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Research productivity of self-initiated expatriate academics: Influences of job demands, resources and cross-cultural adjustment

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Abstract

Research on academic expatriation has rarely investigated the drivers of academic performance in a foreign cultural environment. This study focuses on research productivity as a crucial facet of performance and integral part of academic jobs. Drawing from the job demands-resources model, we position perceived organizational support and the number of doctoral students supervised as resources and teaching and service load as demands of self-initiated expatriate (SIE) academics' jobs. Most importantly, we suggest that being cross-culturally adjusted is a vital personal resource living and working in a foreign country and that cross-cultural adjustment moderates the effects of demands and resources. The analysis of combined survey and publication data from 208 SIE academics in natural sciences indicates that the number of doctoral students supervised increases research productivity, while teaching load reduces it. Moreover, findings show that cross-cultural adjustment amplifies the effects of demands and resources. The implications of these findings are discussed.

KEYWORDS

cross-cultural adjustment, job demands, job resources, research productivity, self-initiated expatriate academics

INTRODUCTION

Higher education systems across the globe have become increasingly internationalized as a result of globalization and higher permeability of job markets for highly skilled individuals (e.g., De Wit, 2020). As part of their internationalization programs, universities not only aspire to strengthen cross-border collaborations and set up branch campuses abroad or attract foreign students, they also engage in fierce competition for academic talent to remain competitive and climb university rankings (De Wit, 2020). For instance, a few years ago, China launched the 'Foreign 1000 Talents Plan' (Jia, 2018) to recruit foreign researchers. Similarly, countries in the West, such as the United Kingdom, Canada, or Germany (Redden, 2017), are launching funding programs to lure foreign scholars to their universities. Thus, while academic mobility is nothing new and has been around for centuries (Richardson, 2000; Selmer et al., 2017), these

developments have created ample opportunities for academics to take initiative and work in foreign countries for a time. In the pertinent literature, these individuals are referred to as self-initiated expatriate (SIE) academics (Froese, 2012; Isakovic & Whitman, 2013; Luring et al., 2014; Selmer & Luring, 2010, 2013).

Nascent research on self-initiated academic expatriation has been growing in the past two decades. Common themes have been the motivations/experiences related to relocating (Froese, 2010, 2012; Richardson & Mallon, 2005; Richardson & McKenna, 2002; Selmer & Luring, 2010, 2013), antecedents of cross-cultural adjustment (Davies et al., 2015; Froese, 2012; Selmer & Luring, 2009), and changes in self-perception and academic identity (Richardson, 2000; Romanowski & Nasser, 2015). Surprisingly, despite the fact that the publication of research is a key component of the academic triad (e.g., Rapert et al., 2002) and a central motive of host universities' hiring strategy, little is known about

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enablers of and barriers to research productivity in a foreign cultural environment. Thus, though certainly important and groundbreaking, related research cannot satisfactorily provide answers to these questions as the few extant studies only looked at broad and self-assessed performance proxies (Lauring & Selmer, 2015; Selmer et al., 2015; Selmer & Lauring, 2011) that did not distinguish research productivity from other academic performance domains. This severely limits our theoretical understanding of the factors that inform the research productivity of academic expatriates and equally constitutes an obstacle to the management of expatriates in host universities.

In response, the present study focuses on the determinants of SIE academics' research productivity. We ground our model in the tenets of the job demands-resources (JD-R) model (Demerouti et al., 2001) and position perceived organizational support (POS) (Eisenberger et al., 1986) and the number of doctoral students supervised by SIE academics as job resources, and teaching and service load as job demands. Further, in contrast to working in a domestic context, expatriates by default traverse national borders and cultures. Hence, they need to learn about the new setting to reduce uncertainty and to establish psychological comfort (Black et al., 1991). This degree of comfort is reflected in their level of cross-cultural adjustment. The extended JD-R model (Schaufeli & Taris, 2014; Xanthopoulou et al., 2007) incorporates individual resources described as psychological characteristics that help individuals to control or impact their environment (Schaufeli & Taris, 2014). Correspondingly, we believe that being adjusted to the foreign environment is a vital personal resource for SIE academics and employ the rationale that well-adjusted SIE academics should be more capable of reaping the benefits of job resources and less strained by job demands. To test our model, we collected survey data from SIE academics working for the world's top 400 universities in the field of natural sciences. We combined the survey data with time-lagged data on SIE academics' publication output, which was retrieved from Thomson Reuters 'Science Citation Index'.

This study has the following contributions. First, the study advances the scant research that examines performance-related outcomes of SIE academics (Lauring & Selmer, 2015; Selmer et al., 2015; Selmer & Lauring, 2011, 2013) by focusing on antecedents and boundary conditions of research productivity. To our best knowledge, this is the first study that specifically focuses on these fundamental parts of academic jobs in a foreign cultural environment. Further, the vast majority of related research is cross-sectional, based on self-reports, or of a qualitative nature (e.g., Froese, 2012; Isakovic & Whitman, 2013; Richardson & Mallon, 2005; Selmer & Lauring, 2011). The research design of the present study overcomes these limitations as it is time-lagged and includes objective,

secondary data. Second, we contribute to more recent advancements in the JD-R model regarding the role of individual level moderators which influence the impact of job demands and resources (Xanthopoulou et al., 2007). By doing so, this study enhances the theoretical understanding of when SIE academics' responses to job demands and resources might differ as a function of cross-cultural adjustment and lead to different levels of research productivity. Third, given the increasing internationalization of higher education (e.g., Altbach et al., 2009), the study also offers crucial stimuli to human resources managers and decision-makers in universities on how to manage and promote the research productivity of expatriate academic staff.

THEORETICAL FRAME

The job demands-resources model

The JD-R model is a seminal framework used to explain the effects of job characteristics on individuals' affective states and behaviors at work. The model was originally developed by Demerouti et al. (2001) to elucidate how work conditions relate to employee well-being. However, since its inception, the model has evolved further, broadening its scope to variables other than well-being or health (Schaufeli & Taris, 2014). One advantage of the model is its flexibility, which allows the conceptualization of demands and resources in a tailored manner, taking into account the specific characteristics of the work environment under investigation.

The main premise of the JD-R model is that job characteristics can be categorized into job demands and job resources. Job demands can be understood as the "physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skill [...]" (Bakker & Demerouti, 2007, pp. 312). Examples of job demands are high work pressure, interpersonal conflict, or job insecurity (Schaufeli & Taris, 2014). Continued exposure to job demands may lead to the depletion of energy, burnout and health deterioration (Schaufeli & Bakker, 2004). In contrast, job resources are those aspects of the job that facilitate employees' goal attainment, personal growth, and the reduction of the physiological and psychological costs caused by job demands (Bakker & Demerouti, 2007). For instance, social support, autonomy, participation in decision-making, pay, performance feedback, or task variety can be categorized as job resources (Bakker et al., 2004; Bakker & Demerouti, 2018; Schaufeli & Taris, 2014). As part of the development of the JD-R model (Xanthopoulou et al., 2007), researchers further encouraged paying attention to individual level variables that might function as personal resources. Personal resources are defined as self-evaluations which are linked to resiliency and refer

to individual's sense of their ability to control and influence their environment successfully (Bakker & Demerouti, 2014; Hobfoll et al., 2003; Xanthopoulou et al., 2007). In other words, personal resources enable individuals to cope with uncertainty and challenging situations and to be efficacious when acting upon and dealing with their environment. One of the roles that personal resources could play in the JD-R model is that of a moderator with the power to buffer the negative effects of job demands and to amplify the positive effects of job resources (Schaufeli & Taris, 2014). Even though Xanthopoulou et al. (2007) did not find initial support for their proposition, later studies showed that personal resources do moderate the effects of demands and resources (e.g., Brenninkmeijer et al., 2010; Thun & Bakker, 2018; van den Broeck et al., 2011; Xanthopoulou et al., 2013). For example, Thun and Bakker (2018) showed that the personal resource of optimism strengthened the effect of empowering leadership on two sub-dimensions of employee job crafting behaviors. Another example is the study by van Doorn & Hülshager (2015), which delineated the buffering role of individuals' core-self evaluations in the relationship between job demands, such as workload and emotional demands, and strain reactions.

