

Not all international assignments are created equal:

HQ-subsidary knowledge transfer patterns across types of assignments and types of knowledge

**Florence Duvivier
Carine Peeters
Anne-Wil Harzing**

Version February 2019

Accepted for *Journal of World Business*

**Copyright © 2017-2019, Florence Duvivier, Carine Peters, Anne-Wil Harzing
All rights reserved.**

Prof. Anne-Wil Harzing
Middlesex University
The Burroughs, Hendon
London NW4 4BT
Email: anne@harzing.com
Web: www.harzing.com

Not all international assignments are created equal: HQ-subsidary knowledge transfer patterns across types of assignments and types of knowledge

ABSTRACT

Drawing on 50 semi-structured interviews in a case study of a Belgian multinational and its foreign subsidiary in Poland, we develop new insights into how using different types of international assignments (long-term expatriation, short-term expatriation, short-term inpatriation) allows a HQ-subsidary dyad to transfer different types of knowledge (declarative, procedural, axiomatic, relational), both from and to HQ, during and after the assignment. We show how each type of assignment acts as a unique knowledge transfer channel, and why it is critical that HQ-subsidary dyads use an appropriate combination and sequence of international assignments reflecting their specific knowledge transfer needs.

Keywords: Expatriation, Inpatriation, Knowledge transfer, knowledge types, HQ-subsidary relationships

Introduction

Global staffing practices are changing (Collings & Isichei, 2018; Collings, Scullion & Morley, 2007) and organizations are increasingly using a portfolio of different types of international assignments (e.g., Collings, McDonnell, Gunnigle & Lavelle, 2010). These assignments have long been acknowledged to play a critical role as channels of knowledge transfer between Headquarters (HQ) and subsidiaries (see e.g. Bonache & Brewster 2001; Harzing, Pudelko & Reiche, 2016). However, research has implicitly assumed that different types of international assignments are equally suited to transfer different types of knowledge between HQ and subsidiaries, which may not necessarily be true. The main contribution of our study is thus to provide a more nuanced understanding of international assignments as knowledge transfer channels than prior research has offered. We achieve this by differentiating the knowledge transfer role of international assignments across types of assignment, types of knowledge, and direction and timing of knowledge transfer (during or after the international assignment).

Although early studies referred to the role of international assignments in facilitating knowledge transfer between HQ and subsidiaries (e.g. Edstrom & Galbraith, 1977), the introduction of the knowledge-based view of the firm (Kogut & Zander, 1993) brought this role to the fore (Bonache & Brewster, 2001). More recently, scholars have shown that both expatriation – long-term (Fang, Jiang, Makino, & Beamish, 2010) and short-term (Salleh & Koh, 2013; Salleh & Nankervis, 2015) – and inpatriation (Collings, et al., 2010; Harzing, Pudelko, & Reiche, 2016; Reiche, 2011) are critical knowledge transfer channels for multinational companies (MNCs). However, different types of knowledge are not equally easy to transfer (Lagerström & Andersson, 2003). International assignments may thus differ not only in the *extent*, *direction* (Harzing et al., 2016) and *timing* of the knowledge transfer between HQ and subsidiaries, but also in the *type* of knowledge that they help transfer. In this study, we explore how different types of international assignments facilitate the transfer of different types of knowledge.

By knowledge transfer, we mean the movement of knowledge between different units or organizations. We focus on international assignments as *channels* of knowledge transfer in an MNC, rather than on individual assignees. Hence, we see international assignments as a *mechanism* used by HQ to manage their interactions with subsidiaries. We study this in the particular case of a Belgian MNC providing financial services, which opened a wholly-owned subsidiary in Poland in 2013. Since the Polish office was to perform some of the work already done at HQ, the knowledge base relevant to that work needed to be transferred to the Polish office. The Belgian parent company decided to do this by using international assignments.

We followed McNulty & Brewster's (2017) classification to investigate how three specific types of international assignments – long-term (LT) expatriation, short-term (ST) expatriation and ST inpatriation – helped transfer knowledge from and to the Belgian HQ over the first 20 months of the Polish subsidiary's activity. This means that, in contrast to research that has looked primarily at established HQ-subsidiary relations, we were able to observe how knowledge transfer flows develop for the first time between an HQ and a new greenfield subsidiary. The in-depth qualitative evidence we collected through 50 semi-structured interviews with key informants at both sites enabled us to differentiate between four main types of knowledge – declarative, procedural, axiomatic, and relational (Antal, 2000; Sanchez & Heene, 1996; Nonaka,

1994; Sackmann, 1992) – and understand how these different types of knowledge are transferred by different types of international assignments in different directions (from and to HQ) and at different times (during or after the assignment).

Our research makes three main contributions. First, prior research on international assignments has concentrated primarily on LT expatriation (Choi & Johanson, 2012; Harzing, 2001a). Few studies have been conducted on inpatriation (Collings et al., 2010; Reiche, 2006, 2011) and ST expatriation (Salleh & Koh, 2013). Our study thus extends the international assignment literature by differentiating between and systematically comparing HQ-subsidiary knowledge transfer patterns between LT expatriation, ST expatriation and ST inpatriation. Second, we challenge the implicit assumption in previous international assignment research that knowledge is a monolithic concept. Specifically, we differentiate between types of knowledge transferred from and to HQ, and we pay equal attention to declarative, procedural, axiomatic, and relational knowledge. Third, in contrast to prior research that mainly focused on the *extent* and *direction* of knowledge transfer via international assignments, we also explicitly investigate whether the transfer of knowledge takes place during or after the assignment – i.e. ‘when’ knowledge is transferred. This fine-grained approach provides the literature with novel evidence of why different types of international assignments are *complementary* rather than *alternative* ways of transferring knowledge, and why it is essential that multinationals use a range of different assignment types to meet their specific knowledge transfer needs. Moreover, we show that, besides the mix of international assignment types, the *sequence* in which different assignments are used is another important factor to consider when designing international assignment programs to transfer knowledge between HQ and foreign subsidiaries. Finally, by observing *actual* knowledge flows – not only the flows originally planned by HQ – we provide new insights into both the benefits and the risks of unintentionality when using international assignments as knowledge transfer channels.

Section 2 of this article reviews the relevant literature on different types of knowledge and different types of international assignments. Then, we describe our research methodology, report our findings, and discuss their theoretical implications. Finally, we conclude with managerial implications, limitations, and suggestions for further research.

Literature review

Knowledge is a complex concept, for which researchers have provided various definitions and typologies over the years (Anderson, 1995; Nonaka, 1994; Sackmann, 1992; Sanchez & Heene, 1996; Antal, 2000; Lundvall & Johnson, 1994; and Cohen & Levinthal, 1990). Anderson’s study (1995) identified two types of knowledge – declarative and procedural – to capture the difference between ‘knowing-what’ and ‘knowing-how’. Declarative knowledge consists of descriptions of facts, things, methods and procedures, and can be seen as a synonym of Nonaka’s explicit knowledge (Nonaka, 1994). Procedural knowledge refers to knowledge of how to do something, and is largely similar to Nonaka’s tacit knowledge (Nonaka, 1994). In addition, Sackmann (1992) referred to axiomatic knowledge or ‘knowing why’ – the reasons why things happen, similar to “know-why”, which Sanchez & Heene (1996) define as a theoretical understanding of why product designs work. Finally, relational knowledge

captures ‘who knows what’ in the organization (Antal, 2000), also defined as ‘who knows how to do what’ (Lundvall & Johnson, 1994), or, as explained by Cohen & Levinthal (1990), ‘who can help with what problem’. The latter is critical if MNCs are to develop social capital from their network of individual relationships (Reiche, Harzing & Kraimer, 2009). Building on the above, our study is structured around four key types of knowledge (see Table 1): know-what (declarative), know-how (procedural), know-why (axiomatic), and know-whom (relational). These four types of knowledge represent our amalgamation of the work of Anderson (1995), Nonaka (1994), Sackmann, (1992), Sanchez & Heene (1996), Antal (2000), Lundvall & Johnson (1994), and Cohen & Levinthal (1990).

