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Vicious and virtuous circles of offshoring attitudes and relational behaviours. A configurational study of German IT developers

Abstract. Prior research has shown that the success of offshoring is affected by relational behaviours of the employees involved in an offshoring collaboration. However, hardly anything is known about the attitudes that onshore colleagues hold towards offshoring, and how such offshoring attitudes affect relational behaviours towards offshore colleagues. We therefore present an interpretivist, qualitative case study that explores the offshoring attitudes of German IT developers. We found that offshoring attitudes affected relational behaviours towards Indian offshore colleagues, in terms of (1) treating Indian colleagues as fellow team members as opposed to suppliers, (2) spending more or less effort in communication and knowledge transfer, and (3) supporting versus avoiding the task transfer. These relational behaviours fed back into participants' offshoring attitudes, leading to vicious and virtuous circles. The circles created two contrasting configurations of offshoring attitudes and relational behaviours, driven by opposing forces within the departmental context. Our findings highlight the value of taking a configurational perspective for understanding offshoring success, and for identifying drivers that need to be managed in order to achieve favourable configurations. We suggest that future research should further expand the typology of attitude-behaviour configurations, and could apply theories of efficacy, self-reinforcing spirals, and planned behaviour.

Key words: IT, offshoring, attitudes, configuration, transnational, vicious circles

INTRODUCTION

Offshoring is commonly defined as the transfer of some or all of a company's work to a provider abroad (Harrison & McMillan, 2006). With the uninterrupted increase of offshoring over the last two decades, particularly in the IT sector, a lively public and academic debate has risen over the benefits and risks that offshoring creates for company and country economies. As an important observation, it has emerged that effective relationships between onshore and offshore colleagues are a prerequisite for achieving offshoring benefits (e.g., Dibbern, Winkler & Heinzl, 2008; Herbsleb, Paulish & Bass, 2005; Levina & Vaast, 2008). Prior research has also shown that particular relational behaviours, such as creating trust, communicating, and transferring knowledge, feed into the success of offshoring collaborations. However, researchers have neglected the question whether and how the attitudes that onshore employees hold towards offshoring affect their collaboration with offshore partners. In other words, do such 'offshoring attitudes' affect the ways in which onshore members behave towards their offshore colleagues, and if yes, how? Moreover, there is, to our knowledge, no research that inquires whether relational behaviours impinge back upon offshoring attitudes.

For firms that are offshoring IT development, for managers involved in the offshoring transaction, and for IT developers themselves it is of crucial practical importance to know whether offshoring attitudes feed into relational behaviours and vice versa. This understanding would help them stimulate attitudes and relational behaviours that are conducive to offshoring success. For the same purpose, they need to know what managerial and organisational conditions support beneficial offshoring attitudes.

In the following, we highlight this research gap by reviewing the transnational team (TNT) and the offshoring literature that describes offshoring attitudes, relational behaviours, and (mostly in an implicit manner) the relationship between the two. This literature review shows an interdependence between various relational behaviours, implying that offshoring attitudes will affect whole configurations of relational behaviours. We therefore adopt a configurational perspective as a meta-theoretical lens for our own research.

We conducted an interpretivist, qualitative case study in a large German multinational firm to gather German IT developers' perspectives on their offshoring attitudes and associated relational behaviours. This served to explore and expand our theoretical assumptions. Most strikingly, we found mutual dependencies between offshoring attitudes and relational behaviours which created vicious and virtuous circles. Accordingly, we identified configurations that encompassed not just relational behaviours, but also a range of offshoring attitudes. By comparing two contrasting configurations, we were able to determine several of their driving forces.

In our discussion, we explain how these findings serve to address the research gap and contribute to offshoring research. We also consult self-efficacy theory and recent observations on self-reinforcing spirals to explicate our findings. We conclude by highlighting implications for offshoring practitioners.

BACKGROUND: OFFSHORING ATTITUDES, RELATIONAL BEHAVIOURS, AND THE CONFIGURATIONAL PERSPECTIVE

Offshoring attitudes

We know little about the attitudes that employees working in offshoring arrangements, such as IT development teams, hold towards the transfer of tasks to the offshore destination. For this paper, we adopt Ajzen's (2001) definition of attitudes as summary evaluations of psychological objects. Offshoring attitudes in particular are defined as evaluations of offshoring, in terms of its advantages and disadvantages, which can amount to overall positive, negative, or ambiguous offshoring attitudes. It seems possible that employees' offshoring attitudes are influenced by the public economic and political debates on offshoring benefits and risks. However, they could also be based on other sources, such as employees' own experience, or socialisation through colleagues.

Current offshoring discussions suggest that the most prominent benefits for firms to offshore their operations are cost savings through lower wages, and potential efficiency gains through focusing on core competences. These benefits are weighed against potential hidden costs such as additional coordination needs and risks of losing important business skills (Bidanda, Arisoy & Shuman, 2006). The gains for offshoring countries include price reductions through cost savings, and job creation in areas where savings are spent (Harrison & McMillan, 2006). Perhaps the

most discussed country-level risk is that of job losses. Whilst some researchers argue that offshoring leads to an overall increase of employment in the home country (Mankiw & Swagel, 2006), others demonstrate that offshoring of low end jobs correlates with a decrease in low end jobs (Harrison & McMillan, 2006). In several Western countries, trade unions have campaigned against offshoring, arguing that offshoring leads to the loss of home country jobs. This campaign was often supported by the popular press (Downey & Fenton, 2007) and may therefore have influenced many Western citizens.

From the public offshoring debate, it appears that members of offshoring arrangements are likely to evaluate the transfer of tasks to an offshore destination with respect to various parameters, such as cost advantages and performance. For themselves, they may also see risks of additional coordination efforts and losing their own jobs. A couple of studies support of these assumptions. Dibbern *et al.* (2008) report on German software developers' perceptions of transaction costs that offshoring caused in terms of control, coordination, knowledge transfer and specification and design costs. Cohen and El-Sawad (2007) demonstrate that British call centre staff perceived their Indian counterparts as threatening their own jobs. In an Irish firm that was offshoring IT tasks to an Indian vendor, Noonan, O Se and Kelly (2007) observed that onshore members were initially anxious about the vendor's suitability, their integrity, and the option of offshoring as such, but overcame this anxiety over time. TNT research, however, shows that members of TNTs tend to experience their international collaboration as a personally enriching opportunity for intercultural learning (Stahl *et al.*, 2009). Hence, members of offshoring collaborations may hold various, possibly even contradicting offshoring attitudes depending on the evaluated parameter, which may amount to overall 'ambivalent' offshoring attitudes (see Ajzen, 2001, p.39).

