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Leadership and team cohesiveness across cultures

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Leadership and Team Cohesiveness across Cultures

Abstract

This study examines the relation between leadership and team cohesiveness in different societal cultures. We expect direct effects of societal culture on leadership and team cohesiveness, as well as a moderating effect of culture on the relationship between leadership and cohesiveness. Data were collected from 29,868 managers and 138,270 corresponding team members in 80 countries. Multilevel analysis was used to test hypotheses, relating societal individualism–collectivism (IC), with directive and supportive leadership, and with team cohesiveness. In individualistic societies managers use less directive and less supportive behavior, compared with collectivistic societies. Team cohesiveness is not directly related with IC. Directive leadership and supportive leadership are negatively and positively related with team cohesiveness respectively and these relations are stronger in individualistic societies. Implications for managerial education and practices are discussed.

Keywords: Leadership, Individualism-Collectivism, Team Cohesiveness

1. Introduction

The rise of team-based work structures is perhaps one of the most salient characteristics of contemporary work places and the shift from individualized work structures to teamwork has spread throughout the organization (NRC, 1999; West, 2004). This shift has implications for leadership, as modern management is primarily about managing groups, and leadership behavior should thus be evaluated in relation to team effectiveness (Burke, Stagl, Klein, Goodwin, Salas, & Halpin, 2006; Day, Gronn, & Salas, 2006). An important correlate of effective teamwork is cohesiveness of the group. Therefore, development of cohesiveness among team members is an important part of team management (Druskat & Wheeler, 2003). Exploration of a leader's effect on group cohesiveness is necessary to understand how the latter can be managed and maintained. House (1966) summarized this theme over forty years ago by stating that the productive capacity of the group depends on its degree of cohesiveness, and cohesiveness demands effective leadership.

Theoretical work and empirical studies in this field draw heavily on western ideas and data and it is assumed that these ideas are relevant for western and non-western cultures alike. However, the last decade has shown a rapid increase on international comparative studies to gain a better understanding of effective leadership in different contexts and cultures (Dickson, Den Hartog, & Mitchelson, 2003; Hofstede, 2001; House, Hanges, Javidan, Dorfman, & Gupta, 2004).

The goal of the present study is to contribute further to this growing body of knowledge by examining the relations between societal culture, leadership behavior, and team cohesiveness. More specifically, we explore the direct effects of culture on directive and supportive leadership behavior, and on team cohesiveness, as well as the

moderating influence of societal culture on the relation between leadership behavior and cohesiveness. We focus on “individualism / collectivism”, which is the cultural dimension that has received most attention and recognition in many domains and also is seen as highly relevant for organizational practices, leadership and team work (Hofstede, 2001; Gelfand, Bhawuk, Nishii, & Bechtold 2004; Gelfand, Erez, & Aycan, 2007). We use a large sample of managers and their direct reports from 80 countries, as this sample offers unique insights into managerial behavior as perceived by direct reports around the globe and the relation of these behaviors to cohesiveness of the work group.

We will begin by discussing the relevance of team cohesiveness and the relation with directive and supportive leadership, followed by an exploration of the possible direct and moderating effects of societal culture.

1.1. Team cohesiveness and leadership styles

Team or group cohesiveness is the degree to which members are attracted to a group and motivated to remain part of it (Schermerhorn, Hunt, & Osborn, 2002); it thereby refers to both “forces that attract members to the group,” as well as to “the incentives to remain within the group” (Man & Lam, 2003). Employees in cohesive groups value their membership and strive to maintain positive relationships with other group members (Schermerhorn et al., 2002). Team cohesiveness is strongly related with organizational citizenship at individual and team levels (Chen, Lam, Schaubroeck, & Naumann, 2002; Organ, Podsakoff, & MacKenzie, 2006; Paine & Organ, 2000; Podsakoff, MacKenzie, Paine, & Bachrach, 2000), reduction of destructive conflicts (Jehn & Mannix, 2001; Nibler & Harris, 2003), and improved

performance at the individual level (Chang & Bordia, 2001; Langfred, 1998), and at the team level (Mullen & Copper, 1994; Shields & Gardner, 1997; Dion, 2000), as well as with innovation in teams and organizations (Mumford & Hunter, 2005).

Leadership styles refer to how leaders express specific behaviors (House & Aditya, 1997). Many leadership models differentiate two main types of leadership behaviors: task oriented and relationship oriented behavior, also referred to as initiating structure and consideration (Judge, Piccolo, & Ilies, 2004), concern for production vs. concern for people (Blake & McCanse 1991), or as directive and supportive leadership (Northouse, 2004; Yukl, 2002). According to Marta, Leritz, and Mumford (2005) few scholars question the substantive meaningfulness of consideration and initiating structure as a basis for describing leadership behavior. These two leadership dimensions also have received considerable attention in team leadership (Burke et al., 2006) and cross-cultural leadership studies (Peterson & Hunt, 1997). Dorfman, Hanges, and Brodbeck (2004) conclude that the differentiation in task-oriented and relationship-oriented leadership is a relevant distinction for managerial research around the globe, not limited to the United States. We therefore believe that the concepts of directive and supportive behavior offer a good starting point in exploring the effects on group processes, and more specifically, team cohesiveness, across cultures. Before discussing the cultural influence, we begin by evaluating the relation between these two styles and team cohesiveness.

Directive leadership. This style is usually defined as task-oriented behavior, with a strong tendency to control discussions, dominate interactions and personally direct task completion (Cruz, Henningsen, & Smith, 1999). In addition, time management, pressure to realize targets and close supervision on details are seen as characteristic of this style (Schmidt & Yeh, 1992). Initiating structure and directive

behavior can contribute to productivity both at the individual and team level, depending on several contingencies (Burke et al., 2006) and the skills of the leader (Mumford & Hunter, 2005). In this study, we define *directive leadership* as task-oriented behavior, with a strong focus on targets, close supervision and control of subordinate actions. Directive leader behavior puts employees in a dependent role, facilitating them to wait for the manager before acting, showing less initiative and fewer extra-role activities. In terms of process execution, a directive leader specifies how subordinates should accomplish their tasks and supervises them closely on all stages of the actual execution as well as the end results. Non-directive leaders hold subordinates responsible for the end results as well, however, they leave the subordinates free to execute their assignments in the way they choose to do it (Muczyk & Reimann, 1987).

Directive behavior, particularly autocratic behavior, includes close supervision of team actions and a dominating position of a leader in team discussions and decision making (Burke et al., 2006). The subordinates apparently are less united around common goals during task completion, have weaker self-perception of themselves as a group, and weaker mutually positive group members attitudes (Tjosvold & Tjosvold, 1991). In line with this, several studies report a negative relation between directive leadership and open communication, as well as with group organizational citizenship (Cruz et al., 1999; Paine & Organ, 2000). Most studies see reduced team cohesion and satisfaction as a function of directive leadership (Antonuccio, Davis, Lewinsohn, & Breckenridge, 1987; Mael & Alderks, 1993). Others, for example, Muczyk and Reimann (1987), argue that directive behavior is required when employees and teams are less mature in terms of their motivation and performance, when the team is not cohesive and not productive. In these cases,

directive leadership is inevitable and might contribute to the development of employees (Hersey & Blanchard, 1993). This is also documented in starting teams, who often benefit from a directive leader. However, when the team leader continues this behavior, the team develops a strong dependency of the leader (Wheelan, 2005). Team development is not the focus of this paper but we can conclude that all previously mentioned theoretical notions observe a negative relation between directive leadership and team cohesiveness.

Supportive leadership is a leadership style that is directed toward the satisfaction of subordinates' needs and preferences, such as displaying concern for subordinates' welfare and creating a friendly and psychologically supportive work environment (House, 1996). It includes sensitivity to team member needs, expressed in a focus on harmonic working relations, sensitivity to individual and group needs, care for group tensions, and positive feedback, thus creating a friendly climate in the work unit.

Showing support and care for employees as a leader facilitates a caring and open group climate and cohesive relations among team members (Chen et al., 2002; Hurst, Stein, Korchin, & Soskin, 1978; Wester & Weiss, 1991). Through facilitating discussions, stimulating subordinates to participate in the decision-making process, and caring for conflict resolution, a leader contributes into maintaining the favorable climate within a group and positive attitudes between its members (Tjosvold & Tjosvold, 1991). Under such conditions we expect that employees will reveal more cohesive behavior in task completion and interpersonal communication. Therefore, supportive leadership is expected to facilitate team cohesiveness.

Summarizing these studies, a negative relation between directive leadership and team cohesiveness and a positive relation between supportive leadership and cohesiveness is suggested.

H1: *Directive leadership* is negatively related to team cohesiveness.

H2: *Supportive leadership* is positively related to team cohesiveness.

1.2. Culture and Leadership

Research on leadership in a cross-cultural context is expanding quickly worldwide, exploring and explaining differences in managerial behavior between countries and cultures. Different authors emphasize the strong connection between cultural values and concepts of (e.g., good and effective) leadership (House et al., 2004; Scandura, Von Glinow, & Lowe, 1999). House et al. (1997) conclude that the appropriateness, acceptance, and effectiveness of leadership behavior is primarily a function of congruence with the norms of the culture in which the leader functions. At the same time, knowledge of culture specific and universal cultural syndromes is useful in understanding the very nature of a culture (House & Aditya, 1997). As Hofstede (2001, p.388) argues, “ideas about leadership reflect the dominant culture of a country. Asking people to describe the qualities of a good leader is in fact another way of asking them to describe their culture”.

