit below the threshold value.

The balance between effort and reward, the ERI ratio, was computed as follows: because the number of items in efforts and rewards are not equal, the reward score was multiplied by a correction factor of 0.5454, which is calculated from the number of items in efforts divided by the number of items in rewards (=6/11) (See e.g., Kinnunen *et al*., 2008) and then we placed the effort score as the nominator and the reward score as the denominator. A value close to zero indicates a favourable condition, in which effort is relatively low and reward is relatively high, whereas values much beyond 1.0 reflect a large amount of effort required that was not matched by the reward received. For testing the model, we used the logarithmic ERI ratio, which is recommended in the prior research, as it can be treated as a continuous variable and it has been

Journal of Global Mobility

found to be a more powerful formulation of ERI than the dichotomous version of the variable (see e.g., Kinnunen *et al*., 2008; Siegrist *et al*., 2004).

Job exhaustion we measured using the five-item scale from the Bergen Burnout Inventory (BBI–15) (Salmela-Aro *et al*., 2011) and the scale showed good reliability and validity (AVE=0.51; CR=0.84; Cronbach's α=0.83). The items were rated on a 6-point Likert-type scale ranging from 1 (completely disagree) to 6 (strongly agree).

Control variables: We controlled for gender, age, the duration of stay in the host country and organisational position, because each of these have been found to play a role in expatriate experiences (see e.g. Cavazotte et al., 2021; Wurtz, 2022) and to effect efforts and rewards (Siegrist *et al*., 2004). Our study findings remain the same also if control variables are left out.

Tests of measures and analytic procedures

Confirmatory factor analysis (CFA) was used to assess the quality of the 3-factor measurement model. The 3-factor measurement model (including efforts, rewards, and exhaustion) provided an acceptable fit to the data (x^2=386.23, df=159; x^2/df=2.43; RMSEA=0.06; CFI=0.94; TLI=0.92; SRMR=0.08). All items loaded significantly on their latent constructs ($p<0.001$).

We also tested the extent to which the survey items of efforts, rewards and exhaustion might foster common method variance. Common method variance was tested with different statistical techniques. The single-factor test has been criticised for not revealing all the potential issues of common method variance, however, we decided to use it, because the specific source of method bias is unknown (Podsakoff *et al*., 2003). The results of the single-factor test done by CFA method, showed poor fit to the data (x^2/df=10.3; RMSEA=0.14; CFI=0.49; TLI=0.44; SRMR=0.17). In addition, we conducted Harman's test, which indicates that common method is not an issue in the data, as multiple factors emerge, and the biggest factor constitutes only 23 %

Journal of Global Mobility

of the variance. These results indicate that common method variance is not threating the interpretation of the results of the study.

The analysis was conducted with Stata 17.0 software. Structural equation modelling with maximum likelihood estimation is used to test the study hypotheses. Direct and indirect effects are estimated in the model. The model includes all the control variables presented in the measures section. In addition to the research model, we tested the mediating effects of ERI ratio in a separate model.

RESULTS

Table 1 presents descriptive statistics and the correlation matrix for the constructs used in the study. Further, we tested whether the means of construct between AEs and SIEs are significantly different. We conducted t-tests, which showed that effort demands are significantly higher for AEs (t=3.12**) and the ERI-ratio is unfavorable for AEs as well (t=-2.62**). AEs also reported higher level exhaustion (t=2.16*). Levene's test statistics showed that variances are equal in effort demands (F=0.89, p=0.35) and exhaustion (F=2.1, p=0,15). The mean difference of rewards was not statistically significant.

[Table 1 Descriptive statistics and correlation matrix about here**]**

The hypotheses were tested through latent structural equation modelling (SEM), using Stata 17.0 software. To test for the mediating effects of rewards and efforts (model 1) and ERI ratio (model 2), we followed the suggestions of James *et al*. (2006). Their SEM approach was considered appropriate in comparison to the more commonly used Baron and Kenny (1986) method, which is considered overly conservative. The SEM approach for mediation does not require a statistically significant direct relationship between antecedent and outcome and does not require significant total effects in concluding a mediation (see e.g., James *et al*., 2006; Zhao, *et al.,*, 2010).

Journal of Global Mobility

Model 1 showed acceptable fit to the data ($x^2/df=2.55$; RMSEA=0.06; CFI=0.89; TLI=0.86; SRMR=0.08). It revealed no statistically significant impact on exhaustion for the control variables of gender (β=-0.05, n.s.), age (β=-0.03, n.s.), the duration of stay (β=-0.06, n.s.), or 17rganizational position (β=0.05, n.s.). However, the model shows that organisational position is positively associated with both effort demands (β=0.13, $p<0.05$) and rewards (β=0.23, $p<0.001$). In addition, gender was found to be positively related to rewards (β=0.12, $p<0.05$). Otherwise, no statistically significant link was found between gender and efforts, nor between any aspect of age and duration of stay and rewards or effort demands.

Hypotheses 1a, 1b and 1c were tested (model 1 and model 2) and the results showed that, for this representative sample of Finnish expatriates, 1a was supported, as the ERI ratio was found to be positively connected to exhaustion (β=0.71, $p<0.001$), indicating that if effort demands are not matched by rewards (in terms of esteem, career opportunities and job security), expatriates suffer higher job exhaustion (model 2). Furthermore, effort demand has a positive relationship to exhaustion (β=0.89, $p<0.001$), while rewards have a negative relationship with exhaustion (β=-0.14, $p<0.001$). Thus, support was received also for hypotheses 1b and 1c.

The direct relationship between expatriation type and exhaustion was controlled for but no significant direct path was found either in model 1 (β=-0.07, n.s.) or model 2 (β=-0.02, n.s.).

