REVIEW ARTICLE

Assessing the status quo of international employees' adjustment research, 1990–2022: a review and future research agenda

Irma Baneviciene[1]✉, Maike Andresen[2] & Vilmante Kumpikaite-Valiuniene[3]

This study aims to comprehensively review scientific journal articles related to the adjustment of international employees within the management and business domain from 1990 to 2022. The study seeks to identify trends and patterns in research topics and to propose a future research agenda. To achieve this, we analysed 222 articles from the Web of Science Core Collection database through two main steps: (1) a bibliometric analysis to track the field's evolution over time and (2) a content analysis of abstracts to examine covered topics and pinpoint research gaps. Our findings indicate that the theory surrounding the adjustment of international employees is still in the process of maturation, with several potential areas for future research emerging. The analysis reveals that factors influencing adjustment are the most extensively researched for assigned expatriates, leaving other international employees relatively under-researched. Moreover, quantitative research emerged as the most prevalent methodological approach among the included studies. Most study samples predominantly consisted of individuals moving between Asia, Europe, and North America, underscoring the significance of Africa—characterised by substantial migration flows within the region—as a focal point for future adjustment research. Moreover, individual-, organisation-, and country-related antecedents of international employees' anticipatory and in-country adjustments were analysed to present conclusions for future research. This study supplements the domains of international human resource management and international business by identifying research priorities concerning the adjustment of international employees and outlining an agenda for further research.

Introduction

Economic globalisation facilitates the movement of people, capital, goods, and ideas across borders, leading to a significant rise in international mobility among the workforce, a trend that is of global relevance (Duan et al. 2021). According to the International Organisation for Migration (IOM UN Migration 2022), the global population of international migrants

[1] Kaunas University of Technology, School of Economics and Business, Kaunas, Lithuania. [2] University of Bamberg, Department of Social Sciences, Economics, and Business Administration, Bamberg, Germany. [3] Kaunas University of Technology, School of Economics and Business, Kaunas, Lithuania. ✉email: irma.baneviciene@ktu.edu

reached approximately 281 million in 2020, representing 3.6% of the world's population. This figure marks a significant increase from previous years, with 128 million more international migrants than in 1990 and over three times the number reported in 1970 (IOM UN Migration 2022). The adjustment of these individuals to new countries and organisations varies depending on factors such as language barriers, geopolitical dynamics, cultural differences, and familial status. Therefore, research into working people's international mobility and adjustment has gained much attention from researchers worldwide.

A review of previous studies on adjustment highlights a predominant focus on cross-cultural issues, including the development of adjustment over time, the influence of prior international experience, cross-cultural training, and intercultural learning (Chenyang 2022; Morris et al. 2014; Nam et al. 2014; Takeuchi and Chen, 2013). Additionally, numerous antecedents of expatriate adjustment have been examined, such as personality traits, expatriate-local interactions, family dynamics, and organisational factors (Van Bakel 2019; Dang et al. 2022; Harari et al. 2018; Haslberger and Brewster 2008; Kang and Shen 2018; Takeuchi 2010). Similarly, studies by Hajro et al. (2019), Schudey et al. (2012), and Shen and Hall (2009) explored the influences of individual, organisational, and social variables on migrants' acculturation, coping mechanisms and integration, as well as repatriate readjustment.

This review makes a unique contribution by focusing on the factors influencing the adjustment of different groups of international employees, namely expatriates and migrants. Through systematic literature mapping, it delineates the scope of existing research on adjustment, its evolution over time, and differences between employee groups. By aligning findings with macro-level migration data, the study identifies research gaps and priorities, which are crucial for enhancing our understanding of adjustment processes and informing future research directions. This unique approach aims to advance research on the adjustment of international employees (IE), thereby contributing to the existing body of knowledge on international human resource management and international business.

The literature reveals a plethora of definitions of IEs based on various factors such as mobility patterns, employment characteristics, education level, support availability, and planned duration of stay in a foreign country. However, these definitions often overlap, and authors tailor unique definitions to suit their research needs (Andresen et al. 2018). Common types of IEs include assigned expatriates, self-initiated expatriates (SIEs), sojourners, migrants, international business travellers, short-term assignees, rotational assignees, and international commuters, with SIEs, assigned expatriates, skilled migrants, and skilled immigrants being the most frequently discussed groups in the literature (Andresen et al. 2014; McNulty and Selmer 2017; Cerdin and Selmer 2014; McNulty and Brewster 2017).

The adjustment of IEs is multifaceted and varies depending on the type of IE and the circumstances surrounding their becoming IEs (Shaffer et al. 1999). According to Waxin and Panaccio (2005), the intercultural adjustment of expatriates is defined as a ratio of human psychological comfort and knowledge of a foreign culture. However, scholars have offered differing definitions of intercultural adjustment, with terms such as adjustment, adaptation, assimilation, acculturation, and integration often used interchangeably (Harrison et al. 2004). In this study, "adjustment" is the standard term to denote realigning one's needs with new cultural demands after relocating to an unfamiliar cultural environment (Aycan 1997; Bhaskar-Shrinivas et al. 2005).

Against this backdrop, a hybrid literature review was conducted, combining bibliometric analysis and content analysis of scientific article abstracts published between 1990 and 2022.

Generated systematic literature mapping aimed to (1) provide insights into the field's evolution over time; (2) identify research trends, priorities, and critical areas; (3) pinpoint research gaps for future exploration.

This study contributes to adjustment theory in five key ways. Firstly, it highlights the need to refine the adjustment construct's definition, conceptual landscape, nomological network, and causal mechanisms. Secondly, it underscores the importance of systematically identifying the boundary conditions of adjustment theory. Thirdly, it tracks evolutionary nuances to anticipate the trajectory of adjustment research. Fourthly, it identifies critical knowledge gaps to inform future research directions. Finally, recommendations for research methods are provided to facilitate the evolution of adjustment theory from an intermediate to a mature state.

The paper has been structured into four parts. The first part defines adjustment together with an overview of its most essential antecedents that can be identified in the literature. It expounds upon the methodology and strategy used in the study. The second part presents the findings of the bibliometric analysis that indicates general information such as publication year, country, and the research sample's nationality. The third part covers the content analysis of the abstracts with the presentation of the covered themes and research areas. The final part then discusses the main results and limitations and outlines future research areas.

Theoretical background

The adjustment model proposed by Black et al. (1991) depicts the factors influencing adjustment and refers to the group of assigned expatriates. The authors differentiate between *anticipatory* and *in-country* adjustment, representing two stages of the expatriate cross-cultural adjustment process. *Anticipatory* adjustment, which occurs before the international relocation, is determined by *individual* factors, such as training and previous experience and *organisational* factors, such as selection mechanisms and criteria. It is assumed that individuals' anticipatory adjustment, i.e., their preparation before they embark on the journey to the host country, will ease their adjustment abroad. Black et al. (1991) highlighted four influencing factors related to *in-country* adjustment, which takes place upon relocation to the destination country, that relate to the sphere of the *individual* (self-efficacy, relation skills, and perception skills), *job* (role clarity, role discretion, role novelty, role conflict), *organisation* (organisation culture novelty, social support, logistical help, socialisation tactics, socialisation content), and *nonwork* (culture novelty and family-spouse adjustment). The in-country adjustment process leads to different degrees of adjustment in terms of *work, interaction*, and *general* adjustment in the country of destination that can be measured.

Subsequent researchers delving into adjustment and extending the framework proposed by Black et al. (1991) revealed additional factors influencing anticipatory and in-country adjustment. For instance, Yijälä et al. (2012) investigated the anticipatory adjustment of highly skilled, self-initiated foreign employees, shedding light on specific challenges and strategies pertinent to this cohort. They differentiate between *psychological, socio-psychological*, and *work-related* anticipatory adjustment. Lett and Smith (2009) distinguished – analogous to Black et al. (1991) – *pre-departure* and *in-country* adjustment and highlight *individual, organisational, job*, and *non-work* factors that impact adjustment before and after moving to the destination country.

Ritchie et al. (2015) expanded on general adjustment following relocation by identifying additional precursors, including job satisfaction, team cohesion, and alignment with organisational values. Additionally, they advocate for the incorporation of
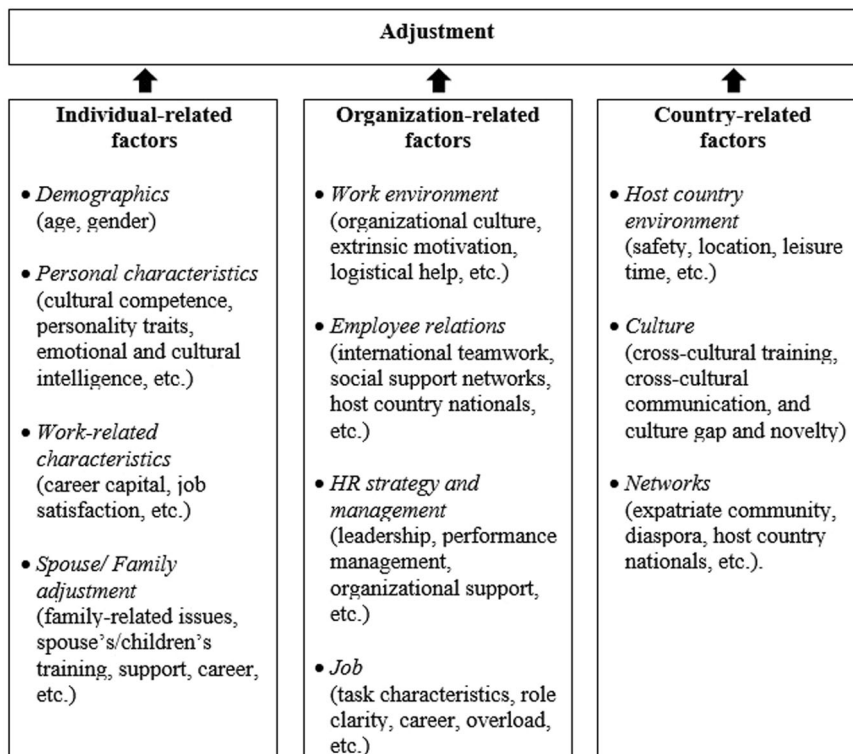
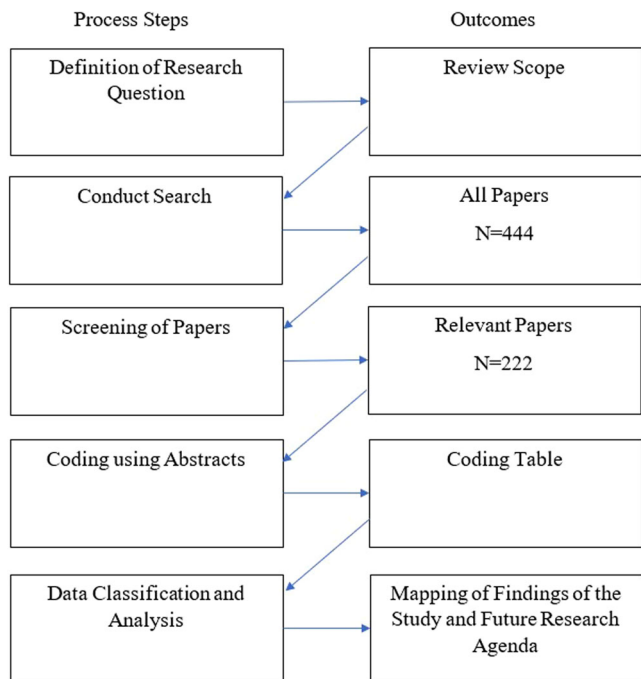**Fig. 1** Model of factors influencing IE adjustment.