Relational behaviours in offshoring arrangements

A great deal of research has shed light on the importance of relational behaviours for TNTs in general and for IT offshoring collaborations in particular. Most researchers focus on certain, strongly interrelated relational behaviours, such as communicating, building trust, creating a shared understanding, transferring knowledge, developing a shared team identity, and overcoming status differentials. However, to our

knowledge, the link between offshoring attitudes and relational behaviours has hardly been examined.

To be more specific, it has often been stated that effective formal and informal communication between onshore and offshore partners is fundamental to offshoring success (Cataldo & Herbsleb, 2008; Herbsleb & Grinter, 1999; Herbsleb et al., 2005). Moreover, trust in the partner's performance and intentions has been shown to affect the success of information systems outsourcing (Herbsleb et al., 2005; Lee, Huynh & Hirschheim, 2008; Sabherwal, 1999; Westner & Strahringer, 2010), because trust is a basis for, and interdependent with effective communication (Gibson & Gibbs, 2006; Jarvenpaa, Knoll & Leidner, 1998), knowledge sharing (Staples & Webster, 2008; Warkentin & Beranek, 1999; Williams, 2011), and enhanced contribution of effort (Mao, Lee & Deng, 2008).

Creating a shared understanding between onshore and offshore partners, for example with regard to the team, the task, and behavioural norms, is another fundamental aspect of offshoring collaborations, and is interdependent with communication (Bjorn & Ngwenyama, 2009) and knowledge transfer (Dibbern et al., 2008). A shared understanding is also required with regard to task-related knowledge, such as IT domain and system knowledge, which tends to demand extensive knowledge transfer in offshoring collaborations (Dibbern et al., 2008; Herbsleb et al., 2005). The development of a shared understanding is inhibited by cultural and spatial distance. Bridging such differences is therefore often seen as a prerequisite for effective offshoring arrangements (Dibbern et al., 2008; Espinosa, Slaughter, Kraut & Herbsleb, 2007; Gregory, 2010; Nicholson & Sahay 2001; Sarker & Sarker, 2009; Walsham, 2002; Winkler, Dibbern & Heinzl, 2008).

Offshoring success is further supported by creating a shared team identity, which helps to bridge national subgroups and thereby develop trust (Maznevski, Davison & Jonsen, 2006, Zakaria, Amelinckx & Wilemon, 2004) and effective communication (Earley & Mosakowski, 2000). A strong team identity also motivates TNT members to contribute their knowledge and effort to the team (Cramton, 2001; Herbsleb & Mockus, 2003). Several researchers have also observed that status differentials are common between offshore and onshore colleagues due to their positions as vendors versus customers (Mattarelli and Gupta, 2009), headquarter versus subsidiary membership (Zimmermann & Sparrow, 2007), and through country boundaries (Levina & Vaast, 2008). Such status differentials can inhibit offshoring

effectiveness by hampering knowledge sharing (Mattarelli and Gupta, 2009), and by limiting the contribution of expertise from lower status members (Levina & Vaast, 2008). Offshoring partners are therefore advised to overcome status differentials, for example by socialising across boundaries (Levina & Vaast, 2008) or using boundary spanners who mediate their communications (Mattarelli and Gupta, 2009).

Offshoring attitudes and relational behaviours

As mentioned, hardly any research has addressed the question whether and how onshore employees' offshoring attitudes affect their relational behaviours towards offshore colleagues. As an exception, Cohen and El-Sawad (2007) found that the fear of losing their jobs led some British call centre members to treat Indian colleagues as scapegoats when performance was poor. Moreover, Noonan *et al.* (2007) demonstrate that overcoming onshore members' initial anxiety helped creating a trusting relationship between onshore and offshore partners.

Although previous research does not address the topic explicitly, it provides strong reasons for assuming that offshoring attitudes do have an impact on relational behaviours. Foremost, if onshore colleagues regard offshoring as a disadvantage for performance or for themselves, or possibly even as a threat to their job, their motivation to support the transfer and engage in conducive relational behaviours is likely to suffer. Notably, attitude research has long shown how difficult it is to predict behaviour from peoples' attitudes (see Ajzen & Gilbert-Cote, 2008 for a review). We therefore cannot take for granted that and how offshoring attitudes will affect relational behaviours. However, it has also been suggested that attitudes are more likely to correlate with behaviours if attitudes are strong, i.e. there is a strong association in memory between an object and a positive or negative evaluation of this object (Fazio, 1986). This condition is fulfilled in our study because we asked respondents directly for their evaluations of the task transfer, which can only reveal readily accessible and therefore strong attitudes. Moreover, according to the principle of compatibility (Ajzen & Fishbein, 1980), a strong attitude-behaviour correlation can be expected to the extent that attitudes and behaviours involve exactly the same action, target, context, and time (Ajzen & Gilbert-Cote, 2008). Our study agrees with this principle, as each respondent's offshoring attitudes and relational behaviours were tied to the same offshoring arrangement at a particular

point in time. These theoretical considerations suggest a link between offshoring attitudes and relational behaviours.

The configurational perspective

From our outline of above, it becomes clear that different relational behaviours such as trust, communication, etc., are strongly interdependent (see Zimmermann, 2011). For this reason, it is unlikely that offshoring attitudes will affect certain relational behaviours in isolation, without impacting upon a range of other, interdependent behaviours. Offshoring attitudes may therefore have an impact on whole configurations of relational behaviours. This consideration is best captured by the configurational perspective that has been developed in organisational theory (e.g., Meyer, Tsui & Hinings, 1993; Miller, 1996). Configurational theorists argue that organisational reality cannot be explained by unidirectional, causal relationships between isolated variables, but only in terms of variable configurations, i.e. 'multidimensional constellations of conceptually distinct characteristics that commonly occur together' (Meyer et al. 1993: 1175). This is because the effect of single variables depends on their interaction with the multitude of other variables in a configuration. With regard to relational behaviours, this would mean, for example, that poor communication is detrimental for offshoring success because it goes hand in hand with insufficient shared understanding, trust, knowledge transfer, etc. Hence, if offshoring attitudes have an impact on communication, they will also affect other relational behaviours.

Because of such interdependencies, configurational theorists argue that variables tend to fall into a limited number of coherent, typical configurations. Typical configurations can be captured either through conceptual typologies or empirically derived taxonomies (Miller, 1996). In our study, we used the configurational perspective as a sensitising device, to understand whether and how offshoring attitudes were tied to discernible configurations of relational behaviours. We thereby derived a taxonomy of typical configurations empirically. Furthermore, organisational configurations are thought to be formed due to driving 'forces' (Meyer et al. 1993: 1176), 'imperatives', or 'orchestrating themes' (Miller, 1996), such as environmental constraints, organisational structure, or leadership. Accordingly, our research aims to identify the driving forces that lead to particular configurations.

