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**ATTRIBUTIONAL TENDENCIES IN CULTURAL EXPLANATIONS OF M&A PERFORMANCE**

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**ATTRIBUTIONAL TENDENCIES IN CULTURAL EXPLANATIONS OF M&A PERFORMANCE**

This paper focuses on managers' attributions of M&A performance. Our analysis indicates that there is a linear association between performance and attributions to cultural differences, which is moderated by prior experience. Furthermore, our results suggest that there is a curvilinear association between performance and attributions to managers' actions, but we found no support for the moderating effect of experience for this association. By substantiating these attributional tendencies, our results contribute to research on M&As and studies on attribution more generally. In particular, our study helps to put cultural differences in perspective and cautions researchers and practitioners alike to avoid simplistic explanations of M&A performance.

**Keywords:** mergers, acquisitions, integration, attributions, culture.

### **ATTRIBUTIONAL TENDENCIES IN CULTURAL EXPLANATIONS OF M&A PERFORMANCE**

One of the key debates in research on mergers and acquisitions (M&A) focuses on the role of cultural differences. Scholars have examined the impact of organizational cultural differences on M&A performance (Chatterjee *et al.*, 1992; Stahl, Mendenhall, and Weber, 2005; Stahl and Voigt, 2008) and, in international settings, the impact of national cultural differences (Calori, Lubatkin, and Very, 1994; Chakrabarti, Gupta-Mukherjee, and Jayaraman, 2009; Morosini, Shane, and Singh, 1998; Weber, Shenkar, and Raveh, 1996). Most of this research tells the same story; cultural differences tend to have a negative impact on performance. Although some of the researchers found a positive impact (Morosini *et al.*, 1998) or argued that cultural differences may provide both sources of value creation and obstacles to integration (Björkman Stahl, and Vaara, 2007), the fact remains that cultural differences are usually associated by researchers and practitioners alike with disappointment and failure.

In this paper, we want to add to this discussion by elucidating the attributional tendencies related to cultural differences and M&A performance. In a nutshell, we focus on the way in which success or failure is attributed to the actions of managers or to cultural differences. This is an important issue for several reasons. Cultural differences may serve as convenient targets for attribution – ‘easy explanations’ – compared with other more complex causes of success. Thus, the focus on cultural differences alone can unduly simplify the ways in which we conceptualize the factors that explain success or failure (King, Dalton, Daily, and Covin, 2004). Moreover, attributions to cultural differences can be (mis)used as political tools for self-serving purposes. In particular, managers may be tempted to reduce their own responsibility for failure by ‘blaming’ cultural differences; the opposite tendency can be expected in successful cases (Vaara, 2002). Methodologically, such attributional tendencies may create biases in research with significant implications for our knowledge of M&As (Stahl and Voigt, 2008; Teerikangas and Very, 2006).

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To better understand these tendencies, we draw on attribution theory (Heider, 1958; Kelley, 1967; Weiner, 1979). Attribution theory provides a useful theoretical basis for analysis of explanations of success and failure and it has also been applied in management studies (Bettman and Weitz, 1983; Hayward, 2002; Hayward and Shimizu, 2006; Martinko, Harvey, and Dasborough, 2011; Nishii, Lepak, and Schneider, 2008). With a few exceptions (Billett and Qian, 2008; Vaara, 2002), research on M&As has, however, focused little attention on attributions. In particular, there is scant systematic evidence of the attributional tendencies associated with cultural differences.

This leads us to formulate our research question as follows: Do managers' explanations of M&A performance reflect biases toward cultural differences and/or their own actions? In line with attribution theory, we first examine whether perceptions of failure lead to increasing attributions to cultural differences and whether perceptions of success increase attributions to management's actions. We then examine whether these tendencies could be curvilinear instead of linear, which would reflect biases in cases of both extreme success and failure. Finally, we focus on the question of whether the experience of previous M&As strengthens these tendencies.

### **ATTRIBUTION THEORY AND HYPOTHESIS DEVELOPMENT**

#### **The relationship between performance and causal attributions**

Attribution theory aims to understand causal explanations for specific events and phenomena (Heider, 1958; Kelley, 1967; Reizenzein and Rudolph, 2008; Weiner, 1979, 2008). It postulates that people have an ingrained need to understand and control their environments and thus try to develop causal explanations for significant events. The theory argues for a general tendency to attribute success to internal causes (people's own actions or abilities, i.e., causes controlled by the individual) and correspondingly a tendency to explain failure by reference to external causes (i.e., causes over which the individual has little control) (Heider, 1958; Kelley, 1971).

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There are two explanations for such attribution biases. First, the psychological explanation states that organizational actors make causal attributions in order to protect their self-esteem, to maintain their sense of mastery over their environment, and to reduce cognitive dissonance (Bettman and Weitz, 1983; Staw, McKechnie, and Puffer, 1983). Second, the political explanation suggests that causal attributions are also utilized to enhance the esteem of actors by projecting a favorable self-image to others. For example, executives tend to take credit for corporate performance and blame outside events in the event of failure (Bettman and Weitz, 1983; Salancik and Meindl, 1984). Similarly, board members tend to be divided on the basis of whether they are inside or outside board members; the former tend to attribute responsibility for negative performance to industry and market conditions, whereas the latter attribute it to top management (Schaffer, 2002).