Fig. 2 Study mapping process.

control variables related to demographics and individual traits such as gender, family status, parental responsibilities, professional background, tenure, and linguistic abilities (Caligiuri et al. 1998; Canhilal et al. 2015; Chen 2010; Lee et al. 2014), a recommendation that subsequent scholars have adopted in their studies. Hippler et al. (2014) divided their scale into ten factors delineating various aspects or changes that may necessitate adjustment. These factors encompass aspects of the work environment, language proficiency, job or task attributes, recreational activities, urban setting, work-life balance, living accommodations, familial dynamics, local social connections, and communication with those remaining behind. This approach shows that *work-related* facets of IEs' adjustment receive the least attention.

After reviewing the antecedents of adjustment proposed by different authors (e.g., Black et al. 1991; Caligiuri et al. 1998; Chen, 2010; Hippler et al. 2014; Lee et al. 2014; Lett and Smith, 2009; Ritchie et al. 2015), both similarities and some differences become apparent. Based on this overview, we group the antecedents of IEs' adjustment (anticipatory and in-country) into the following main groups: individual-, organisation-, and country-related antecedents (see Fig. 1).

Methods

The study aims to achieve several objectives: firstly, to offer a comprehensive overview of the evolution of research within the adjustment field over time, including the types of international employees (IEs) whose adjustment is being researched, the terminology utilised to describe 'adjustment' in publications, and the research methodologies employed. Secondly, it seeks to identify trends in research topics, delineate research priorities, and highlight critical research areas. Lastly, the study aims to uncover research gaps that necessitate attention in future studies.

The methodology employed in our study, illustrated in Fig. 2, follows an adapted systematic mapping approach proposed by Petersen et al. (2008). This approach enables the collation, description, and cataloguing of available evidence, as elucidated by James et al. (2016). By adopting this approach, we can provide a broad overview of a research field and identify the amount and type of research in this field (Petersen et al. 2008; Soaita et al. 2020), as elaborated upon in subsequent sections.

For analysis purposes, we utilised the Web of Science (WoS) Core Collection database, renowned as one of the premier platforms for scientific citation search, discovery, and analytical information (Li et al. 2018). Scholars frequently rely on this database for bibliometric analyses (Vlase and Lähdesmäki 2023).

With its comprehensive coverage spanning articles from 1900 onwards (Chadegani et al. 2013), the WoS database provides a robust foundation for gaining insights into trends in academic research on IEs' adjustment, a vital component of this study.

To conduct our literature search, we established specific inclusion criteria. We designated the base timeframe for the search period from 1990 to 2022 (July). Within the WoS platform, we focused on the management and business categories, representing the primary disciplines relevant to international employees' adjustment. Articles were restricted to published in English, the predominant language for international collaboration.

We formulated search terms targeting IEs and an adjustment in identifying relevant articles. For the IE aspect, keywords such as immigrant, migrant, and expatriate were employed. Concerning adjustment, the terms adaptation, assimilation, acculturation, and integration were selected, aligning with the terminology outlined by Harrison et al. (2004) as synonymous with adjustment. The search terms were combined of the two search fields into a search string using "AND" to search the title, abstracts, or keywords of the articles, i.e. (immigra* OR migra* OR expatriat*) AND (adjust* OR adapt* OR assimilat* OR acculturat* OR integrat*). As an additional criterion, it was stipulated that one of the keywords related to adjustment must be present as an article keyword. Article keywords were meticulously chosen by authors to accurately encapsulate the essence of their paper (Emich et al. 2020; Zhang et al. 2016). Hence, if authors perceive their article as directly pertinent to adjustment, they are inclined to opt for the term as a keyword.

The search yielded a total of 444 articles. The abstracts of these articles were imported into the MAXQDA software, commonly used for qualitative and mixed methods research. Each abstract was meticulously reviewed to confirm its relevance to IE adjustment. In cases where abstracts lacked clarity and inclusion or exclusion was uncertain, the introduction or conclusion of the paper was consulted for clarification (Petersen et al. 2008). Out of the initial pool, 222 articles were identified as unrelated to IE adjustment, focusing instead on consumer acculturation's impact on product selection, micromarketing issues regarding immigration and acculturation, and differences in labour and capital incomes between immigrants and natives. The final selection of the articles for the study consists of 222 articles.

A hybrid approach combining bibliometric analysis and structured review was adopted to analyse the data and achieve the research objectives, following the framework proposed by Paul and Criado (2020). Bibliometric analysis provided insights into the evolution of the field and trends in articles on adjustment and their prevalence concerning types of international employees published from 1990 to 2022. Concurrently, structured review techniques, including content analysis, were employed to identify research trends and uncover research gaps (Paul and Criado 2020). Content analysis systematically condenses extensive text into categories based on predefined coding rules, facilitating the identification of document trends and patterns (Stemler 2000), thus offering a systematic and objective means of describing and quantifying phenomena (Downe-Wamboldt, 1992).

The initial coding process involved 50 articles from the corpus of 222, conducted by one author and subsequently reviewed by other authors. The coding system was refined through discussions among the authors, ensuring consensus. Following this, the 50 initial abstracts were re-analysed, and all remaining abstracts were subjected to the established coding rules. (1) Main categories were created for all statistical data: publication year, research method, terminology of 'adjustment' used in the articles, country of research, nationality of participants, and type of IE. (2) Deductive categories of anticipatory and in-country adjustment were utilised to examine the antecedents of IE adjustment. Each category was further subdivided into individual-related, organisation-related, and country-related antecedents. Inductive codes were then defined for each identified antecedent and assigned to the deductive categories (refer to Table 1 for details).

All statistical data and specified antecedents underwent coding based on the abstracts. A total of 1522 coding instances were assigned. The total number of codings per category sometimes varied from the total number of articles in the corpus. This discrepancy occurred because not all articles included information relevant to every category, or multiple subcategories within an article were pertinent, resulting in multiple codings. For instance, if an article examined and assigned expatriates and self-initiated expatriates within its sample, two codings were recorded under the IE type category.

The interrelationships among the categories were analysed to identify prevalent themes and underlying patterns of connection.

Results

General information

Field progression over time. A total of 222 articles spanning from 1990 to 2022 were subjected to analysis (refer to Fig. 3). The distribution of articles across each year within this timeframe reveals distinct phases in the evolution of interest in IE adjustment research: before 1999, between 2000 and 2016, and from 2017 onwards. Before 1999, sporadic publications occurred every few years (a total of five), indicating budding interest in the field without establishing it as a full-fledged area of research. From 2000 to 2016, researchers consistently, albeit modestly, addressed IE adjustment, with the number of published articles gradually increasing from two per year to a maximum of 12 in specific years. Notably, since 2017, 27 years after the first publication on IE adjustment, the annual publication count has consistently reached 20 or more, albeit not every year. This sustained growth in publications within the management and business domains reflects rising scholarly interest in IE adjustment. Such findings affirm our initiative to delve into topic diversity, identify research gaps, and contribute to the future advancement of the field.

Types of IEs researched. Coding the type of IEs studied in the articles in the corpus generated 230 codings (see Fig. 4). Based on the terminology used in the abstracts by the researchers themselves to elucidate the types of IEs studied in each case, two subcategories of IEs were generated: (a) expatriates (assigned expatriates and self-initiated expatriates) and (b) migrants (migrant workers, immigrants, and skilled/qualified migrants).

In comparison, a more significant proportion of articles concentrated on the expatriate cohort (197 articles) than the migrant cohort (33 articles). Specifically, assigned expatriates emerged as the most extensively studied subgroup within the expatriate cohort, with 165 articles dedicated to their adjustment consistently appearing in the scientific literature over the years. Notably, research on the adjustment of assigned expatriates commenced as early as 1990 and has steadily escalated since 2000. The period post-2017 witnessed a sustained and notable volume of articles on assigned expatriates, indicating continued scholarly interest in this area.

Conversely, a significantly smaller number of research publications delved into the adjustment of self-initiated expatriates (SIEs) (32 articles), albeit ranking as the second highest. Interestingly, the earliest article addressing the adjustment of SIEs only emerged in 2008. Although the number of articles SIEs has remained relatively low over the years, there was a notable surge in 2021 with nine articles. Nonetheless, research on SIEs has persisted since 2012, albeit in limited numbers.

Table 1 Coding table.

Category System	Frequency of codings per category	Frequency of codings per subcategory	Frequency in first-order codes	Frequency in second-order codes
Publication year	222			
International employee types	230			
Expatriates		197		
Assigned expatriates			165	
Self-initiated expatriates			32	
Migrants		33		
Migrant workers			4	
Immigrants			20	
Skilled/Qualified migrants			9	
General adjustment topics	61			
New model/enhancement propositions		17		
Testing of models		9		
Looking for antecedents of adjustment (specific situation)		22		
Adjustment as mediator		13		
Terminology of "adjustment"	222			
Acculturation		19		
Adaptation		22		
Adjustment		167		
Assimilation		2		
Integration		12		
Research methods	186			
Methodological choice		166		
Quantitative			119	
Qualitative			36	
Mixed methods			11	
Strategy		8		
Case study			2	
Secondary sources			6	
Time horizon		12		
Longitudinal			12	
Country where research is performed	149			
Nationality/ethnicity of participants	96			

Table 1 (continued)

Category System	Frequency of codings per category	Frequency of codings per subcategory	Frequency in first-order codes	Frequency in second-order codes
Anticipatory adjustment	33			
Individual – related		19		
Language proficiency			1	
Motivation to migrate			3	
Pre-departure expectations			4	
International experience			11	
Organisation - related		3		
Organizational support			1	
Organisational identification			1	
Recruitment, selection			1	
Country - related		11		
Host country environment			2	
Cross-cultural training			9	
In-country adjustment	323			
Individual-related		148		
Demographics			13	
Female				4
Men vs. women				8
Age				1
Personal Characteristics			100	
Social capital				2
Acculturation/adaptation strategy				10
Person-environment fit				5
Host language proficiency				11
Cross-cultural competencies				2
Work-life balance, well-being				3
Emotional intelligence				6
Cultural intelligence				18
Personal qualities, identity				29
Focus, goal, motivation				14
Work-related characteristics			14	
Psychological contract				3
Organisational commitment				3
Organisational embeddedness				1
Job satisfaction				3
Career capital				4
Family-spouse adjustment			21	
Family-related issues				3
Host country language proficiency				1
Host country nationals				2

The second cohort, migrants, was represented in 33 articles. Among these, the term "immigrant" was predominantly utilised in 20 articles to define the focus group of their research. Four articles specifically focussed on migrant workers, while nine underscored the high skills or qualifications of the migrants in their respective samples. Moreover, research on adjustment primarily concentrated on adjusting IEs to the host country, with no studies additionally analysing the reciprocal adjustment of locals to the cultural changes introduced by IEs.