One of the most well-known and cited theories in cross-cultural research is Hofstede's (2001) model with five (originally four) cultural dimensions; individualism-collectivism (IC), power distance, uncertainty avoidance, masculinity, and long-term orientation. The model and its dimensions have been used in a large variety of studies, including different organizational behaviors and practices (e.g., Dickson et al., 2003; Hofstede, 2001; Smith, Peterson, Schwartz, Ahmad, Akande,

Andersen, et al., 2002). Different cultural dimensions might be related to the appreciation and prevalence of leadership behaviors and group processes (House et al., 2004).

In this paper, we focus on IC. IC is the most documented and recognized of the cultural dimensions and has been studied widely in organizational research (Dickson, Den Hartog, & Mitchelson, 2003; Gelfand, Erez, & Aycan, 2007). It is defined by Hofstede (2001) as the degree to which people in a country prefer to act as individuals rather than as a group. Different definitions, operationalizations and measurements of IC exist; underscoring the relevance and importance of this cultural dimension (Gelfand, Bhawuk, Nishii, & Bechtold, 2004; Oyserman, Coon, & Kemmelmeier, 2002). Oyserman et al. (2002, p 5) see a general pattern in the different definitions, as: "all conceptualize individualism as a worldview that centralizes the personal goals, personal uniqueness, and personal control, and peripheralizes the social. In collectivist cultures, individuals define their needs more in terms of relations within groups and sacrifice personal needs for the sake of the group". Matsumoto (2000) emphasizes that individualistic cultures support values of the autonomous and unique self, as well as the importance of personal needs, goals, and development. This clearly has implications also for team processes (Gelfand et al., 2007).

In terms of leadership behaviors, according to Hofstede (2001) managers in collectivistic societies aspire for conformity and orderliness, and provide less support for employee initiative, compared with managers in individualistic societies. Respect and obedience to leaders are important in many collectivistic societies (Scandura et al., 1999). This clearly reflects both the deployment and acceptance of directive leadership in these societies.

In Western, individualistic societies, a directive style is less advocated as appropriate leader behavior. In the last 25 years, leadership theories in Western, individualistic societies, have emphasized participative leadership, delegation of responsibilities, and charismatic and transformational leadership (Dickson et al., 2003; Hofstede, 2001; Judge et al., 2004). In a recent study, Van de Vliert and Smith (2004) found indeed that leaders in individualistic societies rely more on subordinates for information and use them as targets of delegation, than leaders in collectivistic societies. Furthermore, in individualistic cultures directive leadership will be less demonstrated by managers as this behavior contradicts the values shared in such societies. In collectivistic societies directive behavior towards a group is expected to be more frequent and also better accepted by employees due to the collectivistic values of compromising one's own desires and needs for the sake of the group (Hofstede, 2001).

Supportive leadership behavior also seems to be appreciated more in collectivist cultures, compared with individualistic cultures. As mentioned before, in collectivist cultures, there is a strong emphasis on group relations, reduction of group tensions, and care for personal well being of employees. Collectivists maintain longer-term relations with their organizations and value interpersonal skills and relations more than individualists, who are more motivated by self-interests and personal goals (Jung & Avolio, 1999). It is likely, that in collectivist cultures supportive leadership is more common indeed, as this is a core value of the cultural orientation. We therefore expect *directive and supportive leadership* to be more present in collectivistic cultures.

H3: Cultural individualism is negatively related to *directive leadership*

H4: Cultural individualism is negatively related to *supportive leadership*.

1.3. Culture and team cohesiveness

Team cohesiveness is related to a wide variety of factors at different levels. For example, at the individual level, cohesiveness is related to the personalities of team members (Van Vianen & De Dreu, 2001) and, at the team level, it is related to goal clarity, task structure, and coordination mechanisms (Braaten, 1991; Terborg, Castore, & DeNinno, 1976; West, 2004), whereas at the organizational level it is related to structure and climate (Cummings & Worley, 2001). Among these, societal culture might also contribute to cohesiveness, either directly or mediated by the above-mentioned aspects of organizations.

Given the central place of group values, IC seems particularly relevant to relate to team cohesiveness. A number of studies have shown that collectivists tend to have a stronger attachment to their organizations and tend to subordinate their individual goals to group goals, compared with employees in individualistic cultures (Jung & Avolio, 1999; Triandis, 1995).

The relevance of IC at the team member level is demonstrated in several studies. Eby and Dobbins (1997) report that a team collectivistic orientation is related to cooperative team behaviors. This corresponds with conclusions by Oetzel (1998), comparing Japanese and European Americans in culturally homogeneous and heterogeneous groups. Homogeneous Japanese groups, with a collectivist orientation, have fewer conflicts and use more cooperative behaviors, compared with groups with an individualistic orientation. Kirkman and Shapiro (2001a; 2001b) also found positive relations between collectivist orientation, cooperative team behaviors and

team productivity. They demonstrate this effect is mediated by resistance to team work, which is stronger among individualistic oriented employees. These orientations at the employee levels, might reflect the dominant societal cultural orientations.

Gelfand et al. (2004, p 456) conclude, based on their literature review, that '*all in all, these findings illustrate that there is an emphasis on cooperative team processes in collectivistic cultures.*' Based on these theoretical and empirical arguments, we expect a negative relation between individualism at a national level and team cohesiveness in organizations within these countries.

H5: Cultural individualism is negatively related to team cohesiveness.

1.4. Culture, Leadership and Cohesiveness

We have argued that leadership behavior is important for team cohesiveness, and that leadership and cohesiveness might be influenced by societal culture. We now focus on the possible moderating effect of culture on the relation between leadership and cohesiveness. There are no studies known to us exploring this moderating influence of societal culture. Too easily, the assumptions about the relationships between leadership and team processes are generalized to other cultures, both in management literature and management training programs.

The moderating role of culture can work through different processes. First, some cultures might perceive and evaluate leadership and its effects as more important than other cultures. Second, the leadership might be perceived as more appropriate, and therefore motivating. The impact and role of leadership is, according to Dorfman (2004), over-attributed in the USA, and most likely is seen as less important in other societies. This might imply that in these societies the effect of leader behavior on team processes is also stronger; both in the case of a negative

appreciation (e.g., for directive leadership), as well as in the case of positive appreciation (e.g., for supportive behavior). When employees are strongly oriented towards leader behavior, the evaluation of a manager's behavior will influence employees' attitudes and behaviors more than employees who are not as focused on their leader. If a manager's behavior is evaluated negatively, this will have stronger detrimental effects on group behaviors in societies where the leader is seen as very important, and may increase resistance to team work further (Kirkman & Shariro, 2001a).

A second mechanism through which societal norms may moderate the relation between leadership and team cohesiveness, is through their effect on the degree to which a leader's behavior is perceived as rewarding. Directive leadership styles are not only more prevalent, but also seem to be perceived as more appropriate and effective in collectivistic cultures, compared with individualistic cultures (Dickson et al., 2003). We argue that in individualist countries employees focus more on personal needs and rewards and tend to look out for themselves. The natural tendency of employees in individualistic countries is less focused on harmonic (harmonious?) relations within the group (Matsumoto, 2000). Work groups with an individualistic orientation clearly show less cooperative behaviors (Kirkman & Shapiro, 2001a, 2001b; Oetzel, 1998). Directive leadership in such a context may inhibit group-oriented behaviors further, and promote self-oriented approaches. The feeling of being part of a great team and the desire to stay in such a team will be promoted less when team members are managed in a (not appreciated) directive way. Therefore, we expect that directive leadership does have a stronger negative impact on cohesiveness in more individualistic countries.

When employees are strongly oriented towards leader behavior, the evaluation of this behavior will influence employees' attitudes and behaviors more than employees who are not as focused on their leader. This holds also for the development of group norms, and group behaviors. In general one might expect that cultural norms in collectivistic societies, emphasizing team efforts, might moderate the influence of leadership behaviors. If the societal norm is more in favor of teamwork, one might expect that the specific leadership behaviors are relatively less important in facilitating team cohesiveness. Employees act according to the norm, even when the manager is not facilitating this behavior. We therefore expect that supportive leadership has a positive effect on cohesiveness, particularly in more individualistic cultures.

H6: The negative relation between directive leadership and team cohesion is moderated by culture; this relation will be stronger in individualistic societies, compared with collectivistic societies.

H7: The positive relation between supportive leadership and team cohesion is moderated by culture; this relation will be stronger in individualistic societies, compared with collectivistic societies.

Figure 1 summarizes the theoretical model and hypotheses.

Insert Figure 1 about here

2. METHOD

2.1. Population and Sample

This study used data from a database of a worldwide operating consultancy firm (Hay Group). The instruments were developed as assessment instruments by the consultancy company. The origins go back to the work of Litwin and Stringer (1968), Tagiuri and Litwin (1968) and were later updated. The instrument did not change during the data gathering period.

The dataset contains multi-assessment data of managers rated by their employees within 615 organizations from a wide range of industries and services, both public and private. In addition, managers rated their own behavior and processes in the team they supervise. Data was collected during the period 1996 – 2006, as part of a management training program within each of the organizations, and this guaranteed a response rate of approximately 100%; providing feedback was a precondition of participating in this program. Managers invited their subordinates to give anonymous feedback for development purposes only.

The final dataset included 80 countries. The number of managers in each country varies largely (see Table 2). In this study, we used multilevel analyses to control for these large differences in sample size at country level (Hox, 2002). Given the small number of participants in some countries, we will check if the results are the same if we exclude countries where we have less than 100 questionnaires. For the present study, we used the information from 29,868 self-assessment questionnaires by managers and 138,270 questionnaires of corresponding employees. This implies an average of almost five employees directly supervised by each manager in this study. 75% of these managers were male and 25% female. Average age of the participating

managers was 41.5 years. Only limited demographics, including characteristics about the organizations, were available. We do not have any demographic information about the employees.

