



Best of both worlds: How embeddedness fit in the host unit and the headquarters improve repatriate knowledge transfer

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Abstract

Knowledge transfer within multinational enterprises is a source of competitive advantage. However, we know little about repatriates' role in reverse knowledge transfer upon their return to headquarters (HQ). Using an organizational embeddedness perspective, we conceptualized how embeddedness fit – individuals' perceived match between their knowledge and skills and the job requirements – during the expatriation assignment and upon repatriation predicts repatriate knowledge transfer. To test the hypotheses, we collected multi-wave survey data from 129 repatriates and their supervisors and developed a repatriate knowledge transfer scale. The results show that perceived organizational support from HQ positively influences embeddedness fit, both in the host unit during expatriation and in the HQ upon repatriation. Further, embeddedness fit in the HQ upon repatriation has a direct effect, while embeddedness fit in the host unit during expatriation has an indirect effect on repatriate knowledge transfer via increased communication frequency with the former host unit. In addition, we found that knowledge transfer is particularly pronounced for repatriates with both high levels of embeddedness fit in the HQ upon repatriation and frequent communication with colleagues in their former host unit. Our results highlight the critical importance of helping expatriates increase their perceived embeddedness fit for reverse knowledge transfer to occur.

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INTRODUCTION

In today's knowledge-based global economy, knowledge transfer across countries is a source of competitive advantage for multinational enterprises (MNEs) (Gupta & Govindarajan, 2000; Huang & Li, 2019). Prior literature has provided rich insights into how MNEs can transfer knowledge from headquarters (HQ) to foreign subsidiaries and has pointed to expatriation as one of the most

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effective means to do so (e.g., Chang, Gong, & Peng, 2012; Cuypers, Ertug, Cantwell, Zaheer, & Kilduff, 2020; Minbaeva, Pedersen, Björkman, Fey, & Park, 2003; Stoermer, Davies, & Froese, 2020). At the same time, we know much less about the reverse transfer of knowledge from subsidiaries to the HQ (Ambos, Ambos, & Schlegelmilch, 2006; Gupta & Govindarajan, 2000; Huang & Li, 2019), and the role of repatriates who have returned to HQ after assignment completion (Burmeister, Deller, Osland, Szkudlarek, Oddou, & Blakeney, 2015; Harzing, Pudelko, & Reiche, 2016; Lazarova & Tarique, 2005). This is surprising because, during their assignments, expatriates' role is not only confined to providing subsidiary employees with knowledge but they also gain valuable knowledge and develop new skills themselves as part of their international experience (Berthoin Antal, 2000; Lazarova & Cerdin, 2007; Oddou, Osland, & Blakeney, 2009). From existing research (Lazarova & Tarique, 2005; Reiche, 2012), we know that the acquired knowledge and skills are mainly transferred back to HQ upon expatriates' return, and evidence suggests that such reverse knowledge transfer in the HQ – which represents the focus of this study – can enhance HQ performance (Subramaniam & Venkatraman, 2001), generate a competitive strategic advantage (Ambos et al., 2006; Gupta & Govindarajan, 2000), and trigger new ideas and innovation (Birkinshaw, Hood, & Jonsson, 1998; Huang & Li, 2019).

Despite these promises, repatriate knowledge transfer often becomes thwarted due to a lack of trust (Kostova, 1999), as well as low organizational receptivity and support in the HQ (e.g., Burmeister et al., 2015; Furuya, Stevens, Bird, Oddou, & Mendenhall, 2009; Lazarova & Tarique, 2005). In this respect, recent research (Burmeister, Lazarova, & Deller, 2018; Sanchez-Vidal, Sanz-Valle, & Baraba-Aragon, 2018) has started to elucidate factors that can promote repatriate knowledge transfer, such as repatriates' disseminative capacity and opportunities to engage in knowledge transfer. Yet, little is known about the processes underlying repatriate knowledge transfer (Burmeister et al., 2015; Oddou et al., 2009), especially concerning how individuals' experiences in the host unit during expatriation and in the HQ upon repatriation may influence such transfer. This limits our theoretical understanding of repatriate knowledge transfer, leading Chiang, Van Esch, Birtch and Shaffer (2018) to argue that research on repatriate knowledge transfer is still in its infancy. To address

this, the present study builds on an organizational embeddedness perspective (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001; Ng & Feldman, 2010), and investigates the influence of organizational embeddedness in the host unit during expatriation and in the HQ upon return on repatriate knowledge transfer. Organizational embeddedness refers to individuals' perceptions of how strongly they are enmeshed in their organization (e.g., Mitchell et al., 2001; Ng & Feldman, 2007; Reiche, Kraimer, & Harzing, 2011), and we expect that organizational embeddedness facilitates repatriate knowledge transfer via two pathways.

Prior research distinguishes between three dimensions of embeddedness, i.e. fit, links, and sacrifice. Fit refers to the degree of compatibility an individual perceives with his/her organization, encompassing a match between an individual's knowledge and skills and the requirements of the job (Mitchell et al., 2001; Zhang, Fried, & Griffith, 2012). Links can be understood as the informal and formal ties between the individual and the organization, whereas sacrifice captures an individual's perceptions of what he/she would lose upon leaving the organization (Lee, Mitchell, Sablinski, Burton, & Holtom, 2004; Mitchell et al., 2001; Reiche et al., 2011). In line with prior expatriate research (Lazarova & Tarique, 2005; Ren, Shaffer, Harrison, Fu, & Fodchuk, 2014), we focus on the fit dimension of embeddedness (henceforth, embeddedness fit) given that "links and sacrifices within the host country are probably less salient due to the temporary nature of the international relocation" (Ren et al., 2014: 223).

Our study aims to make the following contributions. First, we introduce the organizational embeddedness perspective from turnover research (e.g., Mitchell et al., 2001; Ng & Feldman, 2010) to the repatriation literature. Thus, we apply a novel embeddedness-driven theoretical lens towards repatriate knowledge transfer and develop a conceptual model to understand *why*, *how*, and *when* repatriates engage in knowledge transfer. In addition, we advance current knowledge of the antecedents of organizational embeddedness (e.g., Singh, Shaffer, & Selvarajan, 2018) by investigating perceived organizational support (POS) as a predictor of the fit dimension of organizational embeddedness during and after expatriation. In line with our focus on expatriates who have been assigned by HQ and who subsequently return to the HQ, we focus on HQ POS, because expatriates receive support from the HQ – e.g., from its global mobility



department – before, during, and after the international assignment. This HQ support is instrumental in preparing and setting up expatriates in the foreign subsidiary and providing ongoing tangible and psychological resources to become embedded in the foreign subsidiary and upon return in the HQ. In support, prior research has demonstrated that HQ POS is critical for expatriates' success while abroad and when returning (Kraimer, Wayne, & Jaworski, 2001; Lazarova & Caligiuri, 2002; Liu & Ipe, 2010).

Second, we believe that the fine-grained perspective on embeddedness fit employed in this study has the potential to significantly inform research on embeddedness in the context of expatriation and repatriation (Cuyppers et al., 2020; Reiche, 2012; Reiche et al., 2011; Shen & Hall, 2009; Tharenou & Caulfield, 2010). The on-the-job (organizational) embeddedness construct was born in a domestic context with the employing organization as the central point of reference (see, for an overview, Lee, Burch, & Mitchell, 2014). For corporate expatriates, the situation is different as they should ideally serve two masters, i.e., the HQ and the foreign subsidiary (Black & Gregersen, 1992). Accordingly, it is plausible to expect that there are two organizational contexts in which they can experience embeddedness fit, and that the mechanisms between fit in these contexts and subsequent repatriate knowledge transfer work differently. In our study, we considered this to capture the temporal and contextual particularities of the working realities of expatriates in the MNE environment as they relate with repatriate knowledge transfer. In this regard, our study shows a way forward for future studies on expatriation/repatriation on how to harness the explanatory power of the embeddedness perspective by looking at embeddedness across different phases of the expatriation cycle and distinct organizational units within the MNE. At the same time, we extend the general embeddedness literature that has similarly advocated the idea of multiple foci of embeddedness that affect individuals' workplace behaviors (e.g., Feldman & Ng 2007; Kiazad, Holtom, Hom, & Newman, 2015; Ng & Feldman, 2007).