In the context of expatriation, we consider cross-cultural adjustment an important personal resource. Cross-cultural adjustment is the degree of psychological comfort with respect to the job tasks, general living conditions and interacting with foreign nationals (Black & Stephens, 1989). As such, having established high levels of cross-cultural adjustment indicates mastery of and familiarity with the novel cultural environment (Black & Mendenhall, 1991). For instance, research on the cross-cultural adjustment of expatriates in academia has shown that successful adaptation is based on several pillars that relate to communication effectiveness, understanding of social behaviors of locals, satisfaction with living conditions, knowledge of local student's learning styles/abilities, and clarity regarding departmental expectations for their work (e.g., Froese, 2012; Richardson & Wong, 2018; Wilkins & Neri, 2019). Plausibly, expatriate academics' ability to adjust has a profound impact on their professional and personal life (Richardson, 2000) and we, hence, propose that, once accomplished, cross-cultural adjustment will be a personal resource that SIE academics can draw on.

After having introduced the central tenets of our theory and its relationship to our foci constructs, we will develop our hypotheses next.

Hypotheses development

Job resources and research productivity

Following the JD-R model (Demerouti et al., 2001), jobs feature resources that are valuable for the attainment of

work goals. Reviewing the extant research focusing on the aspects of jobs that generally facilitate individuals' performance, POS (Eisenberger et al., 1986) is an essential variable. POS refers to employee perceptions of how strongly their organization values their contribution and cares about their well-being (Rhoades & Eisenberger, 2002).

Since POS is considered to be highly beneficial for employees regarding several work-related emotions, attitudes, and behaviors (e.g., organizational citizenship behavior or performance) (Kurtessis et al., 2017; Rhoades & Eisenberger, 2002), it is plausible to conceptualize POS as a job resource. We propose that SIE academics working for highly supportive organizations are provided with the necessary infrastructure (e.g., labs or technical gear) to develop and to test their research questions. Furthermore, we believe that feeling valued and backed by the employing university can motivate as well as empower SIE academics to pursue bold research ideas that may have the potential to generate groundbreaking discoveries. Similarly, high POS may prompt SIE academics to reciprocate and invest increased efforts with regards to producing and publishing research. In terms of empirical studies, research has indicated that POS is positively associated with in-role and extra-role performance (Chen et al., 2009; Rhoades & Eisenberger, 2002). Thus, we posit:

Hypothesis 1a. POS is positively related to SIE academics' research productivity.

As Larivière (2012) states, doctoral students make up an important part of the academic workforce and when individuals commence their doctoral studies they are usually "inundated with messages that underscore the importance of writing papers for certain outlets" (Prasad, 2013, p. 941). Consequently, doctoral students are expected to engage in publication activities and to generate new knowledge—a prerequisite for obtaining a PhD.

Drawing from the JD-R model (Demerouti et al., 2001), we consider doctoral students as a pivotal resource for the following reasons. First, particularly in natural sciences, research is based on running experiments and trials in laboratories. In order to carry out such major activities, doctoral students are essential, which resonates with Stephan & Levin (1992) who concluded that human resources have a major influence on scientists' productivity. Second, doctoral students co-author papers with their supervisor, which automatically boosts SIE academics' research productivity. For example, Larivière (2012) found that doctoral students were involved in approximately 30% of all publications and the tendency was even stronger in the natural sciences (Mägi & Beerkens, 2016). Third, SIE academics can involve doctoral students in teaching and service work, which grants them more time to devote to their own research (Johnes, 1988). Therefore, we hypothesize:

Hypothesis 1b. The number of doctoral students supervised is positively related to SIE academics' research productivity.

Job demands and research productivity

Aside from conducting research, teaching is one of the core components of most academic jobs (García-Gallego et al., 2015; Robert & Carlsen, 2017). Teaching is a highly interactive process which requires focused efforts to impart knowledge in a comprehensive way. Preparing teaching materials and engaging in follow-up work is time-intensive and demanding. Given the amount of time and mental effort invested, teaching has often been characterized as a serious drawback on academics' aspirations as researchers (Fox, 1992; Ramsden, 1994; Robert & Carlsen, 2017).

As such, we position teaching as a demand of SIE academics' work that conflicts with the cognitively demanding process of producing research. Following the JD-R model, the attainment of work goals, in this case writing and publishing research papers, becomes less likely with increasing demands that advance the physical and/or mental exhaustion of individuals (e.g., Schaufeli & Bakker, 2004). Correspondingly, empirical studies conducted in domestic settings (Fox, 1992; Gottlieb & Keith, 1997) suggest that research productivity is hampered by teaching load. Previous research also shows that high teaching load deprives SIE academics of another critical resource: time (Chen et al., 2006). For instance, Fox & Milbourne (1999), in a domestic setting, found that a 10% increase in teaching load is associated with a 20% decrease in research productivity. Therefore, we derive:

Hypothesis 2a. Teaching load is negatively related to SIE academics' research productivity.

On top of teaching and research, academics are usually expected to also carry out administrative tasks (García-Gallego et al., 2015) (henceforth, service). Service includes participation in faculty meetings, coordinating chair/department activities, committee work, filling out forms/documentation, or assuming representative tasks, reporting, and so on (e.g., Macfarlane, 2011; Tight, 2002). Following Robert and Carlsen (2017), for most academics placing emphasis on their career as researchers service is likely to be perceived as what Rosser (2004, p. 288) refers to as "administrivia."

Following the JD-R model, we position service as a demand of the job with potential to derail SIE academics' research productivity. Engagement in service is a highly time consuming burden which is likely to deprive scientists of the resources necessary to generate research, for instance, it reduces valuable time (Robert & Carlsen, 2017) needed to prepare and revise manuscripts

for publication. This resonates with prior empirical studies which found that research productivity suffers from high service duties (Johnes, 1988) and that there are few synergies between service work and research productivity (Taylor et al., 2006). This leads to:

Hypothesis 2b. Service load is negatively related to SIE academics' research productivity.

The moderating role of cross-cultural adjustment

Prior studies (Bhaskar-Shrinivas et al., 2005; Davies et al., 2019) have shown that maladjusted expatriates hold increased withdrawal cognitions, show low job satisfaction, and, as a result, have problems engaging with their work. Consequently, we propose that maladjusted SIE academics do not fully reap the benefits of the resources provided by their organizations. In contrast, SIE academics who are well-adjusted to their new environment are more open to engaging with their organization, drawing upon available support, and fully exploiting available resources to boost their research productivity. Furthermore, experiencing high levels of cross-cultural adjustment eases interactions with domestic doctoral students and facilitates socialization. In this regard, prior studies (Cabrera et al., 2006; Hansen, 1999) have shown that increased interactions as well as sound relationships with foreign colleagues, related to the present case, doctoral students, are important predictors of knowledge sharing, which enhances the available pool of knowledge and serves as a catalyst for conducting and producing research.

Regarding demands, in the case of teaching duties, well-adjusted SIE academics are able to adapt their teaching materials and teaching style more easily to local expectations and norms. This reduces effort and strain in the preparation/presentation of teaching materials and safeguards resources needed for producing research. Likewise, adapting to local teaching styles provides students with easier access to course materials and clearer expectations, thereby making SIE academics' teaching style more efficient. Furthermore, handling service work should come across easier and should save SIE academics' time and mental energy. Hence, we expect highly adjusted SIE academics to deal with service work in a more effective and efficient manner resulting in an attenuation of the negative effects of service work. In sum, this leads to:

Hypotheses 3a/b. Cross-cultural adjustment moderates the relationship between (a) POS, and (b) the number of doctoral students supervised and SIE academics' research productivity in a way that the positive effects of POS/the number of doctoral students

supervised on research productivity increase when cross-cultural adjustment is high.