Table 1: Previous research on typologies of knowledge

Types of knowledge	Definition	Representative studies
Declarative knowledge	Knowing-what; what needs to be done	Nonaka, 1994; Anderson, 1995; Sanchez and Heene, 1996
Procedural knowledge	Knowing-how; how things need to be done	Nonaka, 1994; Anderson, 1995; Sanchez and Heene, 1996
Axiomatic knowledge	Knowing-why, why things need to be done	Sackmann, 1992; Sanchez and Heene, 1996
Relational knowledge	Knowing-who; who to contact to get things done	Cohen and Levinthal, 1990; Lundvall and Johnson, 1994; Antal, 2000

In line with previous research, we conceptualize tacit knowledge as being embedded in individuals (Nonaka & Takeuchi, 1995). This means that the transfer of knowledge between HQ and foreign subsidiaries requires personal interaction (Kogut & Zander, 1995), which international assignments facilitate (Fang et al., 2010; Reiche, 2011).

Traditionally, researchers have paid more attention to LT expatriation – whereby employees are sent from the HQ to a foreign subsidiary, usually for between one and five years (McNulty & Brewster, 2017) – than to other types of assignments. Although LT expatriation can fulfil many functions, from position filling, knowledge transfer, and management development, to organizational control and coordination (see e.g. Edstrom & Galbraith, 1977 and Harzing, 2001a/b, who summarizes a range of studies in this field), knowledge transfer between HQ and subsidiaries has been found to be one of the most important functions of expatriation (Bonache & Brewster 2001; Harzing, 2001b; Hocking, Brown, & Harzing, 2004). Since tacit knowledge in particular resides in the human mind and only manifests itself through perception and behaviors (Nonaka & Takeuchi, 1995), sending employees to subsidiaries for an extended period has been found to be an effective mechanism for transferring knowledge from HQ to

subsidiaries (Fang et al., 2010). By directly engaging with subsidiary employees, LT expatriates are able to develop trust and shared cognitive ground, which facilitates the transfer of tacit knowledge (Mäkelä & Brewster, 2009). In addition to transferring knowledge directly between entities, LT expatriates also help translate knowledge to make it relevant to the new context (Choi & Johanson, 2012; Hocking, Brown, & Harzing, 2007).

Despite the recognized benefits of LT expatriation, LT expatriates often encounter serious challenges, such as difficulties adjusting to the foreign environment, whether because of inadequate selection criteria or poor training (Haslberger, Brewster & Hippler, 2014). Effective transfer of knowledge via LT expatriation also depends on the characteristics of both host country nationals (HCNs) – citizens of the host country employed locally – and expatriates, such as the absorptive capacity and motivation of HCNs (Chang, Gong & Peng, 2012) and the expatriates' motivation and readiness to share knowledge (Lazarova & Tarique, 2005). Moreover, with MNCs increasingly expanding into emerging economies, the shortage of experienced, competent LT expatriate candidates, together with their difficulties in adjusting to the new environment, have become growing concerns (Haslberger et al., 2014). Further, LT expatriates are often considered one of the most expensive resources in an MNC, because they typically receive a higher salary than HCNs (Sedlmayer, 2009, Navicko, 2010) – although this is by no means universally true (McNulty, 2016). Firms have therefore been keen to explore the use of other types of international assignments, such as short-term (ST) expatriation and inpatriation.

ST expatriation – whereby employees engage in an international assignment lasting up to one year (Suutari, Brewster, Riusala & Syrjakari, 2013; Tahvanainen, Welch & Worm, 2005) – has the advantage of being less costly than LT expatriation. ST assignments also eliminate the problem of relocating family members to the foreign country, and minimize career disruption. It may, however, be more difficult for ST expatriates to build effective relationships with HCNs than it is for their long-term colleagues. They may also suffer from a disrupted family life (Mäkelä, Andersson & Seppälä, 2012), and their intensive travel commitments and resulting levels of stress can result in poor performance (Tahvanainen et al., 2005).

Inpatriation – whereby HCNs from an MNC's foreign subsidiary are sent to HQ for a period usually not longer than 18 months – may offer an attractive alternative. Typically, inpatriates are sent to HQ to absorb both knowledge of the organizational culture and specific skills to take back to the subsidiary, or to bring knowledge of the subsidiary's problems and opportunities to HQ (Reiche, Harzing & Kraimer, 2009). Reiche (2006) shows that inpatriates play a dual role in knowledge transfer. They not only share knowledge of their host country environment with HQ staff, but also transfer knowledge from HQ to the subsidiary on completion of their HQ posting, as HCNs are likely to value the knowledge of inpatriates (Reiche, 2012). Training HCNs at HQ instead of sending expatriates to the subsidiary (Kuhlmann & Hutchings, 2010) is thus becoming increasingly common. Further, inpatriates develop social relationships with HQ staff (Reiche et al., 2009), which can be very valuable when they return home. Since inpatriates' assignments tend to be shorter than those of LT expatriates, relocation and repatriation costs are also kept to a minimum. For the ST inpatriates we focus on in this study (3-month assignments), relocation is even less costly than for standard inpatriation of up to 18 months. Moreover, HCNs are often highly motivated to become inpatriates, as they see this as a career opportunity (Reiche, Kraimer & Harzing, 2011). Nevertheless, coming from a foreign subsidiary, they may not have the

same credibility, respect and status as HQ staff (Harvey, Novicevic, Buckley, & Fung, 2005), and HQ employees are often uncooperative, due to their fear of losing power and authority (Harvey, Speier, & Novicevic, 1999).

Our study focuses on knowledge transfer through international assignments. It is thus important to distinguish the concept of knowledge transfer from the related concepts of knowledge sharing and learning. First, rather than focusing on knowledge *transfer* within the MNC, some scholars have emphasized the importance of knowledge *sharing* (Makela, 2007; Doz et al., 2001). However, an extensive literature review provides evidence that most researchers have used these terms interchangeably (Kumar & Ganesh, 2009). That said, knowledge transfer usually refers to a formally organized activity with specific boundaries (Szulanski, 2000), whereas knowledge sharing relates to a wider range of knowledge exchange activities in interpersonal and organizational interaction (Makela, 2007). Moreover, knowledge transfer typically describes the movement of knowledge between different units and organizations rather than between individuals (Szulanski, Cappetta and Jensen, 2004), whereas knowledge sharing occurs naturally in interpersonal interaction, and may or may not be planned or even intentional (Makela, 2007). Given our focus on international assignments as a *mechanism* used by HQ to manage their interactions with subsidiaries, we use the term knowledge transfer.

