diary step toward the collapse of the distinction altogether. If we come to think of stability as being achieved through dynamic processes of change, then we come to think of stability as a type of change. At that point the distinction between stability and change ceases to be useful as an analytic tool, allowing cultural dynamics to reach their full potential in organization theory.

In the space of these few pages I cannot pretend to have offered a comprehensive analysis. As readers, you will have already begun critically evaluating my arguments. Some of you may find the arguments persuasive, and others may not. Either way, if you have been engaged in the conversation, then I have achieved my goal.

NOTE

1. I owe a debt of gratitude to Koji Takahashi for helping this dyed-in-the-wool discursive psychologist come to appreciate the value of a psychodynamic approach to understanding organizational behavior.

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Measuring Cultural Fit in Mergers and Acquisitions

-- *Yaakov Weber*

Clashes between the cultures of the combining organizations in mergers and acquisitions (M&As) have received growing attention from both practitioners and academics in recent years (e.g., Ashkanasy & Holmes, 1995; Cartwright & Cooper, 1993a, 1993b; Davis, 1968; Lubatkin, Schweiger, & Weber, 1999; Marks, 1994; Nahavandi & Malekzadeh, 1988; Porter, 1985; Shrivastava, 1986; Weber, Ganzah, & Ben-Yemini, 1995; Weber & Pliskin, 1996; Weber, Shenkar, & Raveh, 1996). It has been suggested that such culture clashes have major implications for stress, attitudes, behavior, and turnover, especially for the managers and employees of acquired companies in both domestic and international M&As. Furthermore, culture clashes influence the effectiveness of the postmerger integration process, the integration of information systems, and the financial performance and shareholder value of acquiring companies.

Although cultural fit has been acknowledged to be a potentially important factor in M&As failures, empirical studies that investigate the role of cultural fit in M&As remain a rarity. Moreover, relatively little has been done in terms of specification and operationalization of culture fit measures. As Cartwright and Cooper (1993b) suggest, "Culture fit and culture compatibility are well-used but ill-defined expressions" (p. 60).

The literature on culture clashes in M&As to date has three major limitations. First, most of it is based on observations by practitioners and consultants, with little theoretical or empirical support (e.g., Barrett, 1973; Davis, 1968; Gill & Foulder, 1978; Levinson, 1970; Pritchett, 1985; Searby, 1969; Sinetar, 1981). Second, the few empirical studies that have been conducted have each investigated the cultural clash in only one merger or acquisition (e.g., Blumberg & Wiener, 1971; Buono, Bowditch, & Lewis, 1985; Graves, 1981; Greenwood, Hinings, & Brown, 1994; Sales & Mirvis, 1984; Schweiger & DeNisi, 1991; Shirley, 1973, 1977; Weber et al., 1995). Third, although M&As differ with respect to such factors as relatedness and type of industry (e.g., Lubatkin, 1983; Nahavandi & Malekzadeh, 1988; Shrivastava, 1986; Weber, Lubatkin, & Schweiger, 1994), most studies have been conducted under the assumption that M&As are homogeneous and so have failed to consider the possibility that the impacts of culture clash on organizational effectiveness might vary from one situation to another.

The extant literature does not provide systematic empirical evidence on (a) why and how cultural differences may cause integration problems in M&As, (b) what factors are important for the integration of top management teams (TMTs) in M&As that may be affected by cultural differences, or (c) how any possible relationships between cultural differences and other factors, such as cultural tolerance, affect the behavior of the acquired TMT. Such evidence might be lacking because of the difficulty of gaining access to study M&As (e.g., Greenwood et al., 1994) and the unavailability of an instrument for measuring culture and cultural differences in M&As.

My goal in this chapter is to fill some of these gaps. Specifically, my aim is to describe an instrument for measuring culture in general and cultural differences in M&As in particular. In the next section, I review the literature on the role of culture and cultural differences in M&As. I then identify the important cultural dimensions and describe a study in which a culture scale tailored for top management teams in M&As was developed. Finally, I present the results of the study and discuss future research opportunities.