Management and organizational scholars have used attribution theory in various types of studies (Bettman and Weitz, 1983; Hayward, 2002; Hayward and Shimizu, 2006; Jordan and Audia, 2012; Mantere *et al.*, 2013; Nishii, Lepak, and Schneider, 2008). However, a recent review makes the point that this theory is still underutilized considering its potential and ability to explain important socio-psychological phenomena (Martinko *et al.*, 2011). We argue that this is especially true in research on M&As. While attributions have received little attention in studies of M&As, a few studies nevertheless provide interesting insights into attributions in general and attributions to cultural differences in particular. Hayward and Shimizu (2006) showed that managers are more likely to admit failure and divest a target unit when they can do so without incriminating themselves. Billett and Qian (2008) provided evidence of self-attribution biases and overconfidence in M&As. Their analysis suggested that if managers experienced success in prior M&As, they attributed it to their own ability even when it was due to chance; this made them overconfident, and could eventually result in negative outcomes in subsequent deals. Furthermore, Vaara (2002) demonstrated that

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managers use a number of discursive strategies to deal with the socio-psychological pressures related to success and/or failure; these include tendencies to attribute success to one's own actions and failure to cultural differences.

Hence, although there are good reasons for expecting that the attributions by managers of success and failure in M&As are likely to reflect attributional biases, these tendencies need to be tested in a systematic way. Accordingly, we first propose that managers emphasize the importance of their own actions in successful cases and in turn downplay them in failure cases. Our first hypothesis therefore states the following:

Hypothesis 1a: M&A performance is positively associated with causal attributions to managerial agency.

Second, we expect that managers attribute failure to cultural differences. We thus formulate our second hypothesis as follows:

Hypothesis 2a: M&A performance is negatively associated with causal attributions to cultural differences.

Whilst attribution research has emphasized the use of self-serving attributions to avert blame and to enhance self-confidence, recent studies have questioned the pervasiveness of self-serving attributions (Hodkins and Liebeskind, 2003; Lee and Robinson, 2000; Lee and Tiedens, 2001; Schlenker, Pontari, and Christopher, 2001; Tomlinson, Dineen, and Lewicki, 2004). For instance, in their study of managers' accounts of negative outcomes (a hypothetical salary freeze), Lee and Robinson (2000) found that managers made more internal causal attributions to factors that were under their control (subject to their own effort and behavior) than to external factors that were not under their control (the situation). They argued that in an organizational setting, individuals have multiple motivations that impact causal attributions. On the one hand, individuals are motivated to avert blame and to bolster their self-esteem in cases of failure. On the other hand, they also wish to project a sense of

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power and control. Attributing failure to internal rather than external factors bestows individuals with a sense of control over the situation, and reduces feelings of helplessness (Homsma, Van Dyck, De Gilder, Koopman, and Elfring, 2007). The need to project a sense of being in control to oneself and to others rather than one of being powerless can lead managers in cases of failure to make internal attributions to indicate that they can take charge of the situation and intervene in the future to improve the negative situation (Lee and Robinson, 2000; Lee and Tiedens, 2001). In contrast, external self-serving attributions can make the account-givers seem “deceptive, self-absorbed, and ineffectual; they are viewed as unreliable social participants with flawed character” (Schlenker *et al.*, 2001: 15).

These researchers have also reflected upon whether the nature of self-serving attributions is dependent on positions of different status (Lee, 1997; Lee and Robinson, 2000; Lee and Tiedens, 2001). More specifically, for actors in high-status roles the motivation to appear powerful and in control can be more salient than the need to avert blame, making them more likely to attribute failure to internal causes (Lee, 1997; Lee and Robinson, 2000; Lee and Tiedens, 2001). Hence, managers, knowing that their actions will be evaluated and assessed, may assume greater responsibility for extremely unsuccessful acquisitions. We suggest that the tendency to assume responsibility for failure will be strongest in extreme cases of significant underperformance, because in these situations the need of managers to project that they are in control and can take corrective action is strongest. In this situation, self-serving (external) attributions, for example to cultural differences, are also more likely to be the subject of critical examination (Lee and Robinson, 2000), thereby posing the risk that managers will be perceived as powerless or ineffectual. Hence, we propose the following curvilinearity hypotheses. These represent competing hypotheses for the linear hypotheses 1a and 1b presented earlier.

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Hypothesis 1b: There will be a U-shaped curvilinear relationship between managerial attributions of M&A performance to managerial actions such that attributions to managerial agency are *highest* at extremely high and low levels of performance.

Hypothesis 2b: There will be an inverse U-shaped curvilinear relationship between managerial attributions of M&A performance to cultural differences such that attributions to cultural differences are *lowest* at extremely high and low levels of performance.

### **The moderating impact of acquisition experience**

If and when these attributional tendencies characterize managers' explanations of success and failure – either linearly (Hypotheses 1a and 2a) or curvilinearly (Hypotheses 1b and 2b) as suggested in the above hypotheses – it is important to examine whether prior experience impacts these associations. Although experience can help to provide more nuanced explanations of success and failure and thus in principle mitigate biases, insights from attribution research suggest that the attributional tendencies may actually strengthen with experience as people learn to explain success and failure in particular ways.