2.2. Measurement

2.2.1. Team Cohesiveness.

Team cohesiveness was measured with nine items, covering all three components of team cohesiveness; interpersonal attraction, commitment to the task and group pride (Dion, 2000). Each item consists of a 6-point scale, ranging from A to F, with contrasting statements on the poles of the scale. The first item is shown with both alternatives: for example “The people are not proud to belong to my workgroup” (A) versus, “The people are proud to belong to my workgroup” (F). Cronbach’s alpha of the scale was .91, and the interrater agreement r_{wg} was .72. For the complete scale, please refer to the Appendix.

As mentioned before, the questionnaires were filled out by the manager him/herself and his/her subordinates. On average 4.6 subordinates supplied Cohesiveness scores (sd. 2.5). We checked if there were any differences in the scores from subordinates and managers, using a Confirmatory Factor Analysis (CFA) in a multi-group design (Group1 contained the subordinates data and Group 2 the managers) (Byrne, 2001; Jöreskog & Sörbom 2001). We did not find significant differences, and a model where we constrained all parameters to be equal across the 2 groups fitted well (RMSEA .044 CFI .970); we therefore aggregated the data on managers-level.

2.2.2. Directive and Supportive Leadership.

The two leadership styles were measured with the original scales of Litwin and Stringer (1968) that were adapted by HayGroup and documented later (Hay/McBer, 2000; Houldsworth & Jirasinghe 2006). Exploratory Factor analysis of these items resulted in two factors (see Table 1).

 Insert Table 1 about here

Directive leadership and supportive leadership were each measured with 7 items ($\alpha = .81$ and $\alpha = .87$, respectively). The items of both scales were measured using bi-polar (6-point) scales, with opposing responses similar in format to the scale used to measure team cohesion (see Table 1 for the items). The measurement of a manager's leadership style was calculated by aggregating the (minimal 3) subordinate scores. We omitted the scores from the managers themselves to avoid self-serving biases. The interrater agreement r_{wg} for directive leadership was .77, and for supportive leadership .68, both acceptable scores.

2.2.3. Individualistic- Collectivistic (IC) National Cultures.

Two types of operationalization of IC were used: Hofstede's (2001) and GLOBE (House et al, 2004). We used the original country means for all countries available. In addition Hofstede has estimated scores on IC for 12 countries, such as Malta and Bangladesh, in which he did not originally collect (IBM) data. Because the reliability of this method can be questioned, we also ran analyses without these estimates. These analyses showed comparable results. We further used the original country means of the GLOBE in-group collectivism measure. GLOBE offers

dimension scores for values and practices. In this study the practices are used, as these more closely reflect the theoretical approach of Hofstede (2001), aiming to describe actual differences.

2.3. Data Analyses

To test our hypotheses, multilevel analysis is most appropriate, given the different levels (team level and country level) in this study (Bliese & Jex, 1999). At the team level (level 1), leadership styles (aggregated scores from the employees) and Team Cohesion (aggregated scores from manager and his/her employees) were measured. At the country level (level 2), Hofstede's individualism (IC) and GLOBE's scores were used. Hierarchical Linear Modelling was performed using MLwiN 2.02 (Rasbash, Steelen, Browne, & Prosser, 2005). The independent variables were standardized to be able to handle the cross-level interaction (Miles & Shevlin, 2001), using the grand mean centering method (Raudenbush & Bryk, 2002).

Language issues are always a major concern in cross-cultural studies (Van de Vijver & Tanzer 1997). Accordingly, the items were all translated from English into the languages of the participating countries by native speakers, using the so-called application mode of translation (Van de Vijver & Tanzer, 1997). With this method, it is implicitly assumed that the underlying construct is appropriate for each cultural group and that a simple, straightforward translation will suffice to derive an instrument that measures the same construct in the target group. The translators (consultants) were trained in the concepts and were familiar with the societies' culture, therefore their translations represent the concepts adequately.

2.3.1. Measurement Equivalence

In cross national studies, measurement equivalence is both important and difficult to achieve. There are different techniques to check for measurement equivalence (Peterson, Smith, et al., 1995; Scandura, Williams, & Hamilton, 2001; Van de Vijver & Leung, 1997). For this study, a structure analysis was conducted to prove that the instruments have a stable structure across cultures. This procedure is recommended by several authors (Peterson, et al., 1995; Reise, Widaman, & Pugh, 1993; Scandura et al., 2001). The leadership-instrument was designed in the USA., and therefore we contrasted the American data with the other countries one by one using AMOS 7 (Arbuckle, 2006). We performed a multi-group CFA where we contrasted the USA-sample with each country (if we had enough cases to perform this analysis; our threshold was 100 cases). This resulted in 30 separate analyses. The goal of this test is to check if the same factor model holds for both populations, by constraining the item-parameters and item-variance to be equal across the two groups (called the "measurement Intercepts" model in AMOS 7.0) (Byrne, 2001, Arbuckle 2006) If a model, where the structure was constrained to be equal, could meet the threshold, we found evidence for equivalence, indicating that the construct has the same meaning in both countries (Browne & Cudeck, 1993). For the leadership model the average RMSEA was .053, CFI .913 and TLI .909 which is acceptable. Arbuckle (2006) states that an RMSEA lower than .08 is acceptable, and Browne and Cudeck (1993) use as a rule of thumb an RMSEA lower than .1. The weakest RMSEA was in a multi-group analysis with USA and Brazil: .069 (CFI .850 TLI .843).

The multi-group factor analysis for Cohesion also gave evidence that we can use and can compare results from this instrument across cultures. The average RMSEA was .042, CFI .978 and TLI .977. Comparing Mexico and the USA gave the lowest fit (RMSEA .057, CFI .959 and TLI .958), which is still strong enough to

accept the results. Overall, we conclude that all countries meet the criteria for measurement equivalence. Brazil has the weakest score in this respect, however it is still acceptable for the current research purposes, as we analyze cultural dimensions, and not individual countries. It is unnecessary to check for measurement invariance using item response theory techniques (Scandura et al., 2001) because the scales of our instruments are 6 point-scales, and in this case item response theory and structural equation modeling are equivalent (Glöckner-Rist & Hoijting, 2003).

As an extra check we computed the reliability coefficients for each country where we had more than 100 cases. The average reliability is already reported in table 1, but the lowest reliability coefficient for Directive leadership was .683 and Supportive .823 (both Venezuela), for cohesion it was .881 (Spain), hence we were confident in using this instrument across the various countries in this database.

3. RESULTS

For each country in our sample the means for key variables are presented in Table 2.

 Insert Table 2 about here

Table 3 provides an overview of the statistics and correlations between key variables, leadership and cohesiveness, at individual level and IC at country-level.

 Insert Table 3 about here

3.1. Descriptive Results

A few interesting observations may be noticed from Table 3. First, the mean scores on managerial behavior show that, world-wide, supportive behavior is used more than directive behavior, and that these two styles correlate slightly negatively ($r = -.19$). Second, the countries in this study do represent both strongly individualistic countries as well as collectivistic countries. Third, cohesiveness is, as expected, positively related with supportive managerial behavior ($r = .44$), and negatively with directive leadership ($r = -.19$).

3.2. Test of hypotheses

To test our hypotheses, multilevel analysis is most appropriate, given the different levels (team level and country level) in this study (Bliese, 2000; Kozlowski & Klein, 2000). Analysis of variance for the leadership styles indicated that 15% of the variance of directive leadership can be explained at country-level. For supportive leadership the variance at the country level was 4%. For cohesiveness also 4% of the variance is at the country level ($p < .001$); that is, 4% of the variance is explained by the grouping structure in the population, and therefore, multilevel analysis is required.

3.2.1. Culture and leadership

At the managerial or team level (i.e., level 1), the supportive and directive leadership styles and cohesiveness were used. At the country level (i.e., level 2), the measures of Hofstede and Globe were used. To test the hypotheses, first we centered the level 2 variables (Hofmann & Gavin, 1998) and built interaction terms (see Aiken & West, 1991). The predicted two-way interaction effects were then tested in a series

of separate hierarchical regression analyses for each of the cultural dimensions with the supportive and directive leadership styles. That is, in each hierarchical regression with the interaction terms, the leadership styles, the specific cultural dimension and the interactions of the leadership styles with this specific cultural dimension were entered. We performed separate multilevel analyses for Hofstede's IC and Globe's In-group collectivism. The results of the separate analyses are presented in Tables 4a and 4b.

3.2.2. Leadership and cohesiveness.

We expected a negative relationship between directive leadership and team cohesiveness (TC) (H1), and a positive relationship for supportive leadership and TC (H2). Model 1 in Table 4a shows the end results of the analyses. Directive leadership has a negative relationship with TC ($\gamma = -.058$, $SE = .003$; $p < .001$), and supportive leadership has a positive relationship with TC ($\gamma = .226$, $SE = .003$; $p < .001$), offering support for both hypotheses.

- Insert Table 4a about here -

3.2.3. Culture and Leadership

Hypothesis 3 and 4 predicted a negative relation between individualism and the use of directive and supportive leadership. For both styles a multilevel analysis was conducted. Compared with the null-model, adding the cultural parameter Individualism improves the model significantly (Diff -2 Log Likelihood

58.660 1 dF, $p < .01$). As expected, directive leadership is used more in collectivist cultures $\gamma = -.202$ ($SE = .020$; $p < .001$). The Intraclass correlation is .15. Adding the cultural parameter individualism improves the model (Diff-2 Log Likelihood 9.790 1 dF, $p < .01$). As expected, supportive leadership is used (slightly) more in collectivist cultures ($\gamma = -.056$, $SE = .017$; $p < .01$). For supportive leadership the intraclass correlation coefficient is only .04.

We repeated these analyses with the Globe database and found similar results. Hypothesis 3 is confirmed; the $\gamma = .206$ ($SE = .026$; $p < .001$) for directive leadership, and for supportive leadership $\gamma = .047$ ($SE = .020$; $p < .001$); also a confirmation of hypothesis 4.