CONTACT BETWEEN TWO CULTURES IN M&As

A merger or acquisition involves the combination of two or more organizations. This results in contact between two distinct top management cultures (e.g., Perry, 1986; Sales & Mirvis, 1984). Culture has been defined as "the set of important assumptions (often unstated) that members of a community share in common" (Sathe, 1985a). Every group, top management team or otherwise, has a unique culture that is shaped by its members' shared history and experiences (Schein, 1985). The contact between two top management teams may lead to cultural changes that are usually drastic for the managers of the acquired firm, who are often expected to adapt to the culture of the acquiring firm (e.g., Jemison & Sitkin, 1986; Marks, 1994; Sales & Mirvis, 1984).

In spite of the lack of empirical evidence from large samples on the effects of cultural differences in M&As, the reports from many separate cases can help provide a clearer picture. According to those reports, cultural differences between the parties have produced misunderstandings, fueled emotional reactions, and escalated conflicts. Such conflicts and the related negative attitudes of key top managers of the acquired organization toward the merger and the acquiring top management may be major obstacles to the successful integration of the two firms (Weber & Schweiger, 1992). In a survey of European CEOs, "the ability to integrate the company was ranked as the most important factor in acquisition success, ahead of financial and strategic factors" (Booz, Allen, & Hamilton, as quoted in Cartwright & Cooper, 1993b). The key to managing the integration process is "obtaining the participation of the people and creating an atmosphere that can support [capability transfer] is the real challenge" (Haspeslagh & Jemison, 1991, pp. 106-107).

Cultural differences appear to be a critical factor in creating such an atmosphere and obtaining people's participation. Thus the degree of cultural differences between the two organizations may determine the effectiveness of the integration process and eventually the financial performance of the merger.

Unit of Analysis

This chapter focuses on top management teams as a unit of analysis for five reasons. First, many organizations select their TMTs from the ranks of individuals who appear to best represent the value system of the majority. As such, a TMT's subculture may be a reasonable manifestation of the organization's culture. Second, senior managers play the most significant role in shaping and transmitting corporate culture signals to the broader membership (Schein, 1985). The beliefs and values of these managers are expected to permeate and influence other levels of the organization. Third, some researchers have argued that cultural differences at the top management level are most likely to influence merging organizations' ability to realize the potential synergy of the merger (Davis, 1968; Kitching, 1967; Sales & Mirvis, 1984). The importance of TMT culture is also evidenced by a number of recent studies conducted in a nonmerger context that have found significant relationships between the cultures of TMTs and their firms' financial performance (Covin & Slevin, 1988; Denison, 1990). Fourth, in order to study the effects of cultural differences, one must be able to look at contact between the members of the two cultures. The likelihood of such contact in mergers, in terms of amount and intensity, is greatest at the top management level (Weber & Schweiger, 1992). This is because top managers of the merging firms are in frequent contact throughout the negotiation and transitional stages, whereas middle and lower managers may not have contact with their counterparts in the other organization until later in the transitional stage, if at all. Finally, top managers are involved in and have a wide knowledge of major integration efforts and effectiveness of the integration process.

Cultural Differences, Performances, and Turnover

The differences in organizational cultures that may have important impacts on the financial success of a merger may also have impacts on the value of the acquiring firm's common equity. It may be instructive to note that the predicted relationship between perceptions of cultural differences and shareholder value is based on a central tenet of financial economics: that the capital asset market is efficient. That is, security prices reflect all publicly available information (Fama, 1976). Accordingly, any change in the value of an acquiring firm's common equity due to merging is brought about by a change in the market's estimate of the firm's future financial performance.