METHOD

Our inquiry follows a qualitative, interpretivist approach. In line with Geertz (1973), we regard our data as our constructions of the respondents' constructions of their social reality. Moreover, our study adheres to the principles of interpretive field studies suggested by Klein and Myers' (1999). In particular, we pursue the principle of contextualisation by scrutinising contextual influences on offshoring attitudes and relational behaviours. We also pay attention to possible influences of the interaction between researchers and respondents on respondents' interpretations, as outlined in the data collection section. We started our research with a range of theoretical assumptions, but expanded and altered these assumptions through an inductive data analysis and an iterative comparison to extant evidence and theory. This iterative process accords with Klein and Myers' principles of abstraction and dialogical reasoning, as well as Eisenhardt's (1989) recommendations for developing theory from case studies. Moreover, we followed the principle of multiple interpretations, by taking into account respondents' contrasting evaluations of the offshoring situation. However, we did not follow Klein and Myers' principle of suspicion, because we do not adhere to a critical theoretical view and we did not detect any signs of systematic bias in our participants' reports.

Research setting and respondents

The fieldwork was conducted in a major German electronics firm outsourcing parts of its IT development to Indian subsidiaries. This organisational offshoring context is typical for large German firms which are increasingly offshoring their software operations to India (Mueller, 2009). The first author had worked in this firm for several years, which facilitated access to the firm as well as our understanding of the company context. The firm's main espoused reasons for offshoring of IT are cost savings and a shortage of qualified software engineers in Germany. The company develops and produces automotive technology as its core business, followed by industrial technology, consumer goods and building technology, as well as engineering and IT services. The company has close to 300,000 employees worldwide. In India, the company set up production plants as early as the fifties, and has built up software development sites rapidly since the early nineties, with an

explicit aim of further offshoring in the future. The company now employs over 18,000 employees in India.

Through contact persons who had participated in previous research, we gained access to 30 German IT developers working from Stuttgart (Germany) in virtual teams with Indian colleagues who were located in a wholly-owned subsidiary in Bangalore (India). These respondents were suitable for the inquiry because they could draw on sufficient, first-hand experience of collaborating with offshore colleagues. We included only the German side and not their Indian counterparts, because Germans were bound to have a much better insight into their own and their German colleagues' offshoring attitudes. Respondents had worked with the Indian subsidiary for between one and ten years. All of the participants were male, apart from one, like the vast majority of employees of this industry in Germany. All participants were involved in certain aspects of IT development for automotive car engines, which allowed for easier comparisons between their offshoring collaborations. Five organisational departments participated with three or more representatives each. Additionally, we included seven other IT development departments with one respondent each. Table 1 provides details on the participants' responsibilities.

- Insert Table 1 about here –

Data collection

Data were collected by the first author, a German national, through semi-structured face to face interviews in Stuttgart. The interviews lasted between 40 and 70 minutes, with an average of 58 minutes. All interviews were conducted in German and tape-recorded. At the beginning of each interview, it was explained to all respondents that the research investigated German IT developers' attitudes towards their collaboration with Indian colleagues and how these attitudes affected the collaboration. It is likely and intended that this introduction directed the participants towards the ideas of offshoring attitudes and associations with relational behaviours, even if they had not been fully conscious of them before. Respondents were also informed that a feedback report would be written and sent to respondents, and that none of the respondents' names would be mentioned. This may have contributed to the open and critical responses we received. Respondents' openness was probably also reinforced by the researcher being previously an insider but now an outsider to

the company, which implied that she had a high degree of contextual understanding, but no influence on the respondents' careers.

All respondents were then given identical starter questions. They were asked to state the number of German and Indian colleagues in their team and the tasks of each side. They were then requested to rate the performance of their German-Indian team using a scale developed by Gibson, Zellmer-Bruhn and Schwab (2003). This scale uses a seven point Likert-type scale to assess goal achievement and effectiveness in terms of achieving team goals, team objectives, meeting the requirements set for the team, fulfilling its mission, and serving the purpose the team is intended to serve. Given the small respondent number, this rating served only to elicit attitudes concerning performance, rather than as a statistical device.

Respondents were further asked to describe their offshoring attitudes in terms of perceived advantages and disadvantages that the transfer of tasks to India created for the firm, the TNT, and German TNT members. Respondents were allowed to answer these questions with respect to themselves as well as their colleagues. Moreover, they were requested to describe relationships between Indians and Germans in their teams. If required, they were given more specific probes on the relational behaviours identified in the literature review. Respondents were further interviewed about what their attitudes depended on, and they were asked directly whether they thought that attitudes towards the collaboration affected the Germans' behaviour towards Indian colleagues. Although all of these main points were covered in each interview, respondents were encouraged to speak freely about points of concern not included in the interview schedule, to allow for additional items to emerge, which were then added as probes in subsequent interviews.

Data analysis

The interviews were transcribed and coded in German, using the NVivo 8 software and following a procedure of template analysis (King, 2004). The initial coding tree was constructed from the final interview items. During the process of coding, the tree was refined by merging similar codes, adding codes to capture emerging additional themes, and re-defining codes to better match respondents' explanations (see Appendix for final coding tree). Initially, the first author coded half of the interviews to develop the coding scheme to some maturity. Then, the other authors (both researchers working on TNTs) acted as second coders. They used the scheme to

code three interviews. After each coded interview, the three researchers compared their codes and discussed differences. For the first two interviews, this led to some modifications of the codes to eliminate sources of misunderstanding and incorporate additional meanings observed by the second coders. No further code modification was seen as necessary for the third interview. The coding scheme was therefore deemed saturated and used for the further analysis.

The analysis proceeded from the fundamental categorisation of attitudes, their determinants, and their effect on relational behaviours (based on the interview questions as well as emergent themes) to the data-driven conceptualisation of results in terms of vicious and virtuous circles and configurations.

Respondents' views on attitudes, effects on relationships, and driving forces were analysed through node lookups and coding queries in NVivo. Attitudes were categorised into overall positive, negative, and ambiguous with regard to consequences for the firm, the TNT, and German team members as parameters. Moreover, the five main departments were clustered into overall positive or negative in terms of their members' attitudes. For this purpose, a score was calculated by dividing all positive by all negative attitude summaries. A score below 1 was thus classified as negative and a score above 1 as positive. As a result of this analysis, we identified two departments with extremely contrasting scores. In the other departments, respondents held more mixed, positive, negative, and ambiguous attitudes, depending on the evaluated parameter, and their overall scores were therefore less extreme. To determine the influences that could explain the differences in offshoring attitudes, we consulted the reasons given by our respondents, and we drew our own comparisons between characteristics of contrasting departments.