Second, the concepts of knowledge transfer and learning are two sides of the same coin, with the first emphasizing the sender of knowledge and the second emphasizing the recipient. In addition, although the transfer of knowledge may lead to individual learning – and we do have evidence that learning did occur in the HQ-subsidiary relations we studied – individual learning itself is not the focus of this study, especially given that the level of analysis in our study resides at the organizational rather than the individual level. We thus concentrate on international assignments as channels of knowledge transfer to and from subsidiaries.

Methodology

Research Strategy

Aiming to generate rich insights into how different types of international assignments help transfer different types of knowledge across borders, we opted for a qualitative research strategy. We also wanted to track and compare knowledge transfer patterns during and after international assignments, and therefore decided to collect the data in two separate phases, one year apart.

We used an abduction approach (Dubois & Gadde, 2002), iterating between empirical data and pre-existing theoretical constructs (Snow, Morrill, & Anderson, 2003). This approach involves going 'back and forth' (Dubois & Gadde, 2002) between the literature, the data, and the findings to draw out rich insights. Specifically, we first used the literature to define the research question and identify the main theoretical constructs – the different types of knowledge and international assignments (deductive approach). We then presented the interview data as a narrative before coding, categorizing and interpreting it, thus combining elements of inductive and deductive approaches.

Case presentation

The research field is a large financial services company, headquartered in Belgium, which, in 2013, received full regulatory approval to open an operation center in Poland. With this subsidiary, the company wanted to diversify risk and access a large pool of affordable talent to grow its operations more cost-effectively than was possible at the home office. The goal was to be able to replicate the work performed in Belgium and to have two sites performing the same tasks. By 2014, the Polish office employed 250 staff replicating a number of activities that had historically been performed only in Belgium. The aim was to expand the Polish office to 500 staff by 2017. Effective knowledge transfer between the HQ and the subsidiary was therefore crucial.

The firm chose Poland for a number of reasons, including ease of access from Belgium (2-hour direct flight), the limited time difference (1 hour), and the presence of good universities to ensure a supply of skilled graduates speaking English. In addition, the region's telecommunications and IT infrastructure was rapidly catching up with that in Western Europe. The desire to maintain full control over the Polish operations and create a shared corporate culture between the two sites led the firm to establish a wholly-owned subsidiary rather than outsource the activities to a third-party provider. For confidentiality reasons, we cannot reveal the name of the company.

Case studies are generally perceived as providing limited scope for generalization, because they are too situation-specific (Yin, 2009). However, the company we studied was not selected as a representative organization to provide generalizable findings, but rather for its potential to generate better understanding of the topic of knowledge transfer through international assignments in an HQ-subsidiary dyad. The primary criterion for selecting this company was its need to support knowledge transfer between two sites, and the variety of assignments used. We also chose this particular case because we reached an agreement to obtain data from both HQ and the Polish subsidiary, which is rarely possible in academic studies (Dibbern, et al., 2008). Furthermore, the richness of data we could collect would enable us to track and compare knowledge transfer patterns during and after the international assignments.

Data Collection

We followed the company for one year, starting 7 months after the launch of the Polish subsidiary. We conducted 50 interviews, both at the Belgian HQ (15 interviews) and the Polish subsidiary (35 interviews). Most interviews took place in Poland, as former inpatriates, ST expatriates and LT expatriates were all based in Poland when we collected our data. Table 2 gives more details on the interviewees. During the first phase, September-October 2013, we conducted 19 interviews (5 at HQ and 14 at the subsidiary). The second wave of 31 interviews, conducted in August-September 2014, comprised 10 at HQ, and 21 at the subsidiary. We interviewed most of the same people in both phases, but in phase 2 we added 12 new interviewees (5 at HQ, and 7 at the subsidiary) to deepen our analysis of knowledge transfer after the ST expatriates had returned to their respective home countries. In both waves of interviews, the inpatriates interviewed were former inpatriates at the time of the interviews. Saturation was reached when our informants no longer yielded new information (Mason, 2010).

Table 2: Summary of informants by location and job title for each study period

Periods	Location	Interviewees	Job title
Phase I September - October 2013 19 interviews	HQ (Belgium)	4 top-middle managers	COO, HR manager, Head of Global Sourcing Department, Single Process Owner
	5 interviews	1 team member	Trainer
	Subsidiary (Poland)	8 LT expatriates	CEO, 2 Operational Directors, 5 Team Leaders
		2 ST expatriates	Subject Matter Experts
		2 managers (HCNs)	HR manager, Risk manager
		2 former ST inpatriates	Team members
Phase II August – September 2014 31 interviews	HQ (Belgium)	6 top-middle managers	COO, HR manager, 3 middle managers, Head of Global Sourcing Department
	10 interviews	2 former ST expatriates	Subject Matter Experts
		2 team members	Trainer, Coach
		Subsidiary (Poland)	9 LT expatriates
	2 managers (HCNs)		Risk manager, HR manager
	21 interviews		10 former ST inpatriates

HCNs = Host Country Nationals

We selected the respondents using the following criteria: (i) highly involved in knowledge transfer between the HQ in Belgium and the foreign subsidiary in Poland, such as ST and LT expatriates, former inpatriates, and managers involved in setting up and overseeing the Polish office; (ii) possession of knowledge relevant to the topic, i.e. what, how, when, from whom and to whom (different types of) knowledge was transferred across locations, and (iii) availability for face-to-face interviews in Belgium (HQ) or in Poland (foreign subsidiary). We also ensured we gathered different perspectives by interviewing participants with diverse functional backgrounds and from multiple hierarchical levels in the company.

