

CULTURAL VARIATION OF LEADERSHIP PROTOTYPES

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Across 22 European Countries

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This study sets out to test the assumption that concepts of leadership differ as a function of cultural differences in Europe and to identify dimensions which describe differences in leadership concepts across European countries. Middle-level managers (N = 6,052) from 22 European countries rated 112 questionnaire items containing descriptions of leadership traits and behaviours. For each attribute respondents rated how well it fits their concept of an outstanding business leader. The findings support the assumption that leadership concepts are culturally endorsed. Specifically, clusters of European countries which share similar cultural values according to prior cross-cultural research (S. Ronen & O. Shenkar, 1985), also share similar leadership concepts. The leadership prototypicality dimensions found are highly correlated with cultural dimensions reported in a comprehensive cross-cultural study of contemporary Europe (P. B. Smith, S. Dugan and F. Trompenaars, 1996). The ordering of countries on the leadership dimensions is considered a useful tool with which to model differences between leadership concepts of different cultural origin in Europe. Practical implications for cross-cultural management, both in European and non-European settings, are discussed.

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Cross-cultural researchers and international managers concur with the view that a diversity of management systems exist across contemporary Europe. In respect to predicting future developments, Calori and deWoot (1994) interviewed 51 Chief Executives of 40 large international organisations and concluded: "[...] no advocate of diversity denied the existence of some common characteristic and no advocate of European identity denied some degree of diversity" (p. 9). On the basis of such observations, it would appear that Europeans will have to live with at least some diversity in management systems in the foreseeable future. Equally important to note is the fact that societal cultural diversity in Europe remains unquestioned. Indeed, it is frequently perceived to be preserved as much as possible.

Consideration of the issues raised by Calori and deWoot invites exploration of an important question, specifically, the interrelationship between societal cultural diversity and the diversity in management style. The removal of trade barriers and the growth of the single market within Europe increases the permeability of national boundaries. Increasing numbers of companies are expanding beyond national borders, managers are employed transnationally, in cultures other than their own, and participation in cross-cultural teams is becoming more commonplace. In the cross currents between the durability of national cultures (divergence) and the practical necessities born of closer and more frequent interaction (convergence), there certainly is a lag in the chain of change from individual concepts to individual behaviour, to group behaviour, to system, to structural, and finally to institutional harmonisation. Even if convergence may some day prove to be the predominant force in a field like business, managing the long term transition toward a less diverse Europe will require research insights for the expatriates as well as for those (trainers and consultants) facilitating them in accommodating behaviour and adjusting their managerial context in consequent ways. Only then will cross-border assignees successfully manage the increasingly complex matrix of impact

points where culture continues to affect interactions in the world of work. For instance, the more we know about the leadership/culture impact point, the more effective the management of today's and tomorrow's diversity will be. In this regard empirical data on the cultural variation of leadership concepts can be helpful.

Leadership categorisation theory (Lord & Maher, 1991) suggests that the better the match between a perceived individual and the leadership concept held by the perceiver, the more likely it is that the perceiver actually "sees" the individual as a leader. Followers who categorise a manager as a prototypical leader, are likely to allow him/her to exert leadership influence on them. If leadership concepts differ as a function of cultural differences, they can constrain the influence of expatriate managers: in other words, the more leadership concepts differ between managers and subordinates or colleagues, the less influence will be exerted.

Our study investigates the relationship between culture and leadership concepts in Europe on the basis of extensive empirical research which focuses on cross-cultural differences in leadership. Our findings can benefit the development of cross-cultural management training, coaching and consulting.

Leadership Perception

The evolution and operation of leadership concepts follows the more fundamental principles formulated in psychological theories of human perception, cognition and behaviour. The human information processor uses context specific schemata or prototypes to categorise perceptions (Cantor & Mischel, 1979; Rosch, 1978). A schema or prototype is defined as a collection of attributes or traits characteristic of an object or a person. On the basis of the categorisations, implicit theories are used to derive expectations and predictions about other traits or behaviours of the same object or person. According to leadership categorisation theory (Lord & Maher, 1991), prototypical concepts are also formed about leadership traits and behaviours, and they are used to distinguish leaders from non-leaders (or outstanding from average, moral from amoral leaders etc.).

Experimental studies exploring implicit leadership theory have found that people use categorisation processes when forming leadership perceptions. They match a target person against a cognitive prototype that contains characteristic leader attributes (Lord, Foti & De Vader, 1984; Phillips & Lord, 1981, for a review see Lord & Maher, 1991), and someone recognised as a leader is also perceived to be more powerful and influential (Cronshaw & Lord, 1987). Schemata or prototypes in person perception affect individual behaviour. When a person schema is subconsciously activated, people start to behave in ways consistent with the activated schema (Bargh, Chen & Burrows, 1996). Extending this to leadership perception, it is likely that individuals behave as followers when their leadership prototypes or schemata are activated. The more they perceive someone as a prototypical outstanding leader the more they should respond positively. Lord and Maher (1991) assume that leaders are more likely to be accepted and that leader-follower relationships are more likely to be characterised by trust, motivation and high performance when the congruence between the implicit leadership theories of the persons involved is high.

Culture's Consequences for Leadership Perception

Shaw's (1990) theoretical work suggests pre-existing leadership prototypes and expectations to be one potential source of variance across cultures. What is characteristic or prototypical of a leader may be different in distinct cultures. Culturally endorsed differences in leadership concepts can affect the reactions of others to a foreign manager in a way that impedes cross-cultural leadership success. The leadership perceptions of the perceivers in a host country (e.g., higher level managers, colleagues and subordinates) determine whether a foreign manager is labelled a leader which, in turn, can determine the acceptance of his/her leadership traits and behaviours and the degree to which the foreign leader is perceived to be powerful, influential or efficient. Furthermore, the foreign managers' ethnocentric leadership schemata or prototypes can influence the probability that they behave inappropriately as perceived in the host country. In short, the more leadership

concepts between foreign managers and relevant attributers in a host country differ, the less the likelihood that cross-cultural leadership will be accepted and effective.

These predictions apply in so far as there is evidence for differential cultural endorsement of leadership prototypes. Generally, cross-cultural research suggests that culture can influence leadership concepts (House, Wright & Aditya, 1997). Gerstner and Day (1994) and O'Connell, Lord and O'Connell (1990) present evidence for relations between culture and leadership concepts. However, their studies sample only a limited number of countries that are from very different cultural or geopolitical regions (Honduras, Germany, Taiwan, Japan, USA, France, India and China). Thus, the findings may be not applicable to European countries that all belong to one geopolitical region possibly sharing leadership characteristics.

Results from the GLOBE study (Hanges et. al., 1998; House et al., 1997; House et al., 1999) support the view that cultural environments can influence leadership concepts by using a sample of more than 60 countries. However, the countries sampled by GLOBE are also from different geopolitical regions. Therefore, cultural variance in this sample is higher than for a subsample of countries located in only one geopolitical region such as Europe.

The present study is based on the European subsample of GLOBE. Its purpose is to investigate the assumption that leadership concepts vary as a function of cultural differences in Europe. With this objective in mind, we compared those European country clusters which emerged on the basis of similarities and differences in leadership prototypes with those European country clusters which emerged on the basis of more general cultural values, as reported in previous cross-cultural studies. This comparison constitutes a strong test of the hypothesis that culture and leadership concepts co-vary. There are several reasons for this. In the first instance, the sampling of countries from only one major geopolitical region restricts the range of total cultural variance, and thus, strengthens the significance and practical utility of those differences in leadership concepts that occur. Furthermore, European country groupings are compared on the basis of different studies

with different respondents, different cultural variables and different statistical grouping methods. This reduces the likelihood of spurious correlations due to common method variance or to the non-randomness of sampling in single cross-cultural studies. Another purpose of our study is to identify and describe differences in leadership concepts across European countries which are interesting in their own right because these countries are going through a unique socio-political experiment over the coming decades.

Cultural Variability in Europe

There are continuing and non-random cultural differences between European countries and regions that have been identified within a multitude of cross-cultural studies using different measures for cultural values. The major cultural regions identified (Anglo, Nordic, Germanic, Latin and Near East European country clusters) and replicated in these studies are summarised below.

In a comprehensive review, Ronen and Shenkar (1985) considered eight cross-cultural studies, including Hofstede's (1980) seminal research, which measure a variety of work-related attitudes and values such as, work goals' importance, need fulfilment, job satisfaction, managerial style, organisational climate, work role and interpersonal orientation. The authors identified five European cultural clusters (Anglo-Cluster: Ireland, United Kingdom; Nordic-Cluster: Denmark, Finland, Norway, Sweden; Germanic-Cluster: Austria, Germany, Switzerland; Latin-Cluster: Belgium, Italy, Spain, Portugal, France; Near East-Cluster: Greece, Turkey). They posit that countries tend to group together on the basis of geographical proximity, common language or language groups and religion. The cultural similarity of countries which are geographically close to each other can be seen to be the result of a spread of cultural values through geopolitical developments in history (e.g., the Germanic cultures in Austria, Switzerland, and Germany). For some clusters, the countries share one common language (e.g., the Germanic cluster) or a language group (e.g., the Latin European cluster). Language contains meanings and values which influence the development and maintenance of schemata and prototypes related to job behaviour and leadership. Some countries also share

religions, for example, the Latin European cluster is predominantly Catholic. Common religious beliefs are associated with common norms and values in society and at work. Last but not least, the degree of modernity, for example, in economic development (e.g., percentage of agricultural industry, income per capita, life expectancy) and in political, educational and social development (e.g., educational level, public health care and social security), can also determine cultural values such as individualism, uncertainty avoidance or gender equality (Hofstede, 1980). The cultural clustering for European countries in Nordic, Anglo, Germanic, Latin and Near East reported by Ronen and Shenkar (1985) awaits replication.

