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The Impact of Organizational and National Cultural Differences on Social Conflict and Knowledge Transfer in International Acquisitions

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The purpose of this paper is to elucidate the effects of organizational and national cultural differences on international acquisitions. We argue that cultural differences prompt social identity building that leads to ‘us versus them’ thinking and thereby creates the potential for social conflict. We also maintain that the same cultural differences can contribute to learning in terms of knowledge transfer. We develop a structural equation model to test these hypothesized effects on a sample of related international acquisitions. Our analysis shows that cultural differences at the organizational level are positively associated with social conflict, but that national cultural differences can decrease social conflict. Furthermore, both organizational and national cultural differences are positively associated with knowledge transfer. This analysis shows the importance of disentangling the various effects that cultural differences have on international acquisitions. It also suggests that national cultural differences are less of a problem in international acquisitions than is usually assumed.

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We are experiencing a revival of cultural analyses in organization and management studies. This can be seen in studies of the cultural complexity of organizations (Alvesson, 2002; Sackmann, 1997), calls for analyses of cultural factors as both constraints and resources (Dacin and Weber, 2011), as well as new conceptualizations and methods developed for cross-cultural studies (Harzing, 2004; Kirkman, Lowe and Gibson, 2006; Shenkar, 2001). Central to this revived interest is the intention to go beyond static analyses of cultural differences and to focus on the multifaceted nature of organizational cultures and the processes – such as identity-building and learning – through which cultural factors impact organizations.

Mergers and acquisitions are a case in point. A great deal of research has explored the impact of cultural differences on acquisition outcomes, but the results have remained ambiguous. Scholars have suggested that organizational (Buono and Bowditch, 1989; Chatterjee, Lubatkin, Schweiger, and Weber, 1992; Datta, 1991) and national (Olie, 1994; Weber, Shenkar, and Raveh, 1996) cultural differences contribute to poor post-acquisition performance and have found supporting evidence for such effects. However, others have argued that cultural differences may also be a source of value creation in both domestic (Krishnan, Miller and Judge, 1997) and international acquisitions (Larsson and Risberg, 1998; Morosini, Shane, and Singh, 1998). Following the example of others, we argue that these ambiguous findings are due to the complex relationship between organizational and national cultural differences and acquisition performance (Björkman, Stahl and Vaara, 2007; Larsson and Lubatkin, 2001; Teerikangas and Very, 2006; Very, Lubatkin, Calori and Veiga, 1997). Accordingly, it is crucial to explore how and why cultural differences create positive and negative effects (Reus and Lamont, 2009).
Furthermore, it is important to distinguish specific effects that national and organizational cultural differences have on these outcomes (Stahl and Voigt, 2008).

Hence, the objective of this paper is to explain some of the ambiguous research findings by elucidating the effects that organizational and national cultural differences have on international acquisitions. Although there are other important aspects of post-acquisition integration that warrant attention, social conflict and knowledge transfer are particularly interesting outcome variables because they help us to better understand two sides of the coin in post-acquisition integration: the potential negative effects of social identity-building on the one hand and the positive effects of cultural learning on the other. Drawing on social identity theory (Ashforth and Mael, 1989; Cornelissen, Haslam and Balmer, 2007; Hogg and Terry, 2001), we argue that cultural differences easily invoke stereotyping and a confrontation of ‘us versus them’ (Buono and Bowditch, 1989; Vaara, 2003; van Knippenberg and van Leeuwen, 2001). This can lead to and be measured by the social conflict between the acquiring and acquired units (Jehn, 1997). Drawing from theories of learning (Fiol, 1994; Huber, 1991), we posit that cultural differences may also lead to positive learning effects (Khrishnan et al., 1997, Lado and Wilson, 1994; Vermeulen and Barkema, 2001). Especially in international acquisitions of related business units, knowledge transfer is a key part of learning (Björkman et al., 2007; Bresman, Birkintshaw and Nobel, 1999), which is why we will focus on inter-unit knowledge transfer in our analysis.

We argue that organizational and national cultural differences may have different effects on social conflict and knowledge transfer (Sirmon and Lane, 2004). More specifically, we maintain that because of their salience and central role in post-acquisition integration organizational cultural differences can lead to more severe inter-unit social conflict than national cultural differences. We also argue that national cultural differences may be more strongly associated with knowledge transfer than organizational cultural
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differences. This is because significant organizational cultural differences can weaken the
ability to identify, transfer and implement potentially useful knowledge (Sirmon and
Lane, 2004). We also argue that managers’ operational integration efforts increase social
conflict and knowledge transfer. Finally, we maintain that the two outcomes are
interrelated and hypothesize that social conflict has a negative impact on knowledge
transfer.

The remainder of the paper is structured as follows. After an overview of the
relevant literature, we develop our hypotheses and model. We proceed to test the model
on a sample of international acquisitions carried out by Finnish corporations using data
on national cultural differences from the GLOBE study (House, Hanges, Javidan,
Dorfman and Gupta, 2004) and perceptual measures of organizational cultural
differences and post-acquisition integration outcomes. We conclude the paper with a
discussion of the implications of the findings and suggestions for future research.

CULTURAL DIFFERENCES IN INTERNATIONAL ACQUISITIONS
A review of prior research

The association of cultural differences with acquisition performance has intrigued
management scholars ever since the mid-1980s when cultural analyses had become
increasingly popular in management studies (Hofstede, 1980; Pettigrew, 1979). Much of
the existing research has focused on the ‘cultural distance’ or ‘fit’ between the acquiring
and the acquired organizations. These analyses rest on the idea that the pre-acquisition
cultural differences form a critical determinant of the subsequent integration process
(Cartwright and Cooper, 1992, 1993; David and Singh, 1994; Morosini and Singh, 1994).
Most of these studies have considered cultural differences to be the cause of poor
acquisition performance and found such a relationship to exist (Chatterjee et al., 1992;
Datta, 1991; Weber, 1996). In international settings, some scholars have found that
acquisitions from culturally closer nations lead to better outcomes than those from more
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distant cultures (Datta and Puia, 1995; Krug and Hegarty, 1997; Weber et al., 1996). However, it has also been suggested that cultural differences can be a source of capability development and value creation (Krishnan et al., 1997; Morosini et al., 1998) – a theme that we will come back to.

Such studies of cultural ‘cultural distance’ or ‘fit’ have also been criticized. Only a few studies have included both national and organizational cultural factors in the same analysis and have thus been able to examine their interplay in post-acquisition integration (Larsson and Risberg, 1998; Stahl and Voigt, 2008; Very et al., 1997; Weber et al., 1996). Moreover, the use of ‘national cultural distance’ measures has been criticized in research on international business (Harzing, 2004; Kirkman et al., 2006; Shenkar, 2001), and alternative measures proposed (House et al., 2004).