Next, any direct relationships between expatriation type and effort demand and rewards were tested. First, hypothesis 2a was tested and the results revealed a positive relationship between expatriation type and effort demand (β=0.15, $p<0.01$), showing that assigned expatriates experience higher demands for effort than self-initiated expatriates, meaning that H2a was supported. A relationship between expatriation type and rewards was not found (β=-0.05, n.s.), indicating that H2b was not supported as our results show that assigned expatriates do not experience more (non-financial) rewards than self-initiated expatriates. The results of model 2 showed that expatriation type is positively associated with the ERI ratio (β=0.15, $p<0.01$),

Journal of Global Mobility

meaning that assigned expatriates have higher ERI ratios than self-initiated expatriates. Thus, our hypothesis 2c did not gain support as the match between effort demands and rewards is less favourable for AEs than SIEs.

Finally, indirect effects of effort demands and rewards (model 1) and the ERI ratio (model 2) on exhaustion were tested. There is an indirect positive effect of expatriation type on exhaustion through required effort demands (β=0.35, $p<0.01$) supporting our hypothesis 3a, but not through rewards. Thus our hypothesis 3b did not gain support. To assess the significance of the indirect effects of expatriation type on exhaustion, we used a bootstrapping procedure that created a 95 % confidence interval around the indirect effect estimate (see e.g., Lau and Cheung, 2012; Zhao *et al*., 2010). This procedure provided evidence that the indirect effect is statistically significant as the confidence intervals did not include 0 (CI 95 %: 0.01; 0.19). Thus, assigned expatriates experience higher job effort that leads them to suffer higher levels of exhaustion.

The indirect effect of expatriation type on exhaustion through the ERI ratio was tested (model 2). Results showed a positive indirect effect of expatriation type on exhaustion (β=0.25, $p<0.01$), meaning that assigned expatriates experience higher job effort in relation to gained rewards, and that leads to them suffering higher level of exhaustion. The bootstrapping procedure provided further evidence that the indirect effect is statistically significant. Therefore, our hypothesis 4 did not gain support. The results are summarised in Table 2.

[Table 2 Results of structural equation modeling about here**]**

DISCUSSION AND CONCLUSIONS

We explored whether expatriation type (assigned expatriation versus self-initiated expatriation) is linked to job exhaustion via possible differences in the efforts expatriates are required to put into their job or the, non-financial, rewards they gain from it. We also wanted to test whether the

Journal of Global Mobility

effort demand-reward imbalance (ERI) model works in this specific context. The present study is the first to test both JD-R and ERI theory for expatriates. Our results include some expected and some unexpected findings. Although international careers have specific features that differentiate them from domestic careers (Shaffer *et al*., 2012: Froese and Peltokorpi, 2011), the results of the present study indicate that the hypotheses built on the ERI-model developed for domestic work were supported: imbalance between effort demands and rewards was linked to stronger job exhaustion. In addition, JD-R gained support too; higher levels of required effort were related to higher levels of job exhaustion, while rewards have a negative relationship with job exhaustion, ameliorating it. The findings thus support the relevance of ERI and JD-R-theory in the context of international work, although expatriation-specific job demands (e.g. difference in work culture) and resources (e.g. developmental tasks) should be included in addition these more general ones in future studies.

As a theoretical contribution, we suggest that although JD-R and ERI theories typically represent different lines of stress studies in the work psychology literature, together they seem to give more nuanced understanding of the antecedents for work well-being than either approach alone. Thus, studying the effects of job demands (i.e. efforts), resources (i.e. rewards), and the balance between them should be considered in future. Both theories also focus only on the link from job characteristics to work well-being and possible outcomes from that. We suggest that contextual diversity, e.g. different types of employee groups (here AEs and SIEs as sub-groups of expatriates) should be taken into account in work stress theories.

When the indirect effects of effort demands and rewards on exhaustion were tested, the results indicated an indirect positive effect of expatriation type on exhaustion through effort demands and through an imbalance between effort demands and rewards. However, indirect effects of expatriation type on exhaustion through (non-financial) rewards were not found. This reveals the underlying mechanism linking expatriation type and job exhaustion, even though a direct link between expatriation type and job exhaustion was not found. Thus, our study contributes to

Journal of Global Mobility

current knowledge about expatriates' work well-being in the form of job exhaustion (core component of burnout). Future studies should widen the scope and study different indicators of work well-being, for example, work engagement or flourishing (Demerouti, *et al.,*, 2015) and potentially explore antecedents (including those that are psychosocial and context specific in nature, and those that are factual, such as financial rewards). It would also be valuable to study the mechanisms linking work well-being to organisational or individual outcomes, such as expatriate performance or career success.

Our study opens a novel avenue to understanding the diversity of the globally mobile workforce. Future studies should go a step beyond comparison of certain groups, such as AEs and SIEs (although even that is relatively rare). Studies could check whether the relationships between studied variables are different for the two groups (moderation/ interaction effect: here that approach was not relevant as we did not have any reason to expect that the relationships between efforts/ rewards/ ERI ratio and job exhaustion are different for AEs and SIEs). We suggest that future studies should explore the paths that may explain why, for instance, work well-being differs among different groups of globally mobile employees and, if possible, also include a variety of antecedents and outcomes.