Of course, some may argue that the capital asset market does not concern itself with possible cultural problems in mergers, but instead considers only issues of strategic fit when estimating the financial impact. However, with the continual flow of anecdotal evidence from the business world and the popular business press about the adverse effects of "cultural collisions," it is difficult to believe that the capital asset market does not also factor in the human side of a merger. Clearly, the costs of cultural differences are difficult to quantify a priori, and the capital market may not be omniscient enough to predict actual earnings with complete accuracy. However, the market, on average, uses all information available when setting a price to a firm's security (Fama, 1976), and those investors in the market who are familiar with the top management teams of the combining firms are at least able to form opinions about consolidation costs. To do otherwise would be to overestimate systematically the value of a merger. There is no theoretical or empirical evidence to suggest that the capital market follows this or any other observable and inefficient trading pattern.

Many M&As are characterized by high levels of top management turnover (Gill & Foulder, 1978; Hambrick & Cannella, 1993; Levinson, 1970; Marks, 1994; Pritchett, 1985; Walsh, 1988b, 1989). Recent empirical investigations, however, have not been able to explain acquired TMT turnover effectively through examination of either the degree of relatedness between merging firms (Walsh, 1988b) or the nature of the negotiation process (Walsh, 1989). Nor could Walsh and Ellwood (1991) explain turnover by relating it to the target company's reacquisition performance—that is, through the replacement of an acquired incompetent TMT. Weber and Schweiger (1992) suggest that cultural differences may be positively related to acquired TMT turnover. Furthermore, they suggest that culture clash may be negatively related to acquired TMT commitment. Previous studies in the field of organizational behavior have found that low levels of commitment are associated with high rates of turnover (Mathieu & Zajac, 1990; Porter, Steers, Mowday, & Boulian, 1974).

Nahavandi and Malekzadeh (1988) suggest that cultural differences will be less of a problem when the buying firm "values cultural diversity and is willing to tolerate and encourage it" (p. 83). Conversely, a buying firm that does not tolerate an acquired firm's culture may use a variety of control mechanisms to establish its own culture in the acquired firm, thereby raising the potential for conflict between the two top management teams (Walter, 1985). Put another way, the more the buyer tolerates multiculturalism, the less likely the buyer is to expect the acquired firm to conform to its own goals, strategies, and administrative practices.

The foregoing discussion suggests that the predicted relationships between cultural fit and financial performance and turnover are likely to be moderated by the degree of cultural tolerance. However, it is not clear whether cultural tolerance (a) is independently related to shareholder value and turnover, (b) moderates the relationship between cultural fit and value and turnover, or (c) represents some combination of the two. Regarding possible independent effects, firms can expect to differ according to their cultural tolerance, and some firms may be able to minimize the adverse impacts of cultural differences between the two organizations. To the extent that capital market investors hold opinions about this information, they will factor it in along with other points of information when estimating the value of a merger. Regarding possible moderating influences, it is also likely that, in addition to the two independent effects, investors may consider cultural fit in light of cultural tolerance. Accordingly, there may be a greater probability of value creation when cultural difference is low and cultural tolerance is high.

Cultural Differences, Tension, and Attitudes

Scholars of organizational conflict regard conflict as a process that includes antecedent conditions, affective states (e.g., tension, stress), negative attitudes on the part of one group toward the other, and conflictual behavior that ranges from passive resistance to overt aggression (Katz & Kahn, 1978; Thomas, 1976). In this subsection, I discuss cultural differences as the antecedents of these affective states and negative attitudes.

Prior to a merger or an acquisition, each firm's TMT usually achieves some degree of equilibrium in understanding its external and internal environment. Over time, and with shared experience among members, each TMT assimilates beliefs and values that

greatly influence its decision making (Donaldson & Lorsch, 1983; Shrivastava, 1986; Wilkins & Ouchi, 1983). In M&As, when one TMT culture is exposed to another, as happens in the process of acculturation, the state of equilibrium is disturbed, possibly leading to communication problems between the cultures (Mirvis, 1985; Sales & Mirvis, 1984). The shared beliefs and values that are unique to each TMT culture and that originally functioned to facilitate communication among a team's members (Sathe, 1985a; Wilkins & Ouchi, 1983) become sources of communication problems between members of different TMTs.