Others have focused on acculturation processes (Elsass and Veiga, 1994; Larsson and Lubatkin, 2001; Mirvis and Sales, 1990; Nahavandi and Malekzadeh, 1988). The key idea has been to study how the congruence between the preferred modes of acculturation of the acquiring and acquired firms affects the integration period (Nahavandi and Malekzadeh, 1988). Very et al. (1997) constructed a ‘cultural compatibility’ measure that explains respondents’ perceptions of cultural compatibility and subsequent behavior in post-acquisition integration. Interestingly, Veiga, Lubatkin, Calori and Very (2000) found that post-merger performance was highest in cases where pre-merger cultural incompatibility turned into post-merger cultural compatibility after the merger – and lowest in cases where cultural compatibility turned into incompatibility.

Still other researchers have focused on the ‘constructed’ nature of cultural differences (Gertsen, Søderberg and Torp, 1998; Kleppesto, 2005; Phillips and Maguire, 2008; Riad, 2005). From this perspective, the point is not to examine ‘real’ cultural differences but rather to focus on subjective interpretations and how they are linked with identity-building (Gertsen et al., 1998, Kleppesto, 2005). Recent analyses have indeed
illustrated how post-acquisition integration involves national cultural stereotypes (Vaara, Tienari and Björkman, 2003) and nationalism (Vaara, Tienari, Piekkari and Säntti, 2005) that tend to lead to conflict.

While these studies have greatly increased our knowledge of the role of cultural factors in post-acquisition integration, there remains considerable ambiguity concerning their effects on post-acquisition outcomes. For example, Stahl and Voigt (2008) performed a meta-analysis of previous research that confirmed that cultural differences affected socio-cultural integration, synergy realization, and shareholder value in different ways. However, they concluded that more studies are needed to study how cultural differences affect integration. In their review, Teerikangas and Very (2006) argued that the complexity surrounding the effects of cultural differences stems from several sources: the concept of cultural differences, the dynamics of the integration process, and methodological concerns. They suggested that the multilevel character of cultures and the integration efforts of managers should be given more attention. Consequently, there is a need to specify the distinctive, possibly contradictory effects that national and organizational cultural differences may have on different aspects of the post-acquisition integration process. As a step in this direction, we set out to examine the effects of cultural differences on social conflict and knowledge transfer in related international acquisitions.

Organizational and national cultural differences as antecedents of social conflict

Organizational and national cultural differences impact identity-building in mergers and acquisitions (Phillips and Maguire, 2008; Terry, 2001; Vaara, 2003; Van Knippenberg and van Leeuwen, 2001). We argue that a close analysis of this process is key to understanding the widely reported negative effects of cultural differences (Buono and Bowditch, 1989; Greenwood, Hinings and Brown, 1994; Sales and Mirvis, 1984). Identity-building revolves around different social categories that may be activated during
processes of organizational change (Ashforth and Mael, 1989; Cornelissen et al., 2007; Hogg and Terry, 2001). In the case of international acquisitions, the most central categories are organizational and national identities that become salient precisely when previously separate organizations are combined – a process that can be described as ‘double acculturation’ (Malekzadeh and Nahavandi, 1998).

Essential in this identity-building process is that people tend to associate similarity concerning beliefs and values with attractiveness and trustworthiness (Terry, 2001; Van Knippenberg and van Leeuwen, 2001). This association often results in the development of in-group versus out-group biases that are likely to be amplified in conditions of uncertainty and ambiguity about the future (Terry, 2001; Van Knippenberg and van Leeuwen, 2001). As a result, people in merging organizations often have a tendency not to understand and even distrust the people on the other side (Vaara, 2003).

As post-acquisition decision-making often deals with issues of fundamental importance for the actors involved, divisions tend to strengthen and lead to confrontation between the people representing the two organizational sides (Cartwright and Cooper, 1992, 1993; Olie, 1994; Vaara et al., 2005). If unaddressed, mutually reinforcing distrust can grow in intensity between the members of the acquired and target firm until relationships are irreparably damaged and social integration fails (Stahl and Sitkin, 2005). Consequently, we argue that significant cultural differences are likely to be associated with social conflict, that is inter-group tensions ranging from different opinions to mistrust and open confrontation (Jehn, 1997):

Hypothesis 1a. Differences in organizational and national culture between the acquiring and the acquired firms are positively associated with social conflict.

However, it is important to differentiate between organizational and national cultural differences, and we thus posit that their relationship with inter-unit social conflict will tend to differ. More specifically, we argue that organizational membership is
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a particularly salient and central social category in acquisitions where previously separate organizations are combined (Terry, 2001; Van Knippenberg and van Leeuwen, 2001). As explained above, a key in this identification is that perceived differences tend to be associated with in-group versus out-group biases. Consequently, organizational cultural differences are likely to be strongly associated with organizational conflict. National cultural differences may play an important role in international acquisitions, but they are likely to be less salient or central when compared with organizational cultural differences. Thus, their association with social conflict is likely to be weaker.

Previous empirical findings support this argument. Weber et al. (1996) found that in domestic acquisitions, differences in organizational culture were negatively associated with employee commitment, attitudes towards the merger, and the level of cooperation between employees of the firms that are combined, whereas in cross-border acquisitions national cultural differences were positively associated with attitudinal and behavioral outcomes. Very et al. (1997) found that cross-border acquisitions were not associated with higher levels of cultural difficulties, performance problems, and autonomy removal than domestic acquisitions. A case survey of acquisitions conducted by Larsson and Risberg (1998) reported a higher number of cultural clashes and a lower degree of acculturation in domestic than in international acquisitions. Further, the meta-analysis of Stahl and Voigt (2008) revealed that organizational cultural differences were more negatively related with socio-cultural integration outcomes than national cultural differences. This leads us to the following hypothesis:

Hypothesis 1b. Differences in national culture between the acquiring and the acquired firms are less positively associated with social conflict than are differences in organizational culture.