Studies indicate that attributions of success by individuals to their own ability tend to increase over time (Bandura, 1997; Schunk, 1994; Weiner, 1992). In particular, prior attributions of success to internal factors, such as skills and abilities, have been found to increase overconfidence (Duncan and McAuley, 1993; Schunk and Gunn, 1986; Weiner, 1992). For example, in educational research, it was found that students' attributions of performance tended to become more personally flattering and comforting as the school semester progressed (Arkin, Detchon, and Maruyama, 1981). Similarly, it was shown in finance that when analysts and managers experienced initial success, they tended to become overconfident in their subsequent entry and investment choices (Camerer and Lovo, 1999; Hilary and Menzly, 2006; Malmendier and Tate, 2005, 2008). In the M&A context, Billett and Qian (2008) found evidence indicating that managers with greater acquisition experience

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were more likely to attribute M&A success to internal factors, which increased their self-attribution biases and caused them to become overconfident. This line of reasoning is also supported by studies of learning in organization studies. In particular, March and Sutton (1997) argued that managers who make it to the top are likely to be biased about their experiences of success; this leads them to be overconfident about the impact of their own actions. As managers involved in M&As are usually top managers, they may be individuals who are especially likely to attribute success to internal causes that is to explain successful acquisition with their own managerial action.

Concerning external attributions, attributions of poor performance to external factors may also increase with experience. This is in line with attribution theory, according to which experience increases an individual's awareness about external factors that can potentially impact performance, thereby making these external factors more salient (Kelley, 1973). Accordingly, Smither *et al.* (1986) argued that as experience increases, actors develop an appreciation for the difficulties in the external environment and as a result make more external attributions; however, their results did not support this hypothesis. Mitchell and Kalb (1982) found that experience increased the tendency of supervisors to attribute failure to external factors (the work environment) because it made the impact of the work environment more salient to the supervisors. Furthermore, managers who experience repeated failures are likely to become increasingly defensive and make more external performance attributions in order to protect their self-esteem and persuade themselves that they should not be blamed (Brown, 1984). Building on the reasoning above, it can be expected that in cases of poor M&A performance, managers with greater acquisition experience will be more likely to attribute failure to external factors because these factors are more salient to them and because external attributions protect their personal self-esteem and public image. Hence, we propose that managers with experience will be even more likely to attribute successes to their own actions and failure to cultural differences.

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Hypothesis 3a: A positive linear association between M&A performance and causal attributions to managerial agency will be stronger in acquisitions where the managers have greater prior experience.

Hypothesis 4a: A negative linear association between M&A performance and causal attributions to cultural differences will be stronger in acquisitions where the managers have greater prior experience.

The above argumentation assumes a linear relationship between M&A performance and attribution effects, in line with hypotheses 1a and 2a. If the relationship is curvilinear, as suggested in hypotheses 1b and 2b, we would expect experience to moderate the curvilinear relationship. We would still predict that at a high level of performance, experience increases attribution to managerial action and decreases attribution to cultural differences because managers may become overconfident about their own influence (Billett and Qian, 2008; Malmendier and Tate, 2005, 2008). However, in contrast to the linear hypotheses, at a low level of performance a curvilinear relationship would imply that attributions to manager's actions are high and attributions to cultural differences are low as managers take responsibility for cases of obvious failure in order to project a sense that they are responsible and in control (Lee, 1997; Lee and Robinson, 2000; Lee and Tiedens, 2001). Prior research has not explicitly addressed this issue, but experience could accentuate this tendency as managers learn that they cannot escape taking responsibility for obvious failure. Accordingly, we present the following hypotheses for the possible moderating effect of experience in the case of the curvilinear relationship.

Hypothesis 3b: A positive curvilinear association between M&A performance and causal attribution to managerial agency will be stronger in acquisitions where the managers have greater prior experience.

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Hypothesis 4b: A negative curvilinear association between M&A performance and causal attribution to cultural differences will be stronger in acquisitions where the managers have greater prior experience.

### METHODOLOGY

#### Sample and data collection

Our sample consists of Finnish acquirers and includes domestic and cross-border mergers based on a database maintained by the Finnish business magazine *Talouselämä* between 2001 and 2004. Mergers were included only if the acquiring firm gained a controlling interest in the acquired firm and the acquired firm was valued at EUR three million or more. In order to obtain high quality responses, acquiring firm CEOs were contacted via telephone and asked to identify potential respondents who were involved at the time in the acquisition and were knowledgeable about it. Then a survey was mailed to the CEOs, who distributed it to the respondents that had been identified in the acquiring and acquired firms. The respondents included CEOs (42.7%), top managers (42.7%), other members of the management group and board members (14.6%).

The overall response rate was 20 percent, yielding a sample of 92 mergers (51 domestic and 41 cross-border acquisitions in 22 countries). The cross-border acquisitions included the following countries: Austria, Belgium, Canada, China, the Czech Republic, Estonia, France, Germany, Great Britain, Hong Kong, Italy, Latvia, Lithuania, Norway, the Netherlands, Poland, Russia, Spain, Sweden, Switzerland, and the USA. Ten firms returned responses from multiple respondents. Based on the cases from which we received multiple answers, the inter-rater reliability was checked, yielding significant intra-class correlation scores for most cases ( $p < 0.05$ ). Two non-significant cases were removed to improve reliability (Calori *et al.*, 1994).

Potential non-response biases were checked using acquisition size and time elapsed after the acquisition as these factors may influence managers' perceptions (Dundas and Richardson, 1982). T-

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tests of mean differences were not significant, indicating that there was no non-response bias. The domestic and cross-border samples were also compared. T-tests of the mean differences for all variables were non-significant across the two samples.