These communication problems can lead to ill feelings and to polarization and ethnocentrism (Blake & Mouton, 1985; Sales & Mirvis, 1984), which in turn may "increase the tendency for misunderstanding and conflicts" (Gregory, 1983, pp. 359-360). For example, in studying the contact between the two top management groups following what is known as a "white knight" acquisition of a small manufacturing firm by a multibillion-dollar conglomerate, Sales and Mirvis (1984) found that the cultural differences between the parties produced misunderstandings, fueled emotional reactions, and escalated conflicts.

The conflict that results from cultural differences in M&As is characterized by the following:

1. Tension, distrust, and annoyance on the part of the acquired TMT in working with the acquiring TMT (e.g., Buono et al., 1985; Ivancevich, Schweiger, & Power, 1987; Schweiger & DeNisi, 1991; Sinetar, 1981)
2. Negative attitudes on the part of the acquired TMT toward both the acquiring organization and its TMT in general (e.g., Blake & Mouton, 1985; Buono et al., 1985; Perry, 1986; Sales & Mirvis, 1984)
3. Negative attitudes on the part of the acquired TMT toward cooperating with the acquiring TMT in particular (e.g., Blake & Mouton, 1985; Sales & Mirvis, 1984)

Commitment and Cooperation of the Acquired TMT

The success or failure of a merger or acquisition depends not only on how much synergy is potentially available from the combination but, more important, on whether the synergy can actually be realized through effective integration (Porter, 1985; Schweiger & Csiszar, in press). Realizing synergies in M&As can be an arduous and difficult task, and its success depends to a large extent on the commitment and cooperation of the acquired TMT (Barrett, 1973; Mace & Montgomery, 1962; Porter, 1985; Shrivastava, 1986).

Commitment may be defined as the willingness to exert on behalf of the organization and the desire to maintain membership in it (Porter et al., 1974; Steers, 1977). Level of commitment is affected by the acquired TMT's attitude toward the new organization (Buchanan, 1974; Steers, 1977) and its level of tension (Argyris, 1970). Therefore, tension and negative attitudes of the acquired TMT toward the new organization will lower the acquired TMT's commitment to the success of the merger.

Cooperative behavior, according to Fishbein's theory (Ajzen & Fishbein, 1973; Fishbein & Ajzen, 1975), is influenced by two sets of attitudes: attitudes toward an action and attitudes toward an object. With regard to the first, noncooperative behavior in M&As may result in top managers' negative attitudes toward the act of cooperating with the acquiring TMT (e.g., Blake & Mouton, 1985; Perry, 1986; Pritchett, 1985). With regard to the second, attitudes toward an object can also be good predictors of behavior associated with that object (Rokeach & Kliejunas, 1972; Wicker, 1969, 1971). In M&As, a negative attitude toward the new organization (the object) can lead to noncooperative behavior on the part of the acquired TMT (e.g., Blake & Mouton, 1985; Perry, 1986).

Cultural Differences and Intended Integration

As discussed earlier, the degree of contact (intensity and frequency) between cultures may moderate the relationship between the degrees of cultural differences and conflict. More specifically, it suggests that the more members of two cultures come into contact and/or the more contacts they have per a given period of time, the greater the ability of the dominant culture to expose the weaker one to its own features or to impose those features on the other party, and the greater the subsequent potential for conflict. In this subsection, I contend that in M&As the degree of contact between the acquired and the acquiring TMT cultures and the extent to which the weaker culture is dominated by the stronger are determined by the intended level of integration of the two TMTs.

Merging firms achieve synergy by integrating similar departments and functions, such as marketing, inventory, and production. To achieve integration, the acquiring TMT typically intervenes in the decision-making processes of the acquired TMT and imposes standards, rules, and expectations (e.g., Cray, 1984; Goehle, 1980; Vancil, 1979).