3.2.4. Culture and cohesiveness.

Hypothesis 5 predicted a positive relationship between collectivism and team cohesiveness. Neither at simple correlational level (Table 3), nor the multilevel analysis using Hofstede (Table 4a model 2) or Globe (Table 4b model 2) was this relationship found. Therefore, there is no support for H5.

3.2.5. Culture, leadership and Team Cohesion.

Our final hypotheses predicted a moderating effect of culture on the relationship between leadership behavior and team cohesion. We expected that in individualistic cultures the effects of directive leadership on team cohesion are more negative, than in collectivistic cultures, whereas the effect of supportive leadership is not moderated by culture. Results are presented in model 3, Table 4a. We entered both interactions simultaneously, and the model improved significantly; the difference 2* Loglikelihood (31.840, 2 degrees of freedom). This was mainly due to the interaction

of the directive style with culture; the interaction of culture with the supportive style was significant, but very small ($\gamma = .009$, $SE = .004$).

Results offer support for both hypotheses six and seven. The plot of the moderating effect of IC, presented in figure 2, shows that in individualistic countries particularly the directive style has a stronger (negative) impact on team cohesion compared to collectivistic countries.

 - Insert Figure 2 about here -

3.2.6. Additional analyses

We replicated the analyses using a smaller database, with Globe's cultural dimension In-group collectivism. In this database we had 28,769 cases in 62 countries. The results are similar. Hypothesis 5 is rejected ($\gamma = -.012$, $SE = .015$), all others are confirmed. The cross-level interaction tested in hypothesis 7 is also in this model significant, however, again, small¹.

 - Insert Table 4b about here -

An analysis which included only countries where we had more than 100 cases (28,205 cases and 31 countries), gave the same results as the full dataset. Also

¹ Please note that the original cultural dimensions of IC (Hofstede) and Ingroup Collectivism (GLOBE) have opposite directions, therefore we find opposite values for the gamma parameters in Table 4a and 4b.

introducing gender or level within the organization as a control variable did not change the results.

3.2.7. Additional controls.

We also have to reject hypotheses 6 and 7 if leadership mediates the relation of culture and cohesion. We therefore performed a multilevel SEM analysis, where we included the mediating and moderating effect of leadership. We performed this test with the latest version of Mplus 4 (Muthen L.K. & Muthen B.O (2007), which could handle indirect effects in a multilevel setting. The analysis confirmed that the direct effect of collectivism on Team Cohesiveness was not significant, and the indirect effect (Collectivism via Directive leadership on Cohesion) was marginal. These results are in line with our previous findings.

4. DISCUSSION

This study explores the relations between managerial behavior and team cohesiveness in different cultures. The observations of almost 140.000 employees from 615 companies give a clear impression of managerial behavior worldwide. Globally, leaders use supportive leadership considerably more than directive leadership. Although our data showed that there were cultural differences, the similarities in behavior should be highlighted as there are many stereotypes of managerial differences around the world. These impressions might be true in the eyes of visitors, however according to managers and employees, managerial behavior shows remarkable similarities with respect to supportive and directive leadership.

Nonetheless, culture does have an impact on leadership behavior. Dorfman et al. (1997) present a theoretical model with both a direct effect of culture on leadership behaviors and a moderating effect of culture on the effects of leadership behaviors. Our study demonstrates the validity of this model. Moreover, this study specifies the moderating effect, as this was found stronger for directive leadership behavior than for supportive leadership.

The present findings offer interesting insights and support the idea that indeed in collectivistic cultures, compared with individualistic cultures, leaders do behave more directive and more supportive at the same time. This reflects a typical paternalistic way of managing, in which the leader takes care of his employees, and in return demands obedience, which can be seen as representative for many collectivistic cultures (Chen & Van Velsor, 1996; Dickson et al., 2003).

It was no surprise that the effects of directive behavior on team cohesiveness were more negative in individualistic cultures. Only a small moderating effect was found for culture on the positive relation between supportive leadership and cohesiveness. This suggests that supportive leadership is important, regardless of the cultural context. These results are in line with findings from the GLOBE project (Den Hartog, House, & Hanges, 1999; House et al., 2004), in which inspirational and team-oriented attributes are seen worldwide as important for effective leaders, while domineering, formal and willful characteristics vary widely in their relevance across cultures. Our results are also in line with and largely extend the findings by Dorfman et al. (1997) from their five-country study. They conclude that "three behaviors (leader supportiveness, contingent reward, and being charismatic) showed universally positive effects in all five cultures; and three leader behaviors (participativeness, directiveness, and contingent punishment) had positive effects in only two cultures

(p.262) ”. The present study offers further support for the idea that some leadership behaviors are mainly universal in their effects, while the effects of other styles are moderated by culture. Furthermore, it is important to realize that the negative effects of directive behavior found in this study are only related to cohesiveness. Most likely, directive behavior contributes in positive ways to individual and team performance, such as by increasing/motivating/enhancing productivity.

A surprising outcome is that the national culture does not have an effect on cohesiveness, as experienced by managers and team members. Though we expected to find more cohesive relations in collectivist cultures, we did not. A possible explanation for this finding may be related to the identity of the group. Initially, the work group in collectivist cultures may be perceived by its members as a weak social identity, for example given the group composition of people with different societal background and status, education, and age. In this group, traditional values of sacrificing for the sake of a group are less applicable compared to other types of referent groups. Thus high cohesiveness is not inherent to the group in the collectivist societies until necessary conditions for its development are satisfied. In turn, in individualistic cultures group cohesiveness might be high, due to the comparatively high importance of work for the individuals as the job can satisfy a wide set of needs, including affiliation, acknowledgment, etc. In such cases employees in Western societies might develop positive attitudes towards teamwork and self management, and move toward a collectivist orientation (Kirkman & Shapiro, 2001a, 2001b). In any case, results showed that high or low team cohesiveness of work groups should not be considered as an inherent part of a national culture, thus its development demands additional attention of management. Given previous reported findings,

development of group cohesiveness in different cultures deserves attention in future research.

One of the strengths but also one of the limitations of this study is the sample. Due to the fact that the participating organizations and respondents are clients of the consultancy that collected the data, they tend to have either an international or Western orientation. This might cause a response bias, in the sense that these companies might under-represent the actual national culture of which they are a part. Even with this sample, however, we find main effects of culture on leaders' behavior, as well as on the relation between directive behavior and team cohesiveness.

A second limitation is that this study lacks individual IC data to distinguish between horizontal and vertical individualism and collectivism (Schwartz, 1999; Triandis, 2001, Triandis, 1995). As vertical individualism is associated with competition and stress, we could expect a positive relation with the directive leadership style. Managers scoring higher on the horizontal individualism dimension (associated with loneliness, freedom to pursue one's interests) will show the supportive style less often. We did not have these individual IC data in our database, and to our knowledge these data are also not available at the country level.

Another limitation of this sample is the lack of employees' demographic data, which makes it impossible to control for important variables such as gender, age, and education. There is an under representation of Eastern European and African countries in this sample, as has been the case in most cross-cultural databases (Den Hartog et al., 1999; Hofstede, 2001).

Finally, we used a limited set of measures at group and individual levels. Particularly performance measures would have enhanced the richness of the data. Further studies need to investigate these to avoid a biased message concerning the

effects of directive behavior. In addition to this, further studies might focus on the skills related to the effective use of directive and supportive behaviors in different cultures (Mumford & Hunter, 2005). Though many questions still are open, this study highlights the importance of supportive leadership behavior. This showed to be a universal, highly valued way of leading people, regardless of the cultural environment. In this respect, people around the globe do have the same values and needs.

4.1. Practical implications

The results of this study might be useful for managerial training programs focused on team development and leadership. Leadership behaviors have a considerable effect on team cohesion and these effects are universal. Leaders should learn how to support employees and meet their needs as well as the needs of the team. This is more easily said than done. The good news from our study is that managers worldwide do use supportive behavior relatively more than directive behavior, and thereby foster team cohesion. Directive behavior usually is a necessary part of managerial actions. However, managers should be aware of its effects on teams. Particularly, when managers limit their behavioral repertoire to only this style, team cohesiveness may be negatively affected.

More specific, the results of this study are relevant for management education to help students gain a better understanding of cultural differences in management behavior and in the effects of behavior on team processes.

Finally, managers in individualistic countries use less directive and (marginally) less supportive behavior, compared with collectivist countries. This raises questions such as, what do Western managers do more of, if anything? This

discussion might be relevant also for Western management practices, as both directive and supportive behaviors should be considered as core activities of managers and they are not easily replaced by other behavior. Employees in complex and dynamic organizations often complain about a lack of leadership, or even the actual presence of managers, given all kinds of external and extra-curricular activities. This might be reflected by the outcomes of this study, in that less supportive and directive behaviors were observed in Western organizations.

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Appendix. Team cohesion instrument used in this study ($\alpha = .91$)

- There is a friendly atmosphere among people
- People in my work group trust each other
- People are warm and friendly
- People treat each other with respect
- People work well together as a team
- People cooperate with each other
- People are willing to share resources
- People almost always speak well of it
- People are proud to belong to the group

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Table 1.

Results of exploratory factor analysis of leadership items.