Our sample of assigned expatriates experience higher pressure for effort than self-initiated expatriates, in line with earlier findings that AEs are often in more senior jobs and work longer hours than SIEs (Froese and Peltokorpi, 2013; Ballesteros *et al*., 2018; Ballesteros *et al*., 2017). One unexpected finding concerned the direct relationships between expatriation type and rewards. We did not gather information on financial rewards, although there is evidence in expatriation research to suggest that equally qualified AEs and SIEs may not be so different in this respect (Biemann and Andresen, 2010). In this study we focused on non-financial rewards that are essential elements of companies' rewarding systems (De Gieter and Hofmans, 2015) and we expected, given the higher positions of AEs in general, that they would have measurably more non-financial rewards than SIEs. In fact, this was not the case. Looking further

Journal of Global Mobility

into the three dimensions of rewards (career opportunities, esteem, and job security) in additional tests, expatriation type was not statistically significantly related to any of them.

Different interpretations of our finding here are possible. From the career success perspective, the typical starting point in career discussion and research is what happens to expatriates when they return to their home countries. However, many expatriates do not return home, they continue their international career either by staying on in the host country or by moving to assignments in other countries. Recent research (Suutari, *et al*., 2018) reinforces that point and in addition shows that in the long run the careers of SIEs and AEs were equally successful. Expatriation is, in general, good for your career – at least in the long run. Hence, perhaps, the finding that job security and career opportunities seem to be not so different between AEs and SIEs. Esteem may come from different sources. Thus, AEs may be more recognised and supported as agents of headquarters, but SIEs greater knowledge of the country and its language may bring them some credit – indeed SIEs may be used as boundary spanners (Furusawa and Brewster, 2018). SIEs may also be highly valued in local organisations, for example in less developed countries, when they may be able to bring in new knowledge and competencies through their experience elsewhere. Since both AEs and SIEs may have successful careers, even though their careers may end up being to some extent different by nature, their equal rewards may not be such a surprise though, clearly, we need more research be able to conclude whether and how the rewards of SIEs and AEs may differ.

Opposite to our expectations, we found that AEs balance between effort demands and rewards was worse than SIEs, with the required efforts being too high compared to the non-financial rewards received. Our hypotheses 2c and 4 suggested that there is no difference in balance between effort demands and rewards and thus no mediation effect on job exhaustion was expected. Both of these hypothesis were left without support. It is likely that the reason for this is that the earlier expatriate literature has mainly compared jobs and careers of AEs and SIEs with objective measures (such as organisational position or job offers) whereas our study was based

Journal of Global Mobility

on their subjective evaluations concerning their work life. It is possible that this has affected our findings and we suggest that both subjective and objective measures are needed in future research. However, it is important to acknowledge that they may tell a different story about the AEs and SIEs experiences and it is likely that subjective experiences are closer to each other than the objective measures would make us to assume. In addition, it is possible that overall, for AEs, balance may be more challenging to achieve as they have less control over their assignment than SIEs. This all is likely to effect on well-being outcomes too. Furthermore, in addition to the need to study different types of job-related effort demands and rewards (or interaction between them), it is also important to consider whether they are in balance.

In summary, the theoretical contribution of this study is threefold. First, our contribution to the current expatriation literature is that we use JD-R and ERI to compare the work well-being of two types of expatriates and reveal the underlying mechanisms explaining why these two types of expatriates may differ from each other in job exhaustion. Second, this study contributes to work stress theories, JD-R and ERI, by testing them in the same study and in a novel context, international relocations. Based on our findings we suggest that incorporating both perspectives is needed and especially relying on the idea of imbalance only may leave the holistic understanding of the phenomena incomplete. Third, this study contributes to work stress theories by highlighting the value of taking account of the diversity of employee groups (here two types of expatriates) when mechanisms from antecedents to work well-being outcomes are being studied.

In addition to these theoretical contributions, several practical implications can be drawn from the present study. The results indicate that required job effort had a significant impact on the job exhaustion of expatriates. In order to avoid overload, in particular among AEs who often have higher level of responsibility and workload than SIEs, organisations employing expatriates should consider providing them with further support. The main focus in expatriate training has been on cross-cultural issues in order to support expatriate adjustment (Wurtz, 2014).

Journal of Global Mobility

However, since expatriates are often required to handle tasks that are more demanding and have jobs where task variety is higher, attention should be given also to job-related training and initiation into the new work situation. Furthermore, since AEs particularly often take up higher level positions than the ones they had back at home, there may be a need for further management training. As ERI-theory suggests, it is also important to examine the reward side of expatriation since an effort-reward imbalance impacts the well-being of expatriates. Multinational employers tend to provide generous financial rewards to their assigned expatriates but the non-financial rewards (esteem in the form of respect and support, career opportunities and job security) are also important to balance the high levels of required effort during expatriation. In addition, it has been found that SIEs rely on emotional social support more than AEs when coping with stress (Wurtz, 2022). Increasing expatriates' own knowledge and understanding about different ways in which they can take care of their own work well-being would be beneficial too.

Further research

Like all research, this project was limited by resources. Our data is cross-sectional and the response rate could be higher (25.3 %) – although this is higher than many less representative studies and not far from some more opportunistic expatriate studies (e.g. 30.7 % in Ynlu *et al.*, 2018; 21.5 % Maharjan, *et al.,* 2021). Our data was taken from a carefully constructed sample from Finland and is representative of qualified people (business graduates and architects and engineers) in a small but highly international country. However, exploration of the effort demands, rewards and well-being, and the effort demand-reward imbalance, of assigned and self-initiated expatriates with longitudinal data and in other countries, perhaps especially larger and less internationally minded ones, would be beneficial and help to generalise our results. Further studies amongst less well qualified expatriates would also be valuable.

Our study has used data from the expatriates themselves and has, therefore, recorded their perceptions. In terms of required effort demands, rewards and well-being it is difficult to see who would be in a better position to understand these issues, and hence the perceptual data is the most

Journal of Global Mobility

appropriate data possible. However, carefully constructed studies using data from their superiors, and their co-workers, in particular their local co-workers, could add useful nuance to the picture.