M&As vary in their intended level of integration. The higher the intended integration, the more effort the acquiring firm must make to control and coordinate decisions and activities, not only by determining goals for the acquired company, but by generating alternative solutions to strategic problems and making crucial choices. The intended level of integration influences the emotions and attitudes that affect acquired top managers' commitment to and cooperation with the acquiring TMT. This can be expected to happen in two ways. One is through a main effect that could occur even where the beliefs of two TMTs are relatively similar. To many top executives who had previously managed independent operations, superimposed authority following an acquisition or merger is bound to be objectionable. The loss of autonomy through the intervention of the acquiring TMT in the acquired TMT's decision making can be expected to evoke tension and negative attitudes toward the merger (Blake & Mouton, 1985; Levinson, 1970; Marks, 1982; Mirvis, 1985; Perry, 1986; Schweiger, Ivancevich, & Power, 1987).

In addition to its main effect, the intended level of integration may have an interaction effect with belief differences. The integration of two firms requires contact (not necessarily physical) in the decision-making process between the two TMTs (Nahavandi & Malekzadeh, 1988). This contact may elicit conflict because it exposes the belief systems of the two teams to each other and makes the differences salient (Weber, 1988). Furthermore, at higher levels of integration, the acquiring firm imposes more of its beliefs on the acquired TMT (Walter, 1985). This imposition may also contribute to the salience of any belief differences and to the TMT's ability to deal with conflict and tension, and hence may lessen commitment and cooperation (Weber, 1988).

The interaction effect can also be explained by Haspeslagh and Jemison's (1991) presentation of different types of integration approaches, as determined by the needs of the companies for strategic interdependence (low and high) and organizational autonomy. The effects of cultural differences will vary in M&As of different types. The impacts will be felt most strongly in absorption (high interdependence, low autonomy), in which integration brings consolidation of the two cultures. It will be felt least in "preservation types," in which "the source of the acquired [company] benefits [remain] intact" (p. 148).

Cultural Differences and Nature of Contact

The nature of contact—that is, whether it is friendly or hostile—is determined by the extent to which top management has free choice (prior to the merger or acquisition) in having the other company as a partner. The mergers and acquisitions literature recognizes that whether an acquisition is friendly or hostile may influence the amount of conflict between acquiring and acquired executives (e.g., Mirvis, 1985; Nahavandi & Malekzadeh, 1988; Perry, 1986; Pritchett, 1985; Sales & Mirvis, 1984; Weber, 1988). For example, Mirvis (1985), in his model of premerger negotiations, suggests that the friendliness of the negotiations affects the motivation, commitment, and cooperation of the acquired top management team after the merger or acquisition is effected. Unfriendly takeovers "are likely to promote more conflict than voluntary mergers or acquisitions as the unfriendliness of the purchase poses an immediate threat and presages a battlefield mentality" (p. 81).

Although cultural differences are a source of conflict even in friendly M&As, their effects are likely to be much worse in unfriendly takeovers. An unfriendly takeover is likely to provoke resistance on the part of the acquired TMT to the dominant firm's culture, especially if the two are very different, and the concomitant hostility may prevent friendly exploration of cultural similarities and resolution of cultural differences (e.g., Blake & Mouton, 1985; Sales & Mirvis, 1984), which may further undermine integration in M&As.

Other Influences

Industry effect. The industry context in which M&As take place may also influence the roles and effects of cultural differences, autonomy removal, and commitment on the success of the integration process and a firm's performance. Culture is often thought of as a social control system (O'Reilly, 1989). Unlike formal control systems that typically assess outcomes or behaviors in relatively highly predictable situations, social control systems are more useful when the activities to be controlled are nonroutine and unpredictable, and exist in settings that require initiative and flexibility. Consequently, manufacturing is conducive to formal control systems because processes and products are more tractable. In contrast, service sector firms rely more heavily on social control mechanisms to direct members' actions (Pablo, 1994) because of the high frequency of off-site work, multiple engagements, and the high proportion of professional staff members (Margnet, 1993). The shared beliefs and assumptions that constitute a social control system are internalized and can be especially helpful in the service sector because they can be applied to produce a broad range of appropriate behavioral responses that are difficult for managers to anticipate or formalize in highly uncertain, and largely uncontrollable, situations.