Organizational and national cultural differences as antecedents of knowledge transfer
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Cultural differences can also lead to learning due to diversity and increased knowledge base (Fiol, 1994; Huber, 1991; Vermeulen and Barkema, 2001). This is especially the case for related international acquisitions where differences in beliefs, values and practices are likely to foster learning and innovation (Barkema and Vermeulen, 1998; Krishnan et al., 1997; Vermeulen and Barkema, 2001). One of the most central source of learning in related acquisitions is knowledge transfer (Bresman et al., 1999; Haspeslagh and Jemison, 1991). In this paper, we conceptualize knowledge transfer as the beneficial use of knowledge, capabilities, or skills originally residing in one organization or unit in the other organization (Bresman et al., 1999; Zander, 1991). Our conception is thus broad; knowledge transfer may include activities ranging from specific resource deployment to the joint development of new capabilities and understanding (Bresman et al., 1999; Haspeslagh and Jemison, 1991).

We argue that different beliefs, values and practices are related to the different forms of knowledge that may be useful for the other party. International acquisitions provide access to a potentially valuable repository of knowledge and capabilities embedded in the local environment of the merging organizations (Ghoshal, 1987). According to Morosini et al. (1998), acquisitions in culturally distant countries are more valuable because a greater cultural distance makes it more likely that the target firm will have capabilities that are significantly different from the acquirer’s own set; thus, ceteris paribus complementarities are more likely to exist. Larsson and Finkelstein (1999) also suggested that combination potential may be more complementary, and hence more valuable, in acquisitions that are culturally distant.

However, cultural differences may also create problems for transferring knowledge across units (van Wijk, Jansen, and Lyles, 2008). Knowledge transfer depends on the receiving unit’s potential absorptive capacity (Lane and Lubatkin, 1998; Zahra and George, 2002) as has been demonstrated in the strong positive relationship found
between absorptive capacity and knowledge transfer (van Wijk et al., 2008). Following Minbaeva, Pedersen, Björkman, Fey and Park (2003), we argue that the potential absorptive (and teaching) capacity consists of both motivation and ability on the part of the receiving organization to acquire and assimilate capabilities. Commonalities make it easier to identify, acquire and assimilate capabilities residing in the other unit (Cohen and Levinthal, 1990; Lane and Lubatkin, 1998) and also easier to “teach” (Easterby-Smith, Lyles, and Tsang, 2008) the receiving organization. In contrast, cultural differences can undermine the relevant absorptive and teaching capacities.

Nevertheless, we argue that the complementary potential will have a stronger impact on the propensity to transfer knowledge during the integration process than the possible increase in barriers to transferring knowledge. Hence, we hypothesize as follows:

Hypothesis 2a. Differences in organizational and national culture between the acquiring and the acquired firms are positively associated with knowledge transfer.

Although both organizational and national cultural differences will have a bearing on the success of the knowledge transfer, we argue that differences in organizational culture between the acquiring and the acquired firms are less positively associated with knowledge transfer than are differences in national culture. This is because substantial differences may also hamper the identification, transfer and implementation of potentially useful knowledge (Cohen and Levinthal, 1990; Lane and Lubatkin, 1998). The greater the organizational cultural differences, the more difficulties people in the receiving unit may have in evaluating the potential advantages stemming from the adoption of certain practices from the other organization. Furthermore, incompatibilities in the beliefs, values and norms may turn out to be significant impediments to successful knowledge transfer.

This view finds support in Sirmon and Lane’s (2004) analysis of international alliances. They proposed that the more central the cultural differences are to the value-
creating activities of an alliance, the more disruptive those differences will be on these activities, including the transfer and application of complementary knowledge and the creation of new knowledge. They also suggested that organizational cultural differences may lead to decreased learning, satisfaction, and effectiveness of interactions, which are expected to inhibit the business processes used to share, combine and leverage resources such as knowledge, relationships and physical assets. This discussion leads us to hypothesize the following:

**Hypothesis 2b.** Differences in organizational culture between the acquiring and the acquired firms are less positively associated with knowledge transfer than are differences in national culture.

**The role of operational integration**

To complement our understanding of the effects of national and organizational cultural differences, it is important to examine the impact of managers’ actions on post-acquisition outcomes, i.e. the integration approach or strategy pursued (Birkinshaw, Bresman and Håkanson, 2000; Haspeslagh and Jemison, 1991; Stahl and Voigt, 2008; Teerikangas and Very, 2006). We will here focus on the role of operational integration, i.e., the extent to which the acquirer standardizes work procedures and systems, and removes overlapping operations.

Operational integration may increase the negative effects of identity-building. First, the decisions and actions concerning standardization and integration of structures and processes can be interpreted as a threat to or a disregard of the culture and identity of the focal organization (Buono and Bowditch, 1989, Cartwright and Cooper, 1992, 1993; Larsson and Lubatkin, 2001). Second, a loss of autonomy is a key concern for the people in acquired organizations (Hambrick and Cannella, 1993; Haspeslagh and Jemison, 1991; Lubatkin, Schweiger and Weber, 1999). Since acquisitions that require high levels of operational integration tend to result in significant organizational changes
and autonomy removal (Datta, 1991; Larsson and Finkelstein, 1999; Schweiger, 2002), the potential for inter-organizational conflict is high. In the worst cases, changes resulting in autonomy removal lead to high levels of employee resistance (Larsson and Finkelstein, 1999) and management turnover (Hambrick and Cannella, 1993; Lubatkin et al., 1999) – a situation that Datta and Grant (1990) have termed the “conquering army syndrome.” While in some takeover situations autonomy removal may not be a key factor and people in the acquired organization may even favor a ‘hands-on’ integration approach by the acquirer, in most situations a tight post-acquisition operational integration approach is likely to be associated with social conflict. This suggests the following hypothesis:

**Hypothesis 3.** The level of operational integration is positively associated with social conflict.

We expect learning resulting in knowledge transfer to increase with the level of operational integration. During the process of operational integration, there will be extensive opportunities for people from the two organizations to interact and learn from knowledge residing in the two units (Ranft and Lord 2002; Slagen, 2006). Furthermore, the more the two units develop standardized procedures and practices, the easier it will be for the receiving unit to see the value and acquire the knowledge residing in the other organization, assimilate it into its own unit, and transform and exploit it in its operations (Gupta and Govindarajan 2000, Zollo and Singh 2004). Thus, we propose that operational integration affects post-acquisition knowledge transfer through the receiving unit’s potential absorptive capacity (Lane and Lubatkin, 1998; Zahra and George, 2002). Additionally, operational integration may facilitate the transfer and assimilation of more tacit knowledge, as processes and practices will have to be articulated and possibly also codified (Björkman et al., 2007; Zollo and Winter, 2002).

It should be noted that integration efforts can be made with other objectives than knowledge transfer in mind. For example, integration may be pursued to consolidate value chains or to create economies of scale. However, even in these cases, the actual
integration will often involve comparisons, redesigns and learning linked with knowledge transfer (Vaara et al., 2003). This discussion leads us to hypothesize as follows:

**Hypothesis 4.** The level of operational integration is positively associated with post-acquisition knowledge transfer.