Hypotheses 4a/b. Cross-cultural adjustment moderates the relationship between (a) teaching load, and (b) service load and SIE academics' research productivity in a way that the negative effects of teaching/service load on research productivity are mitigated when cross-cultural adjustment is high.

Figure 1 summarizes our conceptual model and related hypotheses.

METHODS

Data collection and sample

We collected data from SIE academics in the natural sciences field, working at the world's top 400 universities according to the Times Higher Education World University Ranking. These universities usually emphasize the importance of research and expect academics to frequently publish research papers. Surveyed SIE academics worked in one of the following fields: astronomy, chemistry, geology, or physics. Potential participants were identified via the homepages of target universities/departments (Davies et al., 2015). To ensure that only SIE academics made it into our contact pool, we thoroughly inspected homepage profiles for selected criteria indicating that they were SIEs, for example, name, place

of birth, and country of origin of academic degrees. Furthermore, we included screening questions at the onset of the survey to corroborate our selection. The initial contact pool included 1554 individuals, each of whom received an email-invitation to our online survey. In all, 334 individuals participated, which equates to a response rate of 21.5%. After dropping individuals with large numbers of incomplete responses and those respondents who did not meet our criteria (e.g. visiting professors on sabbaticals), the final sample was comprised of 208 individuals, including a few cases where we applied missing value replacement.

Among the respondents, 87.5% are male, 83.2% are married and the average age is 47.57 years (SD = 8.9). 60.1% are full professors, while the remaining respondents are associate professors (22.1%), or assistant professors (17.8%). The average tenure is 10.92 years (SD = 8.22). The respondents are from 40 different countries, with the largest groups being German (N = 33), British (N = 28), US-American (N = 24), Russian (N = 14), Italian (N = 10), Korean (N = 10) and Chinese (N = 9). Respondents primarily work in Anglo-Saxon host countries: the US (N = 111), UK (N = 22), and Canada (N = 19), followed by Australia (N = 12), Singapore (N = 10), China (N = 6) and Japan (N = 4).

Measures

POS (job resource) was gauged using seven-items from Eisenberger et al. (1986). Respondents provided their answers on a seven-point Likert scale ranging from

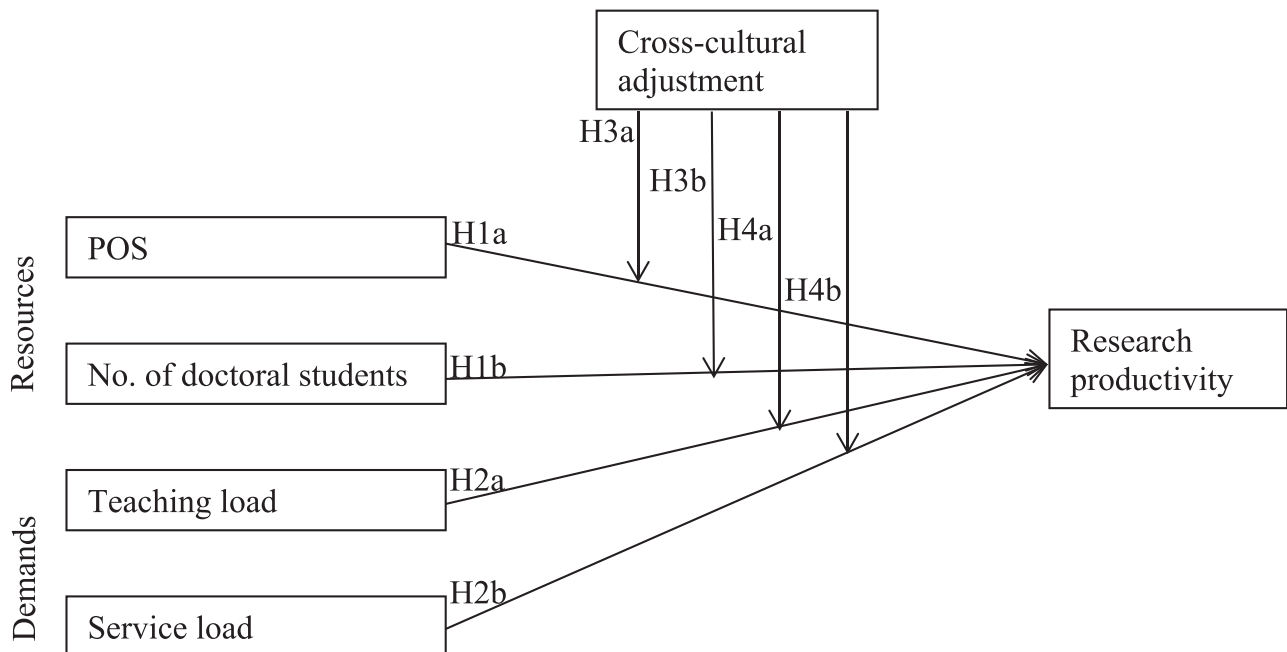


FIGURE 1 Conceptual model

‘strongly disagree’ (1) to ‘strongly agree’ (7). A sample item is: “Help is available from the organization when I have a problem.” Cronbach’s alpha is 0.94. The second job resource, doctoral students, was measured by asking SIE academics about the number of doctoral students they were supervising at the time of the survey.

The job demands, teaching and service, were measured using the following item: “The job duties of a professor can usually be distinguished into teaching, research, and service. How much time do you spend on these duties in your current job? Please divide 100 points across these duties.” We created two variables for teaching and service, respectively.

The moderating variable, cross-cultural adjustment, was captured using the 14-item inventory by Black & Stephens (1989). Expatriates responded to the items on a seven-point Likert scale ranging from ‘very unadjusted’ (1) to ‘completely adjusted’ (7). The scale was used to indicate expatriates’ perceived degree of adjustment regarding general living conditions, interacting with locals, and the working environment. While the original measure distinguishes between these three facets, prior research has also successfully used combined scales (e.g., Davies et al., 2015; Li et al., 2012; Ren et al., 2014). To examine the effects of cross-cultural adjustment as a whole, we followed this approach in the present study and conceptualized cross-cultural adjustment as a second-order construct. Cronbach’s alpha for the composite scale is 0.93.

For capturing the dependent variable, research productivity, we used the publication record of SIE academics from the Thomson Reuters ‘Science Citation Index’ as a proxy. We followed the methodology suggested by Stephan & Levin (1991), considering both the quantity and quality (impact factor) of publications. The measure integrates four different factors: the total number of publications, an author-adjusted count, an impact adjusted count, and an author-and-impact adjusted count. Each publication was accounted for and adjusted for the number of authors and impact. Then, the scores for all publications were combined into a single score. To smooth out productivity fluctuations and outliers, we computed logarithmized scores for each SIE academic over a three-year period.

Following prior research (Black et al., 1991; Enders & Teichler, 1997; Gottlieb & Keith, 1997; Peltokorpi & Froese, 2009; Stoermer et al., 2021), we controlled for age (in years), gender (0 = female, 1 = male), tenure (in years), and position (0 = assistant/associate professor, 1 = full professor). In addition, since most respondents were residing in the United States ($N = 111$), we decided to control for host country effects and created a dummy variable differentiating between the United States and other host countries (0 = other countries, 1 = US). We also controlled for perceived cultural novelty as it has been argued to pose a barrier to expatriates’ effectiveness (Black et al., 1991; Froese & Peltokorpi, 2011; Varma

et al., 2021). To measure perceived cultural novelty, we used the eight-item scale developed by Black & Stephens (1989). Respondents indicated how similar or different they thought several conditions were in the host location compared to their home country. Response categories ranged from ‘extremely different’ (1) to ‘extremely similar’ (5). Cronbach’s alpha is 0.84.