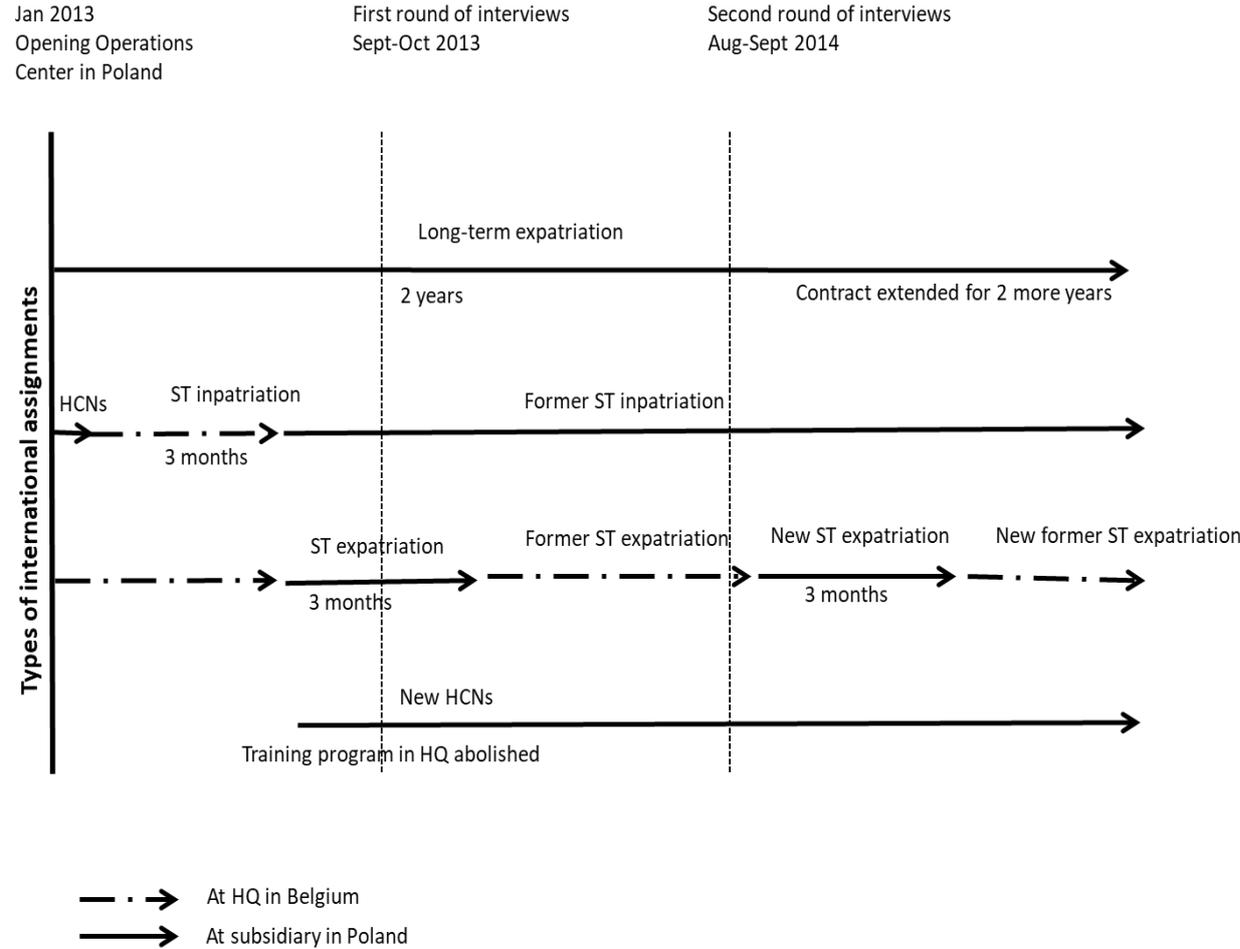
To ensure systematic data collection we used an interview guide with open-ended questions tailored to each interviewee group (top management, HR managers, trainers and coaches, expatriates, and inpatriates). However, during the interviews we remained open to new topics introduced by the participants. We conducted all interviews face-to-face, in closed rooms to prevent colleagues or supervisors from overhearing. Interviews lasted between 60 and 90 minutes and were all conducted in English. One might argue that interviewing the participants in their respective native languages (French, Dutch or Polish) might have improved our rapport and enriched their critical incident descriptions. However, the research context was very much

unilingual, as the company promotes the use of English in the workplace. We therefore adopted English as the language for all interviews (Welch & Piekkari, 2006). For confidentiality reasons, we will not disclose the identity of the respondents.

Data Analysis

Figure 1 presents the general sequence of international assignments to and from the foreign subsidiary in Poland. First, LT expatriates were sent to Poland to open the office and fill senior positions, such as CEO, Operations Director and Team Leaders. Second, employees recruited in Poland were immediately sent to Belgium for an intensive 3-month inpatient program. Third, ST expatriates spent 3 months in the Polish office to continue the knowledge transfer initiated during the inpatient program and extend it to new recruits who had joined since the inpatient program ended. The inpatient program was not renewed for HCNs who joined the Polish office after the return of the first ST inpatient. In contrast, after a first 2-year contract, the positions of the LT expatriates (Operations Director and Team leaders) were renewed for another two years.

Figure 1: Types of international assignments involved in transferring knowledge over time



We analyzed the data in several steps. First, we analyzed and reported on the types of knowledge transferred through different types of international assignments (inpatriation or expatriation). We developed a provisional set of codes based on the literature (Miles & Huberman, 1994) to capture the different types of knowledge: declarative, procedural, axiomatic, and relational knowledge. Second, we identified text passages related to knowledge transfer for each type of assignment. Each description was marked with a short label indicating which type of knowledge was transferred. We then moved to the second level of ordering by systematically comparing each of the emergent codes with our provisional short-listed codes from previous research. We ended the analysis when we had assigned all data to a category (type of international assignment) with a code representing the type of knowledge being transferred. The analysis confirmed that the provisional codes comprehensively described the different types of knowledge transferred. However, we found that differentiating the interview material according to the *direction* of the knowledge transfer (from HQ to foreign subsidiary or from foreign subsidiary to HQ), and the *timing* of knowledge transfer (during or after the assignment), instead of the knowledge type, provided an even finer understanding of how different types of assignments facilitate different types of knowledge transfer in an HQ-subsidary dyad.

Findings

Below we report on the knowledge transfer flows we observed in the HQ-subsidary dyad studied, structuring our findings by IA category: i) ST inpatriation, ii) ST expatriation and iii) LT expatriation. Table 3 summarizes the main findings of our study in a discursive format, detailing how each type of international assignment exhibits specific features regarding the type of knowledge it helps transfer, the direction of the transfer, and the timing of the transfer.

Knowledge transfer via ST inpatriation

We start with inpatriation because, after sending LT expatriates to launch the subsidiary, the inpatriation program was the company's first initiative to transfer knowledge to its subsidiary. Once the HCNs involved in finance and banking operations were recruited into the foreign subsidiary, they were immediately sent to HQ.

When I (new HCN) arrived in February, from the very beginning, they immediately sent me to Belgium. My first day was on Friday and my flight (to Belgium) on Sunday." (former ST inpatriate)

At the HQ, the ST inpatriates first attended a three-day welcome course about the company and the financial services industry. In the following weeks, they followed an intensive training program to transfer *declarative knowledge* about their future tasks. This trainer at HQ explains the process:

"We explain the terminology. If you do not train them and straight coach them on the job, people are quite lost, because they are going to do things and will have no clue about the terminology so they will just execute the procedure without understanding the meaning. There is no time to explain what is behind the operations with their coach, so for me (the trainer) our task when people arrive it is to put them at ease with the terms." (HQ employee)

Table 3: Summary of findings

	Type of knowledge transferred from HQ to foreign subsidiary					Type of knowledge transferred from foreign subsidiary to HQ				
	Declarative	Procedural	Axiomatic	Relational	Who to contact at HQ	Declarative	Procedural	Axiomatic	Relational	Who to contact at HQ
ST INPATRIATION										
What	Job content	Job process	Norms, values, expected corporate behavior	Who to contact at HQ		Suggestions to improve the SOP	Habits and values of HCNs			
When										
During	X	X	X	X				X		
After	X	X	X	X		X				
ST EXPATRIATION										
What	Job content	Job process	Context and rationale of the job process			Good practices (e.g. training of new recruits) Improving the SOP	Host country culture & sensitivities of HCNs			
When										
During	X	X	X							
After						X	X			
LT EXPATRIATION										
What		Job process	Norms, values, expected corporate behavior	Who to contact at HQ						
When										
During		X	X	X						
After	n.a.	n.a.	n.a.	n.a.		n.a.	n.a.	n.a.	n.a.	

HQ = Headquarter in Belgium, HCN = Host country national in Poland, SOP = Standard Operating Procedures

n.a. = LT expatriates had not yet returned from their assignments during our data collection

Since repatriates must perform the same tasks as their colleagues in Belgium, in the same way, the classroom training was complemented with on-the-job coaching sessions that focused on *procedural knowledge* of how to do the job. The ST inpatriates sat next to the coaches and observed how they performed the routine work, until they were ready to carry out the tasks themselves – first with support and close supervision from the coaches, then on their own.

“They have to learn the SOPs [Standard Operating Procedures] first, then they see their coach doing the things, and by so doing they explain well there you have to do that... And then after that, the trainee takes over the job, with the coach sitting close to him or her and checking whether they are doing the right thing.” (HQ employee)

Further, the coaches and trainers transferred *axiomatic knowledge* about how the firm does business, its values, norms, and expected behaviors.