East versus West European country clusters. In another study comprising nearly 50 nations, a variety of personal values and behavioural intentions amongst circa 10,000 managers and employees were surveyed (Trompenaars, 1993). Trompenaars' data was re-analysed by Smith, Dugan and Trompenaars (1996). They confirmed for Europe that the major cultural divide lies between Eastern and Western Europe. On the one hand, West European countries from the Nordic, Anglo, Germanic and Latin European clusters tend to score higher on work related values of "Equality" (cf. Smith, 1997) or "Egalitarian Commitment" (cf. Smith et al., 1996), meaning that achieved status is valued more highly than ascribed status. For example, work is perceived to be fairly evaluated and objective criteria for appointments are reported to be used and applied equally. On the other hand, East European countries from East, Central (including former East Germany) and Near East European clusters tend to score higher on "Hierarchy" (cf. Smith, 1997) or "Conservatism" (cf. Smith et al., 1996), meaning that ascribed status is more highly valued than achieved status. For example, power differentials, paternalism and nepotism are reported to be expected or accepted. Smith (1997) concludes, "The footprint of history which appears to leave the sharpest imprint at present is not the legacy of the Roman Empire, but that of the Soviet Union." (p. 378). The East versus West distinction also appeared in a study reported by Jago, Reber, Böhnisch, Maczynski, Zavrel and Dudorkin (1993). The researchers used training tasks, constructed according to the

Vroom and Yetton (1973) model, to evaluate cultural differences in participative decision making behaviour. Managers from Germanic countries (Austria, West Germany, Switzerland) made more participative decisions, whereas managers from Central Europe (Poland and the Czech Republic) made more autocratic decisions.

North versus South European country clusters. A North versus South European distinction emerged in a study of 16 West European countries reported by Smith (1997) which represents another re-analysis of the Smith, Dugan and Trompenaars (1996) data. The two cultural dimensions found for West Europe differ somewhat from the original dimensions identified in the total sample of 43 countries because Central and East European countries were not included in the re-analysis. The first dimension is "Hierarchy and Loyal Involvement". Hierarchy means that power differences and paternalism are accepted, loyal involvement means that personal identity is defined as a long term commitment to the organisation. The second dimension is "Equality and Utilitarian Involvement". Equality means that criteria are applied equally to all persons. Utilitarian involvement means that job involvement is dependant on a rational calculus of expected rewards, career prospects and alternative opportunities. The North European countries of Ronen and Shenkar's Anglo cluster (Ireland, United Kingdom), the Nordic cluster (Sweden, Denmark, Finland, Norway, Netherlands) and Germany tend to score high on the "Equality and Utilitarian Involvement" dimension. The South European countries of the Latin European cluster (France, Belgium, Spain, Italy, Portugal), the Near East cluster (Greece, Turkey) and Austria tend to score high on the "Hierarchy and Loyal Involvement" dimension. The North versus South European distinction also appeared in two further cross-cultural studies. In the first study investigating cultural diversity of "event management style", that is decisional preferences of leaders in various prototypical management situations, with a sample of 17 East and West European countries (cf. Smith, 1997), managers in North European countries were shown to favour greater involvement with subordinates (high in equality and participation) and managers from South European countries were shown to prefer reliance on

supervisors (high in hierarchy). In the second study, employees' preferences for interpersonal leadership styles were evaluated (Zander, 1997). In North European countries (United Kingdom, Netherlands, Denmark, Norway, Sweden and Finland) it seems that a coaching leader is preferred as compared to a preference for a directing leader in South European (Spain, Belgium, France) and Germanic countries (Austria, West Germany, Switzerland).

Research Questions

The first research question to investigate in our study is the cultural endorsement of leadership prototypes with comprehensive samples of European countries. We hypothesise that leadership prototypes vary as a function of cultural differences in Europe. Thus, it is to be expected that the regional distinctions found in previous cross-cultural studies are confirmed for leadership prototypes. Based on leadership prototypes, the major cultural divides between East and West and between North and South should be evident, and more specifically, the Anglo, Nordic, Germanic, Latin and Near East European country clusters should be replicated. The Ronen and Shenkar (1985) country clusters are used as a criterion measure because they are based on the most comprehensive review of a variety of cross-cultural studies within European countries.

The second research question addresses the identification of leadership prototypicality dimensions which describe differences between European countries and regions. For both practical and theoretical reasons it is interesting to investigate those dimensions which represent core differences in leadership concepts between countries. Practically, an understanding of the cultural variation in leadership concepts and of the particular traits and behaviours associated with such variation can help managers (trainers and consultants) to predict more accurately potential problems within cross-cultural interactions at work. Theoretically, this is interesting because we then know which dimensions of leadership traits and behaviours have to be researched in more detail when addressing cultural differences in Europe. The leadership dimensions identified will also be made subject to testing the cultural endorsement of leadership hypothesis by correlating them with the cultural dimensions reported in Smith, Dugan and Trompenaars (1996). Their study comprises the most comprehensive sample of contemporary Europe including Central and East European countries, most of which are also sampled in the present study. This gives us an estimate of the cultural validity of the leadership prototypicality dimensions identified here.

The third research question addresses the possibility of different cultural dimensions to emerge as a result of using different regional subsamples of European countries. As can be learned from Smith's (1997) study, when only West European countries were investigated, cultural dimensions were found that somewhat differ from the cultural dimensions that emerged on the basis of East and West European countries. Thus, in the present study, the identification of leadership prototypicality dimensions will be implemented on two levels. On the first level, those dimensions which constitute the core differences across all European countries (East, West, North and South) will be explored on a more general level (across-region analysis). On the second level, the study moves beyond the macro-level analysis to examine variables which differentiate countries within the major cultural regions found in Europe (within-region analysis). This could result in core dimensions that reflect micro- as opposed to macro-level differentiations and can go beyond differences that only appear between major cultural regions, for example between Eastern and Western European countries. Hence, the two-level analysis will tell us whether a simple core set of variables exists which differentiates all countries across and within European cultural regions or whether a more differentiated approach is necessary, one which embraces countries within cultural subunits of Europe.

Method

Sample

The present study is based on the European subsample of GLOBE (Hanges et al., 1998; House et al., 1997; House et al., 1999). Twenty two European countries were selected from the GLOBE data base by using two criteria, i) the country is either a member of the European Union (e.g., France, UK, Germany, Greece) or an applicant to it (e.g., Poland, Hungary, Slovenia, Czech Republic), ii) the country is geographically located in Europe (e.g., Switzerland) or strongly associated with European history and geopolitical development (e.g., Russia, Georgia, Turkey).

The countries sampled and the number of participants per country are: Austria (N = 169), Ireland (N = 156), Czech Republic (N = 244), Denmark (N = 324), Finland (N = 430), France (N = 182), Georgia (N = 259), Germany, West (N = 413), Germany, former East (N = 53), Greece (N = 234), Hungary (N = 183), Italy (N = 257), Netherlands (N = 287), Poland (N = 278), Portugal (N = 79), Russia (N = 210), Slovenia (N = 254), Spain (N = 360), Sweden (N = 895), Switzerland (N = 321), Turkey (N = 289), United Kingdom (N = 168).

The total sample of individual respondents comprised N = 6,052 middle managers from organisations (mid-sized to large companies) in three different industrial sectors (food, finance, telecommunication). At least two of the industries were represented in each of the countries investigated (with the exception of France in which only the finance sector was sampled). The data were gathered between 1995 and 1997 by the authors of this paper who are Country-Co-investigators (CCIs) of the GLOBE project.

Measures and Procedure

GLOBE defines leadership as "the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of organisations of which they are members" (House et al., 1997, p. 548). Leadership areas other than business, such as politics, sports, religion or military are not investigated by the GLOBE project. Subjects responded to 112 questionnaire items by rating the degree to which each leadership attribute (traits or behaviours per item) facilitates or impedes "outstanding leadership". Per item, one attribute was given and defined by synonym terms (see Table 1). Items were rated on a seven point Likert-type scale that ranged from a low "This behavior or characteristic substantially impedes a person from being an outstanding leader" to a high of "This behavior or characteristic contributes substantially to a person being an outstanding leader". This method is consistent with Implicit Leadership Theory and analogous to "leadership prototypicality ratings" that are commonly used for assessing leadership

concepts (Gerstner & Day, 1994; Hollander & Julian, 1969; Kenney, Blasovich & Shaver, 1994; Lord & Maher, 1991).