To summarise, most adjustment research focuses on expatriates, particularly assigned expatriates, with a notable increase in articles over the years. Conversely, studies on all other groups have remained consistent, albeit low, levels. Furthermore, adjustment was predominantly explored unilaterally through the lens of IEs.

Adjustment terminology used. The terms adjustment, acculturation, assimilation, integration, and adaptation have been used to describe IEs' successful settling in a new host country, new job, or community. Figure 5 shows the adjustment terms used in the scientific literature concerning a specific type of IE.

Assimilation is the least utilised term in the literature on IE adjustment, appearing in only two articles. Acculturation, integration, and adaptation were employed more frequently, with 13, 12, and 23 articles, respectively. However, the usage frequency of these terms pales compared to the predominant use of the term adjustment, which was featured in 174 articles.

Furthermore, we analysed the extent to which multiple terms were employed within individual article abstracts. While most authors consistently used only one term in their articles, a minority of articles (9) utilised four of the five adjustment terms in varying combinations. For instance, as the primary term, adjustment was paired with acculturation (1) and integration (1). Acculturation, as the primary term, was coupled with adjustment (1), assimilation (1), or integration (4). Assimilation, as the primary term, was combined with acculturation (1) and

5

Table 1 (continued)

Cultural distance			2
Organisational/social support			8
Coping strategies			4
Personality traits			1
Organisation - related	95		
Job-Related		16	
Role clarity, discretion			5
Length of assignment			1
Job position, wage			3
Organizational justice			1
Person-organization fit			2
Workplace learning			4
Human Resource Strategy and Management		36	
HRM practices			5
Organizational support			14
Mentoring/coaching			4
Performance management			2
Leadership			11
Employee Relations		30	
Organisational socialisation			10
Social support networks			5
Host country nationals			10
International teamwork			5
Work environment		13	
Cross-cultural training			2
Organizational culture			6
Logistical help			2
Employer trust			2
Extrinsic motivation			1
Country - related	80		
Networks		24	
Host country nationals			8
Spousal/family support			3
Social support networks			13
Culture		43	
Cross-cultural training			9
Cross-cultural communication			7
Cultural gap, novelty			27
Host Country Environment		13	
Location			2
Hostile environment, terrorism			4
Religion, beliefs, ethnicity			3
Stress, stressors			4
	1522		

(2 instances), while integration (migrants: 10 [30.3%]; expatriates: 2 [1%]) and acculturation (migrants: 11 [33.3%]; expatriates: 7 [3.6%]) were employed more frequently in research related to migrants compared to expatriates.

Research methods. Table 3 presents the research methods outlined in the abstracts of the articles. These methods were categorised based on the research onion framework proposed by Saunders et al. (2009), distinguishing between methodological choice, time horizon, and strategy. Quantitative research emerged as the most frequently employed methodological choice (124 instances) in IE adjustment research, followed by qualitative research methods (38 instances) and mixed methods (11 instances), with a considerable margin between them. Concerning the time horizon of the research, only 11 articles with a longitudinal design were identified since 1990 in the domain of IE adjustment. Several unique features were observed regarding the research strategy, including case studies (2 instances) and secondary sources (7 instances). Notably, the methodological choice was listed in the abstracts of only 186 (84%) articles.

In summary, quantitative research predominated in both expatriate and migrant groups. However, studies on migrants exhibited a relatively higher proportion of qualitative methods. Additionally, there was slightly more variability in the research methods employed for expatriates than migrants.

Trends in research topics and critical research priorities
Host countries and nationality of participants. Notably, 154 articles specified the country or countries where the research was conducted, while 96 articles indicated the nationality of the participants. Some articles opted to identify regions rather than specific countries (e.g., Asia or Africa) without providing details on the nationalities of the participants, leading to ambiguity regarding the participants' origins and the research locations. The information extracted from the articles was categorised based on the type of international employee (IE) under study, as outlined in Table 4.

Whenever available, the nationalities of the IE samples were classified according to geographic regions defined by the (United Nations 2022): Africa, Asia, Europe, Latin America and the Caribbean, North America, and Oceania. Analysis of the abstracts revealed that the samples predominantly comprised IEs from Asian (42 instances), European (24 instances), and North American (14 instances) origins. Conversely, IEs from Africa (1 instance), Latin America and the Caribbean (3 instances), and Oceania (2 instances) were less frequently examined in terms of adjustment. Among the focal regions, Chinese (17 instances), Japanese (12 instances), and American (12 instances) IEs were the most commonly studied. Notably, the Japanese IE group exclusively consisted of assigned expatriates.

A similar trend is observed concerning the host countries where international employees reside. Based on available data, the majority of research on IE adjustment focused on IEs living in Asia (93 instances), Europe (23 instances), and North America (18 instances), with significantly fewer studies conducted in regions such as Africa (8 instances), Latin America and the Caribbean (4 instances), and Oceania (8 instances). Examining individual countries, the data indicate that China (25 instances), Japan (10 instances), and the United States (13 instances) were the primary host countries for IE adjustment research. Among studies focusing on Japan or China as host countries, the articles predominantly referred to expatriates, particularly assigned expatriates (84% and 70%, respectively), rather than migrants.
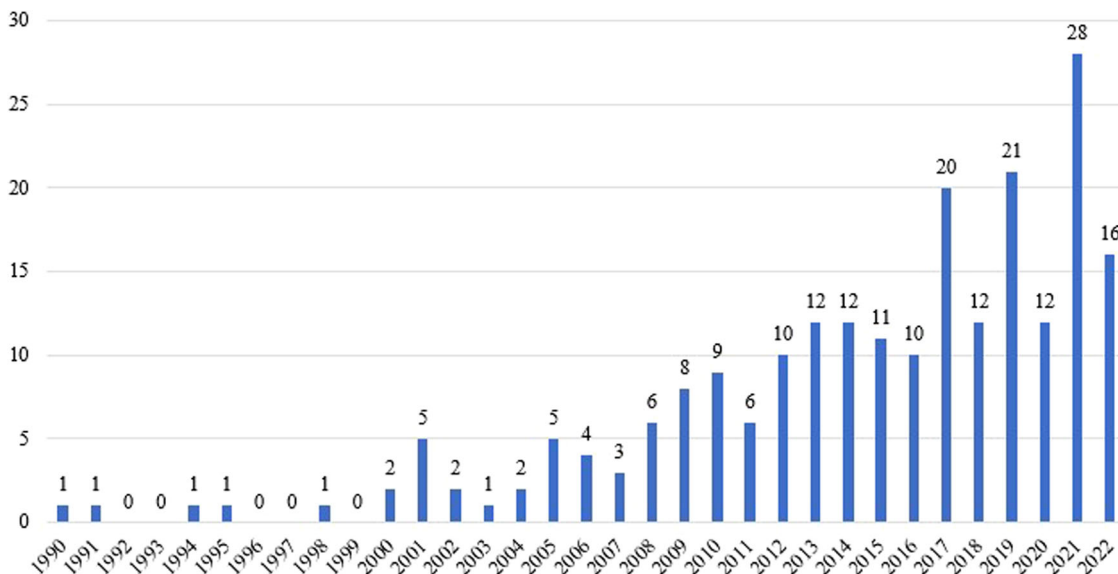
integration (2). Notably, the term adaptation was not used concurrently with the other terms. Integration was frequently interchanged with other terms within the same articles (7) (refer to Table 2 for details).

The analysis of bibliometric data also highlights variations in the predominant adjustment terms across different types of international employees. A comparison between expatriates and migrants reveals distinct patterns. Research articles concerning expatriates predominantly utilised the terms adjustment (160 [81.2%]) and adaptation (21 [10.7%]). Conversely, these terms were less prevalent in studies focusing on migrants, accounting for only 14 (42.4%) and 2 (6.1%) instances, respectively. Notably, the term assimilation was exclusively used in studies on migrants

Fig. 3 Number of articles on IE adjustment published per year, 1990–2022.
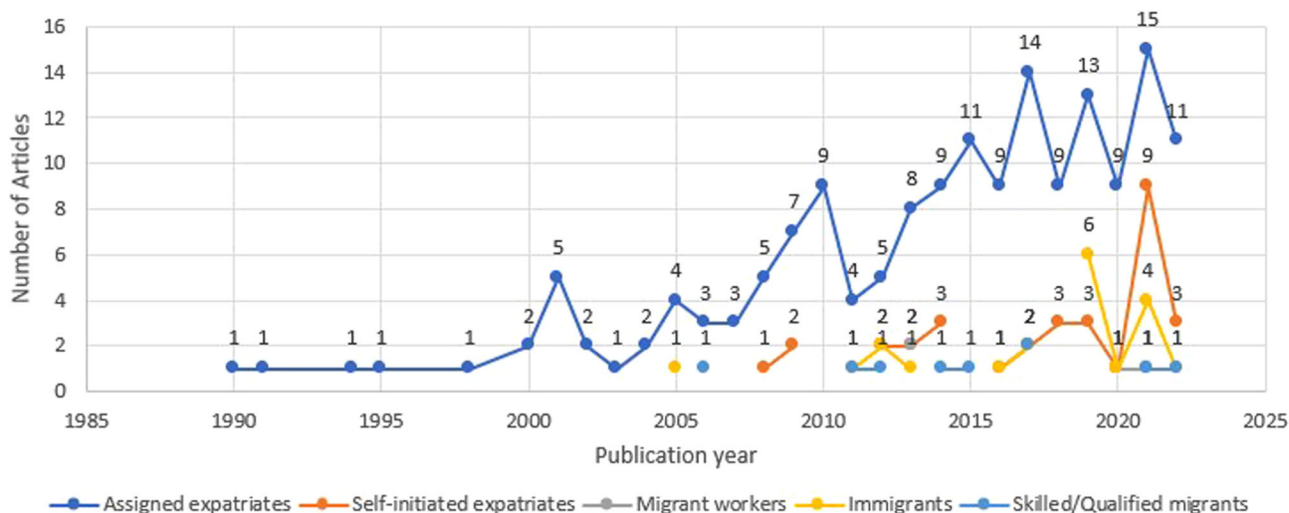

Fig. 4 Use of the different IE types to name the samples per year.

Overall, the findings suggest that regions such as Africa, Latin America, the Caribbean, and Oceania, along with their nationals, were significantly underrepresented in research on IE adjustment.