We did not collect data on financial rewards as it is not included in the ERI model. Given the large range of countries, the huge differences in organisational type and sector, occupations and job levels amongst our respondents, evaluating and comparing financial data would have amounted to an additional, or an alternative, research project. Non-financial rewards are the ones that have been measured in previous studies using ERI theory and our assumptions were that non-financial rewards would 'mirror' financial rewards and that rewards would go with the type of expatriate, replicating the data in other studies. This was not confirmed, so it may not have been material to the use of ERI theory, but future studies could incorporate financial rewards too. Furthermore, it could be seen as a limitation that our study has a tight focus on assignment type as an independent variable and on wellbeing as an outcome variable while there are many other predictors of wellbeing as well as possible outcome variables.

Finally, here, future studies should explore other possible mediators which may shed light on how and why the experiences of AEs and SIEs may differ. In addition, a wider approach to expatriates' well-being, taking account, for instance, of general life satisfaction as well as positive indicators of work well-being such as work engagement (Akkermans and Kubasch, 2017), would give us a more holistic understanding. Paying attention to the role of effort demands and rewards originating from the personal life sphere would be a valuable addition to research, as family has been shown to play an essential role in the context of international careers (Lysova *et al*., 2015) and expatriates' lives (Mäkelä and Suutari, 2013) and thus likely to affect their well-being too.

In conclusion, this study contributes to the literature on international careers by revealing underlying mechanisms related to the effort demands-reward imbalance relationship of expatriates' and their well-being at work as revealed, in particular, by exhaustion, and shows

Journal of Global Mobility

how some of these effects are mediated by the type of expatriation being undertaken. Although expatriation type was not found to have any direct effect on job exhaustion, our results revealed that being an assigned expatriate significantly increased job effort, which in turn predicted job exhaustion.

Journal of Global Mobility

REFERENCES

Agha-Alikhani, B. (2016), Embeddedness and social support of self-initiated and assigned expatriates: The role of social networks. *Journal of Global Mobility*, 4, 453–475. https://doi.org/10.1108/JGM-11-2015-0056

Akkermans, J., and Kubasch, S. (2017), Trending topics in careers : a review and future research agenda. *Career Development International*, *22*(6), 586–627. https://doi.org/10.1108/CDI-08-2017-0143

Ali, M., Ali, I., Albort-Morant, G. and Leal-Rodríguez, A. L. (2020), How do job insecurity and perceived well-being affect expatriate employees' willingness to share or hide knowledge? *International Entrepreneurship and Management Journal*, 17(1), 185-210. DOI: 10.1007/s11365-020-00638-1

Alshahrani, S. and Morley, M. (2015), Accounting for variations in the patterns of mobility among conventional and self-initiated expatriates. *International Journal of Human Resource Management*, 26(15), 1936-1954, DOI: 10.1080/09585192.2015.1041757

Andresen, M., Biemann, T. and Pattie, M. W. (2015), What makes them move abroad? Reviewing and exploring differences between self-initiated and assigned expatriation. *International Journal of Human Resource Management*. Taylor & Francis. https://doi.org/10.1080/09585192.2012.669780

Andresen, M., Brewster, C. and Suutari, V. [Eds.] (2021), *Self-Initiated Expatriation: Contextual Perspectives*. London: Routledge ISBN: 9780367371036

Bakker, A. B., Demerouti, E., and Sanz-Vergel, A. I. (2014), Burnout and Work Engagement: The JD–R Approach. *Annu. Rev. Organ. Psychol. Organ. Behav*, 1(April 2016), 389–411. https://doi.org/10.1146/annurev-orgpsych-031413-091235

Bakker, A. B., Xanthopoulou, D., & Demerouti, E. (2022), How does Chronic Burnout affect Dealing with Weekly Job demands? A Test of Central Propositions in JD-R and COR-theories. Applied Psychology. https://doi.org/10.1111/apps.12382

Ballesteros-Leiva, F., Poilpot-Rocaboy, G. and St-Onge, S. (2017), The relationship between life-domain interactions and the well-being of internationally mobile employees. *Personnel Review*, 46(2), 237-254. https://doi.org/10.1108/PR-05-2015-0142

Ballesteros Leiva, F., Poilpot-Rocaboy, G. and St-Onge, S. (2018), Social support and life-domain interactions among assigned and self-initiated expatriates. *European Management Journal*, 15, 293–313. https://doi.org/10.1111/emre.12149

Baron, R. M. and Kenny, D. A. (1986), The moderator-mediator variable distinction in social psychological research. Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. http://doi.org/10.1037/0022-3514.51.6.1173

Benson, G.S. , & Pattie, M. (2008). Is expatriation good for my career? The impact of expatriate assignments on perceived and actual career outcomes. *International Journal of Human Resource Management*, 19(9), 1636-1653. 10.1080/09585190802295058

Bhanugopan, R. and Fish, A. (2006), An empirical investigation of job burnout among expatriates. *Personnel Review*, 35, 449-68. https://doi.org/10.1108/00483480610670607

Journal of Global Mobility

Biemann, T. and Andresen, M. (2010), Self-initiated foreign expatriates versus assigned expatriates Two distinct types of international careers? *Journal of Managerial Psychology*, 25, 430–448. https://doi.org/10.1108/02683941011035313

Biswas, T., Mäkelä, L. & Andresen, M. (2021), Work and non-work-related antecedents of expatriates' well-being: A meta-analysis. *Human Resource Management Review*, https://doi.org/10.1016/j.hrmr.2021.100889.