Procedural measures were taken in the study's design to reduce the risk of common method bias. The questionnaire was pre-tested on a group of professors and managers and necessary changes were made to reduce item ambiguity (Podsakoff *et al.*, 2003). In addition, questions regarding both the dependent and independent variables and the control variables were spread out among other questions (not all of which are used in this study) (Podsakoff *et al.*, 2003). Furthermore, statistical remedies were used to rule out a significant common method bias. A Harman's one factor test, which consists of an unrotated exploratory factor analysis, was conducted. Several factors emerged from the analysis; no single factor accounted for a majority of the covariance among the items and the first and second factors showed relatively low levels of variance (21% and 19%). This suggested the absence of any serious common method bias (Podsakoff *et al.*, 2003). In addition, following Spector (2006), we examined correlations between the items in the survey. If the self-report survey had introduced a shared bias into the items, one should have been able to establish a baseline level of significant correlations between all variables. We established 253 insignificant pairs of correlations and 83 significant ones. Whereas some level of correlation between the items was expected, the number of insignificant correlations was large enough to suggest a lack of universal bias. Finally, the statistical analyses that we conducted included complex (moderating, curvilinear) relationships between the dependent and independent variables. Because these relationships are unlikely to be part of the respondents' mental models, concerns regarding the existence of common method bias should be alleviated (Chang, Witteloostuijn, and Eden, 2010).

### Measures

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### **Independent variable**

***Acquisition performance.*** This variable consisted of four items that measured the outcome of the acquisition and the integration process. In line with prior studies of M&As, we used managerial evaluations of acquisition performance (Birkinshaw *et al.*, 2000; Datta 1991; Very, Lubatkin, and Calori, 1996; Very *et al.*, 1997). This approach is in line with the essence of attribution research where perceptions rather than for example ‘objective’ assessments are the core of attributional analyses (Heider, 1958; Weiner, 2008). First, respondents were asked to indicate how well the i) acquisition and ii) integration process had succeeded. Second, respondents were asked how the i) acquisition and ii) integration process had succeeded compared with expectations. The scale ranged from 1=“total failure” to 7=“great success.”

To examine any consistent bias between objective and subjective performance measures, we collected objective performance data. Financial statements were available for 43 publicly listed companies, which represented 47.8% of our sample. Objective performance, measured as the acquirer’s ROI after the acquisition (in 2005), correlated positively and significantly with our subjective acquisition performance measure. Also, the objective performance measure was significantly correlated in the expected direction (negatively) with the measure ‘attribution to cultural differences’ and (positively) with ‘attribution to managers’ actions’ (Hypotheses 1a and 2a). This provides further validity for our subjective performance measure.

### **Moderating variable**

***Personal acquisition experience.*** We measured personal acquisition experience by combining the number of acquisitions in which the respondent had been personally involved i) on the acquiring firm side and ii) on the acquired firm side. This sum index represented the person’s combined prior experience of acquisitions.

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### Dependent variables

***Attribution to cultural differences.*** Following this logic, we asked respondents about the extent to which they perceived that cultural differences i) had affected the outcome of the acquisition's integration process and ii) explained the overall success of the acquisition. The scale ranged from 1="not at all" to 7="a great deal."

***Attribution to managers' actions.*** We followed the example of previous studies in measuring attributions based on the respondents' perceptions (De Michele *et al.*, 1998; Duval and Silvia, 2002; Greenlees *et al.*, 2007; Harvey and Martinko, 2009; Schaffer, 2002). Regarding attribution to managers' actions, we therefore asked respondents to rate their perceptions based on the extent to which management's actions i) had affected the outcome of the integration process and ii) explained the overall success of the acquisition. The scale ranged from 1="not at all" to 7="a great deal".

### Control variables

***Organizational cultural differences.*** To control for the effect of actual cultural differences on the attributions, we included both organizational and national cultural differences in our models. Following the example of previous studies (Chatterjee *et al.*, 1992; Weber *et al.*, 1996), we asked managers to report organizational cultural differences prior to the acquisition in the following areas: management and control, sales and marketing, production, research and development, and company values in general. The scale ranged from 1="no differences" to 7="significant differences."

***National cultural differences.*** We controlled for national cultural differences by building a construct of the variance-adjusted sum of differences between the two acquisition parties (Kogut and Singh, 1988) based on the nine dimensions of the GLOBE practices scores (House, Hanges, Javidan, Dorman, and Gupta, 2004)<sup>2</sup>.

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<sup>2</sup> We also calculated an alternative measure of national cultural difference by using Hofstede's (1991) and Berry *et al.* (2010) scores. The results did not change regarding the patterns of statistical significance or the directional influence, which supported the robustness of our measure.

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***Degree of integration.*** To control for the impact of managers' actions in post-acquisition integration (Weber *et al.*, 1996), we asked respondents to assess the degree of integration between the acquirer and the target in the following functions: management and control, sales and marketing, production, research and development. The scale ranged from 1="no integration" to 7="total integration."

***Respondent involvement.*** The participation of a respondent in the acquisition and integration decisions may bias his/her opinion of the acquisition outcome and the factors that contributed to it (Billett and Qian, 2008). We controlled for this by measuring the respondent's involvement in the decision-making leading to the acquisition and in the integration of the companies. The scale ranged from 1="not at all" to 7="yes, as a central decision maker."

***Acquisition size.*** We included the size of the acquisition as a control variable in line with prior acquisition studies (Haleblian and Finkelstein, 1999; Morosini *et al.*, 1998). Acquisition size was measured as the target's net sales at the time it was acquired and was reported in the business magazine *Talouselämä*.