	Factor 1	Factor 2
<i>Directive leadership</i> ($\alpha = .81$)		
– Expects his/her employees to follow my instructions precisely	-0.23	0.68
– Motivates employees by letting them know what will happen to them if their work is unsatisfactory.	-0.03	0.57
– Requires employees to submit detailed reports of their activities	0.11	0.70
– Makes most decisions for employees	-0.25	0.67
– Supervises employees very closely	0.13	0.75
– Supervisor have to lay out goals and guidelines, otherwise subordinates will be passive and get nothing accomplished.	-0.09	0.68
– Expects to carry out instructions immediately	-0.13	0.69
<i>Supportive leadership</i> ($\alpha = .87$)		
– Works hard to ease tensions whenever they arise in work group	0.71	0.03
– Encourages employees to talk to him/her about personal problems	0.71	-0.11
– Devotes a great deal of time to employees' job security and fringe benefits.	0.69	0.08
– Works to develop close personal relationships with employees	0.77	-0.07
– Relies on what he/she learns through personal contact with employees to use each person's talent most effectively.	0.78	-0.05
– Frequently demonstrates concern for employees	0.81	-0.16
– Believes subordinates' feelings are as important as the task at hand.	0.74	-0.23
Eigenvalue	4.08	3.34
% Variance explained	29.11	23.86

Table 2
Sample size and mean scores on the main variables per country

	N Managers	N Team members	Directive Leadership	Supportive Leadership	Team Cohesion	Indiv. Hofstede	In-Group Globe
Argentina	169	701	3.19	4.29	4.78	46	5.51
Australia	1,502	6,928	2.88	4.11	4.75	90	4.14
Austria	64	327	3.00	4.00	4.85	55	4.89
Bahrain	1	2	2.36	5.50	4.85	38	5.07
Bangladesh	9	30	3.25	4.39	5.02	20	
Belgium	194	923	2.99	3.97	4.66	75	
Brazil	2,337	9,613	3.53	4.20	4.76	38	5.16
Canada	379	1,785	2.83	4.08	4.82	80	4.22
Chile	495	1,928	3.35	4.29	4.76	23	
China	649	3,108	3.28	4.01	4.65	15	5.86
Columbia	97	456	3.29	4.20	4.75	13	5.59
Costa Rica	9	59	3.24	4.40	4.75	15	5.32
Croatia	11	40	3.65	3.87	4.79	33	
Czech Republic	98	381	2.98	3.96	4.86	58	
Denmark	68	290	2.92	3.74	4.71	74	3.63
Ecuador	12	57	3.35	4.02	4.89	8	5.81
Egypt	91	301	3.54	4.25	4.74	38	5.07
El Salvador	23	90	3.61	4.17	4.84	19	5.35
Ethiopia	7	37	3.60	4.22	4.56	27	5.34
Finland	27	135	2.85	3.83	4.47	63	4.23
France	846	4,347	3.14	3.85	4.52	71	4.66
Germany	667	3,358	2.83	3.92	4.75	67	4.16
Ghana	18	86	3.30	4.15	4.50	20	5.34
Greece	56	251	3.12	4.22	4.82	35	5.28
Guatemala	40	181	3.59	4.16	4.77	6	5.63
Hong Kong	71	317	3.18	3.84	4.43	25	5.33
Hungary	24	107	3.22	4.20	4.71	80	5.31
India	520	2,595	3.34	4.09	4.64	48	5.81
Indonesia	189	715	3.56	3.84	4.56	14	5.50
Iran	32	144	3.13	4.22	4.78	41	6.03
Ireland	373	1,380	2.96	4.10	4.78	70	5.12
Israel	61	254	3.06	4.16	4.66	54	4.63
Italy	195	894	3.11	4.05	4.58	76	4.99
Jamaica	26	123	3.12	4.32	4.66	39	
Japan	292	1,359	3.08	3.97	4.49	46	4.72
Kenya	101	495	3.53	4.20	4.70	27	5.34
Kuwait	8	20	3.13	4.60	4.75	38	5.07
Lebanon	35	157	3.33	4.11	4.58	38	5.07
Libya	3	16	2.79	4.36	4.75	38	5.07
Malaysia	918	3,379	3.55	4.10	4.63	26	5.47
Malta	10	43	3.06	3.88	4.36	59	
Mexico	701	2,292	3.53	3.95	4.57	30	5.62
Netherlands	1,803	9,394	2.89	3.86	4.63	80	3.79
New Zealand	440	2,002	2.84	4.02	4.75	79	3.58
Nigeria	39	163	3.43	4.48	4.69	20	5.34
Norway	19	72	2.79	3.97	4.76	69	

Pakistan	59	260	3.20	4.05	4.53	14	
Panama	10	52	3.79	4.03	4.64	11	
Peru	39	171	3.54	4.02	4.74	16	
Philippines	60	246	3.38	4.10	4.73	32	6.14
Poland	70	321	2.95	3.85	4.82	60	5.55
Portugal	174	816	3.40	4.01	4.70	27	5.64
Qatar	19	65	3.09	4.37	4.73	38	5.07
Romania	21	124	3.32	4.02	4.81	30	
Russia	71	278	3.03	4.22	4.74	39	5.63
Saudi Arabia	45	186	3.55	4.02	4.56	38	5.07
Sierra Leone	5	17	3.51	4.77	4.75	20	5.34
Singapore	392	1,363	3.26	4.06	4.55	20	5.66
Slovakia	22	87	3.14	4.07	4.84	52	
South Africa	515	2,055	3.14	4.12	4.59	65	4.42
South Korea	137	619	3.62	4.19	4.37	18	5.71
Spain	127	603	3.13	4.01	4.61	51	5.53
Suriname	4	20	3.43	3.93	4.74	47	
Sweden	136	642	2.62	4.17	4.73	71	3.46
Switzerland	110	590	2.91	3.99	4.71	68	4.04
Taiwan	80	371	3.26	4.15	4.68	17	5.45
Tanzania	27	123	3.81	4.02	4.75	27	5.34
Thailand	150	655	3.37	4.36	4.63	20	5.72
Trinidad and Tobago	8	30	2.85	4.52	4.62	16	
Turkey	155	636	3.54	4.00	4.66	37	5.79
U.S.A.	9,034	45,859	2.92	4.12	4.82	91	4.22
United Arab Emirates	1	3	2.57	3.29	3.31	38	5.07
United Kingdom	3,998	18,273	2.78	4.08	4.72	89	4.08
Uruguay	28	115	3.29	4.34	5.00	36	
Venezuela	507	1,783	3.55	4.26	4.97	12	5.41
Vietnam	25	101	3.23	4.11	4.68	20	
Yugoslavia	21	87	3.10	4.62	5.13	27	
Zambia	19	91	3.05	4.36	4.78	27	5.34
Zimbabwe	63	268	3.05	4.08	4.61	27	5.34
Total	29,868	138,270					

Table 3

Descriptive statistics and pearson correlations

	Mean	SD	1	2	3	4
1. Directive	3.06	.65				
2. Supportive	4.08	.68	-.19			
3. Team Cohesion	4.73	.55	-.19	.44		
4. Individualism	68.1	27.3	-.37	-.03	.07	
(Hofstede)						
5. In-Group	4.55	.64	.36	.04	-.06	-.89
Collectivism (Globe)						

N = 29,868, in the Globe database N = 28,769

All correlations significant $p < .01$

Table 4a

Multilevel analysis of team cohesiveness as a function of cultural individualism, using Hofstede (2001) and directive and supportive leadership

	Model 1 Manager as context		Model 2 Culture as context		Model 3 Full model	
	γ coefficients	SE	γ coefficients	SE	γ coefficients	SE
<i>Manager effects (Level 1)</i>						
Directive	-.058 *	.003	-.058 *	.003	-.040 *	.006
Supportive	.226 *	.003	.226 *	.003	.209 *	.005
<i>Culture effect (Level 2)</i>						
Individualism (IC)			.011	.013	.000	.018
<i>Manager * Culture (cross-level)</i>						
Directive * IC					-.020 *	.004
Supportive * IC					.009 *	.004
-2*Loglikelihood	41,618.380		41,617.720		41,585.880	
Diff -2*Loglikelihood			.660 (1dF) ns.		31.840 * (2 dF)	

Note: N (Managers) = 29,868; N (Cultures) = 80.

* $p < .05$

Tabel 4b

Multilevel analysis of team cohesiveness as a function of In-group collectivism, using Globe (2004) and directive and supportive leadership

	Model 1 Manager as context		Model 2 Culture as context		Model 3 Full model	
	γ coefficients	SE	γ coefficients	SE	γ coefficients	SE
<i>Manager effects (Level 1)</i>						
Directive	-.059 *	.003	-.059 *	.003	-.046 *	.004
Supportive	.225 *	.003	.225 *	.003	.232 *	.004
<i>Culture effect (Level 2)</i>						
In-Group Collectivism			-.010	.015	-.012	.015
<i>Manager * Culture (cross-level)</i>						
Directive * In-Group C					.019 *	.004
Supportive * In-Group C					.011 *	.003
-2*Loglikelihood	40,044.310		40,043.860		40,009.680	
Diff -2*Loglikelihood			.450 (1dF) ns.		34.180 * (2 dF)	

Note: N (Managers) = 28,769; N (Cultures) = 62.

* $p < .05$

Fig. 1. Theoretical model and hypotheses.

Fig. 2. Team cohesion as a function of directive leadership in collectivistic and individualistic cultures.

Gender ratio, societal culture and male and female leadership

Does size matter?

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Gender ratio, societal culture and male and female leadership

Does size matter?

Abstract

Top management teams are worldwide largely composed of men, with female top managers being a minority. Gender ratio in top management, being the percentage of female and male managers in the team, is indicative for the position of women in management within the organization, as well as related to leadership styles of male and female managers. In the present study, the relative importance of national culture, organizational, and individual characteristics in explaining leadership styles and the associations of gender and gender ratio with leadership styles are studied. Hypotheses are tested with multilevel analyses using a data set with information from 12,546 managers in 437 organizations in 32 countries. The results show that using a three-level model (i.e., national culture, organizational, and individual level) to explain leadership styles, differences in leadership styles are predominantly explained by individual differences, followed by organizational, and societal differences. Further, after controlling for cultural influences, a higher gender ratio (relatively more female managers), was positively associated with consideration, and negatively related to initiating structure. Moreover, for male managers, there was a negative association between gender ratio and initiating structure, indicating that male managers in organizations with more female managers tend to engage less in initiating structure, whereas the leadership styles of female managers were not associated with the gender ratio.