Table 1 about here

Questionnaire and scale development. As part of the overall GLOBE program 382 leadership attributes reflecting a variety of traits, skills, abilities, and personality characteristics potentially relevant to leadership emergence and effectiveness were generated. The focus was on developing a comprehensive list of leader attributes and behaviors rather than on developing a-priori leadership scales. However, the initial pool of leadership items included leader behaviors and attributes described in well validated leadership theories (e.g., task vs. relationship orientation, charismatic leadership, transformational leadership, directive vs. participative leadership).

In order to limit cultural biases in the survey, the item pool was subjected to extensive reviewing to incorporate the views from many different cultural backgrounds. The GLOBE country co-investigators (CCIs) from 36 different countries wrote an item evaluation report in which they noted any items containing words or phrases that were culturally inappropriate, ambiguous or could not be adequately translated in the target country's native tongue. Items that were problematic were corrected if possible or dropped from further consideration. CCIs also identified several additional themes, which were not tapped by the initial item pool (e.g., face-saving, modesty, status conscious, conflict inducer). The survey was translated from English into each country's dominant language, either by the CCI, some other person fluent in both languages, or by a professional translator. The translation was then independently translated again, from the country language back to English. This back-translation was then sent to the GLOBE Coordination Team (GCT) where it was compared to the original English version of the survey. A pragmatic approach (Brislin, 1986) was taken in evaluating the adequacy of the back translations. Emphasis was put on the accuracy with which the concepts were translated rather than the exact words being used in the translations. When discrepancies between the original survey and the back translations were encountered, the CCI was notified, and the issue was discussed. If necessary, revisions of the item wording were made.

Two pilot-studies were conducted to derive distinguishable themes of leadership prototypicality and to assess psychometric properties of the resulting leadership scales. In the first

pilot study a total of 877 individuals from 28 different countries completed the leadership survey (along with other items about cultural and organisational values). In the second pilot study a total of 346 individuals from 12 additional countries completed the leadership survey. From exploratory (principal components) factor analysis conducted in pilot study 1 a total of 16 leadership scales was formed. In the second pilot study twelve of these scales were replicated by confirmatory factor analysis (at the individual-level of analysis, cf. Kreft & De Leeuw, 1997) showing acceptable levels of fit (indicated by *): Autocratic*, Procedural*, Inspirational, Team Collaborative*, Decisive*, Diplomatic, Modesty*, Face Saving*, Humane Orientation, Autonomous*, Integrity*, Performance Orientation*, Administrative*, Self Centered*, Status Conscious, Visionary* (a more detailed description is given in Hanges et al., 1998).

Aggregation verification per scale was established by using the James, DeMaree and Wolf (1984) r_{wg} procedure as well as one-way analysis of variance to provide estimates of the intra-class correlation coefficient (ρ^2 or ICC (1)). The average r_{wg} for the 16 leadership scales ranged from .78 to .97 with the grand average r_{wg} of .88, the ICC (1) ranged from .07 to .35 with the average ICC (1) being .18 and Cronbach's alphas ranged from a low of .83 to a high of .98 with an average Cronbach's alpha of .89. The 16 leadership scales substantially differed in their relationship to one another. The absolute correlations ranged from a low of .00 to a high of .86. Overall, 38 percent of the interrelationships were of moderate to high magnitude (i.e., above $r = .40$). Therefore, a second-order factor analysis on the societal level of analysis was conducted to determine how many unique themes were contained. Five second order factors were obtained in pilot study 1. However, they were not replicated in pilot study 2. This lack of replication may be due to the fact that, at the society level of analysis, the ratio of the number of scales (16) to the number of data points (28 in pilot study 1 and 12 in pilot study 2) was inadequate to yield a stable second-order structure (Hanges et al., 1998).

In order to provide further evidence concerning the psychometric properties of the leadership scales derived so far, data from the main study of GLOBE was used. For this study members of the GLOBE coordination team wrote additional items based on the results of the two pilot studies as well as focus groups and interviews also conducted by the CCIs. Several leadership attribute items were constructed in order to ensure that the 16 original leadership scales were not biased by including only western leadership behaviors. For an example, several items were developed which describe autocratic, narcissistic, manipulative, and punitive behaviors because it was suggested in the interviews and focus groups that some societies might view these behaviors as enhancing leader effectiveness. The main GLOBE-study's data, comprising (to date) 15,322 middle managers from 61 different countries, was used to identify additional leadership scales among these items with the final result being an expansion of the original 16 leadership scales to 21 scales. The five additional basic factors represent both positive and negative elements of leadership (viewed from a conventional western perspective): Malevolent, Participative, Conflict Inducer, Team Integrator and Self Sacrificial. All 21 leadership prototypicality scales are found in Table 2 (scales were formed by summation of items).

Table 2 about here

Following Glick's (1985) advice, a generalizability analysis was performed to estimate the reliability of respondents' average leadership perceptions based on each scale. More specifically, by generalizability analysis, two sources of random error are taken into account: 1) item sampling (i.e., internal consistency) and 2) people within society (i.e., inter-rater agreement). Generalizability coefficients for each scale are given in Table 2 (second column). With the exception of Diplomacy, all coefficients indicate sound measurement of leadership prototypicality on the societal level of analysis. The construct validity evidence for the 21 leadership scales can only be considered as

preliminary. There are no a priori cross-cultural implicit leadership scales that were available to correlate the GLOBE scales with. Clearly further validation of the GLOBE scales is needed.

Leadership prototypicality scales used in the present study. For the purpose of the present study, the 21 basic leadership scales were used, although it was not proven that they all represent distinguishable concepts of leadership perceptions on the country level of analysis. What we have is a set of 21 unidimensional, internal consistent and socially agreeable leadership prototypicality scales that overlap conceptually and empirically to some degree. In the main GLOBE study ($N = 61$ countries) the absolute values of intercorrelations between the 21 leadership scales ranged from a low of $r = .00$ (between Modesty and Autocratic) to a high of $r = .89$ (between Visionary and Inspirational). Overall, 42 percent of the correlations were of moderate to high magnitude (i.e., above $r = .40$). As long as validation of distinct cross-cultural leadership dimensions is not established, it was reasoned that using these 21 basic leadership scales (instead of a small number of second order factors, cf. Hanges et al., 1998) allows us to more adequately identify leadership dimensions that reflect the particular commonalties and differences within the sample of European countries.

Further methodological considerations. In the present study, we are interested in cross-cultural variation, not in individual variation within cultures. Thus, the "ecological approach" on the country level of analysis is appropriate (Leung & Bond, 1989) and the country mean scores per leadership attribute scale were used. The problem of response bias (cf. Leung & Bond, 1989), that is spurious correlations due to culture specific item response bias, was addressed in the GLOBE study. Within-subjects data standardisation, as described in *The Chinese Culture Connection* (1987), was performed. The correlations between raw scores and unbiased country scores in a GLOBE sample of 54 countries ranged between $r = .90$ and $r = .98$ (Hanges, 1997; Hanges et al., 1998). Thus, the country-level scale means are rather robust against distortions from culturally endorsed response bias.

Results

Cultural Endorsement of Leadership Prototypes

The first research question, testing the cultural endorsement hypothesis, was examined by using hierarchical cluster analysis and discriminant analysis techniques. Cluster analysis is a technique for grouping a set of cases based on their similarities and differences. We used it to group the 22 European countries on the basis of their profiles of leadership prototypicality. In the first instance, a distance matrix (Euclidean D^2) was calculated with the country level mean scores of the 21 leadership prototypicality scales. Since the variables used are measured in the same units, standardisation was not necessary (Everitt, 1993). Secondly, a cluster solution was generated by using the Ward method (Ward, 1963). Ward's method reveals more accurately the true underlying cluster structure than alternative hierarchical methods (cf. Griffith, Hom, DeNisi & Kirchner, 1985). Thirdly, discriminant analysis and multivariate ANOVA using the Ronen and Shenkar country clusters as a grouping variable were conducted. With both statistics we tested the degree of compatibility of Ronen and Shenkar's country clusters, which are based on a variety of cultural values, and our data, which, by contrast, are based solely on leadership prototypicality ratings.

European Country Clusters with Similar Leadership Prototypes

The dendrogram of the hierarchical cluster solution based on all 22 countries used in the present study is shown in Figure 1. The dendrogram should be read from right to left. Two major clusters emerged immediately, with France constituting a third cluster. As part of a North/West European region the Anglo, Nordic and Germanic countries and the Czech Republic formed visible subclusters. As part of a South/East European region, the Latin European countries (Italy, Spain, Portugal) and Hungary, and countries from Central Europe (Poland, Slovenia), Near East (Turkey, Greece) and Russia and Georgia formed visible subclusters. Overall, the Ronen and Shenkar's cultural country clustering is visibly in accord with the country clustering for leadership prototypes found in the present study.