Third, we contribute to expatriate/repatriate research by developing and validating a measure of repatriate knowledge transfer. Even though prior studies have measured knowledge transfer in different ways (e.g., Burmeister et al., 2018; Furuya et al., 2009; Sanchez-Vidal et al., 2018), research on repatriate knowledge transfer would certainly

benefit from the use of a measure with validated psychometric properties. Therefore, the present study offers a valuable measurement instrument for use in the field. Finally, we make a methodological contribution. The majority of existing research on repatriate knowledge transfer is mostly confined to conceptual papers (Lazarova & Tarique, 2005; Oddou et al., 2009), based on interviews (Burmeister et al., 2015) and cross-sectional surveys (Furuya et al., 2009; Sanchez-Vidal et al., 2018). In contrast, the present study is based on a three-wave survey, including expatriate and repatriate self-assessments and supervisor ratings of repatriate knowledge transfer. Thus, our study addresses important limitations of prior research, such as common method bias, and provides more generalizable and valid findings.

CONCEPTUAL BACKGROUND AND HYPOTHESES

The Organizational Embeddedness Perspective

The organizational embeddedness perspective originated from the work of Mitchell and colleagues who investigated the unfolding model of turnover in the mid-1990s to describe the different pathways for why employees voluntarily leave their organization (e.g., Lee & Mitchell, 1994). However, over the course of their research, the focus switched from 'why do people leave their organization' to 'why do people stay'. Eventually, their theorizing and later empirical work resulted in the birth of the embeddedness construct which considers individuals' on-the-job embeddedness (organizational) and off-the-job embeddedness (community) (Mitchell et al., 2001). Taking strong influence from the attachment literature (e.g., March & Simon, 1958), the basic tenets of the theory are that employees can become stuck or enmeshed within their organization. In recent years, the focus of embeddedness studies has been on the organizational component of embeddedness due to its stronger influence on work-related outcomes, such as turnover (Lee et al., 2014; Ng & Feldman, 2010; Zhang et al., 2012). Following the tenets of the theory, individuals are less likely to leave their organization if they score high on embeddedness. These tenets have been corroborated in empirical research. For instance, in a sample of 259 employees from the finance sector, Allen (2006) found that organizational embeddedness was a significant negative predictor of turnover.

In expatriation research, embeddedness has garnered increased attention over the past decade (Kraimer, Shaffer, Harrison, & Ren, 2012; Reiche et al., 2011; Ren et al., 2014; Shen & Hall, 2009; Tharenou & Caulfield, 2010; Stoermer et al., 2020). A common theme of this research is to predict expatriate retention in the host country (e.g., Ren et al., 2014; Tharenou & Caulfield, 2010), or to consider the specific role of embeddedness for fostering repatriates' reintegration into the HQ (e.g., Shen & Hall, 2009). The underlying rationale of these studies is that embeddedness is particularly important for individuals who have become uprooted by relocating to a different host country and organizational environment, and who need to reintegrate as part of the repatriation process (e.g., Shen & Hall, 2009). As such, embeddedness has been argued to be critical in phases of shift and transition. Discussing the specific effects of the separate dimensions of organizational embeddedness, Ren et al. (2014) proposed that the fit dimension of organizational embeddedness exerts the strongest influence on expatriate behavioral outcomes on the job. By contrast, they reasoned that links and sacrifice are less salient influences due to the finite character of the international relocation. The relative importance of the fit dimension for repatriates' job-related behaviors was further corroborated empirically in Reiche et al.'s (2011) study. This also resonates with the conceptual account by Lazarova and Tarique (2005), who theorized about antecedents of repatriate knowledge transfer. The authors concluded that knowledge transfer depends in particular on the compatibility between repatriates' knowledge and the requirements/properties of the job in the HQ. Broader research on job-related behaviors in organizations has similarly focused on the fit dimension (Van Vianen, 2018). Taken together, we follow past research and examine the specific role of the fit dimension of embeddedness in the present study.

Below, we first establish HQ POS as an antecedent of embeddedness fit in both organizational contexts and proceed with the development of two pathways through which embeddedness fit promotes repatriate knowledge transfer: (1) directly via embeddedness fit in the HQ upon repatriation, and (2) indirectly through embeddedness fit with the former host unit during expatriation, mediated by communication frequency with the former host unit upon repatriation. Finally, we investigate potential interactions between embeddedness fit

in the HQ upon repatriation and communication frequency with the former host unit upon repatriation. Figure 1 summarizes our conceptual model.

Antecedents of Organizational Embeddedness Fit

HQ POS and embeddedness fit in the host unit during expatriation and the HQ upon repatriation

In general, organizational support is one of the most important resources for employees (for a review, see Rhoades & Eisenberger, 2002), including expatriates and repatriates (e.g., Kraimer et al., 2001; Reiche, 2012). Therefore, the construct has received major attention and is commonly defined as employees' global beliefs with regards to how strongly their organization values their contribution and efforts, and the degree to which the organization cares about their well-being (Eisenberger, Huntington, Hutchison, & Sowa, 1986). In fact, prior research has shown that POS relates positively to central employee-level outcomes such as organizational citizenship behavior, job satisfaction, and retention (Allen, Shore, & Griffeth, 2003; Rockstuhl et al., 2020).

With regards to expatriation, we know that expatriates often struggle with challenges encompassing cultural novelty, language hurdles, socialization problems, or work requirements that differ from the job in the home country (e.g., Bader, Reader, & Froese, 2019; Selmer & Luring, 2011; Shin, Morgeson, & Campion, 2007). As such, the cross-cultural demands that expatriates face have been shown to pose barriers to the establishment of overall embeddedness and, in particular, the fit dimension of embeddedness (Ren et al., 2014). In this respect, we propose that perceiving the HQ as supportive and sensitive to expatriates' concerns during the assignment will help overcome these hurdles. Specifically, scholars have argued that the accumulation of resources is what enables individuals to become embedded (Halbesleben & Wheeler, 2008), and we reason that HQ POS provides two forms of vital resources that expatriates can draw from to establish embeddedness fit in the host unit during expatriation (e.g., Singh et al., 2018). First, Guzzo, Noonan and Elron (1994) showed that the number of tangible resources that organizations offer to expatriates contributes to expatriates' perceptions of organizational support. For example, relevant support from the HQ during expatriation relates to assistance in terms of ensuring a smooth work transfer and mentorship provision, as well as cross-cultural and/or language training (e.g., Guzzo