**The impact of social conflict on knowledge transfer**

Up until now we have discussed social identification leading to social conflict and learning resulting in knowledge transfer as if the two were independent processes. However, knowledge transfer takes place only if individuals are prepared to share and exchange knowledge (Gupta and Govindarajan, 2000; Szulanski, 1996). A number of studies indicate that social factors are important predictors of resource sharing and transfer across units within multinational corporations (Schultz, 2003; Szulanski, 1996; Tsai and Ghoshal, 1998).

In the context of acquisitions, the importance of social integration for knowledge transfer is especially salient. On the one hand, knowledge transfer requires constant social interaction, which rests on social cohesion and trust (Bresman et al., 1999, Haspeslagh and Jemison, 1991). As Bresman et al. (1999, p. 442) noted in their study of knowledge transfer following international acquisitions, “individuals will only participate willingly in knowledge exchange once they share a sense of identity or belonging with their colleagues.” On the other hand, mistrust, conflicting views, and organizational politics can be seen as major obstacles for such efforts (Empson, 2001; Vaara, 2003). For example, Empson (2001) illustrated how fears of exploitation (being used and losing one’s own culture and identity) and contamination (being changed in ways that threaten one’s culture and identity) impede successful post-acquisition knowledge transfer. Therefore, we hypothesize that social conflict will be negatively associated with knowledge transfer.
EMPIRICAL ANALYSIS

Sample and procedures

We examined a sample of foreign acquisitions conducted by Finnish firms. We conducted three cross-sectional mail surveys in 1997, 2001, and 2005, in each case 1-3 years after the acquisition had taken place in order to focus on the integration process (Haspeslagh and Jemison, 1991). On average, the survey was conducted 1.35 years after the time of the acquisition. The companies were chosen based on a database on acquisitions provided by the leading Finnish magazine Talouselämä, which is the most comprehensive source on Finnish acquisitions and has been used previously for similar research purposes (Lehto, 2006).

We applied the following method in the pre-selection of the sample. The acquired company’s sales were required to surpass FIM 20 million (EUR 3.4 million). The acquirer had to be a corporation based in Finland with a stock holding of more than 50% in the target firm. Furthermore, the acquisition had to be of related type and lead to concrete integration efforts. We used the same data gathering process in each survey. After sending out cover letters, we contacted the CEO or another top executive by phone and asked him/her to name key decision makers (1-5 persons) from the acquiring and target companies. During the phone conversation, a member of the research team asked questions to determine the degree of integration in the acquisition so that financial or purely preservation acquisitions involving no real integration were excluded. The respondents completed the questionnaire by mail or by a phone interview.

In line with response rates in previous studies (Datta, 1991, Morosini et al., 1998), we received answers from 25% of the acquisitions originally identified in the Talouselämä database. 24% of the responses were from CEOs, 69% were from other
members of the top management team (including vice presidents, divisional managers, and CFOs) and the remaining 7% were members of the board of directors." Of the answers, 74% were received from the acquirer and 26% from the acquired firm. 57 answers were received from acquisitions in Sweden and 35 in Germany. 10-20 answers each were collected from Switzerland, USA, Estonia, Poland, Great Britain and Norway. In addition, we received 5-9 answers each from France, Denmark, South Africa, and Canada. 2-4 answers each were obtained from Belgium, the Netherlands, Russia, Hungary, Lithuania, China, Austria, and Italy. Finally, we collected 1 answer each from acquisitions in Australia, Brazil, Columbia, South Korea, Latvia, and Romania. The final sample consisted of 220 answers after missing values were controlled for.

The answers came from a total number of 123 foreign acquisitions. 62% of the cases contained single respondents and 38% had multiple respondents. To test inter-rater reliability, we calculated intra-class coefficients for each acquisition with multiple respondents. The intra-class coefficients exceeded 0.75 suggesting a reasonably high level of agreement among multiple respondents (Lubatkin, Calori, Very and Veiga, 1998; Lubatkin et al., 1999).

Typically, researchers have used the mean scores of multiple respondents to represent an acquisition or a top management team in an acquisition (Lubatkin et al., 1998; Lubatkin et al., 1999; Weber, 1996; Weber et al., 1996). However, for the purposes of structural equation modeling, the use of mean scores for multiple response cases is problematic because it creates unequal variance between the cases that have a single respondent compared with those that have multiple respondents. Therefore, to fulfill the assumption of homoscedasticity we weighted each observation by a constant $\frac{1}{\sqrt{n}}$. We used several methods to reduce and control for the possibility of common method bias. Based on pre-tests, we adjusted the questions to improve face validity and
reduce item ambiguity. In addition, we scattered the questions used in this analysis and added unrelated questions to control for priming and consistency effects (Pfeffer and Salancik, 1977). Furthermore, the answers were confidential to decrease social desirability effect and pressure to present politically correct answers. Moreover, we conducted statistical analyses to test for possible common method effects. In the Harman's single factor test, no single factor emerged suggesting the absence of a serious common method bias (Podsakoff, McKenzie, Lee, and Podsakoff, 2003). In addition, the proposed structural equation model was compared with one that also included a global method factor (McKenzie, Podsakoff, and Fetter, 1993). The results indicated a worse fit for the global method factor model, which suggested absence of a serious bias.

**Measures**

Table I reports the variable means, standard deviations and correlation coefficients between the variables used. The survey questions are reported in Appendix I.

**Insert Table I here**

**Organizational cultural differences.** Direct questions concerning the perceived cultural differences that existed before the acquisition were administered to top managers. We measured perceptions of cultural differences because they are likely to predict behavior (Chatterjee et al. 1992; Elsass and Veiga, 1994). Respondents assessed the extent of cultural differences across key organizational functions: management and control, sales and marketing, production, research and development, and finance. Respondents also evaluated differences in company values in general and differences in the values of key decision makers. This procedure implies that these scores inevitably involve some degree of recall bias. However, it is likely that managers can realistically reflect back on the pre-acquisition situations because acquisitions represent major memorable events. Also, the assessment should take place after real experiences of integration efforts because learning about organizational cultural differences takes time.
For control purposes, we included a set of questions about cultural differences at the time of the survey. Evaluations of cultural differences prior to the acquisition and at the time of the survey were significantly different indicating that managers were able to distinguish between prior and current organizational cultural differences.