***Time elapsed.*** Acquisition dynamics can be influenced by the time elapsed since the acquisition. Following the approach by Very *et al.* (1997), we measured the number of years that had passed after the acquisition (one to four years). This external measure was based on the information in the business magazine *Talouselämä*.

## RESULTS

Pre-tests of the questions with professors and managers supported the face-validity of the constructs. To further evaluate the reliability and validity of our items and constructs, we used confirmatory factor analysis with Partial Least Squares (PLS) analysis, which is a structural equation modeling approach particularly applicable for smaller sample sizes. We followed the instructions of Shook, Ketchen, Hook, and Kacmar (2004) for evaluating the results of the confirmatory factor

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analysis. First, we examined the variable loadings, their  $t$ -values and corresponding significance levels ( $p$ -values) and verified that all of them were significant (see Table 1). Then, we examined the reliability of the constructs. Cronbach's alphas all exceeded the commonly used threshold of 0.7. However, Cronbach's alphas have several limitations. Hence, following the recommendation of Shook *et al.* (2004), we calculated the composite reliabilities for each construct, all of which were above the limit of 0.7, with each indicator reliability above 0.5. To establish convergent validity, we calculated the average variance extracted, which exceeded 50% (Shook *et al.*, 2004). The convergent validity was also supported by examination of an item-to-item correlation table that showed that the items correlated highest with other items belonging to the same construct. Discriminant validity was assured by calculating the shared variance between each pair of constructs and confirming that it was lower than the square root of the average variance extracted for each individual construct (Shook *et al.*, 2004).

---Insert Table 1 about here---

Table 2 presents the means, standard deviations, and inter-correlation coefficients of the study measures. On the whole, these relationships are in line with our hypotheses.

---Insert Table 2 about here---

We used hierarchical regression analyses to test our results. We first examined the relationship between M&A performance and attributions to managers' actions (see Table 1 in the Online Appendix, 'Linear Model: Attribution to Managers' Actions'). The first-order term of 'performance' was positively and significantly related to causal attributions to managers' actions ( $\beta=0.275$ ,  $p<0.05$ ). When the second-order term of 'performance' was added, the first-order term remained significant ( $\beta=0.547$ ,  $p<0.001$ ) and the second-order term was also positive and significant ( $\beta=0.299$ ,  $p<0.001$ , see Table 3, 'Curvilinear Model: Attribution to Managers' Actions'). These coefficients imply a curvilinear, non-monotonic relationship between performance and attributions

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to managers' actions (Barnett and Salomon, 2006) and indicate that the relationship is better represented with a curvilinear than a linear distribution. A significant increase in the model fit after the curvilinear term was added ( $\Delta R^2=0.125$ ,  $p<0.001$ ) further supports the curvilinear effect. Hence, hypothesis 1b was supported while hypothesis 1a was not supported. To examine the curvilinear effect further, we depicted the curve as shown in Figure 1 in the Online Appendix. The curve illustrates that attributions to managers' actions decline at first as performance increases reaching a minimum at a performance level of 4.0 (on a scale of 1 to 7), but then increase continuously. Also, attributions to managers' actions are even stronger at very high levels of performance than at very low levels of performance. In other words, we found a significant positive association between managers' attributions to their own actions at low and high levels of performance with the association being even stronger at high levels. Of the control variables, respondent involvement was significantly related to attribution to managers' actions ( $\beta=0.189$ ,  $p<0.05$ ).

---Insert Table 3 about here---

Then, we tested the relationship between M&A performance and attributions to cultural differences (see Table 1 in the Online Appendix, 'Linear Model: Attribution to Cultural Differences'). The first-order independent variable 'performance' showed a negative and statistically significant relationship with attribution to cultural differences ( $\beta=-0.319$ ,  $p<0.01$ ). The second order term of 'performance' (performance squared) was not significant ('Curvilinear Model: Attribution to Cultural Differences' in Table 3). Hence hypothesis 2a proposing a negative linear relationship was supported while hypothesis 2b suggesting a curvilinear relationship was not. None of the control variables were significantly related to attribution to cultural differences. We then proceeded to examine the moderating effect of experience. Since the association of M&A performance and attribution to managers' actions was curvilinear, we tested hypothesis 3b (curvilinear moderation) with respect to attribution to managers' actions. Respectively, since the association of M&A performance and

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attribution to cultural differences was linear, we focused on hypothesis 4a (linear moderation) with respect to cultural differences. To test curvilinear moderation in hypothesis 3b, we included both the first and second order interaction terms ‘performance x acquisition experience’ and ‘performance squared x acquisition experience’ and tested their association with ‘attribution to managers’ actions.’ The second order interaction terms were not significant and therefore hypothesis 3b was not supported (‘Curvilinear Moderation: Attribution to Managers’ Actions’ in Table 3).

To test hypothesis 4a, we added the interaction term ‘performance x acquisition experience’ and examined its relationship with ‘attribution to cultural differences.’ The significant improvement in the new model (‘Linear Moderation’ in Table 3) compared with the initial linear model (see Table 2 in the Online Appendix) ( $\Delta R^2=0.047$ ,  $p<0.05$ ), and the negative interaction term ( $\beta=-0.426$ ,  $p<0.05$ ) suggest a negative association between the interaction terms ‘performance x acquisition experience’ and ‘attribution to cultural differences’. In Figure 2 (see the Online Appendix), we plotted the interaction effect. It shows that respondents who had been personally involved in a greater number of acquisitions were more likely to attribute low performance to cultural differences, thus supporting our Hypothesis 4a.