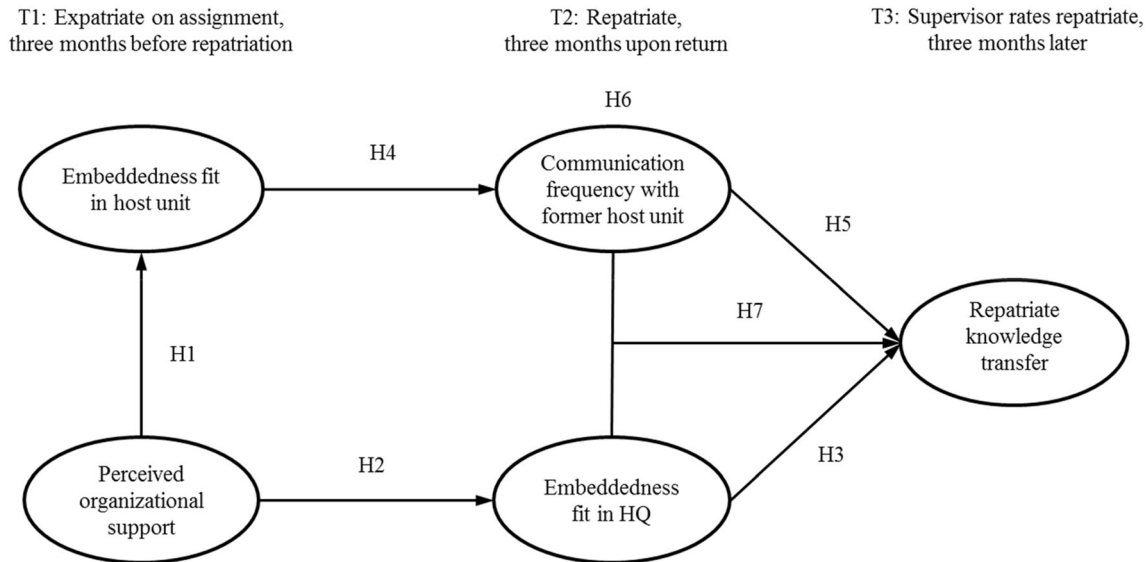


Figure 1 Conceptual model and hypotheses: the role of embeddedness fit during expatriation and upon repatriation for repatriate knowledge transfer. Note: *H6* refers to the mediation hypothesis.

et al., 1994; Kraimer et al., 2001), which should help expatriates better match their knowledge and skills with the requirements of the job. Second, perceptions of organizational support should also provide expatriates with the necessary psychological resources to grow into their new role abroad. This is because POS reflects an assurance that help will be available from the HQ when employees need to perform their job effectively or to deal with stressful situations, and should hence increase their confidence to establish fit (Rhoades & Eisenberger, 2002). Initial empirical evidence from related research conducted in a domestic setting supports the positive association between POS and embeddedness. Although not the focus of their model, the study by Allen and Shanock (2013) demonstrated a strong positive correlation between the two constructs. Hence, we conclude:

Hypothesis 1: Perceived organizational support from the HQ relates positively to embeddedness fit in the host unit during expatriation.

In terms of embeddedness fit in the HQ upon repatriation, which we measured 3 months after return, we expect a similar relationship. Repatriates often face difficulties when they return to the HQ, leading to high turnover (Paik, Segaud, & Malinowski, 2002). These difficulties, inter alia, relate to unfulfilled career expectations, little appreciation of the gained international experience and knowledge, or a loss of autonomy (e.g., Black, Gregersen,

& Mendenhall, 1992; Lazarova & Cerdin, 2007). Accordingly, providing resources for creating congruence between repatriates' expectations and the characteristics of the job in the HQ appears to be critical for facilitating embeddedness fit in the HQ upon repatriation. Referring to the extant literature on repatriate integration (e.g., Paik et al., 2002) and the organizational embeddedness perspective (Mitchell et al., 2001), we propose that HQ POS is a central means to establish such fit.

As stated above, organizational support entails a heightened sensitivity to employee needs and a strong appreciation of their unique knowledge and contributions (Eisenberger et al., 1986). Consequently, we theorize that repatriates, who perceive their HQ as supportive and responsive to their needs during the assignment, will have more psychological resources (i.e., confidence) to clarify their expectations and engage in a dialogue with the organization about their role and tasks in the HQ when they return. This will enable them to actively craft their job before reentry, e.g., by adding responsibilities to the job that correspond with the newly gained international experience, such as stronger involvement in international operations (Kraimer et al., 2012). Similarly, if repatriates perceived their HQ to be supportive while they were on the assignment, they will more likely ask for tangible resources such as additional preparatory reintegration measures, including pre-departure training, or reorientation programs that,

for example, provide information on the changes in the company that occurred during the assignment (Lazarova & Caligiuri, 2002). This is because perceived support from the HQ during the assignment should serve as a signal to individuals that the HQ will be able to care for their well-being in the form of assistance upon completion of their assignment. In sum, the perceived support should facilitate repatriates' embeddedness fit in the HQ upon their return. Related empirical studies support this contention. For example, Lazarova and Caligiuri (2002) found a strong negative relationship between HQ POS and turnover intentions across a sample of repatriates from U.S.- and Canadian-based MNEs. Similar findings were presented in a study by Lazarova and Cerdin (2007). This leads to:

Hypothesis 2: Perceived organizational support from the HQ relates positively to embeddedness fit in the HQ upon repatriation.

Pathway 1: The Direct Link to Repatriate Knowledge Transfer

Embeddedness fit in the HQ upon repatriation and repatriate knowledge transfer

The knowledge that employees carry is a competitive advantage for organizations (Grant, 1996). It is defined as "information processed by individuals including ideas, facts, expertise, and judgments relevant for individual, team, and organizational performance" (Wang & Noe, 2010: 117). However, to leverage the potential benefits of knowledge, it has to be transferred. Knowledge transfer refers to the exchange of information between organizational units (Szulanski, Cappetta, & Jensen, 2004; Wang & Noe, 2010). Within the expatriation context, expatriates have traditionally been considered as agents of knowledge transfer from the HQ to subsidiaries (Edström & Galbraith, 1977). However, during the assignment, expatriates also gather knowledge that is relevant to the HQ, such as knowledge of host-country markets, cultural customs, or expertise on how to establish local business contacts (Berthoin Antal, 2000). Plausibly, the reverse transfer of this knowledge within the HQ through repatriates as knowledge repositories is a vital asset for organizations (Oddou, Szkudlarek, Osland, Deller, Blakeney, & Furuya, 2013).

Following the organizational embeddedness perspective (Mitchell et al., 2001), we propose that perceiving embeddedness fit with the HQ upon

repatriation serves as a crucial antecedent of repatriate knowledge transfer, as fit entails a high degree of compatibility between repatriates' knowledge and skills and the characteristics of the job at the HQ. Thus, we expect that repatriates will be more motivated to engage in reverse knowledge transfer if they perceive their knowledge to be useful for solving work-related tasks and if their expertise is valued by the organization. Repatriates who perceive higher levels of embeddedness fit should also engage in increased knowledge transfer as they can better assess where their knowledge is needed, thus enabling targeted and more effective knowledge transfer. Similarly, Lazarova and Tarique (2005) argued in a conceptual paper that the fit between individual readiness and organizational receptivity facilitates repatriate knowledge transfer, thereby underlining the importance of the fit dimension of organizational embeddedness. Further, there is indirect empirical support for this argument. For example, Stoermer et al. (2020) found a strong positive association between organizational embeddedness and knowledge sharing in a sample of expatriates, and Ng and Feldman (2010) demonstrated that embedded, domestic employees engage in higher levels of innovative behaviors at work. Hence, we conclude that the direct association between embeddedness fit in the HQ upon repatriation and repatriate knowledge transfer operates as the first pathway through which the fit dimension of organizational embeddedness influences repatriate knowledge transfer. We propose:

Hypothesis 3: Embeddedness fit in the HQ upon repatriation relates positively to repatriate knowledge transfer.