Keywords: Leadership, Gender differences, Cultural differences

Gender ratio, societal culture and male and female leadership

Does size matter?

Top management teams are worldwide largely composed of men, with female top managers being a minority. Gender ratio in top management, being the percentage of female and male managers in the team, is seen as an important indicator of both, the percentage of women in management in the organization, as well as the styles in leadership behaviour in that organization of female and male managers (Kanter, 1977; Tharenou, Latimer, & Conroy, 1994). It is therefore not surprising that there has been a notable interest in the study of gender, gender ratio, cultural processes and their association with leadership styles. However, evidence of a strong association of gender, gender ratio, and cultural processes with leadership styles has not yet been conclusively established, although some studies indeed support this relationship (Dobbins & Platz, 1986; Eagly & Johnson, 1990; Eagly & Johannesen-Schmidt, 2001; Konrad, Corrigan, Lieb, & Ritchie, 2000; Lewis & Fagenson-Eland, 1998).

In the present paper, we will use a three-level model to investigate the associations of societal, organizational, and individual characteristics with leadership styles. In the remainder of this section, we will elaborate on explaining leadership styles with the use of three levels (i.e., societal, organizational, and individual level). Specifically, we will focus on the following issues.

(1) Relative importance of societal culture, gender-ratio, and individual characteristics (with a focus on gender) in explaining leadership styles. (2) The association of gender and gender ratio with leadership styles. How does gender ratio at organizational level impact on the

leadership style of female and male managers? Does any impact of gender ratio interact with manager's gender after controlling for societal level cultural variables?

The relation of gender, and gender ratio with leadership behavior will be addressed in a data set using information from 12,546 managers in 437 organizations in 32 countries. Many writers acknowledge the need to use worldwide samples, since most previous research on leadership has been conducted in predominantly western countries. An enduring question remains regarding the extent to which these western research findings are generalizable to other cultures (Javidan & Dale, 2005). Given the state of knowledge, the variety of theoretical perspectives, the diversity of samples involved, and the range of research designs used, an interesting avenue for research lies in examining the relative importance of individual, organizational, and cultural level characteristics to explain leadership styles with a worldwide sample.

Leadership

Leadership refers to the abilities of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of organizations of which they are members (House, Hanges, Javidan, Dorfman, & Gupta, 2004). Although leadership styles can be conceptualized along various dimensions, much of their content can be captured using two constructs originating in the Ohio State approach to leadership (Stogdill, 1963, 1977).

Consideration refers to friendly and interpersonally supportive supervisory behaviour (Yammarino, Dionne, Uk Chun, & Dansereau, 2005). Consideration is described as a leadership style that leaders use to create a supportive environment of warmth, friendliness, and helpfulness,

for instance by being approachable, looking out for the welfare of the group, doing little things for subordinates, and giving advance notice of change (House, 1971; Judge, Piccolo, & Ilies, 2004). *Initiating Structure* refers to task-oriented and directive behaviour (Yammarino et al., 2005). This leadership style is shown in an emphasis on assigning tasks, specifying procedures to be followed, clarifying expectations of subordinates, and scheduling work to be done (House, 1971).

Consideration and initiating structure are considered relatively independent leadership styles, such that leaders can be placed on a continuum from low to high on each of the two dimensions (Yammarino et al., 2005). Typically, these two types of leadership behaviour are measured by the Leader Behaviour Description Questionnaire (LBDQ, Stogdill, 1963) or with an adaptation of these scales. For instance, Brown, Ganeson, and Challagalla (Brown, Ganesan, & Challagalla, 2001) measured supervisory consideration with six items and initiation of structure with five items (1974).

For the present study, consideration and initiating structure were chosen because both styles have been shown to have important main effects on numerous criteria that are considered to be fundamental indicators of effective leadership (Euwema, Wendt, & Van Emmerik, 2007; Judge et al., 2004; Wendt, Euwema, & Van Emmerik, 2008). Further, these types of leadership behaviours are particularly relevant to study gender issues because of the documented stereotypes which people hold concerning these styles (Eagly & Johnson, 1990): Men are believed to be more forceful, dominant, and motivated to master their environment and thus more inclined to use the initiating structure leadership style. In contrast, women are believed to be more concerned with others (e.g., more kind, helpful, understanding) and more inclined to use the consideration

leadership style. In fact, there is limited support for these stereotypes in actual managerial behavior. In their 1990 review, Eagly and Johson did not find confirmation for the stereotypical image of men being more task oriented, and females more relationship oriented. However, they did find, consistent with stereotypic expectations, that women tend to adopt a more democratic or participative style and a less autocratic or directive style than men. A review of the literature in 2000 by Van Engen and Willemsen confirmed these conclusions (Van Engen & Willemsen, 2001). In addition, Eagly, Johannesen-Schmidt, and Van Engen (2003) show that female managers, compared with male managers, use somewhat more transformative leadership, are more rewarding, whereas men are paying more attention towards mistakes by subordinates. Gardiner and Tiggemann (1999) observe that female managers are more oriented towards interpersonal leadership than man, however only in female dominated industries. Gibson (1995), in a cross cultural study in four countries, did in all four countries find that male managers emphasize goal setting, whereas females focus more on interaction facilitation. Gibson did not find interactions between gender and culture. This might be due to the limited sample of four countries in her study. Generally, it is noted that gender and context do interact in relation with expectations and actual behavior of female and male managers (Van Engen & Willemsen, 2001).

With regard to cultural background and resulting cultural processes, it is commonly found that they have a pervasive influence on leadership styles (Hofstede, 2001; House et al., 2004; Van de Vliert, 2006; Wendt et al., 2008). As such, a considerable amount of studies have shown that a societal culture helps to explain leadership styles (e.g., Brodbeck et al., 2000; Gerstner & Day, 1994 ; Hofstede, 2001; House et al., 2004; Shaw, 1990; Smith, Peterson, & Schwartz, 2002), though there also appear quite some commonalities in leader behaviour across cultures (Brodbeck

et al., 2000; Wendt, et al., 2008). Moreover, societal cultures have an impact on organizational cultures, which in turn impact leader behaviour (Hofstede, 2001; Hofstede & McCrae, 2004),

Although a large number of empirical studies have suggested associations of societal culture and organizational environment with leadership styles, most studies on leadership styles either have examined the relationship between societal culture and leadership styles (e.g., Brodbeck et al., 2000; Javidan & Dale, 2005; Parboteeah, Bronson, & Cullen, 2005) or, conversely, have focused on organizational characteristics and leadership styles. For instance, the relationships between organizational culture and leadership styles have received considerable attention within specific countries (e.g., Skogstad & Einarsen, 1999; Tsui, Zhang, Wang, Xin, & Wu, 2006). The GLOBE study (House et al., 2004) on leadership was in this respect groundbreaking, as this study systematically looks for differences in leadership due to culture, industry type, and organizational form (Brodbeck, Hanges, Dickson, Gupta, & Dorfman, 2004). This worldwide study demonstrates the effects of both societal and organizational culture on leadership styles. For example, participative leadership is strongly negatively related with power distance as a cultural value, both at the societal and organizational level. In addition, participative leadership is strongly positively related with gender egalitarianism at societal and organizational level (Brodbeck et al., 2004). Organisational characteristics are embedded in societal characteristics, and this might be particularly so for our focal point of interest; the gender ratio in management. Societal norms and practices reflect participation of women in management, as well as appropriate ways of managerial behavior (Gibson, 1995; Ridgeway, 2002). Therefore, it is essential to study the interaction of societal and organisational characteristics, if we want to achieve a better understanding of the complex relation between gender and leadership.

1 Relative importance of societal, organizational, and individual characteristics to explain leadership styles

There are many different definitions of culture but in essence, most of these definitions have in common that culture refers to patterns of beliefs and values that are manifested in practices, behaviours, and various artifacts shared by members of a nation or within an organization (Hofstede, 2001; House et al., 2004). Because organizations are embedded in the societal culture in which they exist, research on organizational level differences should examine both societal and organizational cultures. Two of the most well known models in the field, Hofstede (2001), and GLOBE (2004) use a set of dimensions to describe cultural differences, both at societal and organizational level.

Hofstede et al. concluded that when both the societal and organizational levels are examined, organizational level differences are based on other elements than those that make up societal differences. For example, among societal cultures, comparing otherwise similar people, they found differences in values notwithstanding similarities in practices within organizations. Conversely, among organizational cultures, they found considerable differences in practices for people who held similar values. It can be argued that differences can be explained by the different places of socialization for values and for practices. Values are acquired in our early youth, mainly in the family and in the neighbourhood, and later at school. Organizational practices are learned through socialization at the workplace. One of the conclusions of this study is that when

examining the role of societal culture and organizational factors, the former should be operationalized in terms of cultural values and the latter in terms of organizational practices.

Brodbeck et al. (2004) report main effects of societal culture and industry type on organizational cultures. In addition, they present interaction effects of society and industry type on organizational cultural practices. Furthermore, they report more and stronger relations between organizational culture and leadership, compared to societal culture and leadership styles. They do not present however overall explained variance at societal and organizational values levels. When comparing the relative importance of societal culture and organizational level characteristics, it can be argued that organizations may develop unique characteristics that can override the effects of the societal cultures within which they operate. For instance, Hatrup, Mueller, and Joens (2007) showed that multinational organizations often replicate existing routines and operating procedures in their foreign subsidiaries and by doing so, they provide for efficiency and control of the facilities located in foreign countries. Thus, we can predict that the relative importance of organizational characteristics on leadership will be more prominent than societal culture (House et al., 2004; Wendt et al., 2009).