## DISCUSSION AND CONCLUSION

### Conclusions and contributions

In this paper, we have examined managers’ tendencies to attribute M&A performance to managerial actions and cultural differences. In short, our results suggest that there is a curvilinear association between performance and attributions to managers’ actions, but we found no support for the moderating effect of experience. Our findings also indicate that there is a linear association between performance and attributions to cultural differences, which is moderated by prior experience.

By substantiating these attributional tendencies, our results make a significant contribution to M&A research. It is important to better understand how managers and researchers alike make

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sense of M&A performance and use factors such as cultural differences in their explanations of success or failure. Moreover, our analysis elucidates the specific nature of these attributions and suggests that tendencies to attribute performance to cultural differences and managers' own actions are indeed somewhat different. The findings concerning the attributions to cultural differences support the contention that managers are likely to blame cultural differences for failure. Whilst this result could be expected on the basis of attribution theory, it has major implications for research on M&As as it suggests that managers may use cultural differences as convenient attribution targets. Moreover, we found that prior experience strengthens the association of failure with cultural differences. This is an interesting result; it suggests that managers can 'learn' to explain failure with cultural differences, which carries with it a risk of using cultural differences as easy explanations and scapegoats. Thus, 'cultural differences' may serve as a convenient attribution target for less successful M&As and managers may become increasingly skilled at using the rhetoric of cultural differences as they become more experienced with acquisitions. This may result in an overemphasis on cultural factors when explaining success and failure (Teerikangas and Very, 2006; Vaara, 2002) and even a lack of appreciation for the complex cultural dynamics of M&As (Clark *et al.*, 2010; Vaara and Tienari, 2011).

Interestingly, the results concerning the attributions to managers' actions tell a somewhat different story. Our results suggest a positive curvilinear relationship between M&A performance and attributions to managers' actions. In other words, managers tend to attribute extreme cases of *both success and failure* to their own actions. Thus, managers are likely to take credit for success, which may among other things lead to an illusion of control or to overconfidence. Such an illusion of control can be dangerous when managers confront the complex challenges of M&A processes (Haspeslagh and Jemison, 1991) and may even partially explain the willingness to engage in risky M&As and 'merger frenzy' (Billett and Qian, 2008). However, our curvilinear findings also suggest

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that managers do attribute extreme cases of failure to their own actions. In such cases, managers may need to project a sense of control both to themselves and others (Schlenker *et al.*, 2001). The strength of managerial attributions was, however, unaffected by experience.

By highlighting these attributional tendencies, our analysis has implications for the discussion concerning the conceptualization and measurement of cultural differences (Ailon, 2008; Berry *et al.*, 2010; Boyacigiller *et al.*, 1996; Harzing, 2003; Shenkar, 2001, 2012a, b). On the one hand, our results point toward the importance of using and developing more objective and comprehensive measures of cultural differences. For example, researchers can use multisource and multilevel research designs where (prior) organizational cultures are measured by groups of lower level employees previously employed by the independent organizations. In this case, employees' perceptions would be less likely to be biased due to factors related to their prestige and/or self-esteem. Cultural differences could then be operationalized as differences between the perceptions of these groups. The above could be complemented with analyzing differences in perceptions between lower level employees and higher-level managers. On the other hand, our results caution researchers not to rely overly on any static measure of cultural differences. In the worst case, the result may be myopia, or in other words systematic overestimation of the impact of culture on different organizational phenomena such as M&A, FDI, and entry mode choice (Harzing, 2003). In light of this debate, our analysis provides additional grounds for developing new kinds of conceptualizations of cultural dynamics. These can include qualitative analyses of cultural identity formation (Clark *et al.*, 2010; Maguire and Phillips, 2008; Vaara and Tienari, 2011) or quantitative analyses of convergence or crossvergence in cultural differences (Sarala and Vaara, 2010).

Our findings also contribute to research on attributions more generally. Applying insights from attribution theory to M&As is important per se – and consistent with the recent reviews of attribution theory in management studies (Martinko *et al.*, 2011). Furthermore, our findings

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concerning the role of experience and curvilinear relationships may have broader implications for research on attributions. While studies of attributions indicate that experience may strengthen attributional tendencies, systematic analyses have been scarce. One interpretation of the results is that experience may indeed imply learning of a specific kind, i.e. learning to use particular – in our case cultural – language to explain failure. It would be interesting to examine such phenomena more closely in future studies; this could include analysis of whether and how previous experiences of success or failure make a difference for future attributions. Our findings concerning curvilinearity can in turn complement recent studies suggesting a more complex and nuanced understanding of self-serving attributions (Hodkins and Liebeskind, 2003; Lee and Robinson, 2000; Lee and Tiedens, 2001; Schlenker *et al.*, 2001; Tomlinson *et al.*, 2004). The curvilinear nature of the association of performance and attributions with managers' actions may provide a new piece of the puzzle in attribution research – or at least pave the way for new studies examining and testing such curvilinearity. Based on our findings, it seems that managers may need to project a sense of control both to themselves and others, which requires assuming not only credit for success but also responsibility for clear cases of failure.