Pathway 2: The Indirect Link to Repatriate Knowledge Transfer

Embeddedness fit in the host unit during expatriation and communication frequency with the former host unit upon repatriation

Communication is a central means by which information can be transmitted between entities, and it can take place in various forms, e.g., orally or written, and can be of an informal or formal nature (Robbins & Judge, 2009). Within the MNE context, specific barriers exist that can hamper its initiation or lead to a decrease in communication frequency between the HQ and subsidiaries. These problems



are rooted in, for instance, low trust between the foreign subsidiary and HQ managers, language barriers, or simply detachment due to high geographical distance (e.g., Froese, Peltokorpi, & Ko, 2012; Tenzer, Pudelko, & Harzing, 2014). However, according to the organizational embeddedness perspective, we posit that these barriers will be less pronounced if repatriates perceived high levels of embeddedness fit during their previous stay at the host unit. Specifically, repatriates who perceived high levels of embeddedness fit with their former host unit during expatriation should engage in more frequent communication, defined as an increase in interactions via telephone, email, or video conferences (Ghoshal, Korine, & Szulanski, 1994; Subramaniam & Venkatraman, 2001) with that unit upon their return to the HQ.

In general, we propose that embeddedness fit leads to an increase in communication frequency by facilitating repatriates' overall attachment to the host unit (Chen & Shaffer, 2017; Kraimer et al., 2012). Specifically, repatriates who perceived high fit should show greater identification with the projects they were involved in at the host unit. This should prompt them to regularly contact their colleagues in the host unit to obtain updates on the latest developments. Similarly, we theorize that repatriates, who have experienced a strong compatibility between their competences/skills and host unit demands, will develop a sense of responsibility for the host unit operations and success. In turn, we propose that repatriates will want to maintain their commitment to the host unit and initiate communication to actively partake in decision-making processes and to weigh in their expertise. This resonates with the work of Lee et al. (2004), who argued that fit is crucial to the intrinsic motivation of employees, and with the general notion that individuals with high levels of fit are likely to experience better communication with other members of the organization (Meglino & Ravlin, 1998). Note that the intensified communication between repatriates and co-workers in the host unit is likely to be mutual. Specifically, host unit employees will themselves initiate more frequent communication with the repatriate, if the latter perceived fit in the host unit and his/her skills were deemed valuable to host unit operations. Thus, we postulate:

Hypothesis 4: Embeddedness fit in the host unit during expatriation relates positively to

communication frequency with the former host unit upon repatriation.

Communication frequency with the former host unit upon repatriation and repatriate knowledge transfer

As elaborated above, communication is essential for the sharing of information (Gupta & Govindarajan, 2000; Nonaka & Takeuchi, 1995; Szulanski, 1996). Thus, more frequent communication enables enhanced access to unique knowledge and, consequently, facilitates the transfer of knowledge to resolve work-related problems. In the case of communication between repatriates and the former host unit, we posit that repatriate knowledge transfer is enabled if frequent communication is maintained. Hence, regular exchange should enable the swift gathering and diffusion of critical information that can be transferred in subsequent steps. In a similar vein, frequent communication with former subsidiary colleagues will keep repatriates updated on whom to contact in the host unit whenever a particular expertise is needed. As such, the ability to locate knowledge more easily should further promote the gathering of knowledge and, in turn, increase repatriate knowledge transfer (e.g., Monteiro, Arvidsson, & Birkinshaw, 2008). There is also empirical evidence for the positive association between communication frequency and knowledge transfer. For example, Peltokorpi and Yamao (2017) showed the beneficial effects of communication frequency on reverse knowledge transfer between foreign subsidiaries located in Japan and the HQ.

Further, as per the rationale leading to Hypothesis 4, communication frequency with the former host unit upon repatriation should depend to a considerable extent on the perceived degree of embeddedness fit during expatriation (Meglino & Ravlin 1998). Hence, we expect communication frequency to mediate the association between embeddedness fit in the host unit during expatriation and repatriate knowledge transfer. This suggests that repatriates who perceived high levels of embeddedness fit in the host unit during expatriation will engage in increased knowledge transfer due to more frequent communication with the host unit after returning to the HQ. Therefore, the indirect association between perceived embeddedness fit with the host unit during expatriation and repatriate knowledge transfer represents the second



pathway through which the fit dimension of organizational embeddedness affects repatriate knowledge transfer. This leads to:

Hypothesis 5: Communication frequency with the former host unit upon repatriation relates positively to repatriate knowledge transfer.

Hypothesis 6: Communication frequency with the former host unit upon repatriation mediates the positive relationship between embeddedness fit in the host unit during expatriation and repatriate knowledge transfer.

Interaction Effects between the Two Pathways

Finally, we expect that the two proposed pathways interact in predicting repatriate knowledge transfer. Therefore, we contend that the two direct predictors – communication frequency with the former host unit and embeddedness fit with the HQ upon repatriation – influence each other in a synergistic way, thus reciprocally reinforcing the corresponding effects of each variable on repatriate knowledge transfer. First, drawing on the organizational embeddedness perspective (Mitchell et al., 2001; Zhang et al., 2012) and our argumentation for Hypothesis 3, embeddedness fit in the HQ upon return should positively relate to repatriate knowledge transfer, and we propose that this relationship will become more pronounced for repatriates engaged in frequent communication with the former host unit. Accordingly, repatriates, who score high on the fit dimension of organizational embeddedness, should perceive a good match between their knowledge and the characteristics of the HQ workplace (Lazarova & Tarique, 2005; Zhang et al., 2012). They will, thus, be more inclined to utilize their knowledge and transfer it (e.g., Ng & Feldman, 2010; Stoermer et al., 2020). Further, if the exchange of information between repatriates and the former host unit continues to be strong due to high communication frequency, repatriates will not have to solely rely on their own knowledge and skills. Instead, they can access other sources of information and can supplement their pool of knowledge. This should further boost their knowledge transfer. In sum, this leads to:

Hypothesis 7: Embeddedness fit in the HQ upon repatriation interacts with communication frequency with the former host unit upon repatriation, such that the positive relationship between embeddedness fit in the HQ upon

repatriation and repatriate knowledge transfer is stronger when repatriates' communication frequency with the former host unit upon repatriation is high.

METHODS

Data Collection and Sample

This study is part of a larger research project on expatriation and repatriation. We collected data from five MNEs in the manufacturing and financial sectors. The respective HQ of these MNEs are located in Germany, Spain, and the Czech Republic, with more than 5000 employees each worldwide. We distributed the questionnaires to participants with the support of the responsible global mobility departments, and in cooperation with the organizations' labor councils. All participants were located at HQ prior to their assignment and were scheduled to return to HQ upon completion of their assignment. Global mobility managers sent out online questionnaires to expatriates during their international assignments 3 months before return (Time 1, expatriates), 3 months after their return to the HQ (Time 2, then repatriates) and finally, another 3 months later, to their supervisors in the HQ (Time 3). Overall, we received/sent out in Time 1: 356/570 questionnaires (62.46% response rate), Time 2: 339/570 (59.47% response rate), and Time 3: 178/570 (31.23% response rate). In each questionnaire, we included five questions to generate an individual code to allow matching data obtained from individuals and supervisors. For this study, we could use complete data of 129 individuals and their supervisors, resulting in a total response rate of 22.81%. The response rate compares favorably to other expatriate/repatriate studies, which is partly due to the strong support of the involved global mobility departments. The survey included expatriates who stayed abroad for a time span ranging from 1 to 5 years. However, according to global mobility officers in the participating organizations, the majority of assignees usually spent 3–5 years in the host unit. In line with typical demographics of corporate expatriate studies, the majority of respondents were male (88.37%) and the average age was 42.37 years. The repatriates returned from assignments in Europe (32.56%), North America (31.01%) and Asia-Pacific (36.43%). To consider potential attrition bias, we compared the demographics and Time 1 variables between respondents who completed all surveys and those



who dropped out after Time 1. However, we did not find any statistically significant differences, suggesting that attrition bias is not a serious problem in this study.

Measures

Unless otherwise noted, we measured all items with a 7-point Likert scale. The majority of our measures are based on established scales. Given the lack of a well-established repatriate knowledge transfer scale, we developed our own scale, as described below.