**National cultural differences.** As a response to the criticism of national cultural differences measures based on Hofstede’s (1980) scores (Harzing, 2004; Shenkar, 2001), the GLOBE project set out to develop more elaborate measures. The nine dimensions of GLOBE scores include uncertainty avoidance, institutional collectivism, in-group collectivism, assertiveness, gender egalitarianism, future orientation, humane orientation, performance orientation, and power distance (House *et al.*, 2004). We selected the GLOBE practices scores because they indicate actual rather than ideal differences between countries.iii In the absence of existing theories that would help us conclude which cultural aspects are particularly relevant for social conflict and knowledge transfer, we used the nine dimensions of the GLOBE practices score to construct an index of national cultural differences. For this purpose, we used the technique developed by Kogut and Singh (1988) to calculate the overall national cultural distance between the Finnish acquirer and the foreign acquiree:

\[
CD_j = \frac{1}{9} \sum_{i=1}^{9} (I_{ij} - I_{if})^2
\]

where:
- \( CD_j \) : The national cultural differences for the \( j \)-th country
- \( I_{ij} \) : The Globe score for the \( i \)-th cultural dimension and the \( j \)-th country
- \( f \) : Finland

By using GLOBE scores from a source external to the sample we reduced the possibility of common method variance and retrospective rationalizing concerning national cultural differences (Golden, 1992; Huber and Power, 1985).
Operational integration. Studies in this field have measured integration in various ways, usually by considering distinctive aspects of operational interaction and coordination (Larsson and Finkelstein, 1999). Our construct of operational integration was based on questions measuring operational integration activities. These included elimination of overlaps between the units, tendency to standardize practices, and integration decisions aimed at the realization of synergy, e.g., through cost reduction.

Social conflict. Prior studies have emphasized the importance of studying different aspects of social conflict (Jehn, 1997). Accordingly, we measured social conflict with four questions on inter-group tensions, covering different dimensions of organizational conflicts. We constructed this composite measure of social conflict from the respondents’ answers to questions concerning the extent of different opinions, cooperation problems, conflicts, and mistrust between the merger partners.

Knowledge transfer. In the operationalization of the knowledge transfer construct, we followed the example of previous studies that have emphasized the need to measure knowledge transfer in various parts and functions of the organizations (Capron, Dussage and Mitchell, 1998). Our knowledge transfer construct was measured with five questions concerning the benefits of knowledge transfer across the following organizational functions: management and control, sales and marketing, production, research and development, and finance.

Structural equation analysis

We tested our propositions using structural equation modeling (Byrne, 2001). We used the AMOS 7.0 program with a covariance matrix as input and maximum likelihood as estimation method\(^{9}\) and followed the two-stage procedure recommended by Anderson and Gerbing (1988). In the first stage, we estimated the measurement model with confirmatory factor analysis to assure that the constructs exhibited satisfactory
unidimensionality, validity and reliability. In the second stage, we identified the structural model and tested the hypothesized relationships.

**Results of the measurement model**

Tables II and III summarize the results of the measurement model. Overall, the measurement model performed well with a comparative fit index (CFI) at 0.922, DELTA index at 0.923, TLI at 0.893, and RMSEA at 0.083. The loadings for all measurements were significant at $p < 0.001$ level.

Insert Table II and Table III here

While there is no simple overall yardstick to evaluate the measurement model, there are useful indicators (Boomsma, 2000; Hu and Bentler, 1999; Marsh, Hau and Wen, 2004). Shook, Ketchen, Hult and Kachmar (2004) recommend calculating composite reliability, which draws on the standardized loadings and measurement error for each item. According to Fornell and Larcker (1981), 0.70 is an acceptable minimum level for composite reliability, with reliability for each indicator above 0.50. In our model, composite reliabilities ranged from 0.87 to 0.95 with indicator reliabilities above 0.50, which suggested good reliability for our measures. Another test for convergent validity is average variance. Shook et al. (2004) suggest that convergent validity is achieved when the average variance extracted is above 50%. The average variances in our model ranged from 69% to 73%, which suggested good convergent validity. We tested discriminate validity by conducting pairwise tests of all theoretically related constructs (Anderson, 1987). The pairwise tests showed that the confirmatory factor analysis model, representing two measures with two factors, fit the data significantly better than a one-factor model, which supported the discriminate validity of the model. Overall, the results indicated that our constructs were adequate to proceed on to the second stage of structural equation modeling.

**Results of the structural model**
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Table IV presents the standardized parameter coefficients and their Z-statistics for the hypothesized path model.

**Insert Table IV here**

Hypothesis 1a proposed that both organizational and national cultural differences are associated with a greater level of social conflict. The results offered clear support for the positive association of organizational cultural differences with social conflict \( (b = 0.79, p < 0.001) \). However, contrary to our hypothesis, we found that the relationship between national cultural differences and social conflict was negative and significantly so \( (b = -0.21, p < 0.001) \). Hypothesis 1b suggested that differences in national culture between the acquiring and the acquired firms are less positively associated with social conflict than are differences in organizational culture. This seemed to be the case when comparing the beta coefficients; as their 95% confidence intervals did not intersect. We then proceeded to conduct nested model comparisons that showed that by constraining the two relationships as equal, a significant worsening of overall fit resulted. Therefore, we rejected the equal coefficient model in favor of the original model, thus confirming Hypothesis 1b.

In Hypothesis 2a, we suggested a positive relationship between organizational cultural differences and knowledge transfer, which was supported in our analysis \( (b = 0.60, p < 0.001) \). The hypothesized positive relationship between national cultural differences and knowledge transfer was also supported \( (b = 0.22, p < 0.001) \). Hypothesis 2b proposed that differences in organizational culture between the acquiring and the acquired firms are less positively associated with knowledge transfer than are differences in national culture. The results showed the opposite; the relationship of organizational cultural differences was stronger than that of national cultural differences. However, their 90% confidence intervals intersected. We proceeded to perform nested model comparisons that indicated that constraining the two relationships as equal did not result
in a significant change in the model. This led us to conclude that the strength of the two relationships was not statistically different. Thus, Hypothesis 2b was not supported.

In Hypothesis 3, we proposed that the greater the operational integration, the higher the level of social conflict. The results indicate no empirical support for this hypothesis \((b = -0.03\), non significant\). According to Hypothesis 4, the greater the operational integration, the higher the level of knowledge transfer between the acquiring and acquired units. The standardized parameter estimate was positive and highly significant \((b = 0.44, p < 0.001)\), therefore supporting Hypothesis 4. We found clear support for Hypothesis 5, which suggested that the greater the level of social conflict, the lower the level of knowledge transfer \((b = -0.28, p < 0.001)\). Finally, we controlled for the effect of organizational and national cultural differences on operational integration and found the associations to be positive \((b = 0.80, p < 0.001; b = 0.19, p < 0.001)\).