“What we try to give them [ST inpatriates] is not only about processes, it is also about the approach in terms of mindset, how you should do things, how you should collaborate, communicate with your colleagues in Belgium.” (HQ top-middle manager)

Apart from transferring knowledge about the job, the assignment helped inpatriates at HQ develop closer working relationships with HQ staff. This transfer of *relational knowledge* about whom to contact at HQ would then become critical to facilitate work at the subsidiary after the ST inpatriation.

“Now if they [ST inpatriates] have a question they will immediately call someone in Belgium. The behavior is different, as now they know the Belgian colleague personally. They also know who knows what in Belgium. They can get the information faster.” (LT expatriate)

“I call them when there is something unclear or weird or done incorrectly, I call them and ask them why it is done like that. I am increasing my knowledge through the conversations I have with my Belgian colleagues.” (former ST inpatriate)

In sum, the inpatriation program allowed HQ to transfer different types of knowledge to ST inpatriates. Later on, as new recruits in the Polish subsidiary were not offered the possibility of spending time at HQ, the former ST inpatriates were expected to not just use their new knowledge in their own job, but also transfer it to their HCN colleagues.

“The Polish employees (former ST inpatriates) will train the new Polish employees (HCNs), instead of sending expatriates for the next twenty years. We need to teach them (former ST inpatriates) how to manage a team, how to coach and how to give feedback to new recruits.” (LT expatriate)

During the second phase of interviews in August-September 2014, we indeed observed former ST inpatriates sitting next to new recruits in Poland to transfer their expertise and knowledge acquired during the inpatriation at HQ.

“We (former inpatriates) do some sitting, basically we spend part of our day just sitting with new team members (in Poland) observing or just trying to understand the task they do. And while observing, you can help and improve or explain how it can be done differently to be more effective. You have to make sure they understand what they are doing and why they are doing it. They need to understand the risk behind their task...” (former ST inpatriate)

“... more and more, we coach locally. Which is very good for Polish employees because they (former ST inpatriates) can prove their expertise and it motivates them.” (former ST inpatriate)

In addition, the inpatriation program enabled the transfer of axiomatic knowledge from the Polish subsidiary to HQ. This was not intentional on the company's part, and it

happened very informally, by interactions in the workplace and sometimes outside. Spending time with ST inpatriates helped HQ staff understand the habits and values of their Polish counterparts.

Yes the culture, the Polish customs, the way of working in Poland... we like to have direct comments. I transfer that knowledge (to the Belgian colleagues) that we would like to have more information more directly." (former ST inpatriate)

Finally, when they returned home, former inpatriates also transferred procedural knowledge back to HQ. They demonstrated a continuing commitment to improve everyday tasks and then updated the standard operating processes (SOPs) accordingly.

"They (former ST inpatriates) make us realize stuff. Ultimately, they have a point. [...] They are new, they look at things from a different angle. We (HQ staff) do things the way we have always done it here in Belgium. [...] After some time when they acquire a certain level of knowledge, they (former ST inpatriates) are encouraged to generate continuous improvement and initiatives. They are encouraged to generate ideas about how the process can be improved, or bring up new ways of working in the SOPs." (HQ employee)

"When here in Poland we find a mistake or something, then we raise it and we tell our colleagues (HQ colleagues and expatriates) that it should be done differently." (former ST inpatriate)

The company followed through on its original plan to discontinue the ST inpatriation program, intending former inpatriates to transfer the knowledge they had acquired during their stay at HQ to new recruits. New recruits in Poland were thus no longer offered the possibility of spending time at HQ for training and networking. However, the decision to discontinue the inpatriation program overlooked the importance of face-to-face interactions for transferring axiomatic and relational knowledge effectively. And since no relationships had been created, the new recruits were reluctant to call their Belgian colleagues for help or to make suggestions.

"What makes the difference is that people used to meet physically in Belgium [...]. Now, the relationship between the new Polish employees and those in Belgium is not the same at all because they do not meet." (LT expatriate)

The discontinuation of the ST inpatriation programme therefore seriously affected the two-way transfers of knowledge between HQ and the subsidiary.

Knowledge transfer via ST expatriation

Following the inpatriation program, the company started an expatriation program whereby a number of staff from HQ spent three months in the subsidiary in Poland as ST expatriates. The ST expatriates were area experts who mostly continued the transfer of knowledge initiated during the inpatriation period.

"We (ST expatriates) continue to explain some tasks to Polish employees, not to start everything from scratch but to continue what they have learned in Belgium. For instance things that they did not have time to do during their stay in Belgium." (ST expatriate)

Beyond confirming that former ST inpatriates properly used the *declarative and procedural knowledge* transferred during the stay in Belgium in their everyday work, ST expatriates focused on the former ST inpatriates' *axiomatic knowledge*. Through on-the-job coaching, they explained once more what was not fully understood, correcting behaviors when needed, and adding a number of elements that had not been covered

during the inpatriation program – most importantly *why* employees were asked to do things in a particular way:

“We [ST expatriates] challenge them [HCNs] every day. I say ‘okay you are doing that, could you explain to me why you are doing it’, and sometimes they tell you ‘because I have been told to.’ And then you push them, not only to jump to a solution, but to jump to define the root causes of what is happening and that is really our role”. (ST expatriate)

The data collected in the second wave of interviews also showed that the ST expatriation program was critical to transfer knowledge back from Poland to the HQ – in particular after the ST expatriates had returned from their assignments. Just like for knowledge transfer to the HQ by inpatriates, the company had not planned this aspect of the knowledge transfer process. For *procedural knowledge*, the transfer typically happened formally, via the review of important documents such as the Standard Operating Procedures (SOP). Based on feedback from former ST inpatriates and the newly recruited HCNs, ST expatriates would update the SOP document, and then distribute it to all employees in Poland and Belgium.

“It is true that in Belgium, if people have been there for more than 20 years doing the same task, they will not question the process, or only very rarely. Now we have people [HCNs] who sometimes ask why they are doing something, and sometimes they detect areas for procedural improvements. It is a clear example where a Polish newcomer can actively help change working methods.” (ST expatriate)

“At the beginning it (the knowledge) went just one way, I (former ST inpatriate) just had to write everything down what I was told by the expert (ST expatriate) and that was it. But now (the second wave), there are situations where we look at a problem and I can come up with ideas, to solve it for example.” (Former ST inpatriate)

In addition to formal documents, ST expatriates also learned about practices used in Poland via informal interaction and review meetings. After returning to Belgium, they shared this *procedural knowledge* with the management team, who could decide whether to update and align practice at HQ. One example concerns the training of new recruits:

“Thanks to Poland, we significantly improved the way we coach newcomers, and all the people starting in Belgium benefit from that as well.” (HQ top-middle manager)

“This strict training plan we did in Poland, we are now copying it for new employees in Belgium.” (ST expatriate)

Further, during their assignment, ST expatriates gained deeper understanding of the foreign subsidiary’s values and culture. These insights are a key form of *axiomatic knowledge*. Back in Belgium, former ST expatriates transferred this knowledge to their Belgian colleagues, which helped the latter to understand different behaviors at the Belgian and Polish offices. Eventually, this also improved the way HQ manages its relationship with the subsidiary.