Hence cultural differences in the service sector may be more critical to the effectiveness of the integration process. For the acquiring top management in the service sector, the control of any deviation from original intention will be very difficult. This is because the new management cannot use its accustomed social control system, due to differences in culture and lack of shared beliefs and assumptions with the acquired top managers. This can generate conflict, and, as noted earlier, higher conflict may be associated with more intense effects of autonomy removal due to low cultural tolerance in the service sector compared to that in manufacturing firms.

Relative size. The size of the acquired firm relative to its buyer may influence the attitudes, motivation, and turnover of top managers (Kitching, 1967; Walsh, 1989). The acquired top managers in a relatively small firm may feel unimportant, and their human needs may be overlooked or trivialized by the buyer. Alienation may breed discontent, which can prevent a merger from realizing its financial potential.

Merger type. Walsh (1989) has found that merger type (related or unrelated) explains turnover. Merger type might influence performance of the combination, because mergers have a greater potential for synergy due to similar departments and functions. However, Nahavandi and Malekzadeh (1988) have pointed out that the strategy underlying a merger determines the extent to which the cultures of two firms come into contact. In related mergers, contact between the members of the two cultures is usually higher than in unrelated mergers and elicits conflict. As I will explain below, the sample for the study described in this chapter was constructed to be relatively homogeneous in terms of merger type. Each merger in our sample, therefore, involved firms that were tangibly "related."

EMPIRICAL STUDIES: CULTURAL DIMENSIONS

In this section I describe an empirical study based on a questionnaire survey of TMTs. Because of the subjective and perceptual nature of culture, there may be an infinite variety of cultural dimensions. Starting with the work of Kurt Lewin, however, laboratory research and industrial studies have isolated several important dimensions of culture. Although there is no general agreement on what the most important dimensions are (e.g., Trice & Beyer, 1993; see also Ashkanasy, Broadfoot, & Falkus, Chapter 8, this volume), an effort has been made to include those most relevant to this study based on the literature dealing with both mergers and acquisitions and top management culture. Thus the dimensions and items in the questionnaire were derived from measures of culture used successfully in other studies with high levels of reliability and validity. Nevertheless, the identification of specific items and dimensions for this study was based on the need to have a measurement tool that can capture specific characteristics of culture at the strategic level of top management in the context of M&As. For example, Gordon and Cummins's (1979) questionnaire does not include a dimension that captures the risk-taking philosophy that is an important characteristic of top management culture (e.g., Deal & Kennedy, 1982; Donaldson & Lorsch, 1983). The questionnaire used in the study described below includes the following seven dimensions (for a more complete description and development of these dimensions, see Lubatkin et al., 1999; Weber, 1996; Weber et al., 1996):

1. *Innovation and action orientation:* Top managers who are action oriented value and encourage innovation and rapid response to changes and competitive developments in their environments.
2. *Risk taking:* The propensity to take risks affects many important decisions, such as investment in new ventures, purchase of manufacturing equipment, proportion of the research budget directed to new areas of business, and even the handling of employee pension funds.
3. *Integration—lateral interdependence:* Top management teams differ in regard to their beliefs about the importance of cooperation and communication between various organizational subunits in achieving overall organizational goals.
4. *Top management contact:* This dimension relates to the beliefs of top management in regard to whether subordinates should receive managerial support, warmth, and consideration. This dimension also relates to top managers' beliefs about other individuals and about human nature, such as Theory X and Theory Y, which lead to different managerial cultures in organizations.
5. *Autonomy and decision making:* A fundamental characteristic of top management groups is the value and importance they attach to the degree of autonomy and responsibility they should delegate for important decisions.
6. *Performance orientation:* The nature of the demands that should be placed upon members and the specific focus of performance appraisals constitute another important aspect of the beliefs of top management teams. This dimension also relates to the beliefs held by top managers concerning how much emphasis should be placed on high standards that motivate people to improve their performance and allow them to feel they will be held accountable for their performance, making performance expectations clear.
7. *Reward orientation:* This dimension relates to the beliefs of top management concerning the extent to which the company should pay competitively and fairly, as well as the degree to which compensation should relate directly to performance.