Repatriate knowledge transfer: Scale development

As part of the scale development process, we first generated items by reviewing prior related studies (e.g., Berthoin Antal, 2000; Furuya et al., 2009) and conducted interviews with HR experts and repatriates. Altogether, we interviewed 45 repatriates, 8 domestic supervisors, 2 HR managers, and 2 top managers in order to explore the kind of knowledge that expatriates acquire during an international assignment and possibly transfer over the course of their repatriation. The interviews were tape-recorded and transcribed verbatim. We analyzed our data analogous to the approach of Corley and Gioia (2004), and extracted 58 types of knowledge that can be gained by expatriates and transferred upon return. We then subdivided these types of knowledge into eight second-order themes of knowledge and, then, into two first-order clusters, which we labeled task- and relationship-oriented knowledge. Based on further discussions with 5 repatriates, 5 HR managers, and 3 expatriation

researchers, we cross-checked this classification, checked whether we omitted any important types of knowledge and, eventually, narrowed down the list to 27 types of knowledge, as a result of internal discussions within our team of researchers.

Second, we purified the item list through a pilot study. We surveyed 160 repatriates of an MNE in the manufacturing industry. We provided repatriates with 27 items and asked them to indicate the extent to which they engaged in repatriate knowledge transfer on a 7-point Likert scale (1 = transferred very little, 7 = transferred a lot). We conducted an exploratory factor analysis (EFA), using principal components factor analysis, and rotated our factors orthogonally with the Varimax method. We used a stepwise approach and deleted all items with low factor loadings (< .60) and high cross-loadings (> .30). We applied these rather strict thresholds as we intended to develop a short and robust scale. This resulted in a final set of eight items with two underlying factors with Eigenvalues above one (for more details about the eight item, see Table 1), resembling our first-order constructs of task-oriented and relationship-oriented knowledge transfer. The two identified factors explained 71.39% of the total variance.

Third, we cross-validated our items and factor structure through confirmatory factor analysis (CFA) based on another sample of 209 repatriates who self-assessed their knowledge transfer. The postulated model based on eight items and two factors had a good fit: $\chi^2(19) = 39.60, p = .004, CFI = .985, TLI = .977, RMSEA = .072$.

Table 1 Factor loadings of the repatriate knowledge transfer items

	Task-oriented knowledge transfer	Relationship-oriented knowledge transfer
Knowledge of the host country's customs (traditions, national holidays, etc.)	.87	
Market knowledge (structure, products, customer needs)	.83	
Knowledge of working style in the host country	.82	
Knowledge of structures and processes in the host unit	.62	
Understanding of the behavioral patterns of people from other cultures		.87
Understanding of different ways of thinking		.86
Cross-cultural understanding of work relationships		.81
Understanding of relationship between host unit and headquarters		.77

We asked respondents "Please rate to which extent your repatriate from abroad, after reentry, has been able to use the following knowledge abilities or skills in their new position or has been able to share their knowledge with other colleagues in the company." followed by the above eight statements. For each item, respondents had to select between seven options ranging from 1 = very little to 7 = a lot.

Correspondingly, the reliabilities of both dimensions are high, with a Cronbach's Alpha of .91 for each dimension.

After having validated the items, we used the eight items to measure repatriate knowledge transfer. In Time 3, supervisors evaluated the knowledge transfer of repatriates. Cronbach's Alpha are .93 for task- and .96 for relationship-oriented knowledge.

Embeddedness fit

As elaborated before, drawing from prior expatriate research (Lazarova & Tarique, 2005; Reiche et al., 2011; Ren et al., 2014), we focused on the fit dimension of embeddedness in this study. We used the six-item inventory developed by Mitchell et al. (2001) to capture the fit dimension of organizational embeddedness. An example item reads: "My job utilizes my skills and talents well." While we used the same items to measure embeddedness fit in Time 1 and Time 2, we distinguished between the reference points. In Time 1, while expatriates were on their international assignment, we asked expatriates about their embeddedness fit in the host unit, whereas in Time 2, 3 months upon repatriation, we measured embeddedness fit with the HQ as the point of reference. Since organizational embeddedness is a formative construct (Mitchell et al., 2001), Cronbach's Alpha is not of relevance (Allen & Shanock, 2013). The corresponding Cronbach's Alphas would be .82 and .85, respectively.

Perceived organizational support (POS) from the HQ

At Time 1 during expatriation, we measured HQ POS with five items from Eisenberger et al. (2001). Respondents were asked to indicate the level of perceived organizational support obtained from the home company which equals HQ across all surveyed individuals. An example item is "The organization strongly considers my goals and values." The Cronbach's Alpha for the scale is .94.

Communication frequency with the former host unit upon repatriation

At Time 2 upon return, we measured communication frequency with the former host unit upon repatriation with three items from the communication frequency scale from Subramaniam and Venkatraman (2001). In contrast to the original source and in response to recent changes in communication technology, we replaced the communication channel of "fax" with "video conference."

An example item is: "I'm frequently in contact with my previous host unit via phone." The scale has a Cronbach's Alpha of .82.

Control variables

Based on related research (e.g., Peltokorpi & Froese, 2014; Reiche, 2012), we controlled for respondents' age and host country/region of their international assignment. Age was measured in years. We did not control for gender because only 15 respondents were female. In terms of host regions, we created two dummies, one for North America and the other one for the Asia-Pacific region. We controlled for functional affiliation, distinguishing between individuals working in the service versus the production domains. We created a dummy for expatriates working in marketing/sales/purchasing, and another dummy for production and logistics. As stated above, respondents from five different companies participated in this study. Given that the majority of respondents worked for one German manufacturing company, we created a dummy for that company to control for firm-specific effects. We assessed all control variables at Time 1 and loaded them on both types of embeddedness fit and repatriate knowledge transfer.

RESULTS

Before testing our hypotheses, we conducted CFA to validate our multi-item scales. In line with prior research (Allen & Shanock, 2013; Mitchell et al., 2001), we did not include embeddedness fit in these analyses as it is a formative construct. Due to content overlap and a high modification index, we allowed the error-terms of two items in the HQ POS scale to correlate. The resulting model showed a good fit: $\chi^2(97) = 154.280$, $p < .001$, CFI = .973, TLI = .966, RMSEA = .068). Additional results revealed that the two repatriate knowledge transfer dimensions loaded onto a second-order factor. The model fit for loading the two dimensions on a second-order factor, i.e., $\chi^2(98) = 154.774$, $p < .001$, CFI = .973, TLI = .967, RMSEA = .067, was almost identical to a first-order factors-only model. This implies that the second-order factor structure can account for the correlations among the first-order factors (Brown, 2006). Thus, we retained the second-order factor structure for repatriate knowledge transfer in our subsequent analyses. Table 2 shows the means, standard deviations, and correlations of all variables included in this study.