Figure 1 about here

The Germanic cluster membership of former East Germany (not part of the Ronen and Shenkar sample) is highly plausible. It does not mean that there are no differences in leadership prototypes between West German and former East German managers. However, it does tell us, that the differences between East and West German leadership concepts are small in magnitude or highly specific to a small number of leadership attributes compared with the profiles of all other European countries sampled (Brodbeck & Frese, 1998). The Netherlands' positioning in the Anglo/Nordic cluster corresponds to Hofstede's classification (1980), which considers the Netherlands to be part of the Nordic cluster. The Czech Republic formed a somewhat separate subcluster which is part of the North/West European region. The other two Central European countries (Poland and Slovenia) formed a subcluster within the South/East European cluster. Hungary, however, was clustered together with the Latin European countries (Italy, Spain, Portugal). This may be explained with reference to the strong Roman Catholic tradition in Hungary, which is shared with the Latin European countries, in comparison with the predominantly orthodox tradition in other Eastern European countries (e.g., Georgia, Russia). Contrary to our expectations and to Ronen and Shenkar's (1985) findings was the very distinct position of France. It might have been expected that this country constitutes part of the Latin European cluster. Instead, it formed a cluster which is separate from all other country groupings. However, this might be due to sampling problems in France, where data from only one industry (finance) was gathered. Therefore, the cluster analysis reported above was repeated on the basis of country level data from solely the finance sector (only in Portugal this sector was not sampled) and the cluster structure reported in Figure 1 was basically replicated. More specifically, France again formed a third cluster that is well distinguishable from a

North/West European region (containing an Anglo/Nordic cluster, the Germanic cluster and the Czech Republic) and a South/East European region (containing the Latin, Central and Near East cluster and Russia and Georgia). This finding suggests culturally endorsed differences of substantial magnitude between French leadership prototypes and all others, especially the Latin European countries (see Footnote 1).

Leadership Prototypes and General Cultural Characteristics

Our hypothesis, that leadership prototypes vary as a function of cultural differences in Europe, was tested using discriminant analysis and a multivariate ANOVA based on the sample of 14 European countries common to Ronen and Shenkar's study (1985). The discriminant analysis resulted in 100% correct prediction of cluster membership in accord with Ronen and Shenkar's clustering (Anglo cluster: Ireland, GB; Nordic cluster: Sweden, Finland, Denmark; Germanic cluster: Germany West, Austria, Switzerland; Latin cluster: France, Italy, Spain, Portugal; Near Eastern cluster: Turkey, Greece; see Figure 1, second column). The multivariate ANOVA test for cluster membership using Pillai's trace F -Test statistic (the most conservative multivariate test) resulted in a significant group membership effect ($F(4, 9) = 2.07, p < .05$) of substantial effect size, estimated by using the η^2 -statistic ($\eta^2 = .64$). In summary, these results strongly support the hypothesis that leadership prototypes vary as a function of cultural differences in accord with the Ronen and Shenkar (1985) clustering for European countries.

Description of Leadership Prototypes per Cluster

To illustrate further the content of leadership concepts, Table 3 presents rankings of the 21 leadership prototypicality scales for each of the 10 country clusters identified in the cluster analysis presented in Figure 1. The four way split for leadership prototypicality in Table 3 was based on the scales' mean values per cluster or country and ranges between, "substantially or moderately facilitates outstanding leadership" (high positive), "slightly facilitates" (low positive), "slightly impedes" (low negative), and "moderately or substantially impedes" (high negative).

Table 3 about here

The rankings presented in Table 3 indicate that certain leadership attribute scales were reported as clearly facilitating outstanding leadership across all European countries and clusters - except for France. These include: Inspirational, Visionary, Integrity, Performance Orientation and Decisiveness. "Team Integrator" was also positively rated in all European clusters, although, some variation in ranking is apparent. In the Latin, Central and Near East European clusters "Team Integrator" ranked in the first position in leadership prototypicality, in the Anglo and Nordic cluster it ranked fourth, and in the Germanic cluster as well as in the Czech Republic, Russia and Georgia it ranked between seventh and tenth position. On the lower end of the ranking list, "Self Centered" and "Malevolence" were uniformly reported as mainly impeding outstanding leadership in all clusters (including France). Most of the remaining leadership prototypicality scales vary considerably in ranking position across the European clusters and countries. For instance, "Participation" ranked among the highly prototypical attributes in the North/West European region (the highest in France), and among the slightly facilitative attributes in the South/East European region. Another example of variation is the positioning of the "Administrative" scale. In the Anglo and Nordic countries it ranked among the slightly prototypical leadership attributes. By contrast, in the Germanic cluster, in the Czech Republic and in the South/East European cluster "Administrative" ranked among the highly prototypical leadership attributes. Furthermore, in Russia and Georgia good administrative skills ranked within the first two most prototypical attributes for outstanding leadership.

The results presented in Table 3 provide valuable information regarding the content of leadership concepts in different cultural regions within Europe. However, it is important to note that there may be considerable variation between countries within the same subclusters which are not

shown in Table 3. Thus, the particular rankings should not be interpreted as valid for a single country that is part of that region. Differences between single countries are examined next.

Differences in Leadership Prototypes Between European Countries

For the second research question of identifying dimensions of leadership prototypes which underlie country differences across all European countries, Multidimensional Scaling (MDS) was used. MDS is a technique for calculating sets of linear combinations of variables (dimensions) that represent a maximum proportion of the total variance in the proximities matrix of all cases. In addition, the proportion of the total variance represented by a particular set of dimensions can be specified (\underline{R}^2) and tested (e.g., Kruskal Stress formula 1). MDS is a useful tool for reducing the complexity of a multitude of variables to a small set of two or three dimensions representing the core differences among the cases studied. This method has been widely employed in cross-cultural research as a means of establishing and replicating cultural dimensions which differentiate countries on the basis of questionnaire ratings of cultural values (cf. Leung & Bond, 1989). For interpretative purposes, the leadership prototypicality scales which best represent particular MDS dimensions were identified with the regression method described in Smith, Dugan and Trompenaars (1996).

MDS Across European Countries

For 21 European countries MDS analysis using the City Block metric (Coxon, 1982) was conducted. France was excluded from this analysis.² A three dimensional solution fit the proximities matrix best (Kruskal Stress formula 1, $\underline{KS} = .08$, $\underline{R}^2 = .97$). A four dimensional solution did not add sufficient additional explained variance to the three dimensional solution ($\Delta\underline{R}^2 = .01$) and a one dimensional solution did not result in an acceptable stress level ($\underline{KS} = .28$, $\underline{R}^2 = .78$). The dimensions of a two dimensional solution ($\underline{KS} = .16$, $\underline{R}^2 = .90$) were strongly associated with the first two dimensions of the three dimensional solution ($\underline{r}_s = 1.00$; $\underline{r}_s = .77$). Since the third dimension of the three dimensional solution explained an additional proportion of about 7% of the total

variance and it had an interpretable meaning different from the meaning of the other two dimensions, the three dimensional MDS solution was used here.

"The naming of dimensions is as much an art as it is a science." (Smith, 1997, p. 246). In order to interpret the identified dimensions, the extent to which the 21 leadership prototypicality scales were distinctively associated with the dimensions was analysed. A set of multiple regression analyses with the three MDS dimensions as predictors of the 21 leadership scales as criteria were performed. According to Smith et al. (1996) a scale facilitates interpretation of an MDS dimension when the multiple correlation exceeds the 0.01 significance level, the \underline{R}^2 -value preferably exceeds .70 and regression weights are distinctive. Distinctiveness means that only one of the identified MDS dimensions is strongly associated with a leadership prototypicality scale ($\beta > .70$ is used here as the cut-off criterion) and the other MDS dimensions are only weakly associated (i.e., $\beta < .40$).

The regression equations are described in Table 4. The first dimension was labelled "Interpersonal Directness and Proximity". It was shown to be most distinctively and negatively associated with "Face Saver" ($\beta = -.90$, $\underline{R}^2 = .89$, $p < .0001$), comprising leadership attributes such as indirect, evasive, avoids negatives and face saving; with "Self Centered" ($\beta = -.73$, $\underline{R}^2 = .81$, $p < .0001$), comprising the attributes, self interested, non-participative, loner, and asocial; and with "Administrative" ($\beta = -.79$, $\underline{R}^2 = .79$, $p < .001$), comprising orderly, organised and good administrator. Furthermore, the first dimension was most distinctively and positively related with "Inspirational" ($\beta = .82$, $\underline{R}^2 = .83$, $p < .0001$), comprising for example, enthusiastic, encouraging, confidence builder, morale booster, and motive arouser; and with "Integrity" ($\beta = .79$, $\underline{R}^2 = .79$, $p < .0001$), comprising for example, honest, sincere, just, and trustworthy. In our view, the label "Directness" (the opposite of face saving) describes the communality of the various themes in the leadership prototypicality scales in a more neutral way than the label "Face Saving". The latter label overemphasises the motive to protect others from losing face, which is only one of many other motives for interacting in an indirect way. The label "Interpersonal Proximity" captures the meaning

of the variables not directly addressed by the label "Interpersonal Directness", such as enthusiasm ("Inspirational"), informal ("Non-administrative"), or trustworthiness ("Integrity").