Our further analysis was driven by certain salient, emergent finding. Most importantly, a few respondents mentioned that offshoring attitudes not only influenced behaviours, but these behaviours also impinged back upon attitudes. During and after the interview stage, we scrutinised this observation through a synopsis of reports on the effect that offshoring attitudes had on behaviours, and consequences of these behaviours. It became apparent that constructive relational behaviours were seen to improve performance, workload, communication and knowhow transfer, and these perceived outcomes co-occurred with expressions of positive offshoring attitudes. This inductive analysis led to the higher order

interpretation of results in terms of virtuous and vicious circles of attitudes and relational behaviours. We identified such circles in all departments, but they became most obvious in a comparison between the two departments at the two extreme ends of the positive-negative continuum. These were departments 1 and 2, each including five respondents (see Table 1). Moreover, when examining respondents' retrospective reports on how the collaboration had improved or not improved over time, we understood that vicious and virtuous circles may have given these developments some of their momentum.

By taking a configurational perspective (Meyer *et al.*, 1993), we were able to raise our findings to a higher theoretical level. We found that the vicious and virtuous circles, incorporating a mutual dependency between attitudes and behaviours, generated and perpetuated certain patterns of attitudes and behaviours in the two departments at the extreme ends, which we interpret as contrasting configurations. We were not able to identify other configurations, probably due to the more complex findings in the other departments, involving mixed attitudes, although this does not imply that other configurations in between the two extreme poles may not have existed.

Our methods were consistent with recommendations to establish credibility of qualitative research (Lincoln and Guba, 2002). Our coding was based on inter-rater agreements, and we triangulated our findings by drawing on participants' explanations as well as our own comparisons between respondents and departments. Moreover, we received participant confirmation of our results by sending a feedback report to all respondents, which outlined our main interpretations. Ten participants responded, all confirming that their views were represented in the report. Out of these ten, three were members of department one, and three were part of department two. We regard this as an acceptable response rate. In the results section, we will present extensive quotes to further support our study's credibility.

RESULTS

Our analysis allowed us to determine IT developers' offshoring attitudes with regard to offshoring consequences for team performance and for German team members. These offshoring attitudes were seen to affect certain relational behaviours, namely

(1) the treatment of Indian colleagues as fellow team members versus mere suppliers, (2) the Germans' effort in communication and knowledge transfer, and (3) their support versus avoidance of the task transfer. Our analysis further revealed that these behaviours impinged back upon several offshoring attitudes, leading to vicious and virtuous circles of attitudes and behaviours (see Figure 1). The circles are explained in more depth later on.

- Insert Figure 1 about here -

By a comparison of department 1 and department 2, we were able to identify two contrasting configurations. Offshoring attitudes and associated behaviours of the respective department members were clearly configured around the opposite poles of a continuum of positive and negative attitudes. Accordingly, predominantly virtuous circles of offshoring attitudes and relational behaviours emerged in one of these departments, and predominantly vicious circles in the other, reinforcing positive and negative configurations of attitudes and behaviours, respectively. We were also able to trace these configurations back to particular structural and managerial driving forces. In the following, we will outline the two configurations in terms of characteristic offshoring attitudes, relational behaviours, and the association between the two, before presenting driving forces.

Configuration 1: offshoring as an opportunity for professional and personal growth

The first configuration was predominant in Department 1. This configuration can be characterised by perceptions of offshoring as an opportunity for professional and personal growth. Respondents in the department had worked with Indian colleagues for between one to three years. Despite this relatively short experience, they rated performance outcomes overall positively. They explained that after initial difficulties, the offshoring collaboration now resulted in satisfactory software quality, and the level of required support effort was acceptable. Furthermore, respondents described the transfer of standard tasks to India as an opportunity for themselves to focus on new, challenging and complex tasks. Respondents in this department did therefore not perceive offshoring as a threat to their jobs. By some, the offshoring collaboration was also seen as an opportunity for professional and intercultural learning. They had gained new skills, such as coordinating a larger, distributed team, which was useful for progressing to leadership positions. Moreover, many department members were

seen to enjoy the opportunity to practice their English and interact with members of another culture.

Department members' positive offshoring attitudes were tied to constructive relational behaviours. The German-Indian team identity was described as strong, and relationships as friendly. Moreover, respondents described in much detail how they had spent a great amount of effort to communicate and transfer knowledge to Indian colleagues. Inspired by their belief that good performance could be achieved, some employees had initiated training events, even flown over to India to build up Indian knowledge and skills:

„Until one or two years ago, ... they identified the knowhow on the Indian side as a great problem. Then at that time, Mr. A. [pseudonym] flew over and conducted a week long training event. That had an incredibly positive effect on the collaboration. He does of course approach this with a generally positive attitude... That has a strong effect.” / [Interviewer:] Do you think he would not have done that if he did not have such a positive attitude? / “Not in that form. He invested incredibly, that was very exhausting for him.”¹

For the same reason, members of this department had achieved mostly effective cross cultural communication. For example, one participant explained how his belief that initial performance difficulties were simply down to miscommunication had inspired him to spend conscious effort in creating trust and setting up communication norms:

‘When you ... show them: “I don’t eat anyone, I am a completely normal human being, and you can joke with me” that helps incredibly. ... to explain to them: “Listen. If I tell you this and that, then I expect this and that from you. And if you have this or that problem, then I expect you to communicate it in this or that manner.” And this was the key. Before that ... I was sure that something was going wrong. ... But I was aware that it all had to be down to communication...’

Such effort in communicating and transferring knowledge was regarded as crucial for achieving performance and workload improvements over time, and therefore co-occurred with positive evaluations of the transfer:

‘... It cost us a lot of time and many trips to India. We are typically over there every quarter of the year for a week, but it was worth it. The project is now – the boss always says, “a success story“, and we are now ... three months ahead of the time plan, which no-one would actually expect from a project like this.’

Such success stories not only reinforced positive attitudes, but these attitudes did in turn increase employees' efforts in communication and knowhow transfer, as outlined above. This implies virtuous circles of offshoring attitudes and relational behaviours, as illustrated in Figure 1. In the same vein, a virtuous circle was created as employees' communication and knowledge transfer allowed German and Indian employees to gain more intercultural experience over time, helping them to improve intercultural communication, which supported positive offshoring attitudes concerning the intercultural experience.

'And one advantage is intercultural communication. ... I think that is very important. ... You have to have the inclination for it...then you can progress, and then you benefit from it when negotiating with people from other countries. ...I have regarded it as an opportunity...I see that very positively.'

Configuration 2: offshoring as a threat to professional and personal growth.

A contrasting cultural configuration was identified in department 2, characterised by perceptions of offshoring as a threat to professional and personal growth. Members of this department had worked with Indian colleagues for up to ten years, a time period that would suggest ample experience, therefore good performance and positive offshoring attitudes. However, respondents came to overall negative evaluations of offshoring consequences for performance and for German employees. The quality of the software delivered by Indian colleagues was still regarded as lower than the quality created before the transfer, for all but the most routine tasks. The resulting need to support Indian colleagues and rework Indian results lead to low efficiency, and additional workload for German colleagues, which fed into negative evaluations of the transfer.