Preliminary analyses

We conducted confirmatory factor analysis (CFA) on all scales comprised of multiple items. We used the IBM AMOS version 24 and applied the maximum likelihood estimator. We added one error-term correlation in the general adjustment first-order factor and another one between two items of the POS measure due to a strong overlap in item content. Furthermore, we deleted two items in the perceived cultural novelty inventory due to low factor loadings. Cronbach’s alpha for the perceived cultural novelty scale is 0.86 after discarding these items. The results of the CFA indicate that our model fits the data acceptably: $\chi^2 = 730.565$; $DF = 316$; $p < 0.001$; $CMIN/DF = 2.312$; $CFI = 0.909$; $TLI = 0.899$; $RMSEA = 0.080$. As the average variance extracted by each factor was above 0.5 and higher than any of the squared correlations between factors, no problems with convergent and discriminant validity were detected (Fornell & Larcker, 1981). To reduce the risk of multicollinearity, we standardized variables involved in interactions. The highest variance inflation factor (VIF) value is 2.109, which is substantially below the threshold of 10 (Field, 2013) and, thus, indicates that multicollinearity is not a severe concern.

Results

Table 1 shows the means, standard deviations, and inter-correlations between all variables employed in this study. We tested our hypotheses using IBM SPSS version 24 by means of hierarchical regression. Table 2 displays the results of these analyses. In Model 1, we entered the control variables and cross-cultural adjustment. This model explained 7% of the variance in our dependent variable. In Model 2, we included the independent variables to test the main effects of job resources and demands. The integration of these variables added 6% of explained variance, corresponding to an R^2 of 13%. In H1a, we hypothesized that POS positively affects SIE academics’ research productivity. This hypothesis was not confirmed ($\beta = -0.02$, $p = 0.760$). H1b posited that the number of doctoral students supervised relates positively to SIE academics’ research productivity. This hypothesis was supported ($\beta = 0.20$, $p = 0.005$). In H2a, we expected a negative main effect of teaching load on SIE academics’ research productivity. This hypothesis was confirmed

TABLE 1 Means, standard deviations, and correlations

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1 Age	47.57	8.90											
2 Gender	.88	.33	.06										
3 Host country (US dummy)	.53	.50	-.04										
4 Tenure	10.92	8.22	.61**	.09	.15*								
5 Position	.60	.49	.60**	.11	-.01	.49**							
6 Perceived cultural novelty	2.78	.85	.02	.03	-.11	.03	-.04						
7 POS	4.79	1.29	.13	.10	.13	.09	.16*	.10					
8 No. of doctoral students superv.	3.73	3.15	.02	.09	-.05	.04	.11	.05	.03				
9 Teaching load	28.47	13.34	-.18**	.05	-.00	-.07	-.24**	.04	-.17*	-.02			
10 Service load	20.20	13.54	.15*	.03	-.27**	.07	.11	.06	-.02	.08	-.13		
11 Cross-cultural adjustment	5.95	.90	.19**	-.08	.11	.31**	.16*	.26**	.40**	.07	-.06	.06	
12 Research productivity	4.33	1.01	-.06	.16*	.10	-.05	.06	-.11	.03	.21**	-.15*	-.02	-.05

Note: N= 208
*p < .05. **p < .01. Two-tailed test.

($\beta = -0.15$, $p = 0.030$). In H2b, we posited that service load relates negatively to SIE academics' research productivity. This hypothesis was rejected ($\beta = -0.02$, $p = 0.827$).

In Model 3, we entered the interaction terms. This led to an increase in explained variance of 4%, corresponding to an R^2 of 17%. We found no significant interaction between POS and cross-cultural adjustment ($\beta = -0.05$, $p = 0.571$), leading to the rejection of H3a. Next, we inspected H3b, which postulated that cross-cultural adjustment strengthens the positive effects of the number of doctoral students supervised on SIE academics' research productivity. This hypothesis was corroborated ($\beta = 0.15$, $p = 0.038$). No significant interaction was identified between teaching load and cross-cultural adjustment ($\beta = 0.04$, $p = 0.631$) and, thus, H4a was not accepted. Regarding H4b, results showed that cross-cultural adjustment moderates the association between service load and SIE academics' research productivity ($\beta = -0.17$, $p = 0.019$), though, unlike expectations, the relationship was in the opposite direction. Therefore, H4b was also rejected.

To better understand the nature of the significant interactions terms, we plotted them graphically (see Figures 2 and 3) (Aiken & West, 1991). Figure 2 shows the interaction between cross-cultural adjustment and the number of doctoral students supervised. The plot indicates that well-adjusted SIE academics benefit more from doctoral students. As such, the relationship between the number of doctoral students supervised and research productivity was stronger at high levels of cross-cultural adjustment. Figure 3 illustrates the interaction between cross-cultural adjustment and service load. The plot suggests that high service load is in particular detrimental to the research productivity of well-adjusted SIE academics. For maladjusted SIE academics, the relationship between service load and research productivity was surprisingly found to be positive, which is not in line with expectations.

DISCUSSION

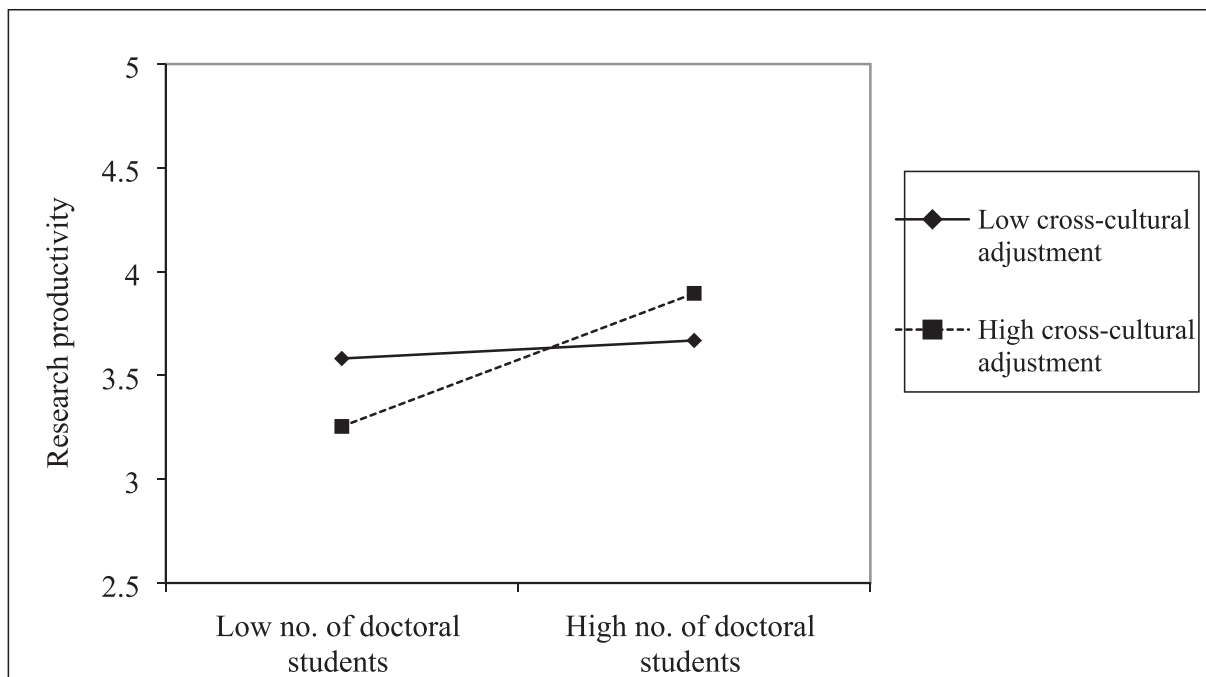
Leveraging the JD-R model (Demerouti et al., 2001), we conceptualized POS and the number of doctoral students supervised, teaching, and service load as antecedents of SIE academics' research productivity. Our findings pertaining to the detrimental effects of teaching load resonate with prior domestic research (Fox & Milbourne, 1999; Ramsden, 1994). Analyses corroborated our prediction that doctoral students in natural sciences are an important resource. This is in line with prior research (Johnes, 1988; Larivière, 2012; Mägi & Beerkens, 2016) conveying that doctoral students in natural sciences are essential to running labs, collecting/analyzing data, and frequently co-authoring papers with their supervisors. In contrast to our contentions, no