“What they [former ST expatriates] have learned is about soft skills. It is for instance to avoid competition between sites (Belgium and Poland teams), which means they have learned to take into account the sensitivity of both sides. Even holiday planning has to be well managed between sites.” (HQ top-middle manager)

“My job (as former ST expatriate) is not necessarily business related, I help them with cultural problems and ease the relationship between sides.” (ST expatriate)

Knowledge transfer via LT expatriation

The presence of LT expatriates in the Polish subsidiary was also reported to be an important way not only to check the work done in Poland but also to facilitate knowledge transfer between the Polish and Belgian sites. First, LT expatriates ensured that the proper *procedural knowledge* was transferred so that the SOP (Standard Operating Procedures) would be respected and the daily tasks correctly executed.

“My job is not to train them [HCNs], but to make sure that they learn in line with our objectives, and to oversee the quality of the work and process ...” (LT expatriate)

“My team leader is a person who guides me, who gives me feedback, who shows me the things I can improve and praises the things I am doing right and good, and whether I deliver what I am supposed to deliver.” (Former ST in-patriate)

Next, the LT expatriation program facilitated the transfer of *axiomatic knowledge* about HQ's values and attitudes to work. During individual meetings and daily group whiteboard sessions, the LT expatriates explained to HCNs 'why' things were done the way they were and why they were asked to behave in a certain way.

“To make them (HCNs) understand why we are saying that being respectful to clients is very important, to be able to explain to people what is behind our values.” (LT expatriate)

Finally, by letting HCNs know whom to contact at HQ in case of problems, LT expatriates transferred some of their *relational knowledge* to improve the efficiency of HCNs:

“...questions regarding who to contact in Belgium if there is a problem in a specific field.” (LT expatriate)

Discussion

Our study was motivated by the need to understand how different types of international assignments transfer knowledge between HQ and subsidiaries. Specifically, we were interested in differences between types of knowledge transferred and in the direction and timing of the knowledge transfer. Overall, our findings provide evidence that all types of international assignments play an important role as knowledge transfer channels, but not always for the same type of knowledge, and not always at the same time. Moreover, we find that ST in-patriation is the most effective way to transfer different types of knowledge both during and after the assignment; and that knowledge transfer from the subsidiary to HQ can be as important as knowledge transfer from HQ to the subsidiary. Figure 2 integrates these findings and visually displays the role of the three different types of IA in knowledge transfer according to the type of knowledge, and direction and timing of the transfer. This confirms that global staffing practices are gradually changing (as first suggested by Collings et al., 2007), with companies increasingly using a portfolio of international assignments (Collings et al., 2010).

Figure 2

Different types of assignments transfer different types of knowledge from and to HQ during and after the assignment

Type of IA	Type of Knowledge								
	Declarative		Procedural		Axiomatic		Relational		
	During	After	During	After	During	After	During	After	
ST inpatriation	↓	↓	↓	↓ ↑	↓ ↑	↓	↓	↓	↓
ST expatriation	↓	--	↓	↑	↓	↑	--	--	
LT expatriation	--	n.a	↓	n.a	↓	n.a	↓	n.a	

↓ Knowledge transferred from HQ to foreign subsidiary

↑ Knowledge transferred from foreign subsidiary to HQ

-- This type of knowledge was not transferred by this type of assignment at this time

n.a. = LT expatriates had not yet returned from their assignments during our data collection

More specifically, our study makes two contributions to our understanding of the role of international assignments in HQ-subsidary transfer knowledge. Below, we elaborate on these contributions and their implications for theory and management practice.

Implications for theory

First, although prior studies have shown that different international assignment types can facilitate knowledge transfer between HQ and subsidiaries (Collings, et al., 2010; Fang, Jiang, Makino, & Beamish, 2010; Harzing, Pudelko, & Reiche, 2016; Reiche, 2011; Salleh & Koh, 2013; Salleh & Nankervis, 2015), none of these studies included each type of international assignment in one research design. Doing so allowed us to provide evidence that different types of international assignments *complement* each other in transferring knowledge between HQ and subsidiaries, as we observed directly how a change to one part of the international assignment mix (discontinuation of the ST inpatriation program) had negative consequences on the effectiveness of the other international assignments (ST and LT expatriation of HQ employees) in transferring knowledge. Specifically, by focusing on the transfer of different types of knowledge via different types of international assignments, and on both the direction (from and to HQ) and timing (during or after the assignment) of knowledge transfer, we provide novel insights into why international assignments are best used in combination, and how the appropriate combination requires not only the right *mix* (Harzing et al., 2016) but also the right *sequence* of international assignments.

In our case study, the initial focus was clearly on transferring to inpatriates declarative and procedural knowledge about job content and processes. However, it was also critical to transfer axiomatic and relational knowledge. Later, ST expatriation was used for focused interventions to validate and deepen the knowledge transfer after the inpatriates had returned home. This sequence was particularly important, as it was only after going back to work in Poland that former ST inpatriates started wondering how to carry out their tasks more efficiently. Thus, coaching by ST expatriates after the inpatriation assignment acted as a powerful additional mechanism to consolidate and intensify the transfer of axiomatic knowledge. Meanwhile, the LT expatriation program ensured that HQ staff would be present every day to clarify any misunderstanding about the knowledge transferred during inpatriation, and to consolidate and reinforce axiomatic knowledge, particularly about HQ culture. This particular sequence facilitated the work of ST expatriates, because they could build on both the knowledge transferred to HCNs at HQ and the mutual trust created by personal interactions between HCNs and HQ staff during inpatriation (Harvey, Reiche & Moeller, 2011). In contrast, the ties that new HCNs – who joined after the ST inpatriation program was discontinued – were able to build with HQ staff were much weaker, and the lack of face-to-face contact limited the development of trust (Kostova and Roth, 2003). In turn, lack of trust hampered effective knowledge transfer between HQ and the foreign subsidiary. Our findings therefore confirm that knowledge transfer is not a ‘once-and-for-all’ issue (Paulin & Suneson, 2012; Tangaraja et al, 2016). It needs consolidation and reinforcement over time; and international assignments are thus best used as a sequence of complementary knowledge transfer efforts.

Second, our study provides new insights into the non-intentionality of some knowledge transfer flows, and their consequences for HQ-subsidary relations. For instance, in the case we studied, HQ did not launch the ST inpatriation program to transfer relational

knowledge, yet this would later facilitate the work of HCNs, because they would know whom to contact at HQ for help, and would not be afraid of contacting them. For HQ, the goal of the ST inpatient program was to transfer to subsidiary employees knowledge about how to do their work, i.e., declarative and procedural knowledge. Similarly, HQ did not expect the ST expatriation program to serve as an important channel of reverse knowledge transfer from the subsidiary to HQ. In fact, none of the original mix of international assignments was designed to transfer knowledge from the subsidiary to HQ. But these unintentional knowledge flows proved critical for the quality of the work by subsidiary employees, for the relations between HQ and subsidiary employees, and to improve HQ practices based on the input of former inpatriates.

However, alongside the gains in richness of knowledge transfer, we also observed that unintentionality could have severe drawbacks when HQ managers change the mix of international assignments used, without realizing the unique role played by different types of assignments in transferring knowledge to and from subsidiaries. In this context, our study points to the added value of firsthand knowledge transfer (see also Kogut and Zander, 1995) – for instance via an ST inpatient program – over transferring knowledge through intermediaries – for instance ST expatriates sent to foreign subsidiaries. The particular value of firsthand knowledge transfer lies in the stronger personal ties it creates between HQ and subsidiary employees, which is especially critical for the transfer of relational and axiomatic knowledge between HQ and foreign subsidiaries.