Members of this department further reported that offshoring to India led to a constant loss of interesting tasks, such as software specifications. On top of this, several respondents stated that offshoring had made employees insecure about their jobs:

'Colleagues do in fact have a certain fear that their work is increasingly being taken away from them. With this aim to transfer more and more work to India, there are in fact certain worries, existential worries, amongst our colleagues, and they talk about them openly. ... It includes worries about the future, that at some stage, their job will be rationalised out of existence.'

Despite their concerns, respondents in this department described working with Indian colleagues as an opportunity for gaining intercultural experience. At the same time, however, intercultural difficulties were emphasised. Foremost, respondents complained about a lack of openness on the Indian side when it came to reporting difficulties. This had led to delays of deadlines and even product failures. Moreover, it was reported that a few German employees in the department held reservations against working with members of another culture and using English as a language.

Some German colleagues' negative offshoring attitudes had reportedly led to unconstructive relational behaviours. Respondents explained that perceived performance problems and a frustration with increased workload due to support requirements had resulted in a weak shared team identity, paired with a lack of effort to improve the collaboration:

'I have never, at least not yet, had the impression that there is a team who want to collaborate ... rather, ... they just have to collaborate. ... I think of it [a team] as of people who ... want to collaborate, so that there is a certain self-motivation, instead of ... saying: "Well, I have been told I have to collaborate with India, so I'll just do it, because I have to." Instead, the colleague would be able to say: "Wow, it's great that I've got someone in India now who can take over this or that task - now how can I improve the collaboration?"'

In the same vein, many Germans were seen to treat Indian colleagues as mere service suppliers rather than fellow team members. This allowed them to request more independent working, contribute less effort into delivering precise software specifications, and be highly critical with their Indian colleagues' performance:

'If you are part of an equal cooperation, you make more of an effort to write good specifications. I think that with a service supplier, you care less. With a service supplier, you will always moan in the end and say: "This and that could be better."'

Some Germans who were frustrated about additional training and coordination needs, or feared intercultural encounters were seen to lack motivation to communicate and transfer knowledge to Indian colleagues beyond the necessary. For example, they would not make new telephone appointments for those cancelled. It was also reported that some employees who believed that the transfer caused worse quality, additional workload or threatened German tasks and jobs simply

avoided the transfer of tasks wherever possible. For example, they would specify a task in a way to ensure Indian colleagues could not declare themselves competent to perform the task:

„... in some cases, people refuse to collaborate with India. You can do that in a very subtle way, of course. ... there are many possibilities to avoid it or to make sure that it does not happen. It's relatively easy. ... just by means of the task description, you can work towards getting the answer from India: 'We don't have anyone who can do this.'. There are many possibilities. It's easy.”

It became apparent that negative offshoring attitudes and destructive relational behaviours perpetuated each other and created a vicious circle. As mentioned, negative offshoring attitudes regarding effects on performance and workload could cause Germans to avoid the transfer of non-routine, complex tasks. The purpose of this was to reduce quality issues and additional workload. However, such a limitation of the task transfer also inhibited the development of technical skills on the Indian side, thereby setting boundaries to better Indian performance in the future, which in turn perpetuated negative attitudes and led to further avoidance of the task transfer (see Figure 1). Similarly, employees' frustration by performance, workload, and intercultural interactions could lead to decreased effort in communicating and transferring knowledge, making it impossible for performance to improve, workload to decrease, or intercultural competence to grow, and thus reinforcing negative offshoring attitudes. This vicious circle was most apparent when it was intentional. For example, some Germans were seen to actively seek evidence for Indian mistakes in order to argue against the transfer:

„...and then you are always glad if the Indian colleagues have made a mistake, because then you can say: ‚Look, they have made a mistake, again.‘. You have one more reason against having to work with them.“

It was even reported that some employees contributed deliberately to Indian mistakes in order to promote their failure and reinforce their negative offshoring attitudes:

‘Maybe you have noticed that he [the Indian colleague] hasn't really understood, but you do not tell him. Then he will take forever. You get no output, and in the end you do it yourself. That's the solution: "I'll just do it myself then, even if I work overtime." Then you will be able to say afterwards: "This doesn't work, does it."’

Similarly, when Germans treated Indian colleagues as suppliers rather than team members, this could inhibit Indians to communicate more openly about problems, in fear of encouraging criticisms of their performance by the German side. This reinforced intercultural communication difficulties and lead regularly to delays of deadlines, which again reinforced some Germans' negative offshoring attitudes regarding intercultural interactions as well as performance:

'It is hard to find a balance. When the Indian side says "no" [to a task] and "we need another quarter of a year", then it is said "They are not good at anything"... That's why we are only dragging along'.

Further, implicit circles

The vicious circles that we found imply that there were certain virtuous circles which our data did not reveal. These plausible circles are also included in Figure 1. In particular, the vicious circle that we found with regard to avoiding the task transfer suggests that an opposite, virtuous circle occurred as well. It is likely that positive offshoring attitudes concerning performance and workload facilitated a proactive transfer of tasks to India. In the same vein, the vicious circle around Germans treating their Indian colleagues as mere suppliers and being overly critical with them suggests an opposite, virtuous circle. It is likely that treating Indians as fellow team members and sharing responsibility, rather than blaming Indian colleagues, supported communication and knowledge transfer, thereby improving intercultural communication and performance, and leading to more positive attitudes regarding these parameters. Possibly, members of the positive configuration did not mention these circles because such positive dynamics were less salient than the negative ones.

Notably, employees' fears of losing their tasks or jobs did not appear to be affected by relational outcomes, and did therefore not create vicious or virtuous circles by itself. However, by influencing communication, knowledge transfer, and the avoidance of task transfer, these fears fed into the other virtuous and vicious circles (see Figure 1).

Driving forces

From the respondents' explanations and from the comparison between the opposite departments, we were able to identify a number of department-specific driving forces

of the two configurations. These drivers were the nature of the transferred and the retained tasks, recruitment levels, managerial offshoring strategies, and the level of employee turnover in India.

Thus, department 1 was responsible for developing highly innovative software for automotive safety systems. This leading-edge product created an abundance of new, innovative tasks for German employees, and allowed the German workforce to grow. This situation reduced employees' fears of losing interesting tasks or even jobs to India:

'We have a lot to do, and we have had an increase in our workforce since I started ... an increase by 150%. I would say that's not bad. So actually I don't think you can talk of jobs being threatened.'

Moreover, due to the amount of challenging, non-routine tasks, the German side was able to transfer primarily routine tasks to India, which matched Indian skills and allowed for satisfactory performance. The promising task and job prospects went hand in hand with a specific, explicit, and convincing managerial strategy for the distribution of tasks in the future. For example, the rise of attractive new tasks and jobs had helped management in convincing employees that core competences would stay in Germany and the workforce would remain stable:

'It is now very clear that we will keep the core competence over here. ... For example, in the simulation task, we have two new colleagues who were employed this year. That was a clear signal to our [German] colleagues: "We want to invest over here, as well". ... We have a cooperation model that is designed for the long term, with a strong core over here and additional competence and capacity in India. This is accepted absolutely.'