Anticipatory adjustment of IEs. Anticipatory adjustment, comprising 34 studies, was most frequently examined in association with assigned expatriates (23 studies) (refer to Table 5). Anticipatory adjustment was not a significant focus in studies involving migrant IE groups (4 studies). The two primary factors explored concerning anticipatory adjustment were cross-cultural training to prepare assigned expatriates for their new roles during foreign assignments (9 studies) and previous international experience (11 studies, of which eight referred to assigned expatriates). Other factors, such as language proficiency, motivation to migrate, pre-departure expectations, organisational support and identification, recruitment/selection, and the host country environment, were only explored in limited studies.

In-country adjustment of IEs. Many studies have dealt with adjustment in the host country, which was named 238 times. Factors/antecedents were grouped into individual-, organisation- and country-related groups (refer to Table 6). Individual factors were researched most frequently (155), followed by organisational (95) and country-related (78) factors.

Out of *individual* factors, demographics such as gender and age were explored in 14 articles related to the expatriate group. Personal characteristics, including cultural competence, personality traits, and networks, were the most extensively researched aspect, with 105 studies dedicated to this area. Most of this research targeted assigned expatriates (79 studies), with relatively fewer studies focusing on SIEs and the broader migrant group (14 and 12 studies, respectively). Additionally, there were 22 articles focusing on spouse/family adjustment, examining how family dynamics impacted IE adjustment and considering factors such as support networks, personality traits, host country nationals, and language proficiency. Most of these articles (20 out of 22) were related to assigned expatriates. Individual work-related
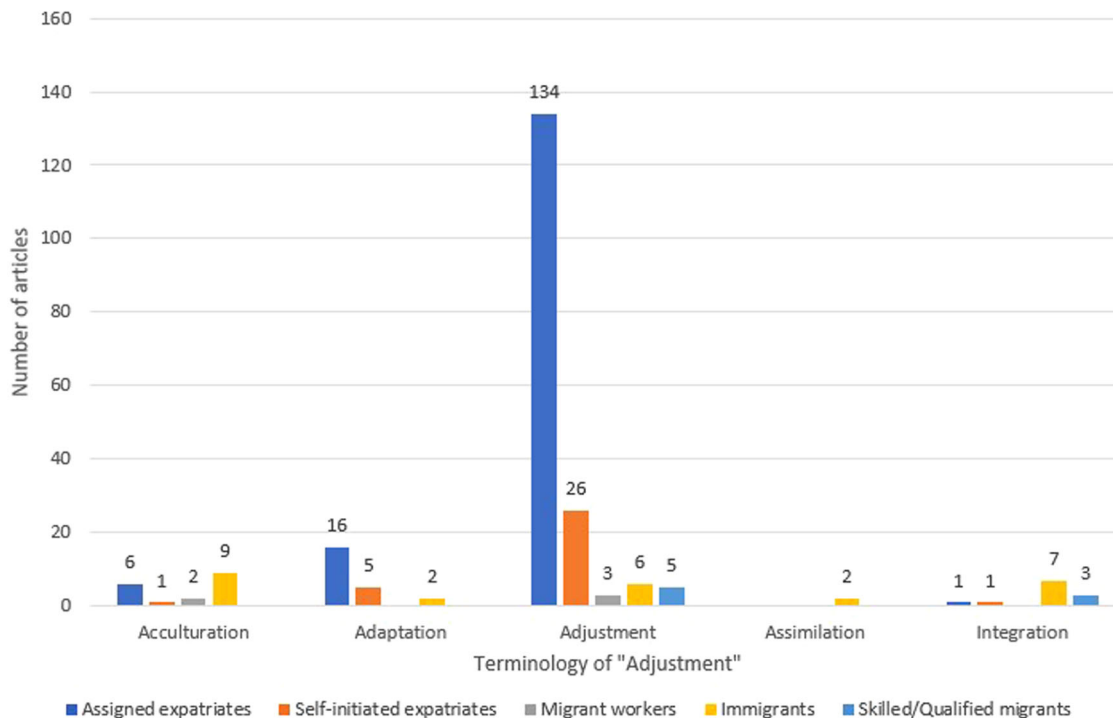
Fig. 5 Use of terminology around "adjustment" according to IE types.

Table 2 The terminology of "adjustment" is used within the same articles.

Main term \ Alternative term	Acculturation	Adaptation	Adjustment	Assimilation	Integration
Acculturation			1	1	4
Adaptation					
Adjustment	1				1
Assimilation	1				2
Integration	4		1	2	

characteristics, such as organisational commitment, embeddedness, and job satisfaction, were also investigated in 14 studies, with all but two articles referencing the expatriate group.

Regarding *organisational* factors, particular attention was given to two areas: human resource strategy and management (including leadership, performance management, and organisational support), which were the focus of 35 studies, and employee relations (such as international teamwork, social support networks, and organisational socialisation), which were explored in 30 studies. Additionally, there were studies examining job-related factors (such as role clarity and workplace learning) and the role of the work environment in adjustment (including organisational culture and extrinsic motivation). Most of these articles primarily focused on assigned expatriates, with four-fifths of the articles on HR strategy and management related to this group.

Finally, concerning *country-related factors*, studies focused mainly on culture (cross-cultural training, cross-cultural communication, and cultural gap, novelty) (43), as well as networks (social support networks, spousal/family support, and host country nationals) (21) and the impact of the host country environment (culture, safety, location, leisure time, etc.) (14) on IE adjustment. Like the previously analysed groups, country-related factors influencing adjustment primarily concentrated on assigned expatriates (59 studies), potentially limiting the generalisation of adjustment patterns to other types of IEs.

In summary, individual, organisational, and country-related factors were predominantly examined through the lens of assigned expatriates. Regarding the distribution of topics by IE type, the analysis revealed that studies on assigned expatriates (49.8%) and SIEs (50%) primarily focused on individual

Table 3 Research methods in association with IE types.

Research methods	Expatriates		Migrants			Total
	Assigned expatriates	Self-initiated expatriates	Migrant workers	Immigrants	Skilled/Qualified migrants	
Methodological choice						
Quantitative	92	18	2	9	3	124
Qualitative	21	8		5	4	38
Mixed methods	10	1				11
Strategy						
Case study	1	1				2
Secondary sources	5			2		7
Time horizon						
Longitudinal	7	2			2	11

factors. In contrast, most studies on the migrant group emphasised organisational antecedents (40.8%). Country-related factors received comparatively less attention across all IE types, with 24.5% of studies on assigned expatriates, 15.8% on SIEs, and 26.5% on the migrant group exploring these aspects.

Discussion

By employing a hybrid analysis, which integrates partial bibliometric analysis and abstract content analysis of scientific articles published between 1990 and 2022, we accomplished two of our objectives: (1) furnishing comprehensive insights into the evolution of the field over time, and (2) identifying trends in research topics to grasp research priorities and essential research areas. In the subsequent sections, we will delve into our third objective, (3) uncovering research gaps that warrant attention in future research. Table 7 outlines the principal findings and a proposed research agenda, which we will elucidate below.

Research agenda. General information about the field progression over time indicates that the number of articles per year increased consistently, indicating that the field of IEs adjustment is of rising interest to management and business researchers. Nevertheless, as shown in the following, abstract content analysis of IE adjustment revealed several under-researched avenues for future research.

IE type. This analysis underscores a notable emphasis on expatriates in IE adjustment research, particularly assigned expatriates, which constituted approximately 72% of all articles. Conversely, other types of IEs remain relatively underexplored, aligning with previous research highlighting the dearth of scholarly attention on international career transitions for self-initiated IEs (Hajro et al. 2021; Yijälä et al. 2012; Zikic et al. 2010). Given the likelihood of SIEs and migrants receiving less or no support from their employers during relocation and in the host country, they may encounter distinct and potentially heightened adjustment challenges (Brewster et al. 2017). Given the escalating global prevalence of SIEs (Collings et al. 2010), the limited coverage of 32 articles on the adjustment of this specific group underscores a critical need for further research.

Moreover, standardising terminology for IE types could enhance the development of adjustment research and improve precision. Notably, the term "immigrant" lacks a robust definition compared to terms like "assigned expatriate," "self-initiated expatriate," or "skilled migrant." Consequently, the ambiguity surrounding the delineation of these groups hampers the comparability of research findings. Future studies would benefit from clearly describing the characteristics of the group(s) under investigation, regardless of the label used. Additionally, given the varied definitions of IEs, more comparative research across two or more IE types is warranted to ascertain whether and how they adjust differently to host country circumstances and the underlying reasons.

Finally, regarding sample perspectives, all studies in the corpus exclusively focused on the adjustment of IEs, who typically represent a minority in the host country, to a foreign culture. However, the adjustment of locals to newcomers and the influences they bring from their home countries, which may affect various aspects of local life, warrant a more thorough examination in future research.

Adjustment Terms. As 76% of articles used the term 'adjustment,' it might be concluded that this term is the most acceptable for scientists to use in conjunction with IE adjustment. Adaptation (22) was mainly used in connection with expatriates (91%) and – as the only term – and not along with other terms. Interestingly, many publications on adaptation (totalling 19) primarily focused on cross-cultural processes. Although these adaptation studies explicitly employed "adaptation" in their abstracts, they frequently cited sources with synonymous terms in their full text. For instance, three adaptation studies directly referenced acculturation literature sources (e.g., Berry et al. 1988) in the complete text, avoiding the explicit use of "acculturation."

Table 4 Host countries and nationality of participants.

World Region	Code System	Expatriates Migrants					Total
		Assigned expatriates	Self-initiated expatriates	Migrant workers	Immigrants	Skilled/Qualified migrants	
	Host countries						
Africa (8)	Africa (country not specified)	2					2
	Ghana	2					2
	Nigeria	4					4
Asia (93)	Asia (country not specified)	1					1
	Bangladesh	1					1
	China	21	4				25
	Hong Kong	7	1				8
	India	7					7
	Japan	7	3				10
	Macau	1					1
	Malaysia	8	1				9
	Middle East			1			1
	Pakistan	4					4
	Singapore	3					3
	South Korea	4	3	1			8
	Taiwan	4		1	1	1	7
	UAE	1	4				5
	Vietnam	2	1				3
Europe (23)	Austria	1					1
	Denmark		1				1
	France	1				1	2
	Germany	2	1				3
	Ireland	1	2				3
	Italy				1		1
	Spain	1					1
	Sweden				4		4
	Switzerland	1				1	2
	UK	3	2				5
Latin America and the Caribbean (4)	Brazil	2	1				3
	Cuba	1					1
North America	Canada		1		3	1	5
	USA	10			3		13
Oceania (8)	Australia	1			4	1	6
	New Zealand					2	2
Total		103	25	3	16	7	154

Table 4 (continued)

	Nationality/ethnicity of participants						
Africa (1)	Cameroonians				1		1
Asia (46)	Assyrians				1		1
	Chinese	10	1	1	3	2	17
	Filipinos				2		2
	Israelis	1	1				2
	Japanese	12					12
	Lebanese				1		1
	Malaysians		1				1
	South Koreans		2				2
	Palestinians	1	1				2
	Taiwanese	4					4
	Vietnamese			1	1		2
Europe (20)	British	1				3	4
	Dutch	1					1
	Finns	1	1				2
	French	2					2
	Germans	4			1		5
	Italians	1					1
	Poles	1					1
	Portuguese		2				2
	Spaniards	1					1
	Swedes				1		1
Latin America and the Caribbean (3)	Brazilians	1					1
	Mexicans				2		2
North America	Americans	11			1		12
	Canadians	1	1				2
Oceania (2)	Australians	2					2
Mixed (10)	Soviets					2	2
	Westerners	8					8
Total		63	10	2	14	7	96

Similarly, seven adaptation articles drew on references from the adjustment literature (J. S. Black and Stephens 1989; Lazarova et al. 2010) as the theoretical foundation for their adaptation research, without employing the term "adjustment" in the full text. In nine articles, the terms "adaptation" and "adjustment" were used interchangeably within the full text (Jyoti and Kour, 2017; Zhang et al. 2021). Given that conventional literature searches involve seeking relevant texts in databases based on titles, abstracts, and keywords, there exists a risk of parallel development between adaptation research and other adjustment research despite their overlapping content. Thus, future adaptation research should aim to demonstrate the scientific value of the terminological distinction between adaptation and other forms of adjustment. If this distinction is justified, it is crucial to clearly define and delineate these terms or refer to synonymous adjustment terms through cross-references in abstracts or keywords.