Managerial recommendations

Since the creation, distribution and sharing of knowledge is a dynamic process, it requires intensive interaction, multiple feedback loops and ongoing informal conversations. Our results suggest that companies should consider a portfolio of different types of international assignments for knowledge transfer from and to HQ. As each international assignment type is particularly suited to passing on specific types of knowledge at different times, companies should consider them as *complementary* solutions rather than as substitutes. For these reasons, the portfolio of different types of international assignments should be carefully chosen and combined in line with the organization's specific knowledge transfer needs.

Our findings show that, both when designing the portfolio of international assignments and in modifying the mix of assignments used, it is critical for HQ managers to understand clearly the role of different assignment types in transferring knowledge to and from subsidiaries, and the best sequence in which to use the assignments. In the case we studied, HQ underestimated the depth of the knowledge flows actually taking place – in particular via the inpatient program –, and how the different assignments enhanced each other. As a result, they did not anticipate the consequences of discontinuing the inpatient program, and took no action to compensate for the loss of knowledge or to mitigate the risk of growing distance between the sites. This means that managers need to pay particular attention to the fact that unintended knowledge transfer flows might occur.

Similarly, the selection and training of each candidate for an international assignment should carefully consider the purpose of the assignment. Knowing the specific roles of different international assignment types will help the company select the right

candidates with the required skills to manage the challenge of transferring knowledge across borders.

Limitations and suggestions for future research

Despite its important contributions, our study has a number of limitations that open up avenues for future research. First, this study focuses on one large organization in the financial services sector, and two countries, Belgium and Poland, which limits the generalizability of our findings. However, this qualitative approach enabled us to take a 360° approach and elicit views on different types of international assignments, from both employees and executives at HQ and the subsidiary. Quantitative research could test our findings in other national and industry contexts, which would provide more detailed knowledge of how different types of knowledge are transferred through different types of international assignments.

Next, future research could pay close attention to the appropriate sequencing of international assignments in specific HQ-subsidiary relationship contexts to maximize the effectiveness of knowledge transfer, and investigate the actions and behaviors that different types of international assignees use to transfer knowledge at different stages.

Finally, while we acknowledge the difficulties of longitudinal research, studying knowledge transfer over time would enhance understanding of how changes in the portfolio of international assignments may have critical consequences. It would also provide a more comprehensive picture of the role of LT expatriation. In our case, we were unable to assess knowledge transfer after this particular category of assignment, as assignments were still ongoing when we collected our data. Longitudinal research could also examine how power dynamics linked to international assignments may change the relationship and affect the transfer of knowledge between HQ and foreign subsidiaries over time.

Conclusion

Based on 50 interviews in the Belgian HQ and Polish subsidiary of a financial services multinational, our study investigated the extent to which different types of international assignments help transfer different types of knowledge. We show that using shorter, bidirectional international assignments in addition to LT expatriation is not just a way to compensate for the well-known drawbacks of LT expatriation, but also to facilitate the transfer of different types of knowledge in different directions and at different times. This differentiation between assignment and knowledge types enhances understanding of the knowledge transfer process, and may eventually lead to more effective knowledge transfer between HQ and subsidiaries. Our results thus reinforce the argument that relying merely on expatriation as a global staffing policy is at best incomplete, and at worst potentially detrimental (Harzing et al., 2016); they show how, alongside the mix of international assignment types, the sequence of international assignments is another critical factor in effective HQ-subsidiary knowledge transfer.

REFERENCES

- Anderson, J.R. (1995). *Cognitive Psychology and Its Implications* (4th Edition). W.H. Freeman and Company: New York.
- Antal, A.B. (2000). Types of knowledge gained by expatriate managers. *Journal of General Management*, 26(2), 32-51.
- Avril, A.B., & Magnini, V.P. (2007). A holistic approach to expatriate success. *International Journal of Contemporary Hospitality Management*, 19(1), 53-64.
- Bender, S., & Fish, A. (2000). The transfer of knowledge and the retention of expertise: the continuing need for global assignments. *Journal of knowledge management*, 4(2), 125-137.
- Bonache, J., & Brewster, C. (2001). Knowledge transfer and the management of expatriation. *Thunderbird International Business Review*, 43(1), 145-168.
- Chang, Y.-Y., Gong, Y., & Peng, M.W. (2012). Expatriate knowledge transfer, subsidiary absorptive capacity, and subsidiary performance. *Academy of Management Journal*, 55: 927-948.
- Choi, S.G., & Johanson, J. (2012). Knowledge translation through expatriates in international knowledge transfer. *International Business Review*, 21: 1148-1157.
- Cohen, W.M., & Levinthal, D.A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative science quarterly*, 128-152.
- Collings, D.G., & Isichei, M. (2018). The shifting boundaries of global staffing: integrating global talent management, alternative forms of international assignments and non-employees into the discussion. *The International Journal of Human Resource Management*, 29(1), 165-187.
- Collings, D.G., McDonnell, A., Gunnigle, P., & Lavelle, J. (2010). Swimming against the tide: Outward staffing flows from multinational subsidiaries. *Human Resource Management*, 49: 575-598.
- Collings, D.G., Scullion, H., & Morley, M.J. (2007). Changing patterns of global staffing in the multinational enterprise: Challenges to the conventional expatriate assignment and emerging alternatives. *Journal of World Business*, 42: 198-213.
- Dibbern, J., Winkler, J., & Heinzl, A. (2008). Explaining variation in client extra costs between software projects offshored to India. *MIS Quarterly*, 32: 333-366.
- Doz, Y.L., Santos, J., & Williamson, P.J. (2001). *From global to metanational: How companies win in the knowledge economy*. Harvard Business Press.
- Dubois, A., & Gadde, L.E. (2002). Systematic combining: an abductive approach to case research. *Journal of business research*, 55(7): 553-560.
- Edström, A., & Galbraith, J.R. (1977). Transfer of managers as a coordination and control strategy in multinational organizations. *Administrative science quarterly*, 248-263.
- Eisenhardt, K.M., & Graebner, M.E. (2007). Theory building from cases: Opportunities and challenges. *Academy of management journal*, 50: 25-32.
- Fang, R., Jiang, G.-L. F., Makino, S., & Beamish, P.W. (2010). Multinational firm knowledge, use of expatriates, and foreign subsidiary performance. *Journal of Management Studies*, 47: 27-54.
- Fenwick, M. (2004). On international assignment: is expatriation the only way to go?. *Asia Pacific Journal of Human Resources*, 42(3), 365-377.
- Ghauri, P., & Grønhaug, K. (2010). *Research methods in business studies*. Harlow, UK: Financial Times.