Table 2 Means, standard deviations (SD), and correlations of study variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1 Age	42.38	9.35										
2 Marketing dummy	.23	.42	-.14									
3 Production dummy	.26	.44	-.01	-.32								
4 Asia-Pacific dummy	.36	.48	.07	.02	-.12							
5 North America dummy	.31	.46	-.10	.04	.20	-.51						
6 Company dummy	.87	.34	.06	.04	.18	.10	.26					
7 Perceived org. support	4.87	.49	-.12	.01	.00	-.10	.08	.02				
8 Embeddedness fit in host unit	5.93	.81	-.02	-.04	-.02	.07	-.08	-.08	.41			
9 Embeddedness fit in HQ	5.84	.98	-.03	.06	.06	.05	.02	.14	.35	.43		
10 Communication frequency	4.32	1.69	.02	-.01	-.01	.08	.06	.04	.31	.30	.29	
11 Repatriate knowledge transfer	5.20	1.52	-.08	.04	-.03	-.06	.14	.08	.32	.10	.21	.34

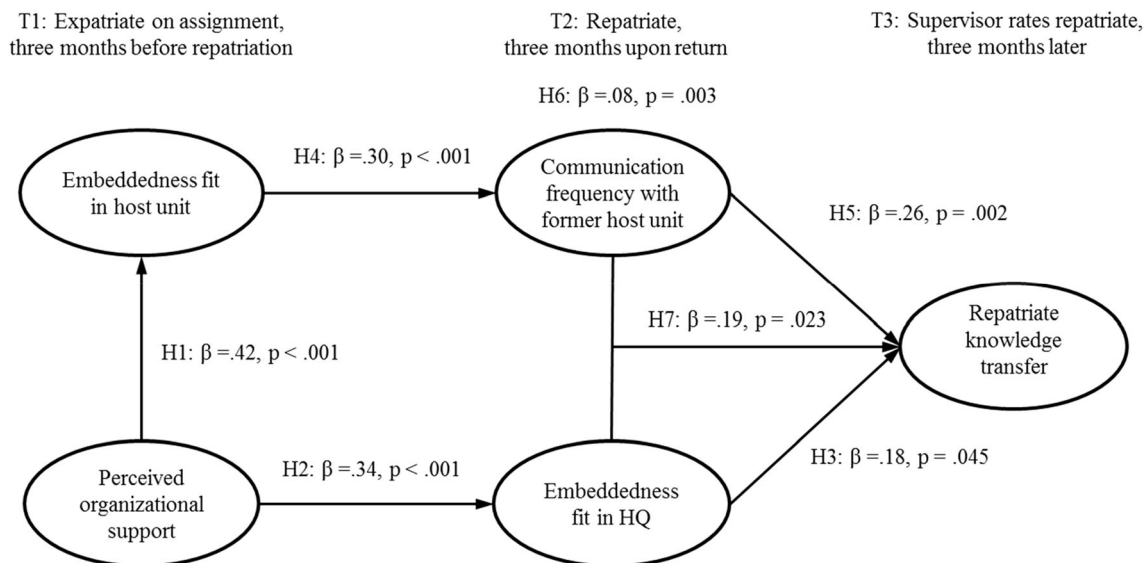
n = 129.

All correlations with absolute value larger than 0.17 are significant at the *p* < .05 level.

We conducted path modeling using the AMOS software package v.26.0 and applied the maximum likelihood estimator to test our hypotheses. To calculate confidence intervals (CI), we applied bootstrap method with 500 samples (Cheung & Lau, 2008). We allowed for a correlation between the error terms of embeddedness fit in the host unit during expatriation and embeddedness fit in the HQ upon repatriation, since they are similarly worded but assessed at two different time points, as is typical in longitudinal data analysis. The path model showed a good fit: $\chi^2(17) = 20.312, p = .376, CFI = .992, TLI = .973, RMSEA = .023$. Figure 2 reports the standardized coefficient estimates. Our

model could explain 18% of the variance in our dependent variable repatriate knowledge transfer.

In Hypothesis 1, we postulated a positive association between HQ POS and embeddedness fit in the host unit during expatriation. This hypothesis was confirmed ($\beta = .42, p < .001, 95\% CI = .27, .56$). HQ POS was also significantly related to embeddedness fit in the HQ upon repatriation ($\beta = .34, p < .001, 95\% CI = .19, .48$), providing support for Hypothesis 2. Next, we turn to Hypothesis 3, which posited a positive relationship between embeddedness fit in the HQ upon repatriation and repatriate knowledge transfer. The results of our analyses support this hypothesis ($\beta = .18, p = .045, 95\% CI = .03, .55$). In Hypothesis 4, we postulated that



Notes: *n* = 129. H6 refers to the mediation hypothesis.

Figure 2 Results of path analysis for predicting repatriate knowledge transfer.

embeddedness fit in the host unit during expatriation is positively related to communication frequency with the former host unit upon repatriation. This hypothesis was also supported ($\beta = .30, p < .001, 95\% \text{ CI} = .14, .45$). Hypothesis 5 proposed a positive relationship between communication frequency with the former host unit upon repatriation and repatriate knowledge transfer. The results provide support for this hypothesis ($\beta = .26, p = .002, 95\% \text{ CI} = .09, .41$). Hypothesis 6 postulated a mediation of the relationship between embeddedness fit in the host unit and repatriate knowledge transfer through communication frequency with the former host unit upon repatriation. Both the Sobel test ($z = 2.359, p = .018$) and bootstrap analysis of the indirect effect ($\beta = .08, p = .003, 95\% \text{ CI} = .04, .27$) provided support for a significant mediation effect. Finally, Hypothesis 7 postulated an interaction between communication frequency with the former host unit upon repatriation and embeddedness fit in the HQ upon repatriation on repatriate knowledge transfer. This hypothesis was also supported ($\beta = .19, p = .023, 95\% \text{ CI} = .01, .37$). Figure 3 illustrates the interaction effect graphically, suggesting that the effects of embeddedness fit in the HQ upon repatriation on repatriate knowledge transfer are particularly pronounced when communication with the former host unit upon repatriation is high. At the same time, under conditions of low communication frequency with the former host unit upon

repatriation, embeddedness fit in the HQ upon repatriation does not appear to influence repatriate knowledge transfer.

We conducted additional tests to further increase our understanding of the role of embeddedness fit in the host unit and in the HQ. First, we tested whether embeddedness fit in the host unit had a direct effect on repatriate knowledge transfer ($\beta = -.04, p = .740, 95\% \text{ CI} = -.23, .19$). Second, we tested whether embeddedness fit in the HQ moderates the relationship between embeddedness fit in the host unit and repatriate knowledge transfer ($\beta = .13, p = .104, 95\% \text{ CI} = -.03, .28$). However, neither of the results were statistically significant. This further highlights that embeddedness fit in the host unit does not have a direct but an indirect effect on repatriate knowledge transfer via increased communication with the former host unit upon repatriation. It should be noted that there is a positive association between embeddedness fit in the host unit and in the HQ ($\beta = .37, p = .003, 95\% \text{ CI} = .13, .54$). This implies that highly embedded expatriates in the host unit tend to be more embedded in the HQ upon repatriation.

DISCUSSION

This study developed a pathway model in which two distinct paths, i.e., embeddedness fit in the host unit during expatriation and in the HQ upon repatriation, lead to repatriate knowledge transfer.

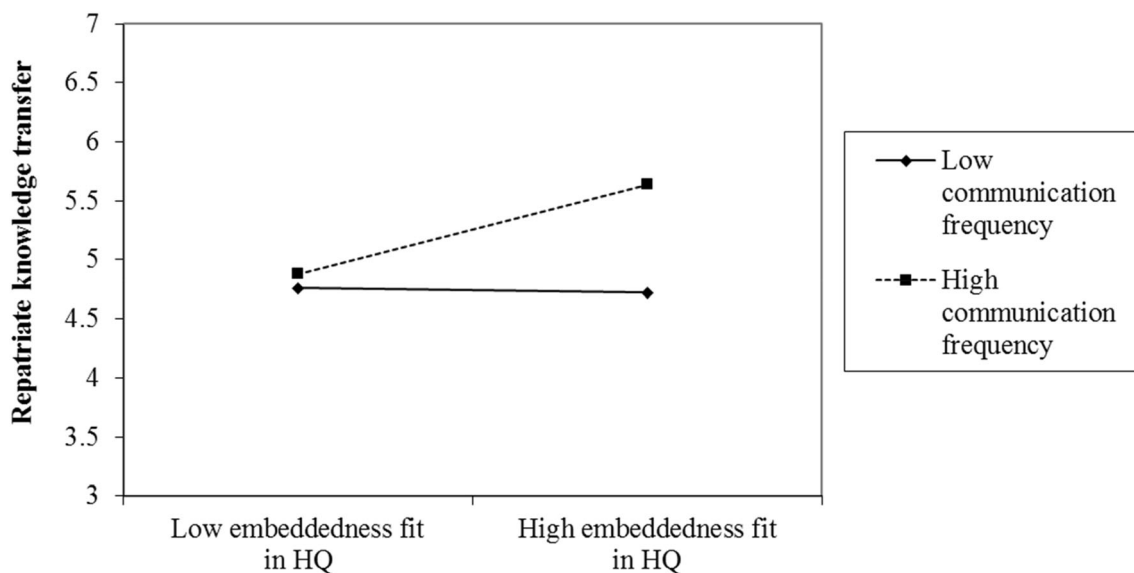


Figure 3 Interaction plot of embeddedness fit in the HQ upon repatriation and communication frequency with the former host unit upon repatriation.