Moreover, the bibliometric analysis unveiled variations in dominant adjustment terms across different IE types. When comparing expatriates and migrants, research articles on expatriates predominantly employed the terms "adjustment" and "adaptation," these terms were notably less utilised for the migrant groups. However, from a content perspective, both terms are equally pertinent and applicable to both groups. This underscores the need for a comprehensive assessment of literature covering both expatriate and migrant IE types, emphasising the importance of scientific exchange between these two research streams in the future.

Research Methods. The limited range of research methods employed in the study is noteworthy. Of the abstracts analysed, 124 indicated quantitative research methods, whereas 38 indicated qualitative methods. Interestingly, while quantitative methods were used across expatriate and migrant groups,

Table 5 Anticipatory adjustment of IEs.

Anticipatory adjustment	Expatriates		Migrants			Total
	Assigned expatriates	Self-initiated expatriates	Migrant workers	Immigrants	Skilled/Qualified migrants	
Individual-related (20)						
Language proficiency	1					1
Motivation to migrate	1	2			1	4
Pre-departure expectations	2	1			1	4
International experience	8	2	1			11
Organization-related (3)						
Organizational support		1				1
Organisational identification		1				1
Recruitment, selection	1					1
Country-related (11)						
Host country environment	1				1	2
Cross-cultural training	9					9
Total	23	7	0	1	3	34

qualitative research methods were comparatively more prevalent in studies focusing on migrant groups, albeit in smaller numbers overall. Existing research offers tentative explanations for adjustment; however, adjustment theory remains in a nascent stage, as evidenced by recent efforts at scale redevelopment (Hippler et al. 2014), the varied terminology used (Harrison et al. 2004), and calls for more significant consideration of context (Szabó 2022). Therefore, adjustment theory is currently classified as an intermediate theory. Although research questions permit the formulation of testable hypotheses, the adjustment construct remains preliminary. To achieve methodological congruence, a hybrid approach combining quantitative and qualitative methods is recommended (Edmondson and McManus 2007). Quantitative research enables testing associations between variables, while qualitative research facilitates elaboration on phenomena, explanations, and illumination of adjustment constructs and relationships. Incorporating more qualitative research would provide deeper insights into the individual experiences of IEs, given that expatriation/migration is inherently unique. Furthermore, latent class analyses could offer a person-centred perspective on adjustment, exploring different adjustment strategies individuals adopt and their characteristics and antecedents (Morris et al. 2015).

The chosen time horizon also reveals explicit limitations in current research practices. Only 5% of the articles indicated the use of a longitudinal design. Given that adjustment is a dynamic process (Banai, 2022; Hippler et al. 2015), the field could benefit from more longitudinal studies to understand its temporal development, success factors, and obstacles. A broader range of research methods is desirable to address diverse research questions (Sam and Ward 2021). Particularly in research on migrants' adjustment, future studies should strive for more

significant methodological variance, as differences in IE types do not inherently dictate differences in research methodology.

Countries of Destination and Sample Nationalities. IEs relocating to and originating from Asia, Europe, and North America were the most researched groups in studies related to IE adjustment. Compared to the absolute number of migrants, which is highest in the *destination regions* of Europe (87 million), Asia (86 million), and North America (59 million) (IOM UN Migration 2022), the host countries in the articles on which the analyses are based reflected the distribution well. Conversely, an analysis of the *increase* in migration flows from 2000 to 2020 shows that the regions Asia (+ 37 million), Europe (+ 30 million), North America (+ 18 million), and Africa (+ 10 million) (IOM UN Migration, 2022) are of the highest relevance. However, the fewest adjustment studies have been conducted in the regions of Africa, as well as Latin America, the Caribbean, and Oceania so far. In particular, the hitherto scarcely explored region of Africa, characterised by a high proportion of migration flow within the region and not across regions as applies to other regions (IOM UN Migration 2022), assumes great significance for future adjustment research. Many scholars posit that adjusting to a host culture that is culturally very different proves more difficult for IEs (Li et al. 2013; Varela and Gatlin-Watts, 2014). However, Selmer (2007) presents evidence suggesting that adjusting to a similar host culture can be as challenging as adjusting to a different one. Consequently, there should be a focus on the nuances of intraregional migration and adjustment, particularly in Africa.

Based on the information in the article abstracts, the most extensively researched destination countries for IEs were the United States, China, and Japan. Despite the United States being the primary destination for international migrants since 1970

Table 6 In-country adjustment of IEs.

In-country adjustment	Expatriates		Migrants			Total
	Assigned expatriates	Self-initiated expatriates	Migrant workers	Immigrants	Skilled/Qualified migrants	
Individual-related (155)	(120)	(19)	(2)	(9)	(5)	
Demographics (14)						
Female	4					4
Men vs. women	7	2				9
Age	1					1
Personal Characteristics (105)						
Social capital	2					2
Acculturation/adaptation strategy	5	1	1	4		11
Person-environment fit	4	1				5
Host language proficiency	9	2		1	1	13
Cross-cultural competencies	2					2
Work-life balance, well-being	1	1		1		3
Emotional intelligence	6	1				7
Cultural intelligence	16	1			1	18
Personality traits, identity	25	4		1		30
Focus, goal, motivation	9	3	1	1		14
Work-related characteristics (14)						
Psychological contract	2	1				3
Organisational commitment	1	1		1		3
Organisational embeddedness	1					1
Job satisfaction	3					3
Career capital	2	1			1	4
Family/spouse adjustment (22)						
Family-related issues	3					3
Host country language proficiency	1				1	2
Host country nationals	2					2
Cultural distance	2					2
Organisational/social support	7				1	8
Coping strategies	4					4
Personality traits	1					1
Organization-related (95)	(62)	(13)	(5)	(14)	(1)	
Job-related (16)						
Role clarity, discretion	4	1				5
Length of assignment	1					1
Job position, wage	3					3
Organizational justice	1					1
Person-organization fit		1		1		2
Workplace learning	1	1	1	1		4

Table 6 (continued)

Human Resource Strategy and Management (35)						
HRM practices	3	1		1		5
Organizational support	14					14
Mentoring/coaching	3			1		4
Performance management	2					2
Leadership	6	1		3		10
Employee Relations (30)						
Organisational socialisation	5	2	1	2		10
Social support networks	3	1		1		5
Host country nationals	9	1				10
International teamwork	2		1	2		5
Work environment (14)						
Cross-cultural training	1	1				2
Organizational culture	3	1		2		6
Logistical help	1	1			1	3
Employer trust		1	1			2
Extrinsic motivation			1			1
Country-related (78)	(59)	(6)	(2)	(9)	(2)	
Networks (21)						
Host country nationals	4	1		2		7
Spousal/family support	3					3
Social support networks	7			3	1	11
Culture (43)						
Cross-cultural training	9	1				10
Cross-cultural communication	6			1		7
Cultural gap, novelty	20	2	2	2		26
Host Country Environment (14)						
Location	2					2
Hostile environment, terrorism	3			1		4
Religion, beliefs, ethnicity	1	1			1	3
Stress, stressors	4	1				5
Total code usage instances	241	38	9	32	8	328

(IOM UN Migration 2022), Germany, the second top destination for migrants (IOM UN Migration, 2022), was notably under-represented in the corpus, with only three articles. Similarly, countries like Saudi Arabia (0), Russia (0), the UAE (5), the United Kingdom (5), and France (2) which rank among the countries with the highest migrant populations globally (IOM UN Migration 2022; UN DESA, 2022), were also underrepresented in adjustment studies. Furthermore, according to the OECD (2017), Switzerland, Australia, and New Zealand have foreign-born individuals comprising over 20% of their total employment. Nevertheless, research articles on IE adjustment in these destination countries numbered only 2, 6, and 2, respectively. Although Asia is witnessing significant growth in migrants, the proportion of international migrants in the population remains relatively low (1.8%; IOM UN Migration, 2022). Historically regarded as a highly homogeneous society with limited global mobility (Andresen et al. 2020; Sugimoto, 2014), Japan was unexpectedly one of the most studied destination countries for IE

adjustment, highlighting the relevance of research in exploring adjustment dynamics in such unique contexts.

Concerning *nationality*, data indicates that over 40 per cent of all international migrants globally in 2020 hailed from Asia, predominantly from countries like India, China, Bangladesh, Pakistan, the Philippines, and Afghanistan (IOM UN Migration 2022). Mexico and Russia are among the largest emigration countries worldwide (UN DESA, 2022). However, these regions were scarcely represented in the nationalities studied in the adjustment articles analysed. Despite numerous studies focusing on Chinese IEs (17), other countries were either underrepresented (e.g., the Philippines, 2) or not represented at all (e.g., India, Bangladesh, Pakistan, Afghanistan) in the sampled articles.

Moreover, it is noteworthy that three of the ten GLOBE cultural clusters (House et al. 2004) accounted for approximately four-fifths of the destination countries (Confucian Asia, Southern Asia, Anglo) and nationalities (Confucian Asia, Latin Europe, Anglo) studied, with studies based on samples from other cultural

Table 7 Findings of the study and future research agenda.