For the second and third dimension, interpretation is less difficult, since each one was distinctively associated with only one of the leadership scales. Dimension 2 is most strongly associated with "Modesty" ($\beta = .64$, $R^2 = .74$, $p < .0001$), comprising modest, self effacing and patient. Dimension 3 is distinctively associated with "Autonomy" ($\beta = .79$, $R^2 = .71$, $p < .0001$), comprising individualistic, independent, autonomous, and unique.

Table 4 about here

In Figure 2 the European country scores for the two MDS dimensions "Interpersonal Directness and Proximity" and "Autonomy" are plotted.³ The major European regions, North/West versus South/East and even the more detailed subclusters (Anglo, Nordic, Germanic, Latin, Central and Near East) that were differentiated by cluster analysis are clearly distinguishable in Figure 2. The "Interpersonal Directness and Proximity" dimension mainly separated the South/East from the North/West European countries (the only exceptions are former East Germany and Portugal). In the Germanic, Anglo and Nordic countries, leadership attributes of interpersonal directness and proximity are perceived to be more prototypical of outstanding leadership than in South/East European countries. In respect of the "Autonomy" dimension, the Germanic cluster, Georgia and most prominently the Czech Republic showed leadership attributes of autonomy to be perceived as more prototypical of outstanding leadership than in the Anglo, Nordic, Central, Latin and Near East European countries.

Figure 2 about here

Relations Between Dimensions of Societal Culture and of Leadership Prototypicality

The three leadership dimensions identified in our study were correlated (Spearman rank correlations) with the two cultural dimensions for Europe reported in Smith, Dugan and Trompenaars (1996), which are labelled "Egalitarian Commitment" and "Loyal Involvement". In this way, the rank ordering of the countries on our leadership dimensions was compared with the rank ordering of the same countries in the Smith et al. (1996) study.

The correlation coefficients indicate substantial relationships, between the Smith et al. dimension "Egalitarian Commitment" and our dimension "Interpersonal Directness and Proximity" ($r_s = .78$, $p < .001$), and between the Smith et al. dimension "Loyal Involvement" and our dimension "Modesty" ($r_s = .56$, $p < .02$). The respective cross-over correlations were low in magnitude and non-significant ($r_s = .16$, $r_s = -.08$). This finding provides additional empirical support for the assumption that leadership prototypes correspond significantly with the more general cultural values held by managers and employees in contemporary Europe. However, the dimension "Autonomy" was not modelled by Smith et al. (1996) and it did not correlate with either of their dimensions ($r_s = .05$, $r_s = .00$). We think that "Autonomy", comprising leadership attributes such as individualistic, independent, autonomous, and unique, is an important additional dimension for differentiating leadership prototypes in contemporary Europe.

Compatibility of Across- and Within-Regional Dimensions

The purpose of conducting a within-region analysis was to answer the third research question: whether the three dimensions identified reflect macro-level differences which distinguish between major cultural regions (e.g., North/West vs. South/East), rather than micro-level differences within cultural regions. Through within-region analyses, dimensions are identified which differentiate between countries within the major cultural regions. The degree of overlap between the within-region dimensions and across-region dimensions tells us whether a simple core set of variables can

distinguish all countries across and within European cultural regions or whether a more differentiated approach is necessary.

Multidimensional Scaling Analysis within European Regions

North/West European Countries. For 10 North/West European countries (the Czech Republic was excluded as it was identified as an outlier, see footnote 2) MDS analysis was performed on the basis of the 21 leadership prototypicality scales. A two dimensional MDS solution fit the data best ($\underline{KS} = .08$, $\underline{R}^2 = .97$). The one dimensional solution did not result in an acceptable stress level ($\underline{KS} = .25$, $\underline{R}^2 = .82$), whilst the three dimensional solution did not add sufficient explained variance ($\Delta\underline{R}^2 < .02$). Therefore, the two dimensional MDS solution was used. Multiple regression analyses revealed the first dimension to be distinctively and positively associated with "Self Centered" ($\beta = .93$, $\underline{R}^2 = .86$, $p < .01$), comprising the leadership attributes, self interest, non-participative, loner and asocial, and "Conflict Inducer" ($\beta = .93$, $\underline{R}^2 = .86$, $p < .01$), comprising secretive, normative, and intra-group competitor; and negatively with "Team Collaborative" ($\beta = -.80$, $\underline{R}^2 = .87$, $p < .01$), comprising loyal, collaborative, group-oriented, fraternal, consultative, and mediator; and with "Team integrator" ($\beta = -.86$, $R^2 = .83$, $p < .01$), comprising clear, subdued, informed, communicative, coordinator and team builder. Therefore, this dimension is labelled "Self vs. Group Orientation". The second dimension was distinctively and positively associated with "Humane Orientation" ($\beta = .93$, $\underline{R}^2 = .88$, $p < .01$), and thus, was labelled accordingly.

The dimensional plot for the North/West European countries is shown in Figure 3. The clustering of countries is in line with Ronen and Shenkar's clustering of these countries. It is evident that managers from Nordic European countries perceived "Self Centered" and "Conflict Inducer" to be less prototypical of outstanding leadership than managers from Germanic countries, whilst managers from Nordic European countries perceived "Team Collaborative" and "Team Integration" to be more prototypical for outstanding leadership than managers from Germanic countries. The two Anglo European countries, Ireland and England, held a central position on that dimension. There

was considerable variance within the Germanic and Nordic clusters. Most pronounced is the expression of self centeredness and conflict inducement as more prototypical for outstanding leadership by managers from former East Germany as compared to West Germany. Team integration and collaboration were most strongly valued by managers in Finland. With regard to the "Humane Orientation" dimension, there is high variance within the Germanic and Nordic subclusters and considerable overlap between the regional subclusters of North/West Europe. Humane orientation was perceived to be less prototypical for outstanding leadership by managers from Germanic countries (with the exception of Austria), from Denmark and Finland than by managers from Anglo European countries, Sweden and the Netherlands.

In summary, it seems that the within-region dimensions found to distinguish between countries and cultural subclusters within the North/West European region are somewhat different in content than the across-region dimensions found for overall Europe.

Figure 3 about here

South/East European countries. For 8 South/East European countries (Georgia and Russia were excluded because they were identified as extreme outliers, see footnote 2) the MDS analysis resulted in a two dimensional MDS solution ($\underline{KS} = .06$, $\underline{R}^2 = .98$). The one dimensional solution did not result in an acceptable stress level ($\underline{KS} = .27$, $\underline{R}^2 = .74$). And, the three dimensional solution did not add sufficient explained variance ($\Delta\underline{R}^2 < .01$). Multiple regression results revealed the first dimension to be distinctively and positively associated with "Face Saving" ($\beta = .94$, $\underline{R}^2 = .98$, $p < .0001$) and with "Autonomy" ($\beta = .79$, $\underline{R}^2 = .93$, $p < .001$), and negatively with "Performance Orientation" ($\beta = -.85$, $\underline{R}^2 = .82$, $p < .05$). This dimension was labelled "Indirectness and Autonomy". The second dimension was not sufficiently strongly associated with any of the leadership prototypicality scales. "Self Sacrificial" leadership attributes (e.g., risk taker, convincing,

self sacrificial) came close to the distinctiveness criteria ($\beta = .60$, $R^2 = .70$, $p < .05$). Thus, dimension 2 was designated as "Self Sacrificial".

The two dimensional MDS solution resulted in a distinct clustering of South/East European countries as is shown in Figure 4. The clear distinction between Near East and Latin European countries is in line with Ronen and Shenkar's clustering, and the Central European countries were also separately positioned from the other two clusters. It is possible to surmise that in the Central and Near East European countries leadership attributes of indirectness and autonomy - at the cost of performance orientation - are perceived to be more prototypical of outstanding leadership than in the Latin European countries. Furthermore, managers from the Near East and most of the Latin European countries perceived self sacrificial leadership attributes to be more prototypical of outstanding leadership than managers in Central European countries (Poland and Slovenia).

In summary, it seems that the within-region dimensions in South/East Europe are somewhat different in content than the across-region dimensions found for overall Europe.

Figure 4 about here

Overlap Between Across-Region and Within-Region Dimensions

In order to estimate the overlap between across-region and within-region dimensions identified in the present study, Spearman rank correlations between the two classes of dimensions were computed. Table 5 shows high correlations between the first and second dimensions of the across- and the within-regions analyses. The third across-region dimension correlated moderately to highly with each of the first dimension in both sub-samples. On the one hand, the high degree of overlap suggests the use of a simple core set of across-region dimensions, as they differentiate between countries across and within the two major cultural regions in Europe. On the other hand, a more detailed within-region analysis revealed some inconsistencies which need to be addressed. It was shown that across- and within-region dimensions differ somewhat in meaning. For example, the meaning of the across-region dimension, "Interpersonal Directness and Proximity", turns into a somewhat different dimension within the North/West European country cluster. The respective within-region dimension was labelled "Self vs. Group Orientation". Leadership attributes of "Self Centeredness" and "Conflict Inducer" take the lead in explaining most of the country differences reflected by this dimension. Simultaneously, the group orientation theme comes into play, represented by the scales "Team Collaboration" and "Team Integration", which were negatively related to this dimension. In contrast, when looking at the South/East European region, leadership attributes of "Face Saving" and "Autonomy" take the lead in explaining dimension one ("Indirectness and Autonomy"), and leadership attributes of group orientation do not differentiate between these countries. In summary, the more detailed approach of within-region analysis helps to identify more precisely how leadership prototypes differ between countries in a particular cultural region.