Our findings indicate that HQ POS is a critical antecedent of perceived fit, both regarding the host unit during expatriation and the HQ upon repatriation. Most importantly, we found that embeddedness fit in the HQ upon repatriation has a direct, positive influence on repatriate knowledge transfer, while embeddedness fit in the host unit during expatriation enhances repatriate knowledge transfer indirectly, via increased communication frequency with the former host unit upon repatriation. Further, embeddedness fit in the HQ upon repatriation interacted with communication frequency with the former host unit upon repatriation, suggesting that repatriates engage in increased knowledge transfer if both embeddedness fit in the HQ upon repatriation and communication frequency with the former host unit are high.

Theoretical Implications

By establishing the importance of the fit dimension of organizational embeddedness for repatriate knowledge transfer, and by developing a model comprised of two pathways that feature antecedents, mediators, and interaction effects of the fit dimension of organizational embeddedness, our study offers several theoretical implications. First, our study expands prior research in the expatriation/repatriation domain that integrated core arguments from the organizational embeddedness perspective (Cuypers et al., 2020; Kraimer et al., 2012; Reiche et al., 2011; Ren et al., 2014; Tharenou & Caulfield, 2010), but was mainly confined to retention-related outcomes. By contrast, our study shifted the focus from retention and applied the organizational embeddedness perspective (Mitchell et al., 2001; Ng & Feldman, 2010) as an explanatory framework for repatriate knowledge transfer. Accordingly, we theorized that embeddedness fit both during expatriation and upon repatriation would promote repatriate knowledge transfer. Our empirical findings supported this proposition and substantiate the conceptual account by Lazarova and Tarique (2005) regarding the vital role of fit for repatriate knowledge transfer.

It is important to note that the temporal perspective and theorized mechanisms applied in this study differ from, and therefore extend, the propositions by Lazarova and Tarique (2005). While Lazarova and Tarique primarily focused on future career-related motivations for repatriates to engage in reverse knowledge transfer, we conceptualized repatriates' past and current organizational experiences – in the form of embeddedness fit – as the

main driver of repatriate knowledge transfer. Further, Lazarova and Tarique (2005) theorized that repatriate knowledge transfer occurs when MNEs match the level of intensity of their knowledge transfer mechanisms to the type of knowledge that repatriates gained abroad. By contrast, we empirically examined the different types of knowledge that repatriates may transfer upon their return and aggregated them into two broad types of knowledge: task-oriented and relationship-oriented. Our analyses showed that these two types of knowledge loaded onto a common underlying factor. In other words, our study suggests that repatriate knowledge transfer is contingent upon the degree to which repatriates have established embeddedness fit both at the host unit during their assignment and at the HQ upon their return. In the context of international assignments, we therefore add another theoretical perspective to already available explanations, which serves to further advance our understanding of repatriate knowledge transfer.

Second, to understand the intricacies associated with international assignments along the expatriation and repatriation phases, we reasoned that embeddedness fit in the host unit while abroad and in the HQ upon return affect repatriate knowledge transfer via two distinct pathways. In this respect, we drew inspiration from the more recent research on embeddedness (e.g., Feldman & Ng 2007; Kiazad et al., 2015; Ng & Feldman, 2007) that built on the original work of Mitchell et al. (2001) and pointed to multiple points of reference that individuals use to assess their embeddedness. An essential element of corporate expatriates' experience is that they are usually deployed from HQ to foreign subsidiaries for a limited period to fulfill tasks and organizational goals and return to HQ after completing their assignment (Harrison, Shaffer, & Bhaskar-Shrinivas, 2004; Harzing, 2001). Accordingly, expatriates traverse both organizational contexts and the cultural contexts in which foreign subsidiaries and HQ are nested (Osland, 1995). Considering this, our study disentangled how embeddedness fit across different time points and two distinct country contexts results in repatriate knowledge transfer. Indeed, our analyses show that there are two mechanisms that explain the effects of the fit dimension of organizational embeddedness: while fit with the HQ upon return had a direct association with repatriate knowledge transfer, fit with the host unit during expatriation can have an indirect, lasting effect on repatriate knowledge transfer if it is maintained through continued communication



between repatriates and former host unit colleagues. Thus, our study demonstrates that communication frequency with the former host unit is a more immediate outcome of fit with the host unit, and that it serves as an intermediary vehicle for repatriate knowledge transfer.

Third, we identified boundary conditions for the two pathways through which repatriate knowledge transfer occurs. In detail, we found that communication frequency with the former host unit upon repatriation and embeddedness fit in the HQ upon reentry interacted with each other such that the beneficial effects of the two constructs can only be realized if both are pronounced. In other words, at low levels of communication frequency with the former host unit upon repatriation, repatriates will not engage in more knowledge transfer even if they experience high levels of embeddedness fit in the HQ upon return. Thus, it seems that high communication frequency with the former host unit upon repatriation serves as a way to continuously update host-unit knowledge, while also signaling a certain credibility and value of the repatriate's knowledge in the eyes of HQ colleagues (Reiche, 2012). Similarly, under conditions of low embeddedness fit in the HQ upon repatriation, which reflects a mismatch between the repatriate's knowledge and the HQ context, repatriates are unlikely to make use of the information gained, hence dampening the effects of communication frequency on knowledge transfer.

Fourth, our two-pathway model further highlights that repatriates' embeddedness fit in the HQ upon return is not automatic, despite the fact that they were employed in that unit before embarking on their international assignment. This finding reflects previous research suggesting that repatriates' reentry is highly problematic (see, for reviews, Chiang et al., 2018; Kraimer et al., 2016), for example, due to difficulties with readjustment or feelings of alienation upon return (e.g., Lazarova & Cerdin, 2007). In particular, both individual assignees and their home-country context change while they are abroad (Sussman, 2001). Given the potential identity changes as a result of international experience (Kraimer et al., 2012), an individual not only develops fit and identification towards the host unit but also needs to reestablish fit with the HQ upon return. Furthermore, our results pertaining to HQ POS as an antecedent of embeddedness fit during expatriation and upon return corroborate the findings of studies from domestic contexts, indicating that POS is important to increase

embeddedness in general and fit in particular (Singh et al., 2018). In other words, organizational support signals care and stability to the individual in the presence of potential identity and context changes that individuals experience during expatriation and repatriation.