In addition, management had encouraged employees' positive attitudes and supported their knowledge transfer efforts. This was seen as crucial for offshoring performance:

, Only because I thought: "How can we improve it? [the collaboration with Indian colleagues]", and because I had a good boss who you could make enthusiastic about it, and who also gave me support, for example for travel costs, only because of this I managed to achieve this'.

However, task distribution and conducive managerial strategies did not seem to suffice to bring about the positive attitudes concerning performance. These attitudes also relied on actual performance success, and this depended strongly on the low

turnover level of Indian employees in the department, allowing for a build-up of Indian knowhow over time:

'We are about to really achieve the efficiency we wish for, because people develop more and more experience, and Indian colleagues do not move around anymore ... We now have relatively quiet conditions where the development progresses continuously.'

In department 2, these driving forces were pronounced in the reverse manner. The department was responsible for the maintenance and development of highly matured functions for electronic control units in car engines. The maturity of the product appeared to be a major reason for the lack of challenging new tasks for German employees, and for recent recruitment restrictions, which encouraged fears of losing tasks and jobs:

'There is of course the fear that more and more tasks will be transferred to India, and you also see that here in Germany, the number of employees working in this department gets smaller, slowly but surely.'

In addition, more and more of the limited non-routine tasks had to be transferred to India in order to motivate the increasingly skilled Indian workforce. This development reduced the Germans' hopes for attractive new tasks and job security in the future, and also led to poor quality when the transferred, demanding tasks did not match the level of Indian skills. In addition, a high rate of employee turnover in India contributed to high levels of coordination and communication effort, knowhow transfer, and rework of Indian results, and therefore fed into the negative offshoring attitudes. This situation was aggravated by some team leaders who were not in favour of the transfer and therefore contributed to the vicious circles:

'There are team leaders who don't think much of the collaboration and, accordingly, let it run into an open blade. If a team leader does not want that it works, then it will not work.'

Moreover, although top management assured that German jobs would not be lost, their plans for securing jobs were not visible enough to convince German employees and reduce insecurities about job losses:

'Our top management keeps assuring that there will be no downsizing in Germany or Europe. They keep saying that we will remain constant, and for some time, there was even talk of a growth in workforce. However, deep in the back of our colleagues' heads, there is still that fear. A while ago, I was in a meeting with some

colleagues where a representative of top management was present, where he said very clearly: "We are not even thinking of downsizing." ... I talked to the colleagues afterwards. The vast majority of them said: "I don't believe a word."

DISCUSSION

Implications for offshoring research

The purpose of this study was to extend our understanding of offshoring collaborations by exploring onshore employees' offshoring attitudes and their influence on relational behaviours towards offshore colleagues. Interestingly, we revealed offshoring attitudes of German IT developers that reflected macro-level arguments for and against offshoring. The offshoring consequences that our participants perceived with regard to team performance, tasks, and jobs on the German side mirror the divergent, macro-level evaluations of offshoring concerning country and firm level economic performance, the nature of onshore tasks, as well as job security (see United Nations, 2005). Moreover, the attitudes concerning effects on employees' workload correspond to Dibbern et al.'s (2008) description of perceived offshoring transaction costs.

Based on the existing literature, we had assumed that offshoring attitudes would affect configurations of interrelated relational behaviours. However, going beyond this expectation, our results showed not just a unidirectional influence, but a mutual influence between attitudes and behaviours with regard to offshoring attitudes on performance, workload, and intercultural communication. As part of vicious and virtuous circles, these offshoring attitudes were interdependent with several of the interrelated relational behaviours that our literature review had suggested. The offshoring attitudes that concerned the future of tasks and jobs fed into these circles, by influencing all of the aforementioned relational behaviours. Accordingly, we found that offshoring attitudes affected not just certain configurations of relational behaviours, as expected, but were part of whole configurations of attitudes and behaviours.

To further explain the interdependence between offshoring attitudes and relational behaviours, and the resulting configurations, we would like to deploy the concepts of self-efficacy and collective efficacy. Self-efficacy is the 'conviction that one can successfully execute the behaviour required' (Bandura, 1986), whilst

collective efficacy refers to a group's shared belief in its capabilities to organise and execute actions required to produce certain levels of attainment (Bandura, 1997, p.477). Both individual and group level efficacy are relevant in the context of this study, because offshoring outcomes depend not only on the actions of individuals, but also on group members' accumulative and joint efforts. We have outlined how positive relational behaviours, such as communication and knowledge transfer, impinged back upon offshoring attitudes because they gave Indian colleagues a chance to improve their performance, thus reducing the Germans' workload and allowing both sides to improve their intercultural communication effectiveness (see Figure 1). Accordingly, efficacy research (Bandura & Wood, 1989) has demonstrated not only that high efficacy increases initiative and perseverance on task-related behaviours, but also that it thereby leads to better performance, which reinforces efficacy. In the same vein, positive offshoring attitudes concerning performance, workload, and intercultural communication may go hand in hand with higher efficacy, i.e. the conviction that oneself and the group could successfully execute the relational behaviours required to achieve satisfactory performance, workload, and intercultural communication. This conviction may have motivated employees to spend effort in such relational behaviours, thus serving to achieve better outcomes, which in turn reinforced positive offshoring attitudes. Our circles therefore also resemble the concept of self-fulfilling prophecies described by Merton (1968), which, however, refer mostly to false rather than true predictions. Our suggestions resonate partly with Fuller, Hardin, and Davison's (2007) findings on virtual teams, demonstrating that virtual team efficacy predicted satisfaction with the team, satisfaction with team outcomes, and perceptions of team outcome quality. However, Fuller et al. do not examine the reverse effect of group outcomes on efficacy.

It has further been argued that the cyclic relationship between efficacy and performance builds upon itself and creates upward or downward spirals of efficacy and performance, leading to improvements or deterioration of performance over time (Lindsley, Brass & Thomas, 1995). Self-reinforcing causal loops and spirals have recently been described with regard to various aspects of organisational behaviour, such as entrepreneurial mindsets (Shepherd, Patzelt & Haynie, 2009) and positive affective similarity in work groups (Walter & Bruch, 2008). Accordingly, the vicious and virtuous circles that we found may have not only perpetuated current offshoring attitudes, but also led to continuous improvement or deterioration, through upward

and downward spirals of attitudes and behaviours, over time. A longitudinal analysis would be necessary to investigate such developments.