The goal of the study		Findings	Research agenda
To provide general information about field progression over time, types of IEs being researched, general adjustment topics, terminology of "adjustment," and research methods	Progression of the field over time	1. Up until 1999, a random single article every few years 2. 2000–2016, the number of articles grows from 2 to 12 per year 3. Since 2017, the number of articles has grown by 20 or more per year, but not each year	Based on the growth patterns, the IEs adjustment field still holds researchers' interest
	Types of IEs being researched	1. 86% of articles are associated with expatriates: 72% with assigned expatriates and 14% with self-initiated expatriates. 14% of all reviewed articles focus on migrants: 1% migrant workers, 9% immigrants, and 4% skilled/qualified migrants 2. The predominant adjustment terms differ between IE types. In expatriate research, the terms adjustment (160) and adaptation (21) predominate, while these two terms are hardly used for the migrant groups (14 and 2, respectively). In migration research, the terms integration and acculturation are used more often than in expatriation research.	1. As assigned expatriates relate to their sending organisations and receive "official" support during their assignment abroad, all other types of IEs might experience different adjustment challenges. As these IE types are much less researched, focusing on adjustment research on self-initiated expatriates and migrants is beneficial to advance our knowledge in this field. 2. The distinction between the IE types "immigrant," "assigned expatriate," "self-initiated expatriate," and "skilled migrant" is not clear-cut in the literature. Consequently, the delimitation of the types and, thus, the comparability of the research results could be more precise. Since there are different definitions of IEs, more research is needed comparing two or more IE types to determine how/if they adapt differently to the exact circumstances in the host country.
	Terminology of 'adjustment' usage	1. 76% of all articles use the term 'adjustment' 2. 4% of articles use more than one term	The term 'adjustment' is the most accepted by researchers in association with IE adjustment. 1. The research on adaptation does not cross-reference the literature on adjustment, integration, acculturation, or assimilation in the title, abstract, or keywords. Cross-referencing in future research would encourage more systematic comparison and integration of research findings. 2. Future research should either show the scientific added value of the terminological distinction between adaptation and other kinds of adjustment and – if this is given – clearly define and delimit the terms or refer to synonymous adjustment terms via a cross-reference in abstract or keywords.
	The research methods	1. 64% of abstracts indicate quantitative methods usage 2. 20% of abstracts indicate qualitative methods used 3. 6% of abstracts note longitudinal study	1. The field would benefit from deeper insight if more qualitative research methods were used to establish methodological fit. A combination of qualitative and quantitative research (hybrid approach) should align with the intermediate state of adjustment theory. 2. Adjustment being a dynamic process, the field would benefit from more longitudinal research.
The trends of research topics and critical research priorities	Countries where research is performed and the nationality of participants	1. The regions of Asia, Europe, and North America are the most frequently represented, and the regions of Africa, Latin America, the Caribbean, and Oceania are the least studied in adjustment research, both as host countries and in terms of nationality of IEs. 2. China, the US, and Japan are the leading host countries for IE adjustment research. 3. Studies on adjustment in Japan and China as host countries concentrate mainly on assigned expatriates. 4. Previous research on adjustment focuses on the adjustment of IEs to the host country. None of the studies additionally analyses the adjustment of locals (i.e., the majority) to the cultural innovations introduced by IEs.	1. Examining destination countries where IEs reside, and their respective nationalities through purposeful sampling could yield valuable insights into adjustment dynamics. For instance, comparing the adjustment experiences of Russians and Germans in the Baltic states could shed light on how historical events have shaped local perceptions towards different nationalities. Given that individual characteristics and the socio-cultural environment of the host country are integral to adjustment processes, stakeholders involved with IEs stand to gain from systematic research conducted within specific combinations of countries of origin/nationalities and destination countries. Such targeted investigations would offer nuanced understandings of the adjustment challenges and facilitate more tailored support mechanisms for IEs. 2. Several countries that have a high proportion of foreign-born workers in their workforce (such as Switzerland, Australia, and New Zealand) or have experienced a large influx of migrants in recent years (see, for example, Germany or the high intraregional migration within Africa) are (almost) not studied by researchers in the field of IE adjustment. A focus on countries with a high proportion of migrants in the population and a large influx of migrants would allow for the identification of facilitating factors. According to this logic, the African region should be more strongly represented in adjustment research. 3. Exploring nationalities and countries with low international mobility allows for a broader identification of conditions (e.g., personal initiative, openness for experience at a country level) for success and obstacles. The region of Africa has the highest share of intraregional migration in the world. The specifics of intraregional migration and adjustment should be focused on in the region of Africa. 4. Research postulates that adjusting to similar cultures is at least as challenging as adjusting to foreign cultures. Comparing the intraregional migration of different regions should examine how this rule can be generalised or why this is different. 5. Future research should additionally (1) focus on the adjustment of local individuals to IEs (bilateral adjustment) and (2) on possible differences in this adjustment of local individuals depending on their nationality (which may differ from the country of residence), own international mobility experience, and share within the population of the host country. 6. Adjustment studies should investigate underrepresented GLOBE cultural clusters, such as the Middle East, Sub-Saharan Africa, Latin

Table 7 (continued)

The goal of the study		Findings	Research agenda
			America, and Eastern Europe, concerning host countries and nationalities. This exploration would help understand how cultural disparities affect IEs' ability to achieve positive adjustment outcomes. Furthermore, analysing the relationship between cultural appeal and adjustment could reveal differences in the difficulty of adjustment across various nationality-destination combinations. 7. As international mobility patterns shift due to economic or political changes, researchers should examine IE adjustment in historically significant migrant-sending countries like Eastern Europe. This exploration would provide insights into the challenges faced by host countries, including their readiness to accommodate IEs and the adaptation of local individuals to changing demographic landscapes. 8. With regard to nationality, existing IE adjustment studies inadequately represent the nationalities of over 40 per cent of all international migrants worldwide, notably those from Asia. Notably, individuals from countries such as the Philippines, India, Bangladesh, Pakistan, and Afghanistan are absent from the samples.
	Anticipatory adjustment	1. 68% of articles study anticipatory adjustment mainly concerning assigned expatriates. 2. 12% of studies analyse migrants' anticipatory adjustment.	1. The other types of IEs than assigned expatriates presumably also plan and investigate their expatriation before the actual move. Therefore, research on these groups' anticipatory adjustment would greatly benefit receiving countries and organisations.
	In-country adjustment	1. Most studies focus on assigned expatriates' in-country adjustment. 2. Studies focus on individual, organisational, and country-related factors influencing in-country adjustment. 3. Individual-related factors include demographics, personal characteristics, work-related characteristics, and family/spouse adjustment. 4. Organisation-related factors include work environment, employee relations, human resource strategy and management, and job. 5. Country-related factors include the host country's environment and networks.	1. Future studies should simultaneously research if and how an antecedent affects different elements of IE adjustment: organisational and individual, organisational and country, individual and country, etc., as some of the antecedents are likely to be related to different settings simultaneously. 2. Individual-related factors: Demographics is used in most statistical data but is limited to age and female/male IEs. Research is needed on the effect of IEs and /or the host country's demographics on IE adjustment. Studies on gender differences in adjustment require expansion to include transgender and other genders to be representative of the population. 3. Organisation-related factors: while entering a host country's labour force, the relationship with the direct supervisor (who, among other duties, is also responsible for human resource strategy implementation within the company) regarding IEs adjustment to the local workplace needs to be researched more extensively. The effect of work environment (such as organisational culture type, working conditions, etc.) on IEs adjustment is under-researched and would benefit from more studies. 4. The COVID-19 pandemic changed workplace settings from in-person to remote; therefore, the IE adjustment needs new research regarding new circumstances.

clusters such as the Middle East, Sub-Saharan Africa, Latin America, or Eastern Europe being the exception. Future research should systematically examine the combination of nationality and host country to understand the impact of cultural attractiveness on adjustment. While cultural distance measures highlight challenges and losses from cross-cultural interaction, cultural attractiveness focuses on the potential gains from such interaction, even in culturally disparate contexts (Li et al. 2017). IEs from countries who perceive the cultural practices of their host country as more valuable than their own may feel attracted to the host country's cultural practices, which could positively impact their adjustment (Li et al. 2017).

To summarise, data accessibility rather than content criteria may have primarily influenced the selection of nationalities and destination countries/regions in previous research. While focusing on countries with high migrant populations and significant migrant inflows may help identify facilitating factors, expanding the scope to include countries with different conditions can help identify equally important barriers. For instance, in countries with few IEs, more personal initiative is required for adjustment, as there are fewer fellow IEs to provide support, and interactions with the native population may be less familiar (Andresen et al. 2020). Given that adjustment processes are influenced by social systems that create inequities across individuals and groups, future research should systematically consider the social conditions in different cultures and how these inequities affect IEs' ability to achieve positive outcomes (Szabó 2022). This necessitates a more deliberate sampling approach for destination

countries/regions and the nationality of IEs, including "exceptional" destinations and nationalities, and examining the combination of nationality and host country attractiveness in future studies.

Research Themes. Most studies on anticipatory adjustment (68%) focused on assigned expatriates, which is understandable given their affiliation with the same company. Assigned expatriates typically receive support from their organisation before their assignment, facilitating their anticipatory adjustment. However, it is worth noting that all other types of international employees also engage in planning before relocating to another country. Therefore, they will likely undergo some form of individual anticipatory adjustment that could impact their adjustment abroad. Despite this, only seven articles explored the anticipatory adjustment of SIEs, and four studies examined the migrant group. Since SIEs and other migrants typically do not receive financial support from their employers for relocation, studying their anticipatory adjustment could benefit both receiving companies and countries. Hence, there is a need for more research on the anticipatory adjustment of all types of international employees beyond assigned expatriates.

Antecedents of in-country adjustment for international employees were categorised into individual, organisational, and country-level factors. However, some antecedents, such as networks, host country nationals, host country language proficiency, or person-organisation fit, could be attributed to multiple levels depending on the researcher's perspective. For example,

social support networks may not solely be "work-related" at work, even within the workplace environment. Individuals often form close networks with co-workers from various departments based on non-work-related factors like shared interests. Therefore, the impact of these adjustment antecedents on international employee adjustment may extend beyond the organisational level. This highlights the need for research that examines antecedents affecting multiple levels (individual, organisation, country) and stages of international employee adjustment.

Only 14 articles investigated how demographics might affect international employee adjustment; one emphasised the age of international employees, and 13 examined gender (with four focusing on women and seven comparing men with women). It is important to note that no articles addressed adjustment related to transgender or other genders. The lack of understanding regarding how international employees' demographics or the host country's environment influence adjustment could lead to poor decision-making and negative consequences for businesses, such as decreased motivation among international employees and disruptions in interactions with customers, suppliers, and colleagues abroad (Olsen and Martins 2009). This highlights the need for more research on the effects of international employees' demographics and the host country's demographics on adjustment.

A phenomenon not previously explored in existing studies is remote adjustment, which refers to the adjustment process experienced by workers with indirect and often temporary intercultural contact with individuals in geographically separated cultures. This indirect contact occurs virtually through the Internet, where IEs build social networks and seek support. Research by Canhilal et al. (2022) indicates that these virtual networks and Internet-based support significantly influence IE adjustment.

The concept of remote adjustment may have been particularly accelerated by the COVID-19 pandemic, which brought about widespread changes in workplaces worldwide, especially in technologically advanced countries. With the shift to online work replacing traditional face-to-face interactions, there has been a surge in virtual assignments and international remote work arrangements. As a result, an increasing number of IEs are navigating adjustment challenges in virtual environments. Given the growing prevalence of virtual work arrangements, exploring the adjustment experiences of virtual IEs, particularly in the context of information technologies, becomes essential in the post-COVID era. Understanding how remote adjustment unfolds and identifying effective strategies for supporting virtual IEs will benefit employers and international employees.