Our hypotheses tested linear relationships. However, the effects might be curvilinear \((Björkman et al., 2007)\). Therefore, we conducted additional regression analyses that included both first order and second order terms of national and organizational cultural differences. None of the second order terms were significant when either social conflict or knowledge transfer was used as a dependent variable. This suggested that no curvilinear effects were present concerning hypotheses 1a and 2a.

**DISCUSSION AND CONCLUSION**

Although research on acquisitions has pointed to the key role that cultural differences play in post-acquisition integration, this research has generated mixed results \((Chatterjee et al., 1992; Datta, 1991; Krishnan et al., 1997; Morosini et al., 1998; Stahl and Voigt, 2008; Weber et al., 1996)\). Our analysis starts to explain these discrepancies by focusing attention on the interplay and effects of organizational and national cultural differences on two important aspects of post-acquisition integration: social conflict and knowledge transfer. Figure 1 summarizes our findings.
Based on social identity theory, we hypothesized that organizational and national cultural differences would be positively associated with social conflict, but that the association of organizational cultural differences would be stronger. Our findings support the argument that organizational cultural differences can be seen as root causes of social conflict, and this may help to explain why numerous studies have reported a negative relationship between organizational cultural differences and post-acquisition performance (Chatterjee et al., 1992; Datta, 1991; Stahl and Voigt, 2008; Weber, 1996). In contrast, we found that national cultural differences were negatively associated with conflict. This surprising finding can be explained by the fact that organizational cultural differences are the key social identity category in international acquisitions whereas national cultural differences are less central. It may also be that managers have learned to focus attention on apparent national cultural differences and to manage them (Morosini et al., 1998; O’Grady and Lane, 1996; Pucik, Evans, Björkman and Stahl, 2010).

Our data supported the hypothesis that organizational and national cultural differences are positively associated with learning in terms of knowledge transfer. These positive effects may at least partly explain the results of studies reporting a positive effect of organizational (Krishnan et al., 1997) or national cultural differences (Larsson and Risberg, 1998; Morosini et al., 1998) on post-acquisition performance. Contrary to our expectations, however, the impact of national cultural differences was not stronger than that of organizational cultural differences. The results indicate that the potential complementarity benefits coming from organizational cultural differences may be larger than usually assumed. Moreover, it may be that national cultural differences undermine the absorptive capacity to a greater extent than organizational cultural differences, e.g., due to language differences and related communication problems (Ambos and Ambos,
2009) or problems in perceiving the value of the knowledge of a unit operating in a distant national culture (Javidan, Stahl, Brodbeck and Widerom, 2005; Simonin, 1999).

We further examined the impact of the operational integration, hypothesizing that the degree of operational integration will increase both social conflict and knowledge transfer. However, the hypothesis that operational integration tends to increase social conflict was not supported. A possible explanation is that without clear-cut decisions, many of the organizational conflicts can remain unresolved and continue to undermine social cohesion (Buono and Bowditch, 1989; Haspeslagh and Jemison, 1991; Vaara, 2003). Our results show that the operational integration is positively associated with knowledge transfer, suggesting that at least a moderate level of integration is a prerequisite for realizing synergies in related acquisitions, which is consistent with previous analyses (Bresman et al., 1999; Haspeslagh and Jemison, 1991).

Finally, the hypothesis that social conflict has an adverse effect on knowledge transfer was clearly supported by our data. This is an important part of the model that elucidates that national and organizational cultural differences affect knowledge transfer through two paths. The indirect effect through social identity-building and conflict is negative, but the direct effect due to learning is positive.

Altogether, these findings lead to three conclusions. First, our analysis shows how important it is to disentangle and clarify the various effects that cultural differences have on related international acquisitions. By distinguishing and elaborating on the effects of social identification and learning, this analysis has helped us to better understand the potentially positive or negative effects of cultural factors on social conflict and knowledge transfer. The point is that only by analyzing specific effects can we move beyond the simplistic debate as regards the negative versus positive effects of cultural differences on performance.
Second, the effects of national and organizational cultural differences seem to be distinctively different, at least in the case of their impact on social conflict. Our interpretation is that organizational cultural differences, and not national cultural differences, may be the root causes of conflict. Although these results might be related to the particular features of our Finnish data, they are consistent with prior research that found that organizational cultural differences are more strongly associated with negative integration outcomes than are differences in national culture (Larsson and Risberg, 1998; Stahl and Voigt, 2008; Very et al., 1997; Weber et al., 1996). Collectively, this research suggests that national and organizational factors should not be lumped together, as is often done in research and practice. We hope that our analysis will provide impetus for future studies on more fine-grained distinctions, such as industrial and professional cultural differences (Sirmon and Lane, 2004; Teerikangas and Very, 2006).

As mentioned above, national cultural differences seem to be less of a problem in international acquisitions than is usually assumed. According to our findings, national cultural differences are not only negatively associated with social conflict, but also provide opportunities for knowledge transfer. Although not entirely surprising in the acquisition context (Larsson and Risberg, 1998; Very et al., 1997), this finding goes against common wisdom in international management. However, the point is that these effects become visible only when one distinguishes organizational cultural differences from differences at the national level.

While our study advances our knowledge of the role of cultural differences in post-acquisition integration, the limitations of this research need to be noted. First, our results reflect the special characteristics of the Finnish corporate acquisitions that we studied. For example, the predominance of Swedish and German acquisitions in our sample should be noted. It is possible that the Finns have over the years created special competencies, such as language skills, in dealing with business transactions in these
particular countries. This could help to reduce the likelihood of social conflict while allowing the firms to realize the knowledge transfer potential. Second, the cross-sectional nature of the study limits our ability to draw conclusions of the direction of the relationship and, as we know from prior research, the effects may be different in different national contexts (Very et al., 1997). Third, our study involves a potential level-of-analysis problem. Our outcome variables are firm level constructions whereas the independent variable, national cultural differences, is conceptualized at the national level. This poses a methodological problem because there can be considerable variation among firms within a nation. However, to address the level-of-analysis issues, we included firm-level culture variables and obtained direct measurements of organizational culture differences.

Fourth, this study used perceptual measures of organizational cultural differences and post-acquisition outcomes. While this is a widely accepted approach, it also involves a risk that the relationships between the variables that come from the survey may be affected by retrospective recall (Golden, 1992; Miller, Cardinal and Glick, 1997; Shadish, Cook and Campbell, 2002) or common method bias (Podsakoff et al., 2003). We do not believe that the large number of single respondents in our sample increased these biases per se. A sample consisting entirely of multiple respondents would, however, allow for more comprehensive testing for interrater reliability. With respect to common method bias, the results of statistical tests referred to in the methodology section suggest that it was unlikely to significantly affect our results.