TABLE 2 Regression results for research productivity

Variables	Model 1	Model 2	Model 3
Age	-.09	-.09	-.09
Gender	.17*	.17*	.16*
Host country (US dummy)	.11	.12	.12
Tenure	-.09	-.08	-.10
Position	.15	.09	.13
Perceived cultural novelty	-.09	-.09	-.08
Cross-cultural Adjustment	.01	-.00	-.03
POS		-.02	-.06
No. of doctoral students		.20**	.18**
Teaching load		-.15*	-.14*
Service load		-.02	-.00
POS x cross-cultural adjustment			-.05
No. of doctoral students x cross-cultural adjustment			.15*
Teaching load x cross-cultural adjustment			.04
Service load x cross-cultural adjustment			-.17*
R ²	.07	.13	.17
ΔR ²	.07	.06	.04
F	2.10*	2.58**	2.59**

Note: N= 208. The reported regression coefficients are standardized

*p < .05. **p < .01. ***p < .001. Two-tailed test.

**FIGURE 2** Interaction plot of the number of doctoral students supervised and cross-cultural adjustment

evidence for a positive relationship between POS and research productivity was obtained. It is possible that POS is less relevant given the specific job profile of SIE academics, which is characterized by high degrees of independence and self-reliance. Perhaps, SIE academics

expect and need less support from their organizations. Our analyses also indicated that service load as a job demand does not significantly affect the research productivity of SIE academics. This finding suggests that academic service obligations are not draining per se. As

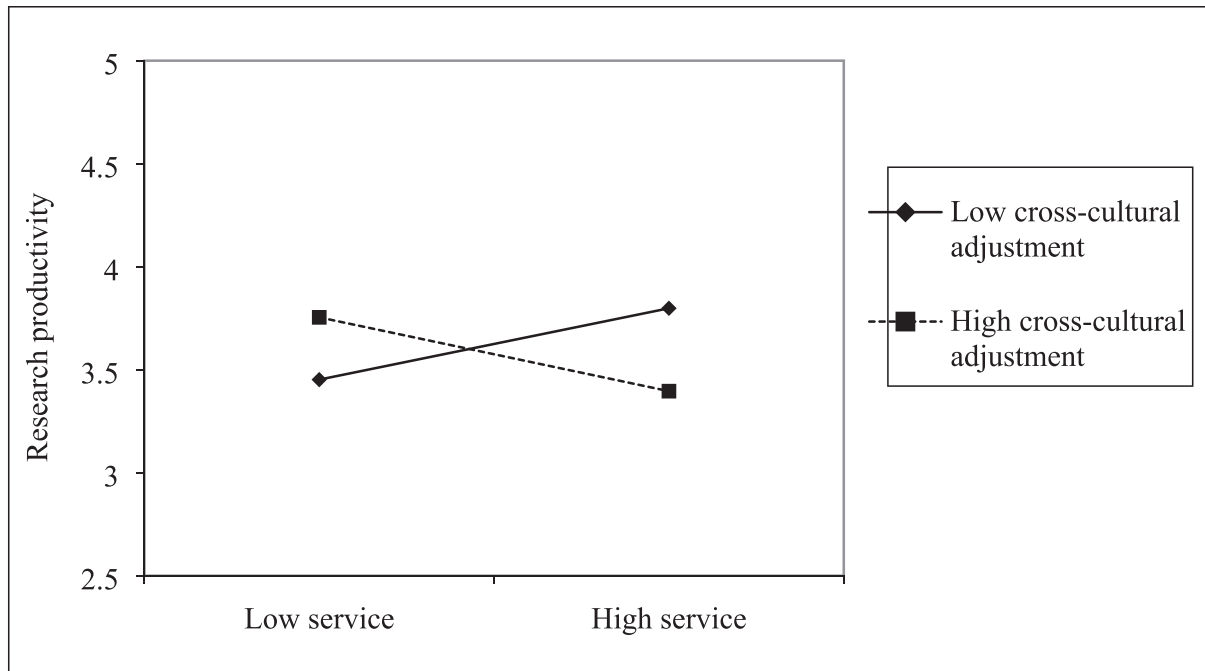


FIGURE 3 Interaction plot of service load and cross-cultural adjustment

suggested by previous literature (Enders & Teichler, 1997), service does not always have to be in conflict with research aspirations—it can be complimentary. For instance, leading a research institute gives autonomy in decision-making which can lead to an increase in available resources.

Most importantly, our findings illustrate that boundary conditions take a critical role in shaping the consequences of demands and resources. In this respect, we found that the interaction between cross-cultural adjustment and service work was interestingly in the opposite direction of what we expected. As such, the relationship was positive for SIE academics with low adjustment levels and negative for those with high adjustment levels. Reverting to the conceptualization of cross-cultural adjustment may help us to disentangle this finding. In its broadest sense, cross-cultural adjustment is a reflection of expatriates' psychological comfort living, working, and socializing in the host country (Black et al., 1991). In a situation of maladjustment, expatriates are confronted with heightened levels of uncertainty and stress, facilitating withdrawal tendencies. Extrapolating this to our finding implies that maladjusted SIE academics may opt to disengage from service work by investing less effort or by delegating said work to other staff members. Likewise, research in higher education differentiates between a local and cosmopolitan orientation in academics (Gouldner, 1957; Merton, 1968). Locals are more strongly involved in local departmental work, whereas cosmopolitans engage more with their wider community of practice, which is mainly driven by research activities (Stichweh, 2013). In light of adjustment difficulties, SIE

academics may thus identify more strongly with their community of practice and place emphasis on their own research. On the other hand, well-adjusted SIE academics may have a stronger local orientation. Thus, they engage with greater effort in service work and spend more time and effort on the completion of their service-related tasks, which reduces their resources for conducting and publishing research. In this regard, related research on expatriate managers has shown that well-adjusted expatriates are more committed to their organization (Chen & Chiu, 2009). In line with predictions, analyses corroborated that cross-cultural adjustment amplifies the positive effects of the number of doctoral students supervised. Thus, our result suggest that well-adjusted SIE academics can capitalize more on the benefits of having a team of doctoral students. A potential explanation is that well-adjusted SIE academics have high intercultural communication effectiveness (Froese et al., 2012), and are thus better able to work with doctoral students in a foreign environment. Relatedly, well-adjusted SIE academics will be more confident to become fully engaged with their doctoral students since they know how to interact with their protégés and are aware of supervisory duties and local working styles/values. Increased social interactions then result in more knowledge sharing and generation (Cabrera et al., 2006; Hansen, 1999), and thus, higher research productivity in the expatriate academic context.

No moderating effects were identified for the relationships between POS, teaching load, and research productivity. As findings imply, POS is probably not relevant for the research productivity of SIE academics and other factors and sources of support take a more

important role. Thus, regardless of the level of cross-cultural adjustment, the relationship between POS and research productivity remains insignificant. Concerning teaching load, no buffering effect of cross-cultural adjustment was detected. As such, the relationship between teaching and research productivity does not hinge on how well SIE academics are adjusted to the host country setting.