Our findings also have practical implications. Practitioners should beware of the attributional tendencies that seem to characterize M&As. In particular, there is a need to pay attention to self-serving attributions and the resulting illusion of control that could lead to overly risky deals and create problems in the management of the integration process. Special attention should be focused on how managers may overemphasize the role of cultural differences and even deliberately blame cultural differences for failure. At the same time, other causes of integration problems might pass unnoticed and be left unaddressed. Furthermore, the 'negative' connotations of cultural differences may cause the management to overlook the potential value embedded in cultural differences

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(Björkman *et al.*, 2007; Morosini *et al.*, 1998; Stahl and Voigt, 2008) or even shy away from potentially attractive acquisitions in the presence of apparent cultural differences.

### **Boundary conditions and limitations**

The boundary conditions of our study should be taken seriously when interpreting these findings. Our analysis is based on a sample of Finnish companies' acquisitions made during a specific period. Thus, our results may be influenced by the characteristics of Finnish firms and this time period. For example, the Finnish economy has been historically driven by the paper and pulp and metal sectors. It could be that attribution effects are more salient in these types of 'traditional' industries where Finns consider themselves to be proficient and have a national heritage. While we tested our model for some of the peculiarities of the Finnish context (e.g., main traditional industries) and found our results to be unaffected, it would be important to examine attributional tendencies in other national and cultural contexts (Morris and Peng, 1994). Furthermore, it may be that the specific time period emphasizes tendencies that could be different in other circumstances. Thus, it would be interesting to compare attributional tendencies for example in times of boom and bust.

Our study is based on top managers' perceptions. While it is important to examine key decision-makers' interpretations, it is possible that employees, managers of other companies, experts such as consultants or financial analysts, or the media might manifest other tendencies. An analysis and comparison of various groups' attributional tendencies would be a major issue for future research.

Our analysis is largely, but not entirely, based on survey data. Although for example the national cultural difference measures were based on external data, our results may involve a risk of common method variance. However, the fact that our tests did not indicate any such bias should alleviate this concern. Nevertheless, it would be interesting to compare these results against an

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analysis where some of the measures were operationalized differently or drawn from other types of data.

We relied on cross-sectional, perceptual measures, and thus cannot establish causal direction *per se*, which means that the risk of reverse causality must be kept in mind when interpreting our findings. In particular, it is important to focus attention on three key issues related to the role of cultural differences in our models. First, one could argue that managers' assessments of cultural differences might be affected by the attributional tendencies. The fact that our models include not only a measure of organizational cultural differences (based on the managers' own assessments) but also national cultural differences (based on external data) should alleviate this concern (see also the discussion about common method variance above). Second, one could raise the question of whether the results would reflect the actual impact of cultural differences on M&A performance; for instance, larger cultural differences would be reflected in poorer performance and thus in attributions to cultural differences. To deal with these concerns, we systematically controlled for the impact of cultural differences (both organizational and national) on the attributional tendencies in all our models. Third, our cross-sectional analysis cannot *per se* establish whether performance affects attributional tendencies or vice versa. In our case, the assessments of performance could be influenced by the attributions to cultural differences. The fact that the financial performance measure (gathered on the basis of available data) correlated significantly and positively with the subjective assessments should at least partially alleviate this concern. Moreover, it is usually assumed in attribution research that people first make sense of success/failure to be able to then construct explanations (attributions). We think that this is also likely to be the usual process in the case of our analysis, especially because the managers first responded to questions about performance and only after that to the questions measuring attributions. Nevertheless, the exact process of making sense of performance and attributions may be more complicated than usually assumed; it may for instance

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be the case that managers in 'normal circumstances' frame success/failure and develop explanations for it (attributions) in a process that involves the mutual reconstruction of both aspects of the association. Thus, we underscore the need for future studies using other types of research designs and performance and attributional measures to verify our propositions and elaborate on our findings.

In all, the results of our analysis should be taken seriously by researchers and practitioners alike when making sense of performance in M&A and other contexts. While the specific features of our sample and other limitations of our study need to be taken into consideration, our analysis does indicate that attributional tendencies are likely to play an important role when explaining performance, with significant theoretical, methodological and practical implications. Our study has provided intriguing results, but it also gives rise to a number of fascinating new questions and issues that warrant attention in future research on attributions in the M&A and other contexts.

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**TABLE 1**  
**Item Factor Loadings, Indicator Reliability, Construct Validity and Reliability**

Construct	Measurement Item	Factor Loading	Indicator Reliability	t-value	Composite Average Reliability	Variance	Cronbach's Alpha
Acquisition Performance	Acquisition outcome	0.868	0.753	20.779***	0.952	0.831	0.933
	Integration outcome	0.918	0.843	49.319***			
	Success of the acquisition compared with expectations	0.920	0.846	40.796***			
	Success of the integration compared with expectations	0.940	0.883	55.336***			
Attribution to Managers' Actions	Extent to which managements' actions affect integration	0.928	0.861	23.315***	0.925	0.861	0.839
	Extent to which managements' actions explain acquisition success	0.928	0.861	26.958***			
Attribution to Cultural Differences	Extent to which cultural differences affect integration	0.929	0.863	14.826***	0.885	0.794	0.747
	Extent to which cultural differences explain acquisition success	0.852	0.726	7.700***			
Organizational Cultural Differences	Management and control	0.861	0.742	4.314***	0.894	0.629	0.859
	Sales and marketing	0.808	0.652	4.195***			
	Production	0.741	0.549	3.435***			
	Research and development	0.737	0.543	3.050***			
	Company values in general	0.811	0.658	4.690***			
Degree of Iintegration	Management and control	0.819	0.671	9.738***	0.938	0.792	0.912
	Sales and marketing	0.889	0.790	10.314***			
	Production	0.925	0.855	10.888***			
	Research and development	0.922	0.849	12.373***			
Participation	Pre-acquisition stage	0.882	0.778	8.942***	0.890	0.802	0.755
	Post-acquisition stage	0.909	0.826	15.458***			