For offshoring research, our findings highlight a need to incorporate the concept of vicious and virtuous circles and the configurational perspective, rather than focussing on offshoring performance, attitudes, or relational behaviours in isolation. The configurations that we described lay at the opposite poles of a positive-negative continuum. However, there are likely to be other, typical configurations in the intermediate spectrum. To refine our typology, it would be necessary to investigate how configurations of offshoring attitudes and relational behaviours vary between settings with different driving factors, such as different products and managerial offshoring strategies in different departments or firms. Qualitative interviews can still serve as the main source of such an analysis. However, this analysis could be expanded to a broader scale by applying the technique of qualitative comparative analysis (QCA; Ragin, 2000). Fiss (2009) has argued convincingly that this method is particularly suitable for configurational research on a large scale. Through logical simplification and a combination of quantitative and qualitative analyses, QCA makes it possible to compare how causes combine to create outcomes across large numbers of cases. At a later stage of research, this method could therefore facilitate a larger scale study of different configurations of offshoring attitudes and relational behaviours, and their association with offshoring success.

In addition, a psychological analysis would be useful for having a closer look at the mechanisms by which offshoring attitudes affect relational behaviours and vice versa. An inductive analysis could explore in more depth how circles emerge in particular settings. This data-driven analysis could be informed by established psychological theories. Firstly, the sources of efficacy described by Bandura (1997) could be explored, including enactive mastery experiences, vicarious experience, verbal persuasion, and physiological and affective states. Secondly, Ajzen's (1985) theory of planned behaviour explains behaviour not only through attitudes and self-efficacy, but also subjective norms. By using this theory, future research could aim to explain more precisely under what psychological circumstances offshoring attitudes do or do not entail certain relational behaviours. Moreover, to explore the reverse influence of behaviours on attitudes, could be Lindsley et al.'s (1995) model could be put into practice, which explains the ways in which self-efficacy leads to upward and

downward spirals, and includes several additional influences such as feedback, verbal persuasion, an actor's abilities, and emotional reactions.

Limitations

To explore the new territory of offshoring attitudes and relational behaviours, we chose an interpretivist case study methodology. Although best suited for this research purpose, the approach has characteristic limitations. Following Lincoln and Guba's (2002) recommendations, we aimed to set the ground for transferability by outlining the context characteristics of the firm and different departments which appeared to have an influence on the phenomenon in question. With regard to the departmental context, the comparison of contrasting departments gives us some confidence that we have captured distinguishing influences. However, in order to determine more clearly what firm level influences affect the configurations of offshoring attitudes and relational behaviours, a comparison to other firms would be necessary. Comparisons could be made firstly to other firms within the same sector and the same combination of nationalities. If transferability within these parameters can be established, the next step would be to question the transferability of findings to other sectors and other nationalities.

Secondly, due to the qualitative nature of our results, we do not provide precise evidence regarding the concepts of efficacy, self-reinforcing spirals, and the theory of planned behaviours, which are based on well-established quantitative research. Given the affinity of our findings to these concepts, it would be useful to develop quantitative measures for our main themes – offshoring attitudes, relational behaviours, and configurations - and explore in more depth how they accord with the processes described in the theories of efficacy, spirals, and planned action. The combination of qualitative and quantitative data could potentially lead to a very rich and, at the same time, more theoretically grounded explanation of the mechanisms by which offshoring attitudes are associated with relational behaviours.

Thirdly, our research has not addressed the question of how offshoring attitudes affect relationships, rather than just relational behaviours. For examining offshoring attitudes and relational behaviours, it was appropriate to consult solely onshore colleagues' perceptions. However, to examine the link between offshore attitudes and relationships, one needs to establish how offshore colleagues perceive and react to onshore members' relational behaviours. It is likely that the onshore

effort of communication, knowledge transfer and team building supports strong relationships, but such relationships depend also on the actions and reactions of offshore counterparts.

Implications for practitioners

Our observations lead to clear implications for practitioners. By supporting positive offshoring attitudes, managers of the offshoring collaboration can stimulate those relational behaviours that contribute to offshoring success, and by stimulating such relational behaviours, they can in turn foster positive attitudes. We found that the clarity and explicitness of managerial offshoring strategies was an important driver of the two contrasting configurations. Hence, to promote a positive configuration of offshoring attitudes and relational behaviours, managers should design and communicate a clear strategy for the distribution of tasks, which addresses employees' career ambitions and security needs. Moreover, steering against high employee turnover at the offshore destination, and ensuring that transferred tasks match offshore colleagues' skill levels is not merely important for performance, as often stated before (e.g., Dibbern et al., 2008) but even for employees' offshoring attitudes and their configurational consequences. Managers are also well advised to expose positive offshoring attitudes and constructive relational behaviours themselves. Through this, they are more likely to achieve the results that justify such positive attitudes. Other drivers are harder to control for managers, in particular the novelty of the product that determines the level of customer demands, the amount of incoming projects, and workforce growth.

To employees involved in the offshoring collaboration, our findings send the encouraging message that their attitudes make a difference for themselves and for offshoring success. The offshoring decision may have been imposed on them, but the effect that offshoring has on their team's performance, their workload, and the quality of their intercultural experience depends in parts on their own offshoring attitudes. Moreover, if in doubt, they may opt for more optimistic rather than pessimistic evaluations of offshoring consequences, because these may help them to behave in a way that leads to success. Even if their evaluations are initially not correct, they could become self-fulfilling prophecies.

Conclusion

To sum up, our study was the first to give a comprehensive account of the offshoring attitudes held by employees involved in an offshoring collaboration. Respondents' attitudes regarding team performance, tasks, and jobs mirrored public and academic evaluations of offshoring at firm and country levels (e.g., United Nations, 2005). Regarding workload implications, our respondents confirmed and expanded previous findings on perceived transaction costs (Dibbern et al., 2008).

As the most important finding, this inquiry revealed a mutual influence between offshoring attitudes and relational behaviours towards offshore colleagues, leading to vicious and virtuous circles that perpetuated contrasting configurations of offshoring attitudes and relational behaviours. To offshoring researchers, this finding sends the strong message that offshoring success cannot be fully understood by focussing on performance, attitudes, or relational behaviours on their own. Rather, it is necessary to pay attention to the dynamics between these elements as part of configurations. From a practical perspective, this stance enables us to highlight driving forces that create favourable configurations, and to explain the importance of fostering positive offshoring attitudes.

Future research could develop a more refined typology of configurations of offshoring attitudes and relational behaviours, potentially making use of QCA. More research is also needed to examine the mechanisms by which attitude-behaviour configurations develop. The concepts of self-efficacy, self-reinforcing spirals, and the theory of planned behaviour are particularly promising for guiding such enquiries. Finally, whilst IT development through German-Indian collaborations is a prominent offshoring context, additional combinations of nationalities, particularly other Western countries and emerging economies, should be examined to tap on more of today's most common offshoring settings.