Implications for research and theory

While SIE academics have received growing attention in expatriate management research in the past two decades (Froese, 2010, 2012; Isakovic & Whitman, 2013; Luring et al., 2014; Richardson & Mallon, 2005; Richardson & McKenna, 2002; Selmer & Luring, 2010, 2013), the enablers of and barriers to the production of research in a foreign culture and working environment have been largely ignored. This is surprising, given the growing numbers of SIE academics, their impact on host universities (Luring & Selmer, 2015), and the importance of research productivity as one constituent element of the academic triad. In this vein, this study advances the scarce research on performance-related work outcomes of SIE academics that primarily zeroes in on general, self-reported performance assessments and does not differentiate between various foci of performance (e.g., Luring & Selmer, 2015; Selmer et al., 2015; Selmer & Luring, 2011). The study identifies job demands and resources (ir)relevant to the research productivity of SIE academics, and shows that some of the associated effects are subject to SIE-academics' cross-cultural adjustment. This is important, as these findings allow for a contextualized understanding of SIE academics' research productivity. Furthermore, the study bridges the domestic literature on research productivity (e.g., Fox & Milbourne, 1999; Kwon et al., 2015; Larivière, 2012; Taylor et al., 2006) and the literature on academic expatriation and cross-cultural adjustment (e.g., Bhaskar-Shrinivas et al., 2005; Davies et al., 2015; Froese, 2012; Luring & Selmer, 2015; Selmer & Luring, 2011, 2013). In addition, common limitations of the nascent research on SIE academics are cross-sectional data (Isakovic & Whitman, 2013; Selmer & Luring, 2010) and rather small samples used in qualitative research (e.g., Froese, 2012; Richardson & Mallon, 2005; Richardson & McKenna, 2002). For instance, the related research on performance outcomes of SIE academics happens to be based on cross-sectional data (Luring & Selmer, 2015; Selmer et al., 2015; Selmer & Luring, 2011, 2013). Through the combination of two different data sources and a time-lagged research design, the present study overcomes the critical limitations and provides a more robust picture of the factors affecting the research productivity of SIE academics.

The quantitative design also allows for greater confidence in the generalizability of findings.

Furthermore, the study contributes to the JD-R model (Demerouti et al., 2001) and its more recent extensions (Schaufeli & Taris, 2014; Xanthopoulou et al., 2007) in terms of the role of personal resources within the JD-R framework. The identification of the moderating effect of cross-cultural adjustment provides empirical substantiation to the extension of JD-R model which, *inter alia*, proposed that personal resources could explain individual differences in responses to job demands and resources (Xanthopoulou et al., 2007). Closely connected, our study holds an interesting implication to the understanding of individual level resources and the equivocal nature of their moderating effects. Accordingly, in the present study, cross-cultural adjustment facilitates the beneficial effects of job resources, while it does not buffer but instead drives the negative effects of job demands. Consequently, this entails that an individual level resource is not invariably bound to affect job demands and resources in a constructive manner; rather, it is the specific characteristics of job demands/resources and individual level resources that determine the directionality of the corresponding interaction. As such, our study provides food for thought to future JD-R model development regarding the conceptualization of individual resources and their complex interplay with job demands and resources.

Practical implications

Producing and publishing cutting-edge research is in the interest of both employing universities and SIE academics. Therefore, this study offers pertinent practical implications related to the direct effects associated with teaching load and the number of doctoral students supervised, and the moderating role of cross-cultural adjustment. Regarding the identified direct effects, the implications are straightforward: universities, especially those with high ambitions to produce cutting-edge research, need to either unburden SIE academics from high teaching loads to save resources (e.g., time and mental/physical energy), or provide SIE academics with means to deal in an enhanced way with high teaching loads. For instance, universities could provide more latitude in the crafting of jobs (Bakker & Demerouti, 2014; Tims et al., 2012) in accordance with SIE academics' motivations, passion, and time. By allowing proactive initiative to craft the demand of teaching, SIE academics could self-dependently establish an improved alignment between teaching and research. Furthermore, universities could offer time-management training to SIE academics since elaborate time-management skills have been shown to mitigate the negative effects of job demands in teaching contexts (Peeters & Rutte, 2005).

Second, our findings indicate a positive relationship between the number of doctoral students supervised and research productivity. This underlines that doctoral students are an important resource for SIE academics (Kim & Choi, 2017). In this vein, universities can promote the recruitment of suitable doctoral students by the provision of sufficient financial means and adequate infrastructure, for instance, office/lab space and state of the art technical equipment, that facilitates the hosting of doctoral students. Moreover, HR-departments in hosting universities may assist SIE academics in placing advertisements in job portals, help in establishing connections with other universities in the region to identify promising graduate students, and inform about labor-law regulations pertinent to hiring doctoral students.

Third, the beneficial effects of the number of doctoral students were amplified for well-adjusted SIE academics. To enable SIE academics' adjustment, Trembath (2016) summarizes several avenues, inter alia, encompassing onboarding programs, cross-cultural training and mentoring by fellow expatriate and local academics, as well as provision of clear job tasks. To mitigate the detrimental consequences of the interplay between service work and cross-cultural adjustment, host universities are advised to reduce service duties for SIE academics by offering administrative support, debureaucratization and deformalization/optimization of documentation processes (Froese, 2012). Likewise, SIE academics need to stay on top of their own administrative commitments to not overburden themselves with service work.

Limitations and future studies

The limitations of this study also serve to inform the direction of future research. The investigated sample only features SIE academics in natural sciences. The situation concerning other SIE academics in social sciences or humanities might be different. For instance, in other fields, doctoral students may not necessarily be a resource in terms of research productivity if academics co-author less frequently with their supervisors (Mägi & Beerken, 2016). Therefore, we encourage future research to broaden the scope and to also include SIE academics in other areas such as business/management research or psychology. Moreover, we encourage future studies to not only obtain the data on the number of doctoral students supervised, but also their skills, capabilities, and performance levels. This could be realized by obtaining ratings from their supervisors. By doing so, research could also embrace situations in which doctoral students may not uniformly be considered a resource. Next, our data has a high share of full professors. Future studies are advised to increase the number of associate and assistant professors to ensure a balanced distribution across professorial ranks.

Second, future research should also take into consideration SIE academics' time horizon with regard to the

intended length of their stay. For instance, there might be differences in length of stay and overall time perspective across host countries. Thus, SIE academics may want to stay for an undefined period of time in the US or UK, whereas SIE academics in the Middle East or Asia might have a fixed time-period in mind. This could, among other things, affect SIE academics' involvement in service work, their willingness to supervise doctoral students, and their adjustment to foreign destinations. Future studies are, thus, advised to take host country effects into account and to conduct comparative analyses across destinations. Likewise, qualitative studies could be used to more profoundly understand how time horizon might inform SIE academics' behaviors in the workplace.

Third, we applied the JD-R model to the context of SIE academics in natural sciences and selected context-specific variables as proxies for job demands and resources. There may be further variables that capture job demands and resources. For example, research grants could be one of the major resources which might directly affect research productivity. However, we could not obtain such data as they are often sensitive and country specific. Future studies should aim to select additional variables tailored to the context. Moreover, some academics may follow a teaching/administrative career track. We recommend that future research collect data on career tracks to better control for associated influences on research productivity. Finally, the applied conceptualization of cross-cultural adjustment has been the subject of criticism (Haslberger et al., 2013). Future research might want to extend our findings by applying the newly developed adjustment conceptualization by Haslberger et al. (2013).

Despite these limitations, our study shows the effects of job demands and resources on the research productivity of SIE academics. We further elucidated the moderating role of cross-cultural adjustment. The findings provide an important missing piece in the research on SIE academics and are equally relevant to SIE academics themselves and human resource managers in universities hosting expatriate academics. While this study focused on SIE academics' research productivity, knowledge sharing, knowledge generation, and innovation are key objectives for expatriates and multinational enterprises (Froese et al., 2019, 2020; Huang & Li, 2019; Stoermer et al., 2021), future research is encouraged to look at other types of expatriate knowledge workers, such as R&D scientists, engineers, and IT professionals.

REFERENCES

- Aiken, L.S. & West, S.G. (1991) *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Altbach, P.G., Reisberg, L. & Rumbley, L.E. (2009) *Trends in global higher education: Tracking an academic revolution*. Paris, FR: UNESCO Publishing.
- Bakker, A.B. & Demerouti, E. (2007) The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328.