Bossard, A. B. and Peterson, R. B. (2005), The repatriate experience as seen by American expatriates. *Journal of World Business*, 40(1), 9–28. https://doi.org/10.1016/j.jwb.2004.10.002

Carraher, S., Sullivan. S. and Carraher, C. (2004), Validation of a measure of expatriate stress: Findings from multinational entrepreneurial health care service organization professionals. *Journal of Applied Management & Entrepreneurship*, 9(3), 3-21.

Cartus (2016), *Trends In Global Relocation*. Global Mobility Policy & Practices. https://www.cartus.com/en/relocation/resource/policy-practices-survey

Casado, R. and Caspersz, D. (2021), Changing psychological contracts and organisational commitment: a longitudinal comparison of assigned and self-initiated expatriates in Australia. *International Journal of Human Resource Management,* 32:18, 3950-3972, DOI:10.1080/09585192.2019.1660701

Cavazotte, F., Mello, S.F. and Oliveira, L. (2021), Expatriate's engagement and burnout: the role of purpose-oriented leadership and cultural intelligence. *Journal of Global Mobility: The Home of Expatriate Management Research*, 9(1), 90-106.

Dai, J. M., Collins, S., Yu, H. Z. and Fu, H. (2008), Combining job stress models in predicting burnout by hierarchical multiple regressions: A cross-sectional investigation in Shanghai. *Journal of Occupational and Environmental Evidence,* 50(7), 785–790. https://doi.org/10.1097/JOM.0b013e318167750a

Journal of Global Mobility

De Gieter, S. and Hofmans, J. (2015), How reward satisfaction affects employees' turnover intentions and performance: an individual differences approach. *Human Resource Management Journal*, 25(1), 200–216. https://doi.org/10.1111/1748-8583.12072

Demerouti, E., Bakker, A. B., and Gevers, J. M. P. (2015), Job crafting and extra-role behavior: The role of work engagement and flourishing. *Journal of Vocational Behavior*, 91, 87–96. https://doi.org/10.1016/j.jvb.2015.09.001

Dickmann, M., Suutari, V., Brewster, C., Mäkelä, L., Tanskanen, J. and Tornikoski, C. (2018), The career competencies of self-initiated and assigned expatriates: assessing the development of career capital over time. *International Journal of Human Resource Management*, 29(16), 2353-2371. https://doi.org/10.1080/09585192.2016.1172657

Doherty, N., Dickmann, M. and Mills, T. (2011), Exploring the motives of company-backed and self-initiated expatriates. *International Journal of Human Resource Management*, 22(3), 595-611. https://doi.org/10.1080/09585192.2011.543637

Ellis, D, Thorn, K. and Yao, C. (2020), Repatriation of self-initiated expatriates: expectations vs. experiences. *Career Development International*, 25(5), 539-562. DOI 10.1108/CDI-09-2019-0228.

Farcas, D. and Goncalves, M. (2017), Motivations and cross-cultural adaptation of self-initiated expatriates, assigned expatriates, and immigrant workers: The case of Portuguese migrant workers in the United Kingdom. *Journal of Cross-Cultural Psychology*, 48(7), 1028-1051. https://doi.org/10.1177/0022022117717031

Fornell, C. and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.

Froese, F. J. and Peltokorpi, V. (2011), Cultural distance and expatriate job satisfaction. *International Journal of Intercultural Relations*, 35(1), 49–60. https://doi.org/10.1016/j.ijintrel.2010.10.002

Journal of Global Mobility

Froese, F. J. and Peltokorpi, V. (2013), Organizational expatriates and self-initiated expatriates: Differences in cross-cultural adjustment and job satisfaction. *International Journal of Human Resource Management*, 24(10), 1953–1967. https://doi.org/10.1080/09585192.2012.725078

Fulton, L. (2015) *Worker representation in Europe*. Labour Research Department and the ETIU. Available at http://www.worker-participation.eu/National-Industrial-Relations

Furusawa, M. and Brewster, C. (2018). Japanese self-initiated expatriates as boundary spanners in Chinese subsidiaries of Japanese MNEs: Antecedents, social capital, and HRM practices. *Thunderbird International Business Review*, 60(6), 911-919. https://doi.org/10.1002/tie.21944

Hakanen, J. J., Schaufeli, W. B. and Ahola, K. (2008), The job demands-resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22(3), 224-241. https://doi.org/10.1080/02678370802379432

Haslberger, A. and Brewster, C. (2009), Capital gains: expatriate adjustment and the psychological contract in international careers. *Human Resource Management,* 48(3), 379-397. https://doi.org/10.1002/hrm.20286

Haslberger, A., Brewster, C. and Hippler, T. (2014), *Managing Performance Abroad: A new model for understanding expatriate adjustment*. London, England: Routledge.

Hussain, T., and Deery, S. (2018), Why do self-initiated expatriates quit their jobs: The role of job embeddedness and shocks in explaining turnover intentions. *International Business Review*, 27(1), 281-288. https://doi.org/10.1016/j.ibusrev.2017.08.002

Ilies, R., Schwind, K. M. and Heller, D. (2007), Employee well-being: A multilevel model linking work and nonwork domains. *European Journal of Work and Organizational Psychology*, 16(3), 326-341. https://doi.org/10.1080/13594320701363712

Journal of Global Mobility

James, L. R., Mulaik, S. A. and Brett, J. M. (2006), A tale of two methods. *Organizational Research Methods*, 9(2), 233–244.

Kinman, G. (2019), Effort-reward imbalance in academic employees: Examining different reward systems. *International Journal of Stress Management*, 26(2), 184-192.