Table 5 about here

Discussion

Concerning our first research question the results of this study support the assumption that in Europe leadership concepts vary by culture. Specifically, the five clusters of European countries which, according to previous cross-cultural research, differ in cultural values (Anglo, Nordic, Germanic, Latin and Near East European countries), were upheld and shown to differ in leadership prototypes. One additional cluster of countries emerged (Central Europe) represented by Poland and Slovenia that share common leadership concepts that differ from the five other European clusters. Compatibility of leadership concepts from countries within the same cultural clusters and regions is more probable than from countries that belong to different cultural clusters and regions.

Regarding our second and third research questions of identifying leadership prototypicality dimensions that differentiate European countries and regions, we would like to underline the following results. Two of the three across-region leadership prototypicality dimensions found were strongly associated with the cultural dimensions reported in a different study of contemporary Europe. Thus, further support is given to the hypothesis that leadership prototypes are culturally endorsed in Europe. Substantial overlap was established between the across-region dimensions and the within-region dimensions for North/West and South/East European countries. The high degree of overlap suggests the use of a simple core set of across-region dimensions, which are "Interpersonal Directness and Proximity", "Autonomy", and "Modesty".

On theoretical grounds we argued that the influential increment of cross-cultural leadership is linked to the degree of cultural differences in leadership concepts (Gerstner & Day, 1994; House et al., 1997; House et al., 1999; Lord & Maher, 1991; Shaw, 1990): To move beyond a formal role in influencing others, one must first be perceived as a leader (an effective or a trustworthy leader etc.). It is unlikely that someone not perceived as a leader can exercise the requisite influence on others which is necessary to perform effectively. In respect of culturally endorsed leadership concepts, it is expected that the less they overlap in cross-cultural leader-follower relationships the less likely it is

that the leader will be accepted and that the interpersonal relationships will be characterised by trust, motivation and high performance.

Practical Implications

The ordering of countries on the identified leadership prototypicality dimensions is a useful tool with which to model relative differences between leadership concepts of different cultural origin. It may also be a useful mechanism to anticipate potential problems in cross-cultural interactions. In more practical terms, an understanding of culturally endorsed differences in leadership concepts appears to be a first step which can be taken by managers to adjust their leadership behaviour to that required in a host country. Knowledge about particular cultural variations in leadership prototypes can help expatriate managers to anticipate potential problems in cross-cultural interactions within business more accurately. For an example, in our study it was shown that leadership attributes of "Interpersonal Directness and Proximity" are more strongly associated with outstanding leadership in Nordic countries (most prominently in Finland) than in Near East (e.g., Turkey) and Central European countries (e.g., Poland) and Russia and Georgia. Furthermore, leadership attributes of "Autonomy" are more strongly associated with outstanding leadership in Germanic countries (e.g., Austria) and the Czech Republic than in Latin European countries (e.g., Portugal).

The particular dimensions of leadership attributes which were shown to characterise different cultural regions and countries in Europe can be also used as a starting point for cross-cultural training. For instance, leadership prototypicality attributes (e.g., Autonomy) that most strongly differentiate two target countries (e.g., Czech Republic vs. Portugal) will be useful in developing a range of situations likely to generate cross-cultural misunderstanding in leader-follower relationships. Furthermore, the amount of prior training, coaching and actual experience in the host country necessary to ensure effective cross-cultural leadership will depend obviously on the magnitude of differences between the cultures. The cultural proximity of two countries will

determine the type of materials and training methods necessary for cross-cultural management preparations. Finally, one may also consider to select expatriate managers on the basis of how strongly their leadership concepts overlap with the leadership concepts predominantly held in the target host country. These recommendations are meant as an addition to, not as a substitute for, other cross-cultural training content, for example, developing mutual respect for differences in conducting collaborative work in meetings (cf. Smith, 1997).

The rapid development of the European Community and the economic integration of the member states produces a strong need for managers who can understand and adapt to cultural differences in work related values and leadership. The findings of this study are of particular value to European cross-cultural management for two reasons. Firstly, our results are based on data gathered some five years after major geopolitical changes within Europe, most notably the fall of the iron curtain and German reunification in 1990. Moreover, our results are significantly associated with results from other comprehensive cross-cultural data sets gathered between the early sixties and the late eighties. Therefore, it seems that the co-variation of cultural values and leadership prototypes found among European countries and regions is fairly stable over time. Secondly, as Smith (1997) points out, "Euromanagers" who want to be able to bridge cultural gaps in Europe must consider the full range of cultural variability within contemporary Europe. Since our findings are elicited from a wider range of countries from North, West and South Europe as well as from Central, East and Near East European countries than have hitherto been investigated, this study provides unique input.

Limitations and Future Directions

Our research is limited to perceived aspects of leadership. Behavioural differences in leadership across cultures, as studied by Jago et al. (1996) and Dorfman, Howell, Hibino, Lee, Tate and Bautista (1997), should also be incorporated into cross-cultural theories of leadership. We assume that there is a link between leadership perception and behaviour that influences cross-

cultural leadership. However, no direct empirical evidence has yet been presented to support this assertion. In our study it was shown that there are culturally endorsed differences in the way people perceive and think about "outstanding leadership" in Europe. These differences should have an impact on the behaviour shown in leader-follower relationships, and thus influence the effectiveness of cross-cultural management (Shaw, 1990). Our results extend the generalizability of the cultural endorsement hypothesis put forward by Gerstner and Day (1994) to countries that are from one geopolitical region - Europe. We hope it can stimulate future research to address issues of leadership perception and behaviour in cross-cultural management. The cultural regions found and the leadership prototypicality dimensions identified for Europe provide a useful basis on which to develop concrete hypotheses for such research endeavours.

Another potential limitation concerns the use of multidimensional scaling on the country level of analysis as a means of identifying leadership prototypicality dimensions. MDS-dimensions are "tools for analysis that may or may not clarify a situation" (Hofstede, 1993, cited in Gerstner & Day, 1994, S. 131). They are taxonomic constructs. As such they need to be validated by using other empirically grounded taxonomic constructs which address the same or similar contents. We find it encouraging that the dimensions found were meaningfully associated with the more general cultural dimensions reported by Smith et al. (1996). Furthermore, the within-region MDS-dimensions identified for the North/West and the South/East of Europe were shown to be conceptually somewhat different from the across-region MDS dimensions. Thus, when comparisons of countries which stem from the same or similar cultural regions need to be made, more differentiated approaches are necessary (for an example, see Szabo, Brodbeck, Weibler, Wunderer & Reber, 1999). Although there were differences within European cultural regions, we believe that a simple core set of dimensions can be used as a basis for establishing macro-level differentiation among all European countries studied.

Conclusion

This study extends previous cross-cultural research on culture and leadership in two ways.

First, it presents evidence that leadership concepts are culturally endorsed in Europe, a geographical region with diverse national cultures and increasingly conjoint political and economic characteristics. Second, it develops and validates a set of dimensions representing core differences in leadership prototypes between the European countries studied. For the cross-cultural practitioner these results can be helpful: a) by supplying a better empirical basis for the expatriates' accommodation of their own behaviour in the search for cross-cultural effectiveness, b) by informing the trainer's planning of curriculum and learning methods for those engaged in preparation for cross-cultural encounters, depending on the cultural distance between home and host cultures, and c) by providing insight for the consultant whose task it is to advise on structure, systems, and processes consonant with the cultural challenges.

Bridging the gap between different concepts and expectations about leadership, management and work in general, seems to be a task that successful "Euromanagers" can solve effectively (Ratiu, 1983, cited in Smith, 1997). Since European cultures are diverse and are unlikely to merge in the near future, we believe that the ability to build conceptual bridges between cultures will remain a key competence for cross-cultural leadership, not only in Europe, but also world-wide.

References

- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. Journal of Personality and Social Psychology, 71, 230-244.
- Brislin, R. W. (1986). The wording and translation of research instruments. In W. J. Lonner & J. W. Berry (Eds.), Field methods in cross-cultural research. Cross-cultural research and methodology series (Vol. 8., pp. 137-164). Beverly Hills, CA: Sage.
- Brodbeck, F. C., & Frese, M. (1998). Societal culture and leadership in Germany: At the interface between East and West. Working paper, University of Munich.
- Cantor, N., & Mischel, W. (1979). Prototypes in person perception. Advances in Experimental Social Psychology, 12, 4-52.
- Calori, R., & de Woot, P. (1992). A European management model: Beyond diversity. New York: Prentice Hall.
- Chinese Culture Connection (1987). Chinese values and the search for culture-free dimensions of culture. Journal of Cross-Cultural Psychology, 21, 5-47.
- Coxon, A. P. M. (1982). The user's guide to Multidimensional Scaling. London: Heinemann.
- Cronshaw, S. F., & Lord, R. G. (1987). Effects of categorization, attribution, and encoding processes on leadership perceptions. Journal of Applied Psychology, 72, 97-106.
- Den Hartog, D., House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A. and 170 co-authors (in press). Emics and etics of culturally-endorsed implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? Leadership Quarterly.
- Dorfman, P. W., Howell, I. P., Hibino, S., Lee, I. K., Tate, U., & Bautista, A. (1997). Leadership in Western and Asian countries: Commonalities and differences in effective leadership processes across cultures. Leadership Quarterly, 8, 233-274.
- Everitt, B. S. (1993). Cluster analysis. London: Heinemann.