Sample

The sample of firms was drawn from exhaustive lists of U.S. mergers published in the *Journal of Mergers and Acquisitions* over a 3-year period. We selected from these lists 198 mergers that met the following criteria: The buying firm gained controlling interest in the acquired firm; the names and addresses of the top managers who were affiliated with the acquired firm immediately before the time of the merger were available, either in the *Directory of Corporate Affiliations* or in *Moody's Manual*; and the core businesses of the merging firms were in the same two-digit standard industrial classification code, to ensure that all of the mergers in the sample would be relatively homogeneous by merger type (i.e., between firms that shared common or related products and/or markets).

From the original 198, we deleted 13 companies from the study upon their request. Of the remaining 185 firms, we received responses from 73, for a response rate of 39%. Of these, 52 firms returned responses from more than one executive. Specifically, 2 firms responded with five completed questionnaires, 2 firms responded with four, 15 firms with three, and 33 firms with two responses. We used these multiple responses to check for interrater reliability.

We checked for potential nonresponse biases using the relative sizes of the merging companies and the time elapsed since the merger announcement, because these variables might have influenced managers' emotions and objectivity (Kitching, 1967; Sales & Mirvis, 1984). The *t* tests of mean differences were not significant, indicating that there was no nonresponse bias. The questionnaire was mailed directly to each top manager (CEO through senior vice presidential level—the average for the sample was seven top managers per firm) who was in the acquired company prior to and at the time of acquisition.

SUMMARY OF RESULTS

Reliability

We conducted a test of survey reliability by examining the responses obtained from the 52 firms with multiple respondents, using Kendall's coefficient of concordance. Interrater reliability was tested for each firm and was found to be significant ($p < 0.05$ or better) in all 52 cases. These results are better than those reported for interrater reliability in recent research (e.g., Finkelstein, 1992). The test, therefore, suggests that each key informant reliably depicted the study's central constructs at the correct unit of analysis. We averaged each item for each of the acquired firms with multiple responses and used the average to represent the views of the firm's top management team.

We further checked the reliability of the perceptions of cultural differences by using a follow-up mailing of the same questionnaire to the top managers of the buying firms, to which 15 companies responded. We found a high level of agreement (i.e., one unit or fewer on the five-point scale) between the responses of the managers of the buying and acquired firms in 12 of the 15 cases, and an acceptable level of agreement (i.e., fewer than two units) in the remaining three cases.

Construct Validity

Statistical analyses of the original sample showed that all the interrelations among the seven culture difference dimensions were high (at least 0.61), significant ($p < 0.01$), and internally consistent (Cronbach's alpha ranging from a low of 0.82 to a high of 0.94). In keeping with the theory underlying the construction of the culture measures, each dimension demonstrated discriminant validity (Cronbach's alpha for each dimension was higher than the dimension's correlations with any of the other six dimensions).

The data also provide strong evidence of convergent validity, indicating, as expected, that the seven dimensions are part of the same general construct (Buchanan, 1974; Rosenthal & Rosnow, 1989). Although each dimension measures a unique aspect of the phenomenon, all the dimensions refer to the same content domain, making it possible to combine them all in a single index, a procedure for which prior research provides theoretical and statistical support (e.g., Buchanan, 1974; Porter et al., 1974). The combined internal consistency of this single culture differences index was high (Cronbach's alpha = 0.97).

We used factor analysis and a scree test to confirm the unidimensionality of this contrast. The results of the factor analysis provide evidence that the best linear combination was produced when all seven dimensions of the cultural differences construct were aggregated into one factor. The proportion of common variance accounted for by this factor was 0.74. Therefore, we collapsed the seven dimensions into a single cultural difference index by summing the scores for all 29 items and taking their average.