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Figure 1. Vicious and virtuous circles of offshoring attitudes and relational behaviours

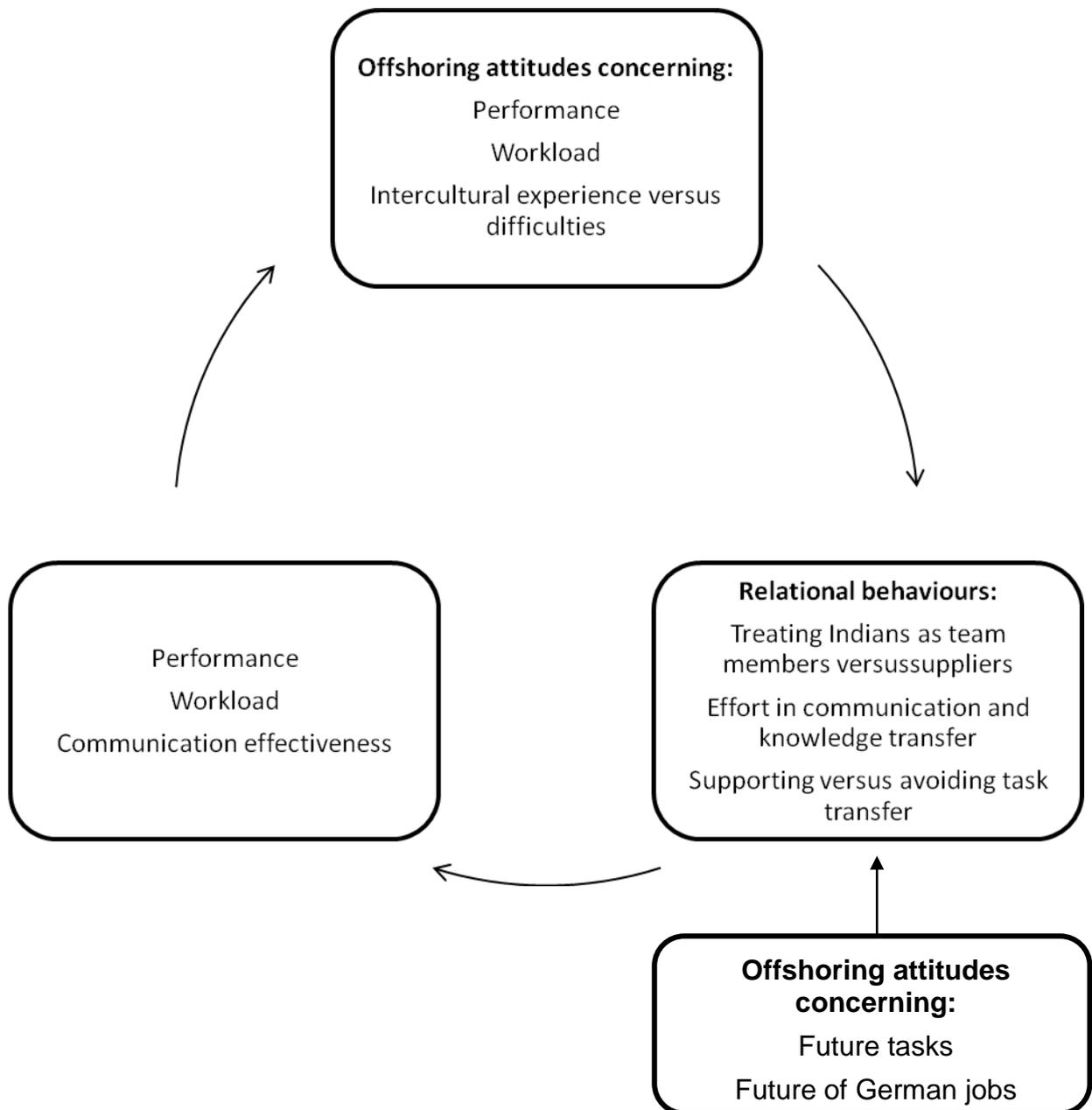


Table 1. Respondents per department

Department	Tasks	Number of respondents
Respondents for five main departments:		
1	Software development for automotive safety systems	5
2	Function development for electronic control unit (ECU)	5
3	Customer support for electronic control unit (customer 1)	4
4	Customer support for electronic control unit (customer 2)	6
5	Software test development automotive safety systems	3
Respondents for other departments:		
6	Customer support for electronic control unit (customer 3)	1
7	Customer support for motor control	1
8	Interface between ECU development and manufacturing sites	1
9	Sales department for Indian customer	1
10	Software tool development for various internal software departments	1
11	Software tool development for heavy motor vehicles	1
12	Software tool development for various internal departments	1

APPENDIX

Final coding tree²

Attitude influences behaviour

Attitudes towards task transfer (offshoring attitudes)

- Alternative tasks for German employees
- Job security
- Intercultural learning experience
- Organisational benefit
- Coordination effort
- Efficiency
- Amount of queries
- Indians avoiding testing or manual work
- Intercultural difficulties
- Language difficulties
- Loss of skills on German side
- Performance, quality
- Taking responsibility, independent working
- Professional learning, career effects
- Workload improvement

Organisational context

- Captive versus non-captive
- Clarity of Management strategy on higher level
- Coordination mechanisms
 - Coordination meeting
 - Documentation
 - Regular feedback
 - Standardised procedures
 - Window people versus broad contact
- Info exchange between Indian colleagues
- Localisation-centralisation strategies
- Management strategy on higher level
- Restructuring phase, undeveloped processes
- Technical facilities in Indian subsidiary
- Training, intercultural training, team workshops
- Turnover levels Indian employees
- Workload fluctuation

Relationships and relational behaviours

- Avoiding vs. supporting transfer of tasks to India
- Communicating
- Competition between national subgroups
- Conflicts
- Scapegoating
- Interpersonal affect
- Knowledge creation and innovation
- Motivation to contribute effort

- Role expectations, role clarity
- Customer-supplier relationship
- Mentoring relationship
- Satisfaction
- Shared understanding
- Subgroup formation
- Team identity
- Trust

Socio-political context

- Demand for particular product
- Economic crisis 2008
- Salary increase and consolidation across firms in India
- Technological environment, environmental standards

Team structure

- Cultural differences between team members
- Individuals' characteristics
- Leadership within team
- Shared goals
- Skill levels of Indian employees
- Task characteristics
 - Coding versus function development
 - End customer interface
 - Repeated vs. one-off tasks
 - Simple vs. complex tasks
 - Specialist vs. allrounders tasks
 - Task fragmentation
 - Task interdependence
- Virtuality, visits
- Work experience of Indian employees

Time factors

- Development over time
- Length of collaboration so far
- Speed of transfer

¹ All quotes were translated by the first author, with careful attention to preserving the meaning of the statements.

² The coding tree was simplified slightly for the purpose of this article. Codes are given in alphabetical order, like in the NVivo interface.