Fifth, we contribute to expatriate/repatriate research by establishing a validated scale for measuring relevant types of knowledge that repatriates transfer to the HQ. Given increased interest in (repatriate) knowledge transfer (e.g., Oddou et al., 2009), but a lack of psychometrically validated scales, we hope that our scale will be used by future researchers. Based on a rigorous scale development process, including a thorough literature review, more than 50 interviews, EFA and CFA on different samples, and hypotheses testing, we developed a short scale consisting of eight items and two dimensions, i.e., task-oriented and relationship-oriented knowledge transfer. Future researchers may opt to use the aggregate scale or to focus on one of the two sub-dimensions according to their own theoretical predictions and research interests. Finally, from a methodological standpoint, our multi-wave and multi-source research design overcomes important limitations inherent in previous research on repatriate knowledge transfer, which is predominantly conceptual (Lazarova & Tarique, 2005; Oddou et al., 2009) and cross-sectional (Furuya et al., 2009; Sanchez-Vidal et al., 2018) or based on small qualitative samples (Burmeister et al., 2015).

Practical Implications

Our study offers several managerial recommendations. First, our study highlights that embeddedness fit both during expatriation in the host unit and after return with regard to the HQ is beneficial for repatriate knowledge transfer. Thus, organizations need to pay particular attention to the factors and the fulfillment of needs that increase expatriates' perceived embeddedness fit while abroad and upon their return to HQ. Specifically, we found that HQ POS is particularly pivotal as it positively relates to perceptions of fit in both organizational contexts. For instance, to provide greater ease with regards to developing embeddedness fit in the host unit and to convey that the organization cares about the expatriate, organizations could offer meetings with former expatriates who have been seconded to the foreign subsidiary before the assignment, or on-site mentorship programs, and provide assistance with the necessary relocation



arrangements, thus ensuring a smoother expatriation (Suutari & Brewster, 2001). Further, preparing assignees – as well as their relevant family members – for their relocation well in advance, for example, through extensive information about the host destination, and ongoing language and cross-cultural training, is likely to induce perceptions of organizational support.

Furthermore, to facilitate embeddedness fit in the HQ upon repatriation, it is important that organizations initiate support practices prior to expatriates' return. Such support practices should entail pre-repatriation briefings, career planning sessions, ongoing communication with the home unit, and reorientation programs that keep expatriates updated on the changes that have taken place in the HQ during their time abroad (e.g., Lazarova & Caligiuri, 2002). Similarly, to maintain high levels of communication between the repatriate and the former host unit, and to benefit from repatriates' role as boundary spanners between the HQ and foreign subsidiaries (Reiche, 2012), organizations can establish regular video meetings with former colleagues in the host unit, or proactively arrange short-term visits that allow repatriates to meet with their colleagues in the foreign subsidiary.

Limitations and Avenues for Future Research

The findings of this study need to be interpreted in the light of its limitations. Due to the demanding three-wave, multi-source survey design, the sample investigated in this study is fairly small ($n = 129$). We conducted additional tests relying on larger sub-samples and bootstrap procedures with 10,000 replications, and we ran analyses with and without control variables to validate our results. All the results were essentially the same as reported above. Although our sample is larger than the samples used in related longitudinal studies (e.g., $n = 84$ repatriates, Kraimer, Shaffer, & Bolino, 2009; $n = 85$ inpatriates, Reiche, 2012; $n = 90$ repatriates, Kraimer et al., 2012), we recommend future research to collect even larger samples to enhance the generalizability of findings and boost statistical power. This would also allow the analysis of more complex models. Furthermore, we measured two phases of the expatriation cycle but were not able to collect data from the pre-expatriation phase. We believe that theoretical and empirical integration of the pre-expatriation phase, also considering the selection process and the existence of selection biases (Mol, Born, Willemsen, & Van der Molen, 2005), is worthwhile. In addition, this would allow

researchers to account for the effects of HQ POS and embeddedness fit in the HQ before expatriation.

In a similar vein, our theorization and data on the antecedents of embeddedness fit centered on HQ POS. While our empirical findings substantiated our argumentation, we nonetheless believe that future research can complement our study by also considering host-unit POS (e.g., Kraimer et al., 2001; Liu & Ipe, 2010) – especially as an antecedent to embeddedness fit with the host unit during the assignment. An interesting endeavor could be to investigate the changing patterns of influence of HQ POS and host-unit POS in predicting embeddedness fit across the expatriation cycle. Such an approach would certainly complement the model presented in this study. Moreover, due to requests by labor councils in the participating companies, we did not get permission to collect certain background information of respondents, such as tenure and assignment duration. Even though global mobility officers in the participating companies informed us that most individuals spent 3–5 years in the host unit, we would have preferred to gauge more detailed information on assignment duration and tenure. Thus, we encourage future research to collect these variables and to control for their effects, if possible.

Another limitation lies in the composition of our sample. Our sample features primarily European-based corporate expatriates who were dispatched to other European countries, North America, or Asia-Pacific. Due to sample size and data privacy restrictions, we used a simplified approach to account for country differences by creating regional dummies. Even though our results did not reveal any differences in regards to host countries, further research is encouraged to investigate the experiences of expatriates from other regions such as Asia, deployed to various regions, e.g., Africa, to explore potential differences based on expatriate origin and host countries (Oki, 2019; Peltokorpi & Froese, 2014). Ideally, scholars would adopt multi-level analyses, covering at least 30 host-country contexts. Such a line of research could, for example, investigate the roles of cultural, language, and geographic and time zone differences and how these relate to repatriation outcomes (Stoermer et al., 2020; Taras et al., 2019; Tenzer et al., 2014).

Further, in this study, we have focused on individual-level variables as explanatory factors of repatriate knowledge transfer. However, we would expect multi-level studies to complement our

research by concentrating on the role of organizational contexts. For instance, future research might explore the role of unit innovation climate (e.g., Scott & Bruce, 1994), interpersonal trust within units/organizations, or global leadership roles (Reiche, Bird, Mendenhall, & Osland, 2017) as predictors or boundary conditions of repatriate knowledge transfer. Similarly, this study demonstrated that organizational embeddedness is an important predictor, not only of turnover (Mitchell et al., 2001; Peltokorpi, Allen & Froese, 2015) but also of repatriate knowledge transfer. Based on related research (Lazarova & Tarique, 2005; Reiche et al., 2011; Ren et al., 2014), we have focused on the organizational fit dimension. Future research could build on our study by investigating various sub-dimensions of embeddedness on various important outcome variables, such as performance.

Finally, the examined direction of knowledge transfer in this study is unidirectional and concentrated on repatriate knowledge transfer within the HQ. For future investigations, this scope could be expanded to include the transfer of knowledge from the repatriate to the former host unit. This would increase our understanding of knowledge transfer from/to the foreign subsidiary (Meyer, Li, & Schotter, 2020). We believe that the factors examined in this study, i.e., the two pathways of embeddedness fit, also hold explanatory power to better understand knowledge transfer from the HQ to the host unit through the repatriate. Investigating this conduit of knowledge transfer would complement our study and help further triangulate the knowledge-related value of international assignments for MNEs in the long run (Cuypers et al., 2020). Empirically, such an endeavor could be realized by collecting knowledge transfer data

from repatriates' former co-workers in the host unit. It would also be worthwhile to study whether and how the two pathways of embeddedness fit facilitate innovative behavior by both repatriates and their colleagues.

CONCLUSION

Integrating the theoretical lens of the organizational embeddedness perspective, the present study developed a two-pathway model to better understand repatriate knowledge transfer. The established model and empirical findings underline the importance of the fit dimension of organizational embeddedness, both in the host unit during expatriation and the HQ upon return, for repatriate knowledge transfer, and delineate the direct and indirect paths through which embeddedness fit facilitates repatriate knowledge transfer. The present study enhances our theoretical understanding of the relevant mechanisms that explain repatriate knowledge transfer and shows a way forward for MNEs on how to promote such transfer. Furthermore, this study equips researchers with a validated measurement instrument that could be vital for advancing future empirical research on repatriate knowledge transfer.

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