Predictive Validity

Shareholder value. Cultural differences were significantly and negatively correlated with CAR ($r = 0.61$, $p < 0.001$), as expected. Moreover, the regression results indicate that the model was excellent at explaining the variance in the stock market performance of acquiring firms engaged in related mergers. This was found regardless of the time interval used to calculate the CARs, where the R^2s for the overall model were high (ranging from 0.28 to 0.38) and the F statistics were significant to at least the 0.05 level. These finding are particularly robust given the small sample sizes. Specifically, the regression results showed that the gains to the shareholders of the buying firm were inversely related to the acquired managers' perceptions of cultural differences ($p < 0.001$).

Turnover. Cultural differences were significantly and positively correlated with fourth-year top management turnover ($r = 0.40$, $p < 0.05$), as expected. The regression analysis of the fourth-year turnover revealed that the overall model was strongly significant ($p < 0.001$) and explained a high percentage (42%) of the variance in turnover. Industry seemed to matter, at least in how it interacted with each of the two other measures. The effect of integration on fourth-year turnover was significantly greater for manufacturing firms than for banks ($p < 0.01$), whereas the effect of cultural differences was significantly greater for banks ($p < 0.10$).

DISCUSSION AND CONCLUSIONS

The literature provides anecdotal evidence that organizational culture may play an important role in the success or failure of merges and acquisitions. In recent years, academicians and practitioners have argued the need for consideration of cultural mismatch between companies involved in M&As in order to avoid, or at least minimize, human resource problems after these deals are consummated. However, there is a shortage of empirical research investigating culture clashes and their consequences in M&As. One crucial reason for this problem is the lack of an instrument that can reliably measure the degree of culture clash during M&As. In this chapter I have described a new measurement tool, developed to measure cultural fit, that shows high reliability and validity.

I have presented the findings of a study that used this tool, and these findings provide systematic evidence, based on a relatively large sample of M&As, of the relationship between culture clash and the turnover of acquired top executives and the performance of the acquirer. Specifically, acquired top management turnover has been shown to be positively associated with the degree of cultural differences between the acquired top management team and the acquiring firm. Cultural differences have been shown to be negatively associated with shareholder gains. These findings not only explain executive turnover and performance after the merger, they may also predict it. The findings are particularly robust given the small ratio of causes to predictors for which they were tested.

The findings also have practical implications. The existing failure rate of M&As suggests that practitioners have an incomplete understanding of the variables involved in planning and implementing a successful merger. The results of the study described here show that cultural fit is an important factor that should be considered in all stages of M&As. The findings have practical importance because they show that investors are generally skeptical about mergers of firms in which the cultures of the two top management teams are perceived to be incompatible, whereas they are supportive of mergers where the firms' cultures appear to be compatible. The implication is clear: Top managers of the buying firm should pay at least as much attention to issues of cultural fit during the premerger search process as they do to issues of strategic fit and financial and operational analysis.

Of course, one should keep in mind that the above conclusions are based on mergers that have taken place in the United States, and some results, and thus conclusions, may be somewhat different for mergers in other nations. Boyacigiller and Adler (1991) note that U.S. cultural values have imbued organizational science with implicit yet inappropriate universalism. The instrument discussed here, however, affords researchers the opportunity to investigate both the effects of culture clashes within international mergers and acquisitions and the relationship between organizational cultures and national cultures.

There are other opportunities for further research as well. For example, the present findings warrant replication using other forms of measurement, such as anthropological and other nonsurvey approaches, expanded samples, and samples containing unrelated as well as related mergers. In particular, unrelated mergers have fewer operational synergies and therefore can be expected to show different types of contacts between the combining top management teams, which may attenuate or accentuate the findings presented here. Replication studies should also try to measure management's and investors' perceptions during comparable time frames so as to establish other causal links between cultural fit and shareholder value. Of course, it may be very difficult for researchers to gain access to such data. However, any attempt at triangulation would be useful for supporting both the internal and external validities of the present design.

Other research efforts could be directed toward understanding how cultural differences manifest themselves. For example, do they become apparent during negotiations and due diligence or only after closing? Do they manifest themselves in dysfunctional ways, such as in losses in job commitment and increases in intergroup conflict? Can the severity of the conflict explain high management turnover? Finally, can cultural differences be effectively managed to minimize their negative impacts?