Fifth, our measures were modified from those used in prior studies, which may be seen as a limitation. However, we aimed at using measures that would be appropriate for a wide variety of firms in different industries. For instance, regarding knowledge transfer, we did not want to focus solely on technology transfer. We also pre-tested our measures rigorously before conducting the study, and the statistical tests indicated good validity.
The Impact of Organizational and National Cultural Differences on Social Conflict and Knowledge Transfer

and reliability. Sixth, this study measured the views of key decision-makers who mostly represented the acquiring firms. They are in a position to provide an overall picture of the integration processes. However, the views of the acquiring firm managers may differ from those of the acquired firm. It is also possible that higher level managers may lack knowledge of instances of social conflict and knowledge transfer at lower levels.

This study has added to understanding of the interplay and effects of organizational and national cultural differences in related international acquisitions, but it has also revealed a need for further studies in this area. There is a need to examine these processes and effects in other national cultural settings and to compare the findings. To avoid top management bias, future research could use data from a wider range of representatives from different organizational levels. These studies could be longitudinal, ethnographic, or interview-based analyses. In survey-based studies, we suggest focusing on respondents from both the acquiring and the acquired firms who are involved in the integration process on a daily basis. In addition, there is an apparent need for further analyses disentangling the role and relationships of the various factors that are often considered under the broad umbrella of ‘cultural differences’ (Stahl and Voigt, 2008; Teerikangas and Very, 2006). There are also likely to be various socio-psychological tendencies related to cultural differences, social conflict, and perceived success that should be given attention in future studies. For example, performance might be cognitively associated with cultural differences, as experiences of success may reduce the importance of cultural differences, while perceived failures could make the people involved over-emphasize them (Vaara, 2002).

Furthermore, we encourage additional research into possible mediating and moderating variables. In particular, a more detailed analysis of the relative absorptive capacity (Lane and Lubatkin, 1998) of the merging units may help explain the conditions under which national and organizational cultural differences are significantly associated
The Impact of Organizational and National Cultural Differences on Social Conflict and Knowledge Transfer

with a higher level of knowledge transfer. One could also go further in the analysis of knowledge transfer versus knowledge creation as sources of value creation. Finally, it seems essential to pay greater attention to the role of human resource management practices and other interventions (Schweiger and Goulet, 2005) in reducing sociocultural conflicts and enhancing the success of the knowledge transfer in international acquisitions. Finally, while our analysis has focused on acquisitions, similar cultural processes and phenomena could also be examined in other contexts such as strategic alliances (Sirmon and Lane, 2004) to advance our understanding of inter-organizational phenomena more generally.
REFERENCES


The Impact of Organizational and National Cultural Differences on Social Conflict and Knowledge Transfer


### Table I Means, standard deviations, and correlations for the latent variables in the model

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***p <0.001, **p < 0.01, *p < 0.05, +p < 0.10, two-tailed tests
N = 220
The Impact of Organizational and National Cultural Differences on Social Conflict and Knowledge Transfer

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***p <0.001, **p < 0.01, *p < 0.05, +p < 0.10, two-tailed tests
N=220
Table II Results of the measurement model

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measurement item</th>
<th>Unstandardized beta coefficient</th>
<th>Z-statistic</th>
<th>Standardized indicator reliability</th>
<th>Error variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational cultural differences</td>
<td>Management and control</td>
<td>1.00</td>
<td></td>
<td>0.95</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>Sales and marketing</td>
<td>0.89***</td>
<td>21.37</td>
<td>0.74</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>Production</td>
<td>0.80***</td>
<td>16.78</td>
<td>0.62</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>Research and development</td>
<td>0.80***</td>
<td>16.45</td>
<td>0.61</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>0.91***</td>
<td>18.13</td>
<td>0.66</td>
<td>0.34</td>
</tr>
<tr>
<td></td>
<td>Company values in general</td>
<td>0.91***</td>
<td>23.36</td>
<td>0.79</td>
<td>0.21</td>
</tr>
<tr>
<td></td>
<td>Values of key decision makers</td>
<td>0.89***</td>
<td>24.02</td>
<td>0.79</td>
<td>0.21</td>
</tr>
<tr>
<td>Operational integration</td>
<td>Elimination of overlappings</td>
<td>1.00</td>
<td></td>
<td>0.73</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>Standardization of practices</td>
<td>1.18***</td>
<td>12.97</td>
<td>0.81</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>Decisions based on maximization of synergies</td>
<td>1.13***</td>
<td>12.46</td>
<td>0.74</td>
<td>0.26</td>
</tr>
<tr>
<td>Social conflict</td>
<td>Different opinions</td>
<td>1.00</td>
<td></td>
<td>0.91</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>Cooperation problems</td>
<td>1.02***</td>
<td>22.32</td>
<td>0.93</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>Conflicts</td>
<td>0.83***</td>
<td>16.46</td>
<td>0.81</td>
<td>0.34</td>
</tr>
<tr>
<td></td>
<td>Mistrust between the employees</td>
<td>0.79***</td>
<td>14.06</td>
<td>0.74</td>
<td>0.45</td>
</tr>
<tr>
<td>Knowledge transfer</td>
<td>Management and control</td>
<td>1.00</td>
<td></td>
<td>0.88</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>Sales and marketing</td>
<td>0.96***</td>
<td>18.17</td>
<td>0.76</td>
<td>0.24</td>
</tr>
<tr>
<td></td>
<td>Production</td>
<td>0.89***</td>
<td>14.68</td>
<td>0.78</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>Research and development</td>
<td>0.85***</td>
<td>14.79</td>
<td>0.78</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>1.06***</td>
<td>17.56</td>
<td>0.72</td>
<td>0.28</td>
</tr>
</tbody>
</table>

***p < 0.001

Table III Construct validity and reliability

<table>
<thead>
<tr>
<th>Construct</th>
<th>Composite Reliability</th>
<th>Average variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational cultural differences</td>
<td>0.95</td>
<td>0.73</td>
</tr>
<tr>
<td>Operational integration</td>
<td>0.87</td>
<td>0.69</td>
</tr>
<tr>
<td>Social conflict</td>
<td>0.91</td>
<td>0.72</td>
</tr>
<tr>
<td>Knowledge transfer</td>
<td>0.92</td>
<td>0.69</td>
</tr>
</tbody>
</table>
Table IV Results of the structural model