Theoretical contributions. To demonstrate the significance of this hybrid review in enriching the adjustment literature, we refer to Mukherjee et al. (2022) systematisation for delineating the critical pathways to making theoretical contributions. Within theoretical contributions (as outlined by Whetten, 1989), our examination reveals that prevailing adjustment research predominantly addresses fundamental theoretical questions. These inquiries encompass defining the adjustment construct, identifying the contributing factors to pre- and post-relocation adjustment phases (the conceptual landscape), delineating the interconnections among these factors (nomological network), and elucidating the underlying causal mechanisms (Mukherjee et al. 2022). Whereby the model of Black et al. (1991) plays a vital role in conceptualising international adjustment as both multifaceted (work and general adjustments together with interactions with host-country nationals) and time-related (anticipatory and in-country adjustments).

A primary theoretical contribution emanating from our analysis is the recognition that while the model proposed by Black et al. (1991) remains prominent, adjustment research also incorporates other theoretical constructs (such as acculturation, integration, and adaptation, albeit infrequently assimilation), which are often used synonymously. Consequently, regarding construct definition, a pressing need exists for either consolidation or precise demarcation of these constructs. A comprehensive comparison of literature concerning expatriates and migrants, as detailed in the research agenda mentioned earlier, holds promise for theoretically refining the conceptual landscape, nomological network, and causal mechanisms (Mukherjee et al. 2022).

Secondly, by delineating knowledge clusters or primary themes in adjustment research (Mukherjee et al. 2022), our analysis underscores the underexplored boundaries of adjustment theory, particularly temporal and contextual factors. These boundary conditions encompass discerning variances in adjustment predicated on the identity of the individuals undergoing adjustment (types of IEs, locals), the geographical locations involved (countries of origin and destination), and the timing of adjustment (anticipatory and in-country phases). Studies on expatriation and migration have explored distinct boundary conditions, but the findings need to be synthesised to inform future research on adjustment. Statistical data has revealed that the sampled populations are not fully representative, highlighting some research gaps that must be addressed. It is essential to compare the findings in the context of the "where" boundary condition to understand the topic better.

Thirdly, our systematic analysis underscores elevated researcher interest despite the increasing productivity in IE adjustment research over time by tracing evolutionary nuances to understand the trajectory of adjustment research (Mukherjee et al. 2022). However, a notable trend emerges wherein most research has predominantly focused on assigned expatriates, with all other IE categories receiving considerably less scholarly attention. This discrepancy highlights the imperative for a more equitable distribution of research focus across diverse IE cohorts to foster a comprehensive understanding of adjustment phenomena.

The fourth theoretical contribution centres on identifying significant knowledge gaps within adjustment research. Addressing these gaps necessitates a heightened focus on several areas in future studies. Specifically, increased attention should be given to anticipatory adjustment, particularly for migrants but encompassing all types of IEs. Additionally, there should be a more concentrated examination of in-country adjustment, specifically emphasising migrants and various country-related factors such as the cultural appeal of the home versus the host country, economic considerations, and political dynamics. Expanding the scope to include a broader range of countries of origin and destination, demographic variables, remote adjustment, and locals' attitudes towards IEs' adjustment or even their adjustment to them is essential.

The theoretical insights gleaned from systematic mapping highlight the necessity for future studies to adopt research methodologies that facilitate the evolution of adjustment theory from an intermediate to a mature stage, advocating for a hybrid research approach.

These findings contribute significantly to international human resource management and business, emphasising the need for additional research involving SIEs and migrants. Given the global rise in their numbers, particularly in less-explored countries and adjustment factors, such research has the potential to deepen our comprehension of the adjustment phenomenon.

Limitations and implications for research. The study is subject to several limitations that warrant acknowledgement. A methodological constraint is inherent in bibliometric analysis, as it primarily involves categorising and organising extensive bibliometric data (Andersen 2019). Although the supplementary content analysis of abstracts in this hybrid review offers additional insights into the state of research, it remains somewhat superficial. Future researchers are encouraged to delve deeper into relevant publications to facilitate a more nuanced differentiation of their research questions based on the research fields identified in this review.

Secondly, a limitation arises from our focus on business and management. The selection of articles inherently reflects a somewhat homogeneous perspective on IE adjustment research, with the organisational context typically foregrounded in these studies. Publications in sociology, economics, or psychology could offer additional insights into IE adjustment, such as those related to the macroeconomic context (sociology, economics) or individual antecedents, such as memory and identity (psychology).

Thirdly, our exploration was confined to the WoS database, inevitably influencing the articles. While it is generally acknowledged that there is a significant overlap in content indexed between WoS and Scopus (Pranckutė 2021), Donthu et al. (2021) advocate for selecting "one appropriate database to mitigate the need for that consolidation" (p. 293) and the associated risks of errors, a search in Scopus or Dimensions databases could have broadened the scope, considering they encompass journals not included in WoS.

Fourthly, our study's search was restricted to English-language articles. Including articles in various languages would introduce research from diverse nations, fostering the exchange of research insights.

Conclusions

Based on a comprehensive review spanning 32 years of theory and research on adjustment, it is evident that studies concerning IE adjustment have seen a remarkable increase over this period. To advance adjustment theory and research further, future research should be deliberate in two key aspects: research design, incorporating purposeful sampling across demographics, types of IE, nationality, and destination countries, and methodological alignment through a hybrid approach that integrates qualitative and quantitative methods; and research focus, involving systematic selection and analysis of host countries alongside their social, political, and technological contexts, comparison of IE adjustment with that of local populations, examination of predeparture and in-country adjustment among various IE types, and tracking adjustment over time, including remote settings. This proposed research agenda is extensive and essential for progressing intermediate adjustment theory towards maturity.

Data availability

All data generated or analysed during this study are included in this published article [and its supplementary information files].

References

Andersen N (2019) Mapping the expatriate literature: A bibliometric review of the field from 1998 to 2017 and identification of current research fronts. Int J Human Resource Manag 32(22):4687–4724. https://doi.org/10.1080/09585192.2019.1661267

Andresen M, Bergdolt F, Margenfeld J, Dickmann M (2014) Addressing international mobility confusion – Developing definitions and differentiations for self-initiated and assigned expatriates as well as migrants. Int J Human Resource Manag 25(16):2295–2318. https://doi.org/10.1080/09585192.2013.877058

Andresen, M, Dickmann, M, & Suutari, V (2018). Typologies of internationally mobile employees. In M Dickmann, V Suutari, & O Wurtz (Eds.), The management of global careers: Exploring the rise of international work (pp. 33-61). Springer International Publishing

Andresen M, Pattie MW, Hippler T (2020) What does it mean to be a 'self-initiated' expatriate in different contexts? A conceptual analysis and suggestions for future research. Int J Human Resource Manag 31(1):174–201. https://doi.org/10.1080/09585192.2019.1674359

Aycan Z (1997) Expatriate adjustment as a multifaceted phenomenon: Individual and organizational level predictors. Int J Human Resource Manag 8(4):434–456. https://doi.org/10.1080/095851997341540

Banai M (2022) Toward a general theory of expatriates' cross-cultural adjustment. Int Stud Manag Organ 52(1):25–43. https://doi.org/10.1080/00208825.2021.2023444

Berry JW, Kim U, Boski P (1988) Psychological acculturation of immigrants. J Soc Issues 57(3):615–631. https://doi.org/10.1111/0022-4537.00231

Bhaskar-Shrinivas P, Harrison DA, Shaffer MA, Luk DM (2005) Input-based and time-based models of international adjustment: Meta-analytic evidence and theoretical extensions. Acad Manag J 48(2):257–281. https://doi.org/10.5465/amj.2005.16928400

Black JS, Mendenhall M, Oddou G (1991) Toward a comprehensive model of international adjustment: An integration of multiple theoretical perspective. Acad Manag Rev 16(2):291–317. https://doi.org/10.2307/258863

Black JS, Stephens GK (1989) The influence of the spouse on American expatriate adjustment and intent to stay in Pacific Rim overseas assignments. J Manag 15(4):529–544. https://doi.org/10.1177/014920638901500403

Brewster C, Dickmann M, Mäkelä L, Suutari V (2017) Managing global and migrant workers. In R Kramar & J Syed (Eds.), Human resource management: A global and critical perspective (pp. 359-378). Macmillan Education UK

Caligiuri P, Hyland M, Joshi A, Bross A (1998) Testing a theoretical model for examining the relationship between family adjustment and expatriates' work adjustment. J Appl Psychol 83(4):598–614. https://doi.org/10.1037/0021-9010.83.4.598

Canhilal SK, Canboy B, Bakici T (2022) Social support for expatriates through virtual platforms: Exploring the role of online and offline participation. Int J Human Resource Manag 33(5):1005–1036. https://doi.org/10.1080/09585192.2020.1752283

Canhilal SK, Gabel Shemueli R, Dolan S (2015) Antecedent factors for success in international assignments: The case of expatriates in Peru. J Global Mobility 3(4):378–396. https://doi.org/10.1108/JGM-06-2014-0016

Cerdin J-L, Selmer J (2014) Who is a self-initiated expatriate? Towards conceptual clarity of a common notion. Int J Human Resource Manag 25(9):1281–1301. https://doi.org/10.1080/09585192.2013.863793

Chadegani AA, Salehi H, Yunus MM, Farhadi H, Fooladi M, Farhadi M, Ebrahim NA (2013) A comparison between two main academic literature collections: Web of Science and Scopus databases. Asian Soc Sci 9(5):18–26

Chen HF (2010) The relationships of organizational justice, social exchange, psychological contract, and expatriate adjustment: An example of Taiwanese business expatriates. Int J Human Resource Manag 21(7):1090–1107. https://doi.org/10.1080/09585191003783520

Chenyang L (2022) Meta-analysis of the impact of cross-cultural training on adjustment, cultural intelligence, and job performance. Career Dev Int 27(2):185–200. https://doi.org/10.1108/CDI-09-2020-0247

Collings DG, McDonnell A, Gunnigle P, Lavelle J (2010) Swimming against the tide: Outward staffing flows from multinational subsidiaries. Human Resource Manag 49(4):575–598. https://doi.org/10.1002/hrm.20374

Dang QT, Rammal HG, Michailova S (2022) Expatriates' families: A systematic literature review and research agenda. Human Resource Manag Rev 32(4):100877. https://doi.org/10.1016/j.hrmr.2021.100877

Donthu N, Kumar S, Mukherjee D, Pandey N, Lim WM (2021) How to conduct a bibliometric analysis: An overview and guidelines. J Bus Res 133:285–296

Downe-Wamboldt B (1992) Content analysis: Method, applications, and issues. Health Care Women Int 13(3):313–321. https://doi.org/10.1080/07399339209516006

Duan C, Kotey B, Sandhu K (2021) Transnational immigrant entrepreneurship: Effects of home-country entrepreneurial ecosystem factors. Int J Entrepreneurial Behav Res 27(3):711–729. https://doi.org/10.1108/IJEBR-05-2020-0300