Kinnunen, U., Feldt, T. and Mäkikangas, A. (2008), Testing the effort-reward imbalance model among Finnish managers: The role of perceived organizational support. *Journal of Occupational Health Psychology* 13(2), 114–127. https://doi.apa.org/doi/10.1037/1076-8998.13.2.114

Kleine, A., Rudolph, C. W. & Zacher, H. (2019), Thriving at work: A meta-analysis. *Journal of organizational behavior, 40*(9-10), 973-999. https://doi.org/10.1002/job.2375

Kohonen, E. (2005), Developing global leaders through international assignments: an identity construction perspective, *Personnel Review*, 34(1), 22-36. DOI:10.1108/00483480510571860

Landolt, K., Donnell, E. O., Hazi, A., Dragano, N. and Wright, B. J. (2017), An experimental examination of the effort-reward imbalance model of occupational stress: Increased financial reward is related to reduced stress physiology. Biological Psychology, 125, 121–129. https://doi.org/10.1016/j.biopsycho.2017.03.006

Lapointe, É., Vandenberghe, C. and Fan, S. X. (2020), Psychological contract breach and organizational cynicism and commitment among self-initiated expatriates vs. host country nationals in the Chinese and Malaysian transnational education sector. *Asia Pacific Journal of Management*, 39:319–342, https://doi.org/10.1007/s10490-020-09729-7

Lau, R. S. and Cheung, G. W. (2012), Estimating and comparing specific mediation effects in complex latent variable models. *Organizational Research Methods*, 15(1), 3–16. http://doi.org/10.1177/1094428110391673

Journal of Global Mobility

Lauring, J., Selmer, J. and Kubovcikova, A. (2019) Personality in context: effective traits for expatriate managers at different levels. *International Journal of Human Resource Management*, 30(6), 1010-1035, DOI: 10.1080/09585192.2017.1381137

Linder, C. (2019), Expatriates' motivations for going abroad: The role of organizational embeddedness for career satisfaction and job effort. *Employee Relations*, 41(3), 552-570.

Lysova, E. I., Korotov, K., Khapova, S., and Jansen, P. (2015), The role of the spouse in managers' family-related career sensemaking. *Career Development International*, *20*(5), 503–524. https://doi.org/10.1108/CDI-10-2014-0142

Maharjan, M.P., Stoermer, S. & Froese, F.J. (2022). Research productivity of self-initiated expatriate academics: Influences of job demands, resources and cross-cultural adjustment. *European Management Review*, 19(2), 285– 298. https://doi.org/10.1111/emre.12470

Malhotra, N. K. (2010). Marketing Research: An applied orientation. Prentice Hall.

Malhotra, N. K., Kim, S. S. and Patil, A. (2006), Common method variance in IS research: A comparison of alternative approaches and a reanalysis of past research. *Management Science*, 52(12), 1865–1883. http://doi.org/10.1287/mnsc.1060.0597

Maslach, C. (2018), Job burnout in professional and economic contexts. In A. A. Ariyanto, H. Muluk, P. Newcombe, F. P. Piercy, E. K. Poerwandari, and S. H. R. Suradijono (Eds.), *Diversity in unity: Perspectives from psychology and behavioral sciences* (pp. 11–15), Routledge/Taylor & Francis Group.

Maslach, C. and Leiter, M. P. (1997), *The Truth about Burnout*. San Francisco: Jossey-Bass

McNulty, Y. and Brewster, C. (2017), Theorizing the meaning(s) of 'expatriate': establishing boundary conditions for business expatriates. *International Journal of Human Resource Management*, 28(1), 27-61. https://doi.org/10.1080/09585192.2016.1243567

Journal of Global Mobility

McNulty, H., and Brewster, C. (2019), *Working Internationally: expatriation, migration and other global work.* Cheltenham: Edward Elgar Publishing.

McNulty, Y, Selmer, J (2017). *Research Handbook of Expatriates*. Cheltenham: Edward Elgar Publishing.

Mello, R., Suutari, M. and Dickmann, M. (2022), Taking stock of expatriates' career success after international assignments: A review and future research agenda. *Human Resource Management Review*, 100913, ISSN 1053-4822. https://doi.org/10.1016/j.hrmr.2022.100913.

Meuer, J., Tröster, C., Angstmann, M., Backes-Gellner, M. and Pull, K. (2019), Embeddedness and the repatriation intention of assigned and self-initiated expatriates, *European Management Journal*, 37(6), 784-793, https://doi.org/10.1016/j.emj.2019.03.002.

Mercer (2021), What's the best method for paying my expatriates? A guide to compensation approaches. https://mobilityexchange.mercer.com/insights/guides-and-whitepapers/whats-the-best-method-to-pay-my-expatriates

Mäkelä, L., Kinnunen, U. and Suutari, V. (2015), Work-to-life conflict and enrichment among international business travelers: the role of international career orientation. *Human Resource Management*, 54(3), 517-531. https://doi.org/10.1002/hrm.21629

Mäkelä, L. and Suutari, V. (2013), Work-life interface of self-initiated expatriates: Conflicts and enrichment. In Vaiman, V. and Haslberger, A. (Eds.), *Managing Talent of Self-initiated Expatriates: A Neglected Source of the Global Talent Flow*. 278–303. Palgrave Macmillan. https://doi.org/10.1057/9780230392809_13

Ng, T. W. H., Eby, L. T., Sorensen, K. L., and Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58, 367– 408. https://doi.org/10.1111/j.1744-6570.2005.00515.x

Journal of Global Mobility

Peltokorpi, V. and Froese, F. J. (2009), Organizational expatriates and self-initiated expatriates: who adjusts better to work and life in Japan? *International Journal of Human Resource Management*, 20(5), 1096 - 1112. https://doi.org/10.1080/09585190902850299

Pennie, E. B., Heckenberg, R.,Wertheim, E.H., Kent, S. and Wright, B. J. (2016), A systematic review and meta-analysis of the effort-reward imbalance model of workplace stress with indicators of immune function. *Journal of Psychosomatic Research.* 91(Dec), 1-8. https://doi.org/10.1016/j.jpsychores.2016.10.003

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y. and Podsakoff, N. P. (2003), Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. doi: 10.1037/0021-9010.88.5.879.