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description of path</th>
<th>Hypothesized direction</th>
<th>Standardized beta coefficient</th>
<th>Z-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>Organizational cultural differences -&gt; Social conflict</td>
<td>+</td>
<td>0.79***</td>
<td>8.01</td>
</tr>
<tr>
<td>H1a</td>
<td>National cultural differences -&gt; Social conflict</td>
<td>+</td>
<td>-0.21***</td>
<td>-4.03</td>
</tr>
<tr>
<td>H2a</td>
<td>Organizational cultural differences -&gt; Knowledge transfer</td>
<td>+</td>
<td>0.60***</td>
<td>5.21</td>
</tr>
<tr>
<td>H2a</td>
<td>National cultural differences -&gt; Knowledge transfer</td>
<td>+</td>
<td>0.22***</td>
<td>4.22</td>
</tr>
<tr>
<td>H3</td>
<td>Operational integration -&gt; Social conflict</td>
<td>+</td>
<td>-0.03</td>
<td>-0.29</td>
</tr>
<tr>
<td>H4</td>
<td>Operational integration -&gt; Knowledge transfer</td>
<td>+</td>
<td>0.44***</td>
<td>4.42</td>
</tr>
<tr>
<td>H5</td>
<td>Social conflict -&gt; Knowledge transfer</td>
<td>-</td>
<td>-0.28***</td>
<td>-3.66</td>
</tr>
<tr>
<td>Control</td>
<td>National cultural differences -&gt; Operational integration</td>
<td></td>
<td>0.19***</td>
<td>3.58</td>
</tr>
<tr>
<td>Control</td>
<td>Organizational cultural differences -&gt; Operational integration</td>
<td></td>
<td>0.80***</td>
<td>10.57</td>
</tr>
</tbody>
</table>

***p <0.001, **p < 0.01, *p < 0.05, +p < 0.10.
Figure I Illustration of results

- National cultural differences
- Operational integration
- Organizational cultural differences
- Social conflict
- Knowledge transfer

-0.21***
0.79***
0.03
-0.28***
0.44***
0.22***
0.60***
Appendix I: Survey questions

Knowledge transfer.

<table>
<thead>
<tr>
<th>In your opinion, has knowledge transfer resulted in benefits in the following operations?</th>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management and control</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Research and development</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Organizational cultural differences before the acquisition.

<table>
<thead>
<tr>
<th>How would you describe the cultural differences between the companies before the acquisition in the following areas?</th>
<th>No differences</th>
<th>Significant differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management and control</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Research and development</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Company values in general</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>In your opinion, how much did the values of the decision makers of the acquiring and the acquired company differ before the acquisition?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Operational integration.

<table>
<thead>
<tr>
<th>To which extent have the overlaps been eliminated?</th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>To which extent has there been tendency towards the standardization of practices?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>To which extent have the decisions been based on maximization of synergistic and other benefits (e.g. cost reductions)?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Social conflict.

<table>
<thead>
<tr>
<th>In your opinion, have there been problems in cooperation between the companies?</th>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different opinions</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Cooperation problems</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Conflicts</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Mistrust between the employees of two companies</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
Endnotes

1 We wish to express our gratitude to all the people involved in gathering the survey data, Antti Kanto and Andreas Voigt helping us with the statistical analysis, and David Miller for the language revision. We also want to thank Joep Cornelissen for excellent editorial guidance and the three anonymous reviewers for extremely useful comments.

2 In this paper, we view cultures as multilevel constructions (Teerikangas and Very, 2006) that can be analyzed as configurations of values, beliefs, and practices (Björkman et al., 2007). According to this view, cultures are complex systems, but it is possible to identify specific cultural sub-systems such as organizational and national cultures for analytical purposes. Organizational cultures are partly embedded in national cultures, but may also include features that are distinctively different from the national cultural characteristics.

3 For control purposes, we also included the following question about the degree of integration in the questionnaire: “How would you describe the current degree of integration between the companies in the following operations?” (1 = low level of integration, 7 = total integration). The questions involved the following functions: management and control, sales and marketing, production, research and development, and finance. The mean level of integration was 4.76. The frequency for “degree of integration” variable is reported below:

<table>
<thead>
<tr>
<th>Degree of integration</th>
<th>% of the sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower medium (2-3.5)</td>
<td>20.6%</td>
</tr>
<tr>
<td>Medium (3.5-5)</td>
<td>35.8%</td>
</tr>
<tr>
<td>High (5-7)</td>
<td>43.6%</td>
</tr>
</tbody>
</table>

4 It can be argued that CEOs of the buying firms are too removed from the day-to-day operational issues to be able to provide reliable answers to questions about post-acquisition integration. The CEO of the buying firm was the respondent in 29 questionnaires. However, the CEO of the buying firm was the sole respondent only in 10 cases. These cases involved smaller firms, in which it is likely that the CEO was directly involved and familiar with the acquisition dynamics. In the other cases, the CEO of the buying firm was one of multiple respondents. Thus, we were able to test inter-rater reliability, and the intra-class coefficients exceeded 0.75. This indicated that the CEOs tended to agree with other respondents in their evaluations suggesting a general reliability of these answers.

5 We conducted t-tests to examine whether there were significant differences between the answers received from the acquiring and the acquired firms. We found no significant differences that would have indicated a systematic bias in the acquiring or acquired firm answers.

6 The model was tested with a control variable for multiple acquisitions by the same firm (less than 10% of the sample). Because the variable did not impact the results, it was not included in the final model.

7 The constant is derived from a basic variance formula \( \text{var}(\bar{x}) = \frac{1}{n} \times \text{var}(x) \). The constant for which the variance of mean is equal to the variance of a single observation (e.g. \( \text{var} \left( \sqrt{n} \times \bar{x} \right) = \text{var} \)) is \( \sqrt{n} \). Multiplying the mean by the constant \( \sqrt{n} \) equals multiplying each case by the constant \( 1/\sqrt{n} \) (Hair, Anderson, Tatham and Black, 1998).

8 The statistical tests further supported this choice by showing that practice scores measuring actual differences correlated more strongly with post-acquisition integration outcomes than value scores measuring ideal differences.

9 ML estimation offers several advantages over both the listwise and pairwise deletion approaches (Arbuckle, 1996; Byrne, 2001; Little and Rubin, 1989).

x This represents a simplified version of the actual model. Latent variables are illustrated by ovals. Standardized maximum likelihood parameter estimates are reported. An error term was added to each endogenous variable. To enable model identification, the error coefficients were fixed to unity. Error terms and indicator variables are not shown.