Besides cultural and organizational associations with leadership styles, individual or background characteristics will also play a role in the explanation of leadership styles. For instance, in some cultures one might need to take strong decisive actions in order to be seen as a leader, whereas in other cultures a democratic approach may be a prerequisite (Den Hartog, House, Hanges, Ruiz-Quintanilla, & Dorfman, 1999). Differences in individual characteristics then may result in different leadership styles, such as the different use of superiority, power, and

close supervision (see for instance Hofstede, 2001; Inglehart, 1995; Triandis, 2006; Van de Vliert, 2006). We expect that the relative importance of individual characteristics will be greater than societal and organizational characteristics.

Hypothesis 1: Differences in leadership styles are predominantly explained by individual differences, followed by organizational and societal differences.

2 Gender, gender ratio and leadership styles

According to the gender perspective, differences in leadership styles of men and women originate in socialization processes, whereby individuals learn to conform to societal expectations about their gender role (see Carless, 1998; Fagenson, 1990). Similarly, social role theory (Eagly, 1989) proposes that individuals behave in accordance with societal expectations about their gender role. These expectations lead to gender differences in leadership styles. According to this gender perspective, the leadership styles of women include more consideration, whereas the leadership styles of men consist of more initiating structure (Carless, 1998; Eagly & Johnson, 1990).

Empirical results to support gender differences in leadership styles are mixed and few firm conclusions can be drawn (e.g., Burke & Collins, 2001; Dobbins & Platz, 1986; Eagly & Johnson, 1990; Omar & Davidson, 2001; Van Engen, Van der Leeden, & Willemsen, 2001; Wood & Eagly, 2002). There is a general agreement that women face more barriers to becoming leaders than men do, but there is less agreement about the differences or similarities in leadership styles (Eagly & Johannesen-Schmidt, 2001). Some studies have found gender differences in

leadership styles, whereas other research has pointed to their absence (see Lewis & Fagenson-Eland, 1998). The meta-analytic review by Dobbins and Platz (1986) indicated that male and female leaders engaged in equal amounts of initiating structure and consideration. The study of Konrad, Corrigan, Lieb, and Ritchie (2000) showed that women attached greater importance to prestige, and challenge. These job attributes seem more consistent with masculine than with feminine preferences. Further, the male managers in the study of Lewis and Fagenson-Eland (1998) described themselves as being higher in initiating structure behaviour than did female leaders. The inconclusive empirical results might be partly due to two contextual factors associated with leadership styles. We have already discussed the first factor, the importance of societal culture. A second condition is the gender-ratio in the organization.

Kanter (1977) showed in her seminal work negative consequences of women's underrepresentation, both for women, as well for the organizational leadership culture. She therefore advocated a stronger numerical representation of women in management. Ever since, the proportion of women in managerial positions has attracted attention as one of the structural properties that may affect leadership style. For instance, Berdahl and Anderson (2005) outline a dominant norms model that addresses how group composition based on other characteristics (e.g., ethnic or cultural) determines a variety of norms and structures that define groups. In the present study, we focus on its application to gender composition and leadership styles. What does gender ratio imply for the choice of leadership styles? Female managers can be expected to be more likely to adopt men's preferences in leadership style than vice versa, since women are more able and motivated to do so (Berdahl & Anderson, 2005). Since women more often operate in both

male-dominated environments, they are thought to better able to understand and operate in organizations where they belong to the minority.

The present study aims to assess whether working in an environment with different gender ratios is associated with different leadership styles after controlling for cultural influences. Based on Eagly and Johnson's (1990) meta-analysis, we hypothesize a direct association between gender ratio (relatively more female managers) and leadership styles beyond cultural influences and a moderating role of gender ratio on the relationship between gender and leadership styles.

Hypothesis 2: After controlling for cultural influences, gender ratio will be related to leadership behaviour; a higher gender ratio (relatively more women), is positively related with consideration, and negatively related with initiating structure.

- *Hypothesis 3: After controlling for cultural influences, gender ratio will moderate the relationship between gender and leadership styles.*
- *H3a: The lower the percentage of women in management, the more male managers will use male-associated leadership styles (more initiating structure, less consideration);*
- *H3b: The higher the percentage of women in management, the more female managers will use female-associated leadership styles (more consideration, less initiating structure).*

METHOD

Data and Sample.

This study used data from the database of a worldwide operating consulting firm (Hay Group). The original dataset contains multi-actor data of managers and their subordinates within 473 organizations for a wide range of industries and services, both public and private. Data collection was part of the assessment of management training programs within each of the organizations and this guaranteed a response rate of approximately 100%. For the present study, we selected only those countries with available scores on the cultural dimensions of Hofstede (2001) and all respondents with missing data were excluded. After this selection, in total there was information on the leadership styles of 12,546 managers (73% men and 27% women) in 437 organizations in 32 countries.

Measurement.

Leadership styles. The items to measure the two dependent variables (i.e., types of leadership behaviour) were adapted from the original scales of the Ohio State Leadership Studies (Stogdill, 1963). The five items to measure consideration were: (1) Frequently demonstrates concern for employees, (2) Relies on what he/she learns through personal contact with employees to use each person's talent most effectively, (3) Works hard to ease tensions whenever they arise in work group, (4) Encourages employees to talk to him/her about personal problems, and (5) Devotes a great deal of time to employees job security and fringe benefits. Alpha was .81. The items to measure initiating structure were: (1) Supervises employees very closely, (2) Expects his/her employees to follow instructions precisely, (3) Requires employees to submit detailed reports of their activities, (4) Expects to carry out instructions immediately, and (5) Makes most decisions for employees. Alpha was .79. The items of both scales used bi-polar (6-point) scales,

with two opposing responses on both ends. An average of five employees (i.e., direct subordinates of the manager) rated their manager's leadership style. We examined the justification for aggregating subordinates' responses to assess the leadership styles of their managers by comparing the proportion of variance in the leadership styles variables that is accounted for by the aggregate level (i.e., the managerial level). This is the ICC1 and is calculated as the ratio of the between-group variance to the total variance. In the present study ICC (1) for consideration was .33 ($p < .01$) and for initiating structure .26 ($p < .01$). A significant ICC (1) value is commonly interpreted as a justification for aggregation to the group level and a range of 0.00 to 0.50 for ICC(1) has been reported adequate (James, 1982, see Chen, Lam, Naumann, & Schaubroeck, 2005).

To assess the cultural influences of the societal level, we used the scores of Hofstede's cultural dimensions (Hofstede, 2001; Hofstede & McCrae, 2004).¹ Hofstede's study of societal culture differences used a database collected by a multinational corporation (IBM) in its subsidiaries in 71 countries, containing the scores on a series of employee attitude surveys with a

¹ We used the dimensions of Hofstede (Hofstede, 2001; Hofstede & McCrae, 2004), the GLOBE dimensions offer a good alternative (House et al., 2004). We would expect overall comparative results, as the dimensions of Hofstede and GLOBE overlap considerably, both conceptually and empirically. Leung, Bhagat et al. (Leung, Bhagat, Buchan, Erez, & Gibson, 2005) suggest that despite the use of different items in the GLOBE study, the cultural dimensions identified are related conceptually and correlated empirically with Hofstede's dimensions. For instance, assertiveness orientation and gender egalitarianism are related to Hofstede's masculinity dimension, institutional collectivism and family collectivism to individualism, power distance and uncertainty avoidance to the two Hofstede dimensions with the same labels, and future orientation to long-term orientation. The remaining two GLOBE dimensions are independent of the Hofstede dimensions. Consequently, although more refined, we expect to find roughly the same results when using the GLOBE dimensions as when using the Hofstede's dimensions.

total of around 117,000 questionnaires (Hofstede, 2001; Hofstede & McCrae, 2004). The following four dimensions were used. (1) Power Distance; the degree of equality, or inequality, between people in the country's society. For instance, low power distance indicates that a society stresses equality and opportunity for everyone. (2) Individualism; the degree a society reinforces individual or collective, achievement and interpersonal relationships. For instance, low individualism is typical for societies with a more collectivist nature with close ties between individuals. (3) Masculinity; the degree a society reinforces traditional masculine work role models of male achievement, control, and power. High masculinity is indicative for a high degree of gender differentiation. (4) Uncertainty avoidance; the level of tolerance for uncertainty and ambiguity within a society. High uncertainty avoidance creates a rule-oriented society that institutes laws, rules, regulations, and controls in order to reduce the amount of uncertainty.

At the organizational level, we measured two structural properties that are related to gender issues. First, gender ratio of the managers within the organization. Second, we used the number of hierarchical levels as an indicator for hierarchical structuring of the organization, since we can expect that gender ratio and hierarchical level are associated with each other.

At the individual level, we measured educational level, hierarchical level and gender of each manager. Gender was coded 0 for male and 1 for female managers.

Measurement Equivalence across Countries. In every cross-cultural study also the question as to whether test scores obtained in different populations can be interpreted in the same way across these populations has to be dealt with (Scandura & Dorfman, 2004; Van de Vijver & Tanzer, 2004). Construct bias may occur if the construct measured is not identical across the cultural clusters used in the present study. Accordingly, to examine invariance of parameters, we

tested different models following the suggestions of Byrne (2001).² First, as a preliminary step in testing for invariance across groups, we tested for the validity of two leadership style factors (i.e., consideration and initiating structure) across the clusters simultaneously. The fit of this model provided the baseline value against which a model with constraints was compared. Next, we tested a model where the parameters were specified as being invariant (i.e., equivalent) across the cultural clusters. This model specified that all ten factor loadings, all ten factor error variances, the covariance of the two factors, and the two error covariances of the factors to be constrained equal across cultural clusters.