Salmela-Aro, K., Rantanen, J., Hyvönen, K., Tilleman, K. and Feldt, T. (2011), Bergen burnout inventory: reliability and validity among Finnish and Estonian managers. *International Archives of Occupational and Environmental Health*, 84, 635-645. https://doi.org/10.1007/s00420-010-0594-3.

Schaufeli, W. B. and Taris, T. W. (2014), A critical review of the job demands-resources model : implications for improving work and health. In G. F. Bauer and O. Hämmig (Eds), *Bridging Occupational, Organizational and Public Health: A Transdisciplinary Approach*, (ss. 43–66), Dordrecht: Springer Science+Business Media. https://doi.org/10.1007/978-94-007-5640-3

Selmer, J., Lauring, J., Zhang, L.E. and Jonasson, C. (2016), How do assigned and self-initiated expatriate CEOs differ? An empirical investigation on CEO demography, personality, and performance in China, global talent management and staffing in MNEs. *International Business and Management,* 32, 49-79. https://doi.org/10.1108/S1876-066X20160000032002

Selmer, J., Suutari, V. and C. Brewster (2022), Self-initiated expatriates. In K. Murphy and A. DeNisi (Eds), *Expatriation*. Organizational Frontiers Series, SIOP. Routledge.

Journal of Global Mobility

Shaffer, M. A., Kraimer, M. L., Chen, Y. and Bolino, M. C. (2012), Choices, challenges, and career consequences of global work experiences: a review and future agenda. *Journal of Management*, 38(4): 1282-1327. https://doi.org/10.1177/0149206312441834 Siegrist, J. (1996), Adverse health effects of high-effort/ low-reward conditions. *Journal of Occupational Health Psychology* 1(1), 27–41. https://psycnet.apa.org/doi/10.1037/1076-8998.1.1.27

Siegrist, J. (2002), Effort-reward imbalance at work and health. In Perrewe, P. L. and Gangster, D. C. (Eds), *Historical and Current Perspectives on Stress and Health*, Bingley, Emerald Group Publishing Limited. https://doi.org/10.1016/S1479-3555(02)02007-3

Siegrist, J., Starke, D., Chandola, T., Godin, I., Marmot, M., Niedhammer, I., and Peter, R. (2004), The measurement of effort-reward imbalance at work: European comparisons. *Social Science & Medicine* 58(8), 1483–1499. https://doi.org/10.1016/S0277-9536(03)00351-4

Siegrist J, Wahrendorf M, Goldberg M, Zins M and Hoven H. (2019), Is effort-reward imbalance at work associated with different domains of health functioning? Baseline results from the French CONSTANCES study. *International Archive of Occupational Environmental Health*. 92(4), 467-480. doi: 10.1007/s00420-018-1374-8.

Siegrist, J., Wege, N., Pühlhofer, F. and Wahrendorf, M. (2009), A short generic measure of work stress in the era of globalization: effort-reward imbalance. *International Archives of Occupational and Environmental Health*. 82(8), 1005–1013. https://doi.org/10.1007/s00420-008-0384-3

Silbiger, A., Berger, R., Barnes, B. R. and W.S. Renwick, D. (2017), Improving expatriation success: The roles of regulatory focus and burnout. *British Journal of Management*, 28(2), 231–247. https://doi.org/10.1111/1467-8551.12187

Silbiger, A. and Pines, A. M. (2014), Expatriate stress and burnout. *International Journal of Human Resource Management*. 25, 1170-1183.

Journal of Global Mobility

https://doi.org/10.1080/09585192.2013.824911

Suutari, V. and Brewster, C. (2000), Making their own way: International experience through self-initiated foreign assignments. *Journal of World Business*, 35(4), 417–436. https://doi.org/10.1016/S1090-9516(00)00046-8

Suutari, V., Brewster, C., Dickmann, M., Mäkelä, L. and C. Tornikoski (2018), The effect of international work experience on the career success of expatriates: a comparison of assigned and self-initiated expatriates. *Human Resource Management*, 57:1, 37-54. DOI: 10.1002/hrm.21827

Suutari, V. and Mäkelä, K. (2007), The career capital of managers with global careers. *Journal of Managerial Psychology*, 22(7), 628–648. https://doi.org/10.1108/02683940710820073

Taris, T. W. and Schaufeli, W. B. (2015), Individual well-being and performance at work: A conceptual and theoretical overview. In M. van Veldhoven and Peccei, R. (Eds.), *Well-being and performance at work: The role of context* (pp. 15–34), Psychology Press.

Tharenou, P. and Caulfield, N. (2010), Will I stay or will I go? Explaining repatriation by self-initiated expatriates. *Academy of Management Journal*, 53(5), 1009-1028. https://doi.org/10.5465/amj.2010.54533183

Tornikoski, C. (2011), Fostering expatriate affective commitment: A total reward perspective. *Cross Cultural Management*, 18(2), 214–235. https://doi.org/10.1108/13527601111126030

Van der Zee, K. I., Ali, A. J. and Salome, E. (2005), Role interference and subjective well-being among expatriate families. *European Journal of Work and Organizational Psychology*, 14(3), 239-262.

Wang, X. and Kanungo, R. N. (2004), Nationality, social network and psychological well-being: Expatriates in China. *International Journal of Human Resource Management*, 15(4-5), 775-793.