- Gerstner, C. R., & Day, D. V. (1994). Cross-cultural comparison of leadership prototypes. Leadership Quarterly, 5, 121-134.
- Glick, W. H. (1985). Conceptualizing and measuring organizational and psychological climate: Pitfalls in multilevel research. Academy of Management Review, 10 (3), 601-616.
- Griffith, R. W., Hom, P. W., DeNisi, A. S., & Kirchner, W. K. (1985). A comparison of different methods of clustering countries on the basis of employee attitudes. Human Relations, 38, 813-840.
- Hanges, P. (1997). Results from the GLOBE project. Scale development and validation. Paper presented at the 2nd international GLOBE Symposium, Wharton School of Management, University of Pennsylvania, Philadelphia, PE.
- Hanges, P., House, R. J., Dickson, M. W., Dorfman, P. W. and 170 co-authors (1998). The development and validation of scales measuring societal culture and culturally-shared implicit theories of leadership. Working paper, University of Maryland.
- Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills, CA: Sage.
- Hollander, E. P., & Julian, J. W. (1969). Contemporary trends in the analysis of leadership perceptions. Psychological Bulletin, 71, 387-397.
- House, R. J., Hanges, P.J., Ruiz-Quintanilla, S. A., Dorfman, P. W., Javidan, M., Dickson, M., and 170 co-authors (1999). Cultural influences on leadership and organizations: Project GLOBE. In W. F. Mobley, M. J. Gessner, & V. Arnold (Eds.), Advances in Global Leadership, (Vol. 1, pp. 171-233). Stamford, CN: JAI Press.
- House, R. J., Wright, N. S., & Aditya, R. N. (1997). Cross-cultural research on organizational leadership: A critical analysis and a proposed theory. In P. C. Earley & M. Erez (Eds.), New perspectives in international Industrial Organisational Psychology (pp. 535-625). San Francisco: New Lexington.

- Kenney, R. A., Blasovich, J., & Shaver, P. R. (1994). Implicit leadership theories: Prototypes for new leaders. Basic and Applied Social Psychology, 15, 409-437.
- Kreft, I. & de Leeuw, J. (1998). Introducing multilevel modeling. Thousand Oaks, CA: Sage.
- Leung, K., & Bond, M. H. (1989). On the empirical identification of dimensions for cross-cultural comparisons. Journal of Cross-Cultural Psychology, 20, 133-151.
- Lord, R., & Maher, K. J. (1991). Leadership and information processing: Linking perceptions to performance. Boston: Unwin Hyman.
- Lord, R. G., Foti, R., & De Vader, C. (1984). A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. Organizational Behavior and Human Performance, 34, 343-378.
- Jago, A. G., Reber, G., Böhnisch, W., Maczynski, J., Zavrel, J., & Dudorik, J. (1993). Culture's consequences?: A seven nation study of participation. In D. F. Rogus & A. S. Ratuni (Eds.), Proceedings of the 24th annual meeting of the Decision Sciences Institute (pp. 451-454). Washington DC: Decision Science Institute.
- Phillips, J. S., & Lord, R. G. (1981). Causal attributions and perceptions of leadership. Organizational Behavior and Human Performance, 28, 143-163.
- O'Connell, M. S., Lord, R. G., & O'Connell, M.K. (1990). Differences in Japanese and American leadership prototypes: Implications for cross cultural training. Paper presented at the meeting of the Academy of Management, San Francisco, CA.
- Rosch, E. (1978). Principles in categorization. In E. Rosch & B. B. Lloyd (Eds.), Cognition and categorization (pp. 27-48). Hillsdale: Erlbaum.
- Ronen, S., & Shenkar, O. (1985). Clustering countries on attitudinal dimensions: A review and synthesis. Academy of Management Review, 10, 435-454.
- Shaw, J. B. (1990). A cognitive categorization model for the study of intercultural management. Academy of Management Review, 15, 626-645.

- Smith, P. B. (1997). Leadership in Europe: Euro-management or the footprint of history? European Journal of Work and Organizational Psychology, 6, 375-386.
- Smith, P. B., Dugan, S., & Trompenaars, F. (1996). National culture and the values of organizational employees. Journal of Cross-Cultural Psychology, 27, 231-264.
- Szabo, E., Brodbeck, F. C., Weibler, J., Wunderer, R., & Reber, G. (1999). Similarities and differences in leadership: A comparison between the Germanic countries. In M. Vartiainen (Ed.), Proceedings of the ninth European congress on work and organizational psychology (p. 255). Helsinki: The Finnish Institute of Occupational Health.
- Vroom, V. H., & Yetton, P. W. (1973). Leadership and decision making. Pittsburg: University of Pittsburg Press.
- Ward, J. (1963). Hierarchical grouping of optimize an objective function. Journal of the American Statistical Association, 58, 236-244.
- Zander, L. (1997). The licence to lead. An 18 country study of the relationship between employees' preferences regarding interpersonal leadership and national culture. Published doctoral Dissertation (ISBN 91-971730-88), Stockholm School of Economics, Sweden.

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This research is based on data from the Global Leadership and Organisational Effectiveness Program (GLOBE), a long term research effort of about 170 social scientists and management scholars from more than 60 countries with the goal to develop a theory about the impact of cultural variables on organisational and leadership values and practices, and their effectiveness. The GLOBE program and overall results are described in Den Hartog et al. (in press), House et al. (1997), House et al. (in press), Hanges et al. (1998).

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Footnotes

¹ The response pattern in France seems to be substantially different from all other European regions and countries. Only two leadership attribute scales are rated as highly prototypical of outstanding leadership as compared to a range of 7 to 10 scales found in the other clusters and countries (see Table 3). In Gerstner and Day's (1994) study, the leadership prototypicality ratings from French subjects were generally rather low as compared to the ratings from the other countries. Interestingly, further analysis based on the GLOBE data (from the financial sector only) showed that French middle managers do not differ from others when rating more general societal cultural items, however, when rating leadership attributes they report generally lower levels of prototypicality as compared to middle managers from other European countries. It seems that French middle managers display a content specific response bias favoring lower ratings for prototypical leadership attributes as compared to middle-managers from other European countries.

² France apparently was an extreme outlying case. Ex post tests for extreme cases supported this view. MDS solutions with an extreme outlier mainly reflect distances to that data point. Hence, the distances between the other cases are underestimated. Therefore, and in order to identify dimensions that represent all the European countries studied more adequately, France was excluded.

³ A three dimensional plot is usually less informative than a two dimensional plot. Therefore, one dimension was omitted. As compared to "Modesty", "Autonomy" relates somewhat more distinctively to the respective MDS dimension and its meaning is more different from the meaning of the first dimension. Therefore, "Autonomy" was used as the second dimension in Figure 2.

Table 1

Measurement of Leadership Perceptions via Leadership Prototypicality Ratings

Leadership attributes and their definition were rated as to how strongly they impede or facilitate unusually effective leadership on a seven point scale:

- 1 = Substantially impedes
- 2 = Moderately impedes
- 3 = Slightly impedes
- 4 = Neither impedes nor facilitates
- 5 = Slightly facilitates
- 6 = Moderately facilitates
- 7 = Substantially facilitates

Sample Attributes:

Term:	Definition:
Motivator:	Mobilises, activates followers.
Evasive:	Refrains from making negative comments to maintain good relationships and save face.
Bossy:	Tells subordinates what to do in a commanding way.
Diplomatic:	Skilled at interpersonal relations, tactful.