Edmondson AC, McManus SE (2007) Methodological fit in management field research. Acad Manag Rev 32(4):1246–1264

Emich KJ, Kumar S, Lu L, Norder K, Pandey N (2020) Mapping 50 years of small group research through small group research. Small Group Res 51(6):659–699

Hajro A, Caprar DV, Zikic J, Stahl GK (2021) Global migrants: Understanding the implications for international business and management. J World Bus 56(2):101192. https://doi.org/10.1016/j.jwb.2021.101192

Hajro A, Stahl GK, Clegg CC, Lazarova MB (2019) Acculturation, coping, and integration success of international skilled migrants: An integrative review and multilevel framework. Human Resource Manag J 29(3):328–352. https://doi.org/10.1111/1748-8583.12233

Harari MB, Reaves AC, Beane DA, Laginess AJ, Viswesvaran C (2018) Personality and expatriate adjustment: A meta-analysis. J Occup Organ Psychol 91(3):486–517. https://doi.org/10.1111/joop.12215

Harrison DA, Shaffer MA, Bhaskar-Shrinivas P (2004) Going places: Roads more and less traveled in research on expatriate experiences. In M Buckley, J Halbesleben, & AR Wheeler (Eds.), Research in personnel and human resources management (Vol. 23, pp. 199-247). Emerald

Haslberger A, Brewster C (2008) The expatriate family: An international perspective. J Manag Psychol 23(3):324–346. https://doi.org/10.1108/02683940810861400

Hippler T, Brewster C, Haslberger A (2015) The elephant in the room: The role of time in expatriate adjustment. Int J Human Resource Manag 26(15):1920–1935. https://doi.org/10.1080/09585192.2015.1041762

Hippler T, Caligiuri PM, Johnson JE, Baytalskaya N (2014) The development and validation of a theory-based expatriate adjustment scale. Int J Human Resource Manag 25(14):1938–1959. https://doi.org/10.1080/09585192.2013.870286

House RJ, Hanges PJ, Javidan M, Dorfman PW, Gupta V (Eds.) (2004) Culture, leadership, and organizations: The GLOBE study of 62 societies. Sage publications

IOM UN Migration (2022) World migration report 2022. Retrieved from https://worldmigrationreport.iom.int/wmr-2022-interactive/ [Last accessed 21 February 2023]

James KL, Randall NP, Haddaway NR (2016) A methodology for systematic mapping in environmental sciences. Environ Evid 5:1–13

Jyoti J, Kour S (2017) Cultural intelligence and job performance: An empirical investigation of moderating and mediating variables. Int J Cross Cult Manag 17(3):305–326. https://doi.org/10.1177/1470595817718001

Kang H, Shen J (2018) Antecedents and consequences of host-country nationals' attitudes and behaviors toward expatriates: What we do and do not know. Human Resource Manag Rev 28(2):164–175. https://doi.org/10.1016/j.hrmr.2017.07.001

Lazarova M, Westman M, Shaffer MA (2010) Elucidating the positive side of the work-family interface on international assignments: A model of expatriate work and family performance. Acad Manag Rev 35(1):93–117. https://doi.org/10.5465/AMR.2010.45577883

Lee LY, Veasna S, Sukoco BM (2014) The antecedents of cultural effectiveness of expatriation: Moderating effects of psychological contracts. Asia Pacific J Human Resources 52(2):215–233. https://doi.org/10.1111/j.1744-7941.2013.00055.x

Lett L, Smith M (2009) East meets West: The case of Polish expatriates in the UK. Int J Human Resource Manag 20(9):1864–1878. https://doi.org/10.1080/09585190903142332

Li C, Brodbeck FC, Shenkar O, Ponzi LJ, Fisch JH (2017) Embracing the foreign: Cultural attractiveness and international strategy. Strat Manag J 38(4):950–971

Li K, Rollins J, Yan E (2018) Web of Science use in published research and review papers 1997–2017: A selective, dynamic, cross-domain, content-based analysis. Scientometrics 115(1):1–20. https://doi.org/10.1007/s11192-017-2622-5

Li M, Mobley WH, Kelly A (2013) When do global leaders learn best to develop cultural intelligence? An investigation of the moderating role of experiential learning style. Acad Manag Learn Educ 12(1):32–50

McNulty Y, Brewster C (2017) Theorizing the meaning(s) of 'expatriate': Establishing boundary conditions for business expatriates. Int J Human Resource Manag 28(1):27–61. https://doi.org/10.1080/09585192.2016.1243567

McNulty Y, Selmer J (Eds.) (2017) Research handbook of expatriates. Edward Elgar

Morris MW, Chiu CY, Liu Z (2015) Polycultural psychology. Ann Rev Psychol 66:631–659

Morris MW, Savani K, Mor S, Cho J (2014) When in Rome: Intercultural learning and implications for training. Res Organ Behav 34:189–215. https://doi.org/10.1016/j.riob.2014.09.003

Mukherjee D, Lim WM, Kumar S, Donthu N (2022) Guidelines for advancing theory and practice through bibliometric research. J Bus Res 148:101–115

Nam KA, Cho Y, Lee M (2014) West meets East? Identifying the gap in current cross-cultural training research. Human Resource Dev Rev 13(1):36–57. https://doi.org/10.1177/1534484313500143

OECD (2017) International migration outlook 2017. Organisation for Economic Co-operation and Development

Olsen JE, Martins LL (2009) The effects of expatriate demographic characteristics on adjustment: A social identity approach Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management 48(2):311–328. https://doi.org/10.1002/hrm.20281

Paul J, Criado AR (2020) The art of writing literature review: What do we know and what do we need to know? Int Bus Rev 29(4):1–7. https://doi.org/10.1016/j.ibusrev.2020.101717

Petersen K, Feldt R, Mujtaba S, Mattsson M(2008) Systematic mapping studies in software engineering In Proceedings of 12th International Conference on Evaluation and Assessment in Software Engineering (EASE) 12:1–10

Pranckutė R (2021) Web of Science (WoS) and Scopus: The titans of bibliographic information in today's academic world. Publications 9(12):1–59

Ritchie W, Brantley BI, Pattie M, Swanson B, Logsdon J (2015) Expatriate cultural antecedents and outcomes: An assessment tool for nonprofit managers. Nonprofit Manag Leadership 25(3):325–342. https://doi.org/10.1002/nml.21128

Sam DL, Ward C (2021) Three generations of psychological acculturation research: Theoretical advancements and methodological challenges. In M Bender & BG Adams (Eds.), Methods and assessment in culture and psychology (pp. 17-40). Cambridge University Press

Saunders M, Lewis P, Thornhill A (2009) Research methods for business students. Pearson

Schudey AP, Jensen O, Sachs S (2012) 20 Jahre Rückanpassungsforschung–eine Metaanalyse. German J Human Resource Manag 26(1):48–73. https://doi.org/10.1177/239700221202600108

Selmer J (2007) Which is easier, adjusting to a similar or to a dissimilar culture? American business expatriates in Canada and Germany. Int J Cross Cult Manag 7(2):185–201

Shaffer MA, Harrison DA, Gilley KM (1999) Dimensions, determinants, and differences in the expatriate adjustment process. J Int Bus Stud 30:557–581. https://doi.org/10.1057/palgrave.jibs.8490083

Shen Y, Hall DT (2009) When expatriates explore other options: Retaining talent through greater job embeddedness and repatriation adjustment. Human Resource Manag 48(5):793–816. https://doi.org/10.1002/hrm.20314

Soaita AM, Serin B, Preece J (2020) A methodological quest for systematic literature mapping. Int J Housing Policy 20(3):320–343. https://doi.org/10.1080/19491247.2019.1649040

Stemler S (2000) An overview of content analysis. Pract Assessment Res Evaluat 7(1):17

Sugimoto, Y (2014). An introduction to Japanese society (4th ed.). Cambridge University Press

Szabó Á (2022) Addressing the causes of the causes: Why we need to integrate social determinants into acculturation theory. Int J Intercultural Relat 91:318–322

Takeuchi R (2010) A critical review of expatriate adjustment research through a multiple stakeholder view: Progress, emerging trends, and prospects. J Manag 36(4):1040–1064. https://doi.org/10.1177/0149206309349308

Takeuchi R, Chen J (2013) The impact of international experiences for expatriates' cross-cultural adjustment: A theoretical review and a critique. Organ Psychol Rev 3(3):248–290. https://doi.org/10.1177/2041386613492167

UN (2022) World population prospect. Retrieved from https://population.un.org/wpp/DefinitionOfRegions/ [Last accessed 21 February 2023]

UN DESA (2022) The sustainable development goals report 2022 - July 2022. UN DESA. https://unstats.un.org/sdgs/report/2022/

Van Bakel M (2019) It takes two to tango: A review of the empirical research on expatriate-local interactions. Int J Human Resource Manag 30(21):2993–3025. https://doi.org/10.1080/09585192.2018.1449763

Varela OE, Gatlin-Watts R (2014) The development of the global manager: An empirical study on the role of academic international sojourns. Acad Manag Learn Educ 13(2):187–207

Vlase I, Lähdesmäki M (2023) A bibliometric analysis of cultural heritage research in the humanities: The Web of Science as a tool of knowledge management. Human Soc Sci Commun 10(1):1–14. https://doi.org/10.1057/s41599-023-01582-5

Waxin MF, Panaccio A (2005) Cross-cultural training to facilitate expatriate adjustment: It works! Personnel Rev 34(1):51–67. https://doi.org/10.1108/00483480510571879

Whetten DA (1989) What constitutes a theoretical contribution? Acad Manag Rev 14(4):490–495

Yijälä A, Jasinskaja-Lahti I, Likki T, Stein D (2012) Pre-migration adaptation of highly skilled self-initiated foreign employees: The case of an EU agency. Int J Human Resource Manag 23(4):759–778. https://doi.org/10.1080/09585192.2011.561252

Zhang Y, Yu Q, Zheng F, Long C, Lu Z, Duan Z (2016) Comparing keywords plus of WOS and author keywords: A case study of patient adherence research. J Assoc Inf Sci Technol 67(4):967–972. https://doi.org/10.1002/asi.23437

Zhang Y, Li Y, Frost M, Rong S, Jiang R, Cheng ET (2021) The impact of organizational position level and cultural flow direction on the relationship between cultural intelligence and expatriate cross-border adaptation. Cross Cult Strat Manag 28(2):332–367. https://doi.org/10.1108/CCSM-01-2020-0012

Zikic J, Bonache J, Cerdin JL (2010) Crossing national boundaries: A typology of qualified immigrants' career orientations. J Organ Behav 31(5):667–686. https://doi.org/10.1002/job.705

Author contributions

Competing interests

The authors declare no competing interests.

Ethical approval

Ethical approval was not required as the study did not involve human participants.

Informed consent

Informed consent was not required as the study did not involve human participants.

Additional information

Supplementary information The online version contains supplementary material available at https://doi.org/10.1057/s41599-024-03098-y.

Correspondence and requests for materials should be addressed to Irma Baneviciene.

Reprints and permission information is available at http://www.nature.com/reprints