Journal of Global Mobility

Willis, T. A., O'Connor, D.B., and Smith, L. (2008), Investigating effort-reward imbalance and work-family conflict in relation to morningness-eveningness and shift work. *Work and Stress* 22(8), 125–137. https://doi.org/10.1080/02678370802180558

Wurtz, O. (2014), An empirical investigation of the effectiveness of pre-departure and in-country cross-cultural training. *International Journal of Human Resource Management,* 25(14), 2088-2101. https://doi.org/10.1080/09585192.2013.870285

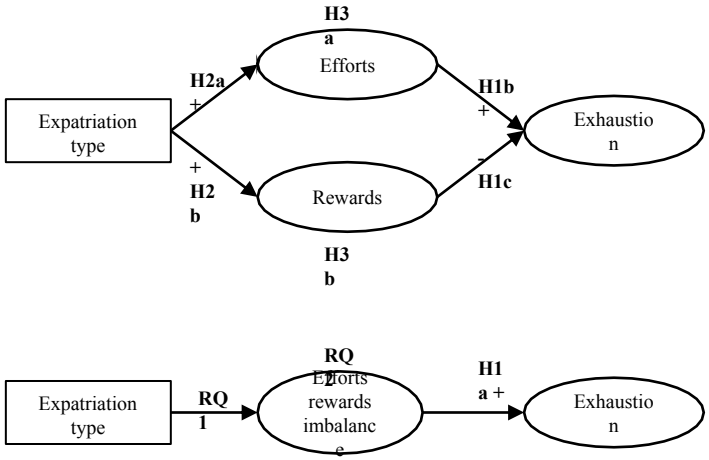
Wurtz, O. (2022), A transactional stress and coping perspective on expatriation: new insights on the roles of age, gender and expatriate type, *Journal of Global Mobility*, 10(3), 351-372. https://doi.org/10.1108/JGM-10-2021-0086

Yunlu, D.G., Ren, H., Mohler Fodchuk, K. and Shaffer, M. (2018), Home away from home: community embeddedness and expatriate retention cognitions. *Journal of Global Mobility*, 6(2), 194-208. https://doi.org/10.1108/JGM-10-2017-0045

Zhao, X., Lynch, J. G. and Chen, Q. (2010), Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(August), 197–206. http://doi.org/10.1086/651257

Zhang, K. Y. and Rienties, B. (2017), Unpacking differences in psychological contracts of organizational and self-initiated expatriates. *Journal of Global Mobility,* 5(1), 93–108. https://doi.org/10.1108/JGM-06-2016-0025

Journal of Global Mobility


H3a
Efforts
H2a +
H1b +
Expatriation type
Exhaustion
+ H2b
Rewards
- H1c
H3b
RQ2
Efforts rewards imbalance
RQ1
H1a +
Expatriation type
Exhaustion

Variable	Mean	SD	Mean	SD	1	2	3	4	5	6	7	8
Expatriation type[2)]												
Eri ratio	0.44	0.30	0.36	0.30	0.12**							
Efforts	2.86	0.63	2.69	0.62	0.13**	1)						
Rewards	3.10	0.48	3.14	0.51	-0.04	1)	-0.01					
Exhaustion	3.26	1.02	3.04	1.12	0.10*	0.65***	0.67***	-0.25***				
Gender[3)]	1.22	0.41	1.36	0.48	-0.15**	-0.06	0.02	0.09*	-0.02			
Age (years)	43.34	9.50	41.38	9.76	0.10*	0.05	0.05	0.04	-'0.02	-0.12**		
Position	7.16	1.81	6.43	1.82	0.19***	0.05	0.18***	0.21***	0.09*	-0.06	0.49***	
The duration of stay	7.47	3.53	10.71	6.84	-0.26***	0.08	0.06	0.02	-0.02	-0.02	0.49***	0.28***

* p<0.05, ** p<0.01, ***p<0.001

1) Correlations are not reported as ERI ratio is calculated based on efforts and rewards.

2) 0=SIE; 1=AE 3) 1=male; 2=female

Journal of Global Mobility

	Model 1: Rewards & Efforts	Model 2: ERI ratio
Structural paths		
Expatriation type[1] → efforts	0.15**	
Expatriation type[1] → rewards	-0.05	
Expatriation type[1] → ERI ratio		0.15**
Expatriation type[1] → job exhaustion	-0.07	-0.02
Rewards → job exhaustion	-0.14***	
Efforts → job exhaustion	0.89***	
Eri ratio → job exhaustion		0.71***
Control variables		
Age → efforts	-0.07	
Age → rewards	-0.01	
Age → ERI ratio		-0.05
Age → job exhaustion	-0.02	-0.07
Gender[2] → efforts	0.1	
Gender[2] → rewards	0.13*	
Gender[2] → ERI ratio		-0.04
Gender[2] → job exhaustion	-0.05	0.03
Organisational position → efforts	0.13*	
Organisational position → rewards	0.23***	
Organisational position → ERI ratio		0
Organisational position → job exhaustion	0.06	0.15***
The duration of stay → efforts	0.12	
The duration of stay → rewards	-0.05	
The duration of stay → ERI ratio		0.15**
The duration of stay → job exhaustion	-0.06	0.04
Indirect effects		
Expatriation type → rewards → job exhaustion	0.01	
Expatriation type → efforts → job exhaustion	0.27*	
Expatriation type → ERI ratio → job exhaustion		0.25**
x^2/df	2.62	2.6
CFI	0.89	0.97
TLI	0.86	0.93
RMSEA	0.06	0.06
*p<0.05, **p<0.01, ***p<0.001		
[1]) 0=AE; 1=SIE [2]) 1=male; 2=female		

Journal of Global Mobility