Table 2

Leadership Prototypicality Scales

Scales	GC ^a	Questionnaire Items (Terms)
1. Visionary	.85	Visionary, foresight, anticipatory, prepared, intellectually stimulating, future oriented, plans ahead, inspirational.
2. Inspirational	.84	Enthusiastic, positive, encouraging, morale booster, motive arouser, confidence builder, dynamic, motivational.
3. Self Sacrificial	.63	Risk taker, self sacrificial, convincing.
4. Integrity	.84	Honest, sincere, just, trustworthy.
5. Decisive	.53	Wilful, decisive, logical, intuitive.
6. Performance Oriented	.63	Improvement, excellence and performance oriented.
7. Team Collaborative	.76	Group oriented, collaborative, loyal, consultative, mediator, fraternal.
8. Team Integrator	.65	Clear, integrator, subdued, informed, communicative, coordinator, team builder.
9. Diplomatic	.29	Diplomatic, worldly, win/win problem solver, effective bargainer.
10. Malevolent	.93	Irritable, vindictive, egoistic, non-cooperative, cynical, hostile, dishonest, non-dependable, intelligent.
11. Administrative	.84	Orderly, administratively skilled, organised, good administrator.
12. Self Centered	.92	Self interested, non-participative, loner, asocial.
13. Status Consciousness	.83	Status conscious, class conscious.
14. Conflict Inducer	.79	Intra-group competitor, secretive, normative.
15. Face Saver	.87	Indirect, avoids negatives, evasive.
16. Procedural	.88	Ritualistic, formal, habitual, cautious, procedural.
17. Autocratic	.92	Autocratic, dictatorial, bossy, elitist, ruler, domineering.
18. Participative	.87	Non-individual, egalitarian, non-micro manager, delegator.
19. Humane Orientation	.83	Generous, compassionate.
20. Modesty	.66	Modest, self effacing, patient.
21. Autonomous	.77	Individualistic, independent, autonomous, unique.

^a Generalizability Coefficient. It gives an estimate of scale consistency and societal level consensus and was calculated for each scale using data from the main GLOBE-study, that is 15,322 middle managers from 61 different countries representing a total of 779 local (non-multinational) organizations.

Table 3

Prototypicality Rankings of Leadership Attributes by Region and Country Cluster

	North/West European region			
	Anglo (GB, IRL)	Nordic (SWE, NL, FIN, DEN)	Germanic (CH, GER/w, GER/e, AUS)	(CSR)
High positive (facilitates outstanding leadership)	Performance Inspirational Visionary Team Integrator Integrity Decisive Participative	Integrity Inspirational Visionary Team Integrator Performance Decisive Non-autocratic Participative	Integrity Inspirational Performance Non-autocratic Visionary Decisive Participative Administrative Team Integrator	Integrity Performance Administrative Inspirational Non-autocratic Visionary Participative Self Sacrificial Team Integrator Diplomatic
Low positive (slightly facilitates)	Non-autocratic Administrative Diplomatic Collaborative Modesty Self Sacrificial Humane Conflict Avoider	Collaborative Diplomatic Administrative Conflict Avoider Self Sacrificial Humane Modesty	Diplomatic Collaborative Self Sacrificial Modesty Humane Conflict Avoider Autonomous	Collaborative Decisive Modesty Autonomous Humane
Low negative (slightly impedes)	Autonomous Status Conscious Procedural	Autonomous Status Conscious Procedural	Status Conscious Procedural	Procedural Conflict Avoider Face Saver
High negative (impedes)	Face Saver Self Centered Malevolent	Face Saver Self Centered Malevolent	Face Saver Self Centered Malevolent	Status Conscious Self Centered Malevolent

Note. AUS= Austria, CH = Switzerland, CSR = Czech Republic, DEN = Denmark, FIN = Finland, FRA = France, GB = United Kingdom, GER/w = Germany, GER/e = former East Germany, GEO = Georgia,

Table 3

(continued)

	South/East European region				
	Latin (ITA, SPA)	Central	Near East		
(FRA)	POR, HUN)	(POL, SLO)	(TUR, GRE)	(RUS)	(GEO)
Participative	Team Integrator	Team Integrator	Team Integrator	Visionary	Administrative
Non-autocratic	Performance	Visionary	Decisive	Administrative	Decisive
	Inspirational	Administrative	Visionary	Performance	Performance
	Integrity	Diplomatic	Integrity	Inspirational	Visionary
	Visionary	Decisive	Inspirational	Decisive	Integrity
	Decisive	Integrity	Administrative	Integrity	Team Integrator
	Administrative	Performance	Diplomatic	Team Integrator	Humane
	Diplomatic	Inspirational	Collaborative		Diplomatic
	Collaborative		Performance		Collaborative
					Modesty
Inspirational	Non-autocratic	Collaborative	Participative	Participative	Inspirational
Integrity	Participative	Participative	Non-autocratic	Collaborative	Non-autocratic
Team Integrator	Self Sacrificial	Non-autocratic	Self Sacrificial	Diplomatic	Self Sacrificial
Performance	Modesty	Modesty	Modesty	Status Conscious	Status Conscious
Visionary	Humane	Self Sacrificial	Humane	Self Sacrificial	Autonomous
Decisive	Status Conscious	Status Conscious	Status Conscious	Modesty	Participative
Diplomatic	Conflict Avoider	Autonomous	Conflict Avoider	Conflict Avoider	Procedural
Collaborative		Humane		Autonomous	
Conflict Avoider		Procedural			
Administrative					
Modesty					
Self Sacrificial	Procedural	Conflict Avoider	Autonomous	Humane	Conflict Avoider
Status Conscious	Autonomous	Face Saver	Procedural	Non-autocratic	Face Saver
Autonomous			Face Saver	Procedural	Self Centered
Humane				Face Saver	
Procedural					
Face Saver	Face Saver	Self Centered	Self Centered	Self Centered	Malevolent
Malevolent	Self Centered	Malevolent	Malevolent	Malevolent	
Self Centered	Malevolent				

GRE = Greece, HUN = Hungary, ITA = Italy, IRL = Ireland, NL = Netherlands, POL = Poland, POR = Portugal, RUS = Russia, SLO = Slovenia, SPA = Spain, SWE = Sweden, TUR = Turkey.

Table 4

Multiple Regressions of MDS Dimensions on Leadership Prototypicality Scales Across $N = 21$ European Countries

Leadership Scales	Standardized Betas (β)			Multiple R^2
	Dimension 1	Dimension 2	Dimension 3	
	Interp. Directness and Proximity	Modesty	Autonomy	
Visionary	.44	.31	-.53	.59**
Inspirational	.82	.31	-.22	.83****
Self Sacrificial	-.03	.49	.62	.62***
Integrity	.79	.40	.17	.79****
Decisive				.28
Performance Orientation				.18
Team Collaborative	-.32	.66	-.31	.63****
Team Integrator	-.04	.50	-.67	.70****
Diplomacy	-.50	.56	-.14	.57**
Malevolent	-.68	-.29	-.40	.68****
Administrative	-.79	.04	.26	.71****
Self Centered	-.73	-.31	-.40	.81****
Status Conscious	-.70	.01	-.53	.73****
Conflict Inducer	-.71	-.14	.27	.61****
Face Saver	-.90	.16	.18	.89****
Procedural	-.77	.41	.12	.79****
Participative	.78	.08	.20	.64***
Autocratic	-.59	.43	-.44	.70****
Modesty	-.50	.64	.28	.74****
Humane Orientation	-.24	.69	.17	.57**
Autonomy	-.16	-.21	.79	.71****

Note. France was excluded in the regression analyses.

** $p < .01$, *** $p < .001$, **** $p < .0001$.

Table 5

Spearman Rank Correlations Between Across- and Within-Region MDS Dimensions

	<u>Across-region dimensions</u>		
	Dimension 1	Dimension 2	Dimension 3
	Interp. Directness and Proximity	Modesty	Autonomy
<hr/>			
North/West Europe (<u>N</u> = 10)			
Dimension 1			
Self (vs. Group) Orientation	-.84**	-.27	.88**
Dimension 2			
Humane Orientation	-.49	.84**	.24
South/East Europe (<u>N</u> = 8)			
Dimension 1			
Indirectness and Autonomy	-.74*	.31	.54
Dimension 2			
Self Sacrificial	.38	.71*	-.12

* $p < .05$. ** $p < .01$.

Figure Caption

Figure 1. Dendrogram of country clusters based on leadership prototypicality ratings. Countries participating in the present study are listed in the first column. Their cultural cluster membership according to Ronen and Shenkar (1985) is listed in the second column. In the third and fourth column, country clusters and major regions with similar leadership prototypes are described.

Figure 2. Country scores for two leadership prototypicality dimensions identified by across-region Multidimensional Scaling analysis in 21 European countries. AUS = Austria, CH = Switzerland, CSR = Czech Republic, DEN = Denmark, FIN = Finland, GB = United Kingdom, GERw = Germany, GERe = former East Germany, GEO = Georgia, GRE = Greece, HUN = Hungary, ITA = Italy, IRL = Ireland, NL = Netherlands, POL = Poland, POR = Portugal, RUS = Russia, SLO = Slovenia, SPA = Spain, SWE = Sweden, TUR = Turkey.

Figure 3. Country scores for two leadership prototypicality dimensions identified by within-region Multidimensional Scaling analysis of 10 North/West European countries. AUS = Austria, CH = Switzerland, DEN = Denmark, FIN = Finland, GB = United Kingdom, GERw = Germany, GERe = former East Germany, IRL = Ireland, NL = Netherlands, SWE = Sweden.

Figure 4. Country scores for two leadership prototypicality dimensions identified by within-region Multidimensional Scaling analysis of 8 South/East European countries. GRE = Greece, HUN = Hungary, ITA = Italy, POL = Poland, POR = Portugal, SLO = Slovenia, SPA = Spain, TUR = Turkey.