- Bakker, A.B. & Demerouti, E. (2014) Job demands–resources theory. In: Chen, P.Y. & Cooper, C.L. (Eds.) *Wellbeing: A complete reference guide. Work and Wellbeing* (Vol. 3). Chichester, UK: Wiley–Blackwell, pp. 37–64.
- Bakker, A.B. & Demerouti, E. (2018) Multiple levels in job demands–resources theory: Implications for employee well-being and performance. In: Diener, E., Oishi, S. & Tay, L. (Eds.) *Handbook of wellbeing*. Salt Lake City, UT: DEF Publishers.
- Bakker, A.B., Demerouti, E., De Boer, E. & Schaufeli, W.B. (2004) Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62(2), 341–356.
- Bhaskar-Shrinivas, P., Harrison, D.A., Shaffer, M.A. & Luk, D.M. (2005) Input-based and time-based models of international adjustment: Meta-analytic evidence and theoretical extensions. *Academy of Management Journal*, 48(2), 257–281.
- Black, J.S. & Mendenhall, M. (1991) The U-curve adjustment hypothesis revisited: A review and theoretical framework. *Journal of International Business Studies*, 22(2), 225–247.
- Black, J.S., Mendenhall, M. & Oddou, G. (1991) Toward a comprehensive model of international adjustment: An integration of multiple theoretical perspectives. *Academy of Management Journal*, 16(2), 291–317.
- Black, J.S. & Stephens, G.K. (1989) The influence of the spouse on American expatriate adjustment and intent to stay in Pacific Rim overseas assignments. *Journal of Management*, 15(4), 529–544.
- Brenninkmeijer, V., Demerouti, E., Le Blanc, P.M. & van Emmerik, I. J.H. (2010) Regulatory focus at work. *Career Development International*, 15(7), 708–728.
- Cabrera, Á., Collins, W.C. & Salgado, J.F. (2006) Determinants of individual engagement in knowledge sharing. *The International Journal of Human Resource Management*, 17(2), 245–264.
- Chen, H.-F. & Chiu, Y.-H. (2009) The influence of psychological contracts on the adjustment and organisational commitment among expatriates. *International Journal of Manpower*, 30(8), 797–814.
- Chen, Y., Gupta, A. & Hoshower, L. (2006) Factors that motivate business faculty to conduct research: An expectancy theory analysis. *Journal of Education for Business*, 81(4), 179–189.
- Chen, Z., Eisenberger, R., Johnson, K.M., Sucharski, I.L. & Aselage, J. (2009) Perceived organizational support and extra-role performance: Which leads to which? *The Journal of Social Psychology*, 149(1), 119–124.
- Davies, S., Kraeh, A. & Froese, F.J. (2015) Burden or support? The influence of partner nationality on expatriate cross-cultural adjustment. *Journal of Global Mobility*, 3(2), 169–182.
- Davies, S., Stoermer, S. & Froese, F.J. (2019) When the going gets tough: The influence of resilience and organizational inclusion climate on expatriate work adjustment and turnover intentions. *International Journal of Human Resource Management*, 30(8), 1393–1417.
- De Wit, H. (2020) Internationalization of higher education. *Journal of International Students*, 10(1), 1–4.
- Demerouti, E., Bakker, A.B., Nachreiner, F. & Schaufeli, W.B. (2001) The job demands–resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.
- Eisenberger, R., Huntington, R., Hutchison, S. & Sowa, D. (1986) Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500–507.
- Enders, J. & Teichler, U. (1997) A victim of their own success? Employment and working conditions of academic staff in comparative perspective. *Higher Education*, 34(3), 347–372.
- Field, A. (2013) *Discovering statistics using IBM SPSS*. London, UK: Sage.
- Fornell, C. & Larcker, D.F. (1981) Evaluating structural equation models with unobservable variables and measurement error. *American Marketing Association*, 18(1), 39–50.
- Fox, K.J. & Milbourne, R. (1999) What determines research output of academic economists? *Economic Record*, 75(3), 256–267.
- Fox, M.F. (1992) Research, teaching, and publication productivity: mutuality versus competition in academia. *Sociology of Education*, 65(4), 293–305.
- Froese, F.J. (2010) Acculturation experiences in Korea and Japan. *Culture & Psychology*, 16(3), 333–348.
- Froese, F.J. (2012) Motivation and adjustment of self-initiated expatriates: The case of expatriate academics in South Korea. *The International Journal of Human Resource Management*, 23(6), 1095–1112.
- Froese, F.J. & Peltokorpi, V. (2011) Cultural distance and expatriate job satisfaction. *International Journal of Intercultural Relations*, 35, 49–60.
- Froese, F.J., Peltokorpi, V. & Ko, K.A. (2012) The influence of intercultural communication on cross-cultural adjustment and work attitudes: Foreign workers in South Korea. *International Journal of Intercultural Relations*, 36, 331–342.
- Froese, F.J., Stoermer, S., Reiche, S. & Klar, S. (2020) Best of both worlds: How embeddedness fit in the host unit and the headquarters improve repatriate knowledge transfer. *Journal of International Business Studies*, 1–19. <https://doi.org/10.1057/s41267-020-00356-4>
- Froese, F.J., Sutherland, D., Lee, J.Y., Liu, Y. & Pan, Y. (2019) Challenges for foreign companies in China: Implications for research and practice. *Asian Business & Management*, 18(4), 249–262.
- García-Gallego, A., Georgantzis, N., Martín-Montaner, J. & Pérez-Amaral, T. (2015) (How) Do research and administrative duties affect university professors' teaching? *Applied Economics*, 47(45), 4868–4883.
- Gottlieb, E.E. & Keith, B. (1997) The academic research–teaching nexus in eight advanced–industrialized countries. *Higher Education*, 34(3), 397–419.
- Gouldner, A.W. (1957) Cosmopolitans and locals: Toward an analysis of latent social roles. *Administrative Science Quarterly*, 2(3), 281–306.
- Hansen, M.T. (1999) The search–transfer problem: The role of weak ties in sharing knowledge across organization subunits. *Administrative Science Quarterly*, 44(1), 82–111.
- Haslberger, A., Brewster, C. & Hippler, T. (2013) The dimensions of expatriate adjustment. *Human Resource Management*, 52(3), 333–351.
- Hobfoll, S.E., Johnson, R.J., Ennis, N. & Jackson, A.P. (2003) Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology*, 84(3), 632–643.
- Huang, K.G. & Li, J. (2019) Adopting knowledge from reverse innovations? Transnational patents and signaling from an emerging economy. *Journal of International Business Studies*, 50(7), 1078–1102.
- Isakovic, A.A. & Whitman, M.F. (2013) Self-initiated expatriate adjustment in the United Arab Emirates: A study of academics. *Journal of Global Mobility*, 1(2), 161–186.
- Jia, H. (2018) “China’s plan to recruit talented researchers”. <https://www.nature.com/articles/d41586-018-00538-z> (accessed 01.06.2020).
- Johnes, G. (1988) Determinants of research output in economics departments in British universities. *Research Policy*, 17(3), 171–178.
- Kim, K. & Choi, S.B. (2017) Influences of creative personality and working environment on the research productivity of business school faculty. *Creativity Research Journal*, 29(1), 10–20.
- Kurtessis, J.N., Eisenberger, R., Ford, M.T., Buffardi, L.C., Stewart, K.A. & Adis, C.S. (2017) Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, 43(6), 1854–1884.
- Kwon, K.-S., Kim, S.H., Park, T.-S., Kim, E.K. & Jang, D. (2015) The impact of graduate students on research productivity in Korea. *Journal of Open Innovation: Technology, Market, and Complexity*, 1(21), 1–11.
- Larivière, V. (2012) On the shoulders of students?: The contribution of PhD students to the advancement of knowledge. *Scientometrics*, 90(2), 463–481.