\*\*\*  $p < 0.001$

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**TABLE 2**

**Descriptive Statistics and Correlations**

Variable	Min	Max	Mean	S. E. mean	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Acquisition Size	3.000	270.000	31.249	5.836	1												
2. Time Elapsed	1.000	4.000	2.400	0.122	0.002	1											
3. Respondent Involvement	1.000	7.000	5.807	0.172	-0.125	-0.042	1										
4. Acquisition Experience	0.000	70.000	6.445	1.260	0.023	0.169	0.049	1									
5. Degree of Integration	1.000	7.000	4.952	0.178	-0.097	0.032	0.087	-0.024	1								
6. Organizational Cultural Differences	1.000	7.000	4.817	0.143	-0.088	-0.100	0.161	-0.123	-0.015	1							
7. National Cultural Differences	0.000	18.853	2.813	0.526	0.170	0.069	-0.181	0.041	-0.099	-0.031	1						
8. Performance	1.000	7.000	5.224	0.136	-0.110	-0.005	-0.006	0.232*	0.349**	-0.267*	-0.081	1					
9. Attribution to Managers' Actions	1.000	7.000	3.714	0.148	0.022	-0.093	0.207	-0.028	-0.085	0.181	-0.152	-0.315**	1				
10. Attribution to Cultural Differences	3.000	7.000	5.610	0.097	-0.228*	0.011	0.274**	0.014	.261*	0.120	-0.169	0.292**	0.065	1			
11. Squared Performance	1.000	49.000	28.878	1.284	-0.109	-0.047	0.087	0.039	-0.270**	0.100	-0.044	-0.551***	0.147	0.136	1		
12. Performance x Acquisition Experience	0.000	490.000	38.702	8.795	-0.032	0.113	0.081	0.863***	-0.041	-0.093	-0.018	0.031	-0.053	-0.014	0.179	1	
13. Squared Performance x Acquisition Experience	0.000	3430.000	237.584	60.340	0.015	0.087	-0.005	0.893***	0.029	-0.207	0.025	0.321**	-0.072	-0.018	-0.083	0.863***	1

All two-tailed tests. N = 90, missing values were replaced with mean. Pearson's bivariate correlations in the table represent standardized beta coefficients.

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

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**TABLE 3**  
**Regression Analyses<sup>3</sup>**

Variables	Curvilinear Model: Attribution to Managers' Actions				Curvilinear Model: Attribution to Cultural Differences				Curvilinear Moderation: Attribution to Managers' Actions				Linear Moderation: Attribution to Cultural Differences			
	Beta	<i>t</i>	Sig.	VIF	Beta	<i>t</i>	Sig.	VIF	Beta	<i>t</i>	Sig.	VIF	Beta	<i>t</i>	Sig.	VIF
Acquisition Size	-0.047	-0.563	0.575	1.116	0.018	0.190	0.849	1.116	-0.049	-0.582	0.562	1.118	0.005	0.058	0.954	1.086
Time Elapsed	0.070	0.862	0.391	1.061	-0.079	-0.862	0.391	1.061	0.063	0.760	0.450	1.097	-0.092	-1.025	0.308	1.061
Respondent Involvement	0.189*	2.040	0.045	1.087	0.169	1.616	0.110	1.087	0.185	1.983	0.051	1.095	0.172	1.697	0.094	1.084
Acquisition Experience	-0.126	-1.297	0.198	1.178	0.084	0.770	0.444	1.178	-0.035	-0.162	0.872	5.821	0.502*	2.246	0.027	5.157
Degree of Integration	0.164	1.644	0.104	1.191	0.000	-0.001	0.999	1.191	0.166	1.652	0.103	1.193	0.031	0.278	0.782	1.192
Organizational Cultural Differences	0.204	1.884	0.063	1.148	0.067	0.550	0.584	1.148	0.194	1.756	0.083	1.188	0.046	0.389	0.698	1.153
National Cultural Differences	-0.057	-0.428	0.669	1.080	-0.221	-1.479	0.143	1.080	-0.058	-0.439	0.662	1.081	-0.248	-1.697	0.094	1.086
Performance	0.547***	4.429	0.000	1.950	-0.377**	-2.700	0.008	1.950	0.551***	4.426	0.000	1.956	-0.425**	-3.464	0.001	1.582
Squared Performance	0.299***	3.938	0.000	1.636	-0.064	-0.745	0.459	1.636	0.293***	3.783	0.000	1.683				
Squared Performance x Acquisition Experience									-0.070	-0.469	0.640	5.794				
Performance x Acquisition Experience													-0.425*	-2.203	0.030	4.764
R <sup>2</sup>	0.357				0.182				0.359				0.224			
Adjusted R <sup>2</sup>	0.285				0.090				0.278				0.136			
R <sup>2</sup> change	0.125				0.006				0.002				0.047			
F	4.941***				1.409				4.425***				2.559*			

All two-tailed tests. N = 90, missing values were replaced with mean. Data in the table represent standardized beta coefficients.

<sup>3</sup> The results are robust to nested models. See the Online Appendix for the results of the simpler models.

## Attributional Tendencies in Explanations of M&A Performance

Dependent variables: Attribution to Managers' Actions, Attribution to Cultural Differences.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$