- Gioia, D.A., Corley, K.G., & Hamilton, A.L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15-31.
- Glaser, B.G., & Strauss, A. (2014). Applying grounded theory. *The Grounded Theory Review*, 13(1), 46-50.
- Gooris, J., & Peeters, C. (2014). Home–host country distance in offshore governance choices. *Journal of International Management*, 20(1), 73-86.
- Harvey, M., & Novicevic, M.M. (2004). The development of political skill and political capital by global leaders through global assignments. *The International Journal of Human Resource Management*, 15(7), 1173-1188.
- Harvey, M., Novicevic, M.M., Buckley, M.R., & Fung, H. (2005). Reducing inpatriate managers' 'liability of foreignness' by addressing stigmatization and stereotype threats. *Journal of World Business*, 40(3), 267-280.
- Harvey, M., Speier, C., & Novicevic, M. (1999). The Role of Inpatriation in Global Staffing. *International Journal of Human Resource Management*, 10: 459-76.
- Harvey, M., Reiche, B.S., & Moeller, M. (2011). Developing effective global relationships through staffing with inpatriate managers: The role of interpersonal trust. *Journal of International Management*, 17(2), 150-161.
- Harzing, A.W., Pudelko, M., & Sebastian Reiche, B.S. (2016). The bridging role of expatriates and inpatriates in knowledge transfer in multinational corporations. *Human Resource Management*, 55(4), 679-695.
- Harzing, A.W. (2001a). Of bears bees and spiders: The role of expatriates in controlling foreign subsidiaries. *Journal of World Business*, 26: 366-79.
- Harzing, A.W. (2001b). An analysis of the functions of international transfer of managers in MNCs. *Employee Relations*, 23(6), 581-598.
- Haslberger, A., Brewster, C., & Hippler, T. (2014). *Managing performance abroad: A new model for understanding expatriate adjustment*. Routledge.
- Hocking, J.B., Brown, M.E., & Harzing, A.W. (2007). Balancing global and local strategic contexts: Expatriate knowledge transfer, applications and learning within a transnational organization. *Human Resource Management*, 46: 513–533.
- Hocking, J.B., Brown, M., & Harzing, A.W. (2004). A knowledge transfer perspective of strategic assignment purposes and their path-dependent outcomes. *The International Journal of Human Resource Management*, 15: 565-586.
- Kogut, B., & Zander, U. (1993). Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of international business studies*, 24(4), 625-645.
- Kühlmann, T., & Hutchings, K. (2010). Expatriate assignments vs localization of management in China: Staffing choices of Australian and German companies. *Career Development International*, 15(1), 20-38.
- Kumar, J., & Ganesh, L.S. (2009). Research on knowledge transfer in organizations: a morphology. *Journal of knowledge management*, 13(4), 161-174.
- Lagerström, K., & Andersson, M. (2003). Creating and sharing knowledge within a transnational team—the development of a global business system. *Journal of World Business*, 38: 84-95.
- Lazarova, M., & Tarique, I. (2005). Knowledge transfer upon repatriation. *Journal of World Business*, 40(4) : 361-373.
- Lundvall, B.A., & Johnson, B. (1994). The learning economy. *The Learning Economy and the Economics of Hope*, 107.

- Mäkelä, K. (2007). Knowledge sharing through expatriate relationships: A social capital perspective. *International Studies of Management & Organization*, 37(3), 108-125.
- Mäkelä, K., & Brewster, C. (2009). Interunit interaction contexts, interpersonal social capital, and the differing levels of knowledge sharing. *Human Resource Management*, 48: 591–613.
- Mäkelä, K., Andersson, U., & Seppälä, T. (2012). Interpersonal similarity and knowledge sharing within multinational organizations. *International Business Review*, 21(3) : 439-451.
- Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. In *Forum qualitative Sozialforschung/Forum: qualitative social research*, 11 (3).
- McNulty, Y. (2016). Why expatriate compensation will change how we think about global talent management. In *Global Talent Management and Staffing in MNEs* (pp. 125-150). Emerald Group Publishing Limited.
- McNulty, Y., & Brewster, C. (2017). Theorizing the meaning (s) of ‘expatriate’: Establishing boundary conditions for business expatriates. *The International Journal of Human Resource Management*, 28(1), 27-61.
- Miles, M.B., & Huberman, A.M. (1994). Qualitative data analysis: A sourcebook. *Beverly Hills: Sage Publications*.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization science*, 5: 14-37.
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford university press: 663-73.
- Paulin, D., & Suneson, K. (2012). Knowledge transfer, knowledge sharing and knowledge barriers—three blurry terms in KM. *The Electronic Journal of Knowledge Management*, 10(1), 81-91.
- Reiche, B.S. (2011). Knowledge transfer in multinationals: The role of inpatriates' boundary spanning. *Human Resource Management*, 50(3), 365-389.
- Reiche, B.S. (2012). Knowledge benefits of social capital upon repatriation: A longitudinal study of international assignees. *Journal of Management Studies*, 49(6), 1052-1077.
- Reiche, B.S., (2006). The inpatriate experience in multinational corporations: an exploratory case study in Germany. *International journal of human resource management*, 17: 1572-1590.
- Reiche, B.S., Harzing, A.W., & Kraimer, M.L. (2009). The role of international assignees' social capital in creating inter-unit intellectual capital: A cross-level model. *Journal of International Business Studies*, 40: 509–526.
- Reiche, B.S., Kraimer, M.L., & Harzing, A.W. (2011). Why do international assignees stay? An organizational embeddedness perspective. *Journal of International Business Studies*, 42(4): 521-544.
- Sackmann, S.A. (1992). Culture and subcultures: An analysis of organizational knowledge. *Administrative science quarterly*, 3: 140-161.
- Salleh, N.M., & Koh, J. (2013). Analysing the Functions of Short-term Expatriate assignments. *Procedia-Social and Behavioral Sciences*, 107, 34-42.
- Salleh, N.M., & Nankervis, A. (2015). Non-Traditional Expatriate Assignments in the Asia-Pacific: Characteristics & Challenges. *Human Resource Management Research*, 5(1), 1-11.
- Sanchez, R. & Heene, A. (1996) *Strategic Learning and Knowledge Management*. John Wiley & Sons, New York, NY.
- Sedlmayer, S. (2009). *Expatriates—Eine kritische Betrachtung aus organisationaler Perspektive* (Doctoral dissertation, Thesis at Universitaet der Bundeswehr Muenchen).

- Snow, D. A., Morrill, C., & Anderson, L. (2003). Elaborating analytic ethnography: Linking fieldwork and theory. *Ethnography*, 4(2), 181-200.
- Suutari, V., Brewster, C., Riusala, K., & Syrjäkari, S. (2013). Managing non-standard international experience: evidence from a Finnish company. *Journal of Global Mobility*, 1(2), 118-138.
- Szulanski, G. (2000). The process of knowledge transfer: A diachronic analysis of stickiness. *Organizational behavior and human decision processes*, 82(1), 9-27.
- Szulanski, G., Cappetta, R., & Jensen, R.J. (2004). When and how trustworthiness matters: Knowledge transfer and the moderating effect of causal ambiguity. *Organization science*, 15(5), 600-613.
- Tangaraja, G., Mohd Rasdi, R., Abu Samah, B., & Ismail, M. (2016). Knowledge sharing is knowledge transfer: a misconception in the literature. *Journal of Knowledge Management*, 20(4), 653-670.
- Tahvanainen, M., Welch, D. & Worm, V. (2005). Implications of short-term international assignments. *European Management Journal*, 23: 663-73.
- Tharenou, P. (2017). 20. Methodological issues in expatriate studies and. *Research Handbook of Expatriates*, 393.
- Toh, S.M., & DeNisi, A.S. (2005). A local perspective to expatriate success. *The Academy of Management Executive*, 19(1), 132-146.
- Welch, C., & Piekkari, R. (2006). Crossing language boundaries: Qualitative interviewing in international business. *Management International Review*, 46(4), 417-437.
- Yin, R.K. (2009) Case Study Research: Design and Methods. Vol.5. Sage Publications, London.