- Lauring, J. & Selmer, J. (2015) Job engagement and work outcomes in a cognitively demanding context. *Personnel Review*, 44(4), 629–647.
- Lauring, J., Selmer, J. & Jacobsen, J.K.S. (2014) Business or pleasure? Blurring relocation categories and motivation patterns among expatriates. *Scandinavian Journal of Hospitality and Tourism*, 14(2), 170–186.
- Li, Y., Chen, A.S. & Song, Y. (2012) Does your intelligence help to survive in a foreign jungle? The effects of cultural intelligence and emotional intelligence on cross-cultural adjustment. *International Journal of Intercultural Relations*, 36(4), 541–552.
- Macfarlane, B. (2011) Professors as intellectual leaders: Formation, identity and role. *Studies in Higher Education*, 36(1), 57–73.
- Mägi, E. & Beerkens, M. (2016) Linking research and teaching: Are research-active staff members different teachers? *Higher Education*, 72(2), 241–258.
- Merton, R.K. (1968) *Social theory and social structure*, 4th edition. New York, NY: Free Press.
- Peeters, M.A. & Rutte, C.G. (2005) Time management behavior as a moderator for the job demand-control interaction. *Journal of Occupational Health Psychology*, 10(1), 64–75.
- Peltokorpi, V. & Froese, F.J. (2009) Organizational expatriates and self-initiated expatriates: Who adjusts better to work and life in Japan? *The International Journal of Human Resource Management*, 20(5), 1096–1112.
- Prasad, A. (2013) Playing the game and trying not to lose myself: A doctoral student's perspective on the institutional pressures for research output. *Organization*, 20(6), 936–948.
- Ramsden, P. (1994) Describing and explaining research productivity. *Higher Education*, 28(2), 207–226.
- Rapert, M.I., Kurtz, D.L. & Smith, S. (2002) Beyond the core triad: Just what do marketing academics do outside of teaching, research, and service? *Journal of Marketing Education*, 24(2), 161–167.
- Redden, E. (2017) "Ready to go expat?". <https://www.insidehighered.com/news/2017/07/26/several-countries-launch-campaigns-recruit-research-talent-us-and-elsewhere> (accessed 30.05.2020).
- Ren, H., Shaffer, M.A., Harrison, D.A., Fu, C. & Fodchuk, K.M. (2014) Reactive adjustment or proactive embedding? Multistudy, multiwave evidence for dual pathways to expatriate retention. *Personnel Psychology*, 67(1), 203–239.
- Rhoades, L. & Eisenberger, R. (2002) Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714.
- Richardson, C. & Wong, H.W. (2018) Expatriate academics in Malaysia: motivation, adjustment, and retention. *Journal of Management Development*, 37(3), 299–308. <https://doi.org/10.1108/JMD-12-2017-0421>
- Richardson, J. (2000) Expatriate academics in the globalized era: The beginnings of an untold story? *Asia Pacific Business Review*, 7(1), 125–150.
- Richardson, J. & Mallon, M. (2005) Career interrupted? The case of the self-directed expatriate. *Journal of World Business*, 40(4), 409–420.
- Richardson, J. & McKenna, S. (2002) Leaving and experiencing: Why academics expatriate and how they experience expatriation. *Career Development International*, 7(2), 67–78.
- Robert, J. & Carlsen, W.S. (2017) Teaching and research at a large university: Case studies of science professors. *Journal of Research in Science Teaching*, 54(7), 937–960.
- Romanowski, M.H. & Nasser, R. (2015) Identity issues: Expatriate professors teaching and researching in Qatar. *Higher Education*, 69(4), 653–671.
- Rosser, V.J. (2004) Faculty members' intentions to leave: A national study on their worklife and satisfaction. *Research in Higher Education*, 45(3), 285–309.
- Schaufeli, W.B. & Bakker, A.B. (2004) Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315.
- Schaufeli, W.B. & Taris, T.W. (2014) A critical review of the job demands-resources model: Implications for improving work and health. In: Bauer, G.F. & Hämmig, O. (Eds.) *Bridging occupational, organizational and public health: A transdisciplinary approach*. Dordrecht, NL: Springer, pp. 43–68.
- Selmer, J. & Lauring, J. (2009) Cultural similarity and adjustment of expatriate academics. *International Journal of Intercultural Relations*, 33(5), 429–436.
- Selmer, J. & Lauring, J. (2010) Self-initiated academic expatriates: Inherent demographics and reasons to expatriate. *European Management Review*, 7(3), 169–179.
- Selmer, J. & Lauring, J. (2011) Expatriate academics: Job factors and work outcomes. *International Journal of Manpower*, 32(2), 194–210.
- Selmer, J. & Lauring, J. (2013) Self-initiated expatriate academics: Personal characteristics and work outcomes. In: Vaiman, V. & Haslbergler, A. (Eds.) *Talent management of self-initiated expatriates: A neglected source of global talent*. London, UK: Palgrave Macmillan, pp. 181–201.
- Selmer, J., Lauring, J., Normann, J. & Kubovcikova, A. (2015) Context matters: Acculturation and work-related outcomes of self-initiated expatriates employed by foreign vs. local organizations. *International Journal of Intercultural Relations*, 49, 251–264.
- Selmer, J., Trembath, J.-L. & Lauring, J. (2017) Expatriate academics: An era of higher education internationalization. In: McNulty, Y. & Selmer, J. (Eds.) *Research handbook of expatriates*. Cheltenham, UK: Edward Elgar Publishing, pp. 335–349.
- Stephan, P.E. & Levin, S.G. (1991) Inequality in scientific performance: Adjustment for attribution and journal impact. *Social Studies of Science*, 21(2), 351–368.
- Stephan, P.E. & Levin, S.G. (1992) *Striking the mother lode in science: The importance of age, place, and time*. New York, NY: Oxford University Press.
- Stichweh, R. (2013) *Wissenschaft, Universität, Professionen: Soziologische Analysen*, 2nd edition. Bielefeld, DE: Transcript.
- Stoermer, S., Davies, S. & Froese, F.J. (2021) The influence of expatriates' cultural intelligence on embeddedness and knowledge sharing: The moderating effects of host country context. *Journal of International Business Studies*, 52(3), 432–453.
- Taylor, S.W., Fender, B.F. & Burke, K.G. (2006) Unraveling the academic productivity of economists: The opportunity costs of teaching and service. *Southern Economic Journal*, 72(4), 846–859.
- Thun, S. & Bakker, A.B. (2018) Empowering leadership and job crafting: The role of employee optimism. *Stress and Health*, 34(4), 573–581.
- Tight, M. (2002) What does it mean to be a professor? *Higher Education Review*, 34(2), 15–32.
- Tims, M., Bakker, A.B. & Derks, D. (2012) Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80(1), 173–186.
- Trembath, J.-L. (2016) The professional lives of expatriate academics. *Journal of Global Mobility*, 4(2), 112–130.
- van den Broeck, A., van Ruyseveldt, J., Smulders, P. & De Witte, H. (2011) Does an intrinsic work value orientation strengthen the impact of job resources?: A perspective from the Job demands-resources model. *European Journal of Work and Organizational Psychology*, 20(5), 581–609.
- van Doorn, R.R.A. & Hülsheger, U.R. (2015) What makes employees resilient to job demands? The role of core self-evaluations in the relationship between job demands and strain reactions. *European Journal of Work and Organizational Psychology*, 24, 76–87.
- Varma, A., Yoon, Y.-J. & Froese, F.J. (2021) Cultural distance and host country national support: Two studies on the expatriate experience in Central/South America. *Cross-Cultural and Strategic Management*, 28(2), 407–423. <https://doi.org/10.1108/CCSM-02-2020-0036>

- Wilkins, S. & Neri, S. (2019) Managing faculty in transnational higher education: Expatriate academics at international branch campuses. *Journal of Studies in International Education*, 23(4), 451–472.
- Xanthopoulou, D., Bakker, A.B., Demerouti, E. & Schaufeli, W.B. (2007) The role of personal resources in the job demands–resources model. *International Journal of Stress Management*, 14(2), 121–141.
- Xanthopoulou, D., Bakker, A.B. & Fischbach, A. (2013) Work engagement among employees facing emotional demands. *Journal of Personnel Psychology*, 12(2), 74–84.

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