The fit of the baseline model for the cultural clusters was considered adequate (e.g., RMSEA = .03, GFI = .94, CFI = .88) although a statistically significant chi-square value of 17,709.56 ($df = 340$) across the groups was found.³ The second model tested was the model with the constraints. A significant chi-square value was found 18,881.21 ($df = 421$) and ΔChi^2 was significant (Yin & Fan, 2003). Therefore, to evaluate the invariance hypothesis from a more practical perspective, the descriptive model fit indices associated with the models with different invariance constraints were inspected. It is expected that invariance will be reflected in the descriptive model fit indices, because constraints on parameter estimates lead to poorer model fit. It turned out that the descriptive fit did not change much (RMSEA = .03, GFI = .94, and CFI =

² Since 32 countries is a very large number to compare, we used the ten cultural clusters of the GLOBE study (House et al., 2004).

³ Several authors suggest that the χ^2 test is not a good indicator of model fit when the sample size is as large as is the case in the present study because small and unimportant departures from the null hypothesis are almost certain to be detected (Byrne, 2001; Yin & Fan, 2003). Therefore, the results of χ^2 test were not considered critical in evaluating model fit for this study.

.87). In general, a GFI value close to 1.00 is being indicative of good fit. A value of the RMSEA of about 0.05 indicates a close fit of the model and a value of $> .90$ for the CFI is representative of a good fit (Byrne, 2001). Thus, the results of the fit indices indicated that the invariance constraints on pattern coefficients did not cause any appreciable worsening in model fit. This supports the conclusion that the factor pattern coefficients are reasonably invariant across the cultural clusters (see Yin & Fan, 2003).

RESULTS

Table 1 presents means, standard deviations, and correlation coefficients for all measures included in the study. Table 2 presents a summary of the research variables by country.

Insert Table 1 and 2 about here

Consideration and initiating structure are negatively correlated ($r = -.19, p < .01$). In addition, both types of leadership styles are positively correlated with gender. That is, both consideration and initiating structure are more prevalent among female ($r = .14, p < .01$) than among male managers ($r = .05, p < .01$). Further, it is worth noticing that the percentage of female managers is significantly related to all four cultural dimensions. The percentage of female managers is higher in more individualistic ($r = .21, p < .01$) and more masculine cultures ($r = .18, p < .01$). The percentage of female managers is lower in cultures scoring high on uncertainty avoidance ($r = -.20, p < .01$) and scoring high on power distance ($r = -.15, p < .01$). Further, the

associations between the variables are low to moderate, although most of them are significant, which is not surprising with the large sample size.

Testing the Relative Importance of Different Levels in Explaining Leadership Styles with Multi-level Partitioning of Variance

Hypothesis 1 predicted that differences in leadership styles are predominantly explained by individual differences, followed by organizational and societal differences. To test this hypothesis, the distribution of variance of both leadership styles in the empty multi-level models was examined. The empty multi-level model allows us to partition the total variability in leadership styles into three distinct components representing the variability in the level-1, level-2, and level-3 units (Raudenbush, Bryk, & Congdon, 2007). Table 3 shows that the distribution of variance for consideration is for 93% at the individual level, 5% at the organizational level, and for 2% at the society level. The distribution of variance of initiating structure is 79% at the individual level, 11% at the organizational level, and 10% at the society level. Thus, hypothesis 1 is supported.

Insert Table 3 about here

Testing Direct Effects and the Moderating Role of Gender Ratio with Three-level Mixed-Effects Regression Analyses

To test hypothesis 2 and 3, we performed two three-level mixed-effects regression analyses with the subordinates-reported leadership styles of the managers as the dependent variables. In this type of multilevel analyses, intercepts and regression slopes may vary randomly across societies. The variables were entered in three steps. The results of these analyses are reported in Table 4. After the estimation of the empty model (see Model 1 and 4), in Step 2 the main effects were entered (see Model 2 and Model 5). In Step 3, the cross-level interactions were added (see Model 3 and Model 6).

 Insert Table 4 about here

Hypothesis 2 predicted that after controlling for cultural influences, gender ratio will be associated with leadership behaviour; a higher gender ratio (relatively more female managers) will be positively associated with consideration, and negatively related to initiating structure. Model 2 in Table 4 shows that gender ratio (relatively more female managers) is indeed positively associated with consideration ($\gamma = .18, p < .01$) and negatively associated with initiating structure ($\gamma = -.22, p < .01$). Therefore, hypothesis 2 is supported.

Hypothesis 3 predicted that beyond the influence of culture, gender ratio will moderate the relationship between gender and leadership styles: (a) The lower the percentage of women in management, the more male managers will use male-associated leadership styles (more initiating

structure, less consideration), and (b) the higher the percentage of women in management, the more female managers will use female-associated leadership styles (more consideration, less initiating structure. Separate mixed-effects regression analyses for initiating structure for male and female managers shows that for female managers there is no significant relationship between gender ratio and initiating structure. For male managers, there is a negative association between gender ratio and initiating structure ($\gamma = -.19, p < .01$). Thus, entering the interaction term in the analysis shows that the gender ratio effect only holds for the male managers and not for the female managers: Male managers in organizations with more female managers tend to engage in less initiating structure. There is no relation found between gender ratio and consideration by either male or female managers. Therefore, Hypothesis 3 is confirmed for initiating structure but not for consideration: when the gender ratio is higher, male managers indeed engage less in initiating structure.

DISCUSSION

The results of this study show that using a three-level model to explain leadership styles, differences in leadership styles are predominantly explained by individual differences, followed by organizational, and societal differences. The distribution of variance of initiating structure is 79% at the individual level, 11% at the organizational level, and 10% at the society level. The distribution of variance of consideration is 93% at the individual level, 5% at the organizational level, and 2% at the societal level. Further, after controlling for cultural influences, a higher gender ratio (relatively more female managers), was positively associated with consideration, and

negatively related to initiating structure. Moreover, for male managers, there was a negative association between gender ratio and initiating structure, indicating that male managers in organizations with more female managers tend to engage less in initiating structure, whereas the leadership styles of female managers were not associated with the existing gender ratio in an organization.

This study on worldwide leadership has several unique features. First, the large dataset in which subordinates evaluate the actual leader styles of female and male managers in 32 countries offers new information on these styles across cultures. Second, the three-level analyses offer a more comprehensive understanding of the associations of gender with leadership.

As the results of this study show, forcing companies to increase the proportion of female managers does have impact on male leadership styles (i.e., less initiating structure by male managers) but not on female leadership styles. Thus, controlling for societal cultural differences, gender ratio has a substantial negative association with initiating structure for male managers. This implies that indeed, a more 'feminine leadership style' is realized when more women are in managerial positions.

Clearly, one of the strengths of this study is the large sample size of 12,546 managers in 437 organizations in 32 countries. However, this study necessitates that the results should be interpreted with a certain degree of caution, since a western culture oriented consultancy firm collected the data. Respondents with an international or even Western orientation may have been overrepresented.

As several authors have already suggested (e.g., Blum, Fields, & Goodman, 1994; Fagenson, 1990), the experiences of female managers may be influenced not only by their

gender and the attitudes of those in power, but also by the organizational context, including a firm's history, industry, and policies. In the present study, we only used a few variables.

However, from a contingency perspective, it can also be important to broaden this type of research to other characteristics that are important to understand leadership styles in different cultures. Clearly, other variables should be considered or controlled, including: modernity, economic wealth, population size, political system, and other socioeconomic characteristics (Sivakuma & Nakata, 2001). An interesting avenue for research lies in identifying those circumstances.

In the present study, we focused on the importance of organizational and individual characteristics (i.e., gender ratio and gender). This is important because characteristics of organizations appear to predict a substantial portion of the variation in the explanations of leadership styles. Moreover, as previous research showed (Blum et al., 1994), organizational characteristics influence the percentage of management positions filled by women, at least as much as do the beliefs and attitudes of members within organizations. Therefore, the results of our study are important for diversity management. Results show the effect of an increase of female managers on organizational culture, in particular on male leadership. A higher percentage of female managers contributes to less initiating structure by male managers.

The results of this study can be especially useful for globally operating organizations and organizations considering the decision to transfer management practices from one cultural setting to another. Our results indicate that the percentage of female managers in organizations does have a substantially larger impact on leadership styles, than societal culture. Societal cultural differences are often emphasized in discussions about international cooperation, mergers, and

other forms of international business. Particularly, problems in cooperation and failures, for example in mergers, are often attributed to different leadership styles in the partner-countries. Given our results, these differences might be overstated. The societal cultural effects on two dominant leadership styles are less than often presented. This might also help in training and developing international managers, to overcome stereotypical thinking over leadership behaviours, both in terms of societal cultural effects, as well as in terms of gender effects on leadership.

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TABLE 1.
Means, Standard Deviations and Correlations for All Variables
(N of managers = 12,546, N of organizations = 437, N of countries = 32).

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1 Consideration	4.10	.67										
2 Initiating Structure	2.92	.69	-.19**									
3 Gender	.27	.45	.14**	.05**								
4 Educational Level	4.25	.86	-.04**	-.05**	.02*							
5 Hierarchical Level	5.23	1.01	-.08**	-.04**	-.16**	.06**						
6 Gender Ratio	.27	.18	.11**	-.08**	.41**	.05**	-.11**					
7 Hierarchical Str.	5.23	.48	-.06**	-.06**	-.10**	.05**	.47**	-.24**				
8 Power Distance	46.01	17.76	-.03**	.11**	-.05**	.08**	-.04**	-.15**	-.10**			
9 Individualism	75.67	23.58	.03**	-.36**	.08**	-.03**	.03	.21**	.07**	-.83**		
10 Uncertainty Avoidance	52.09	16.53	-.04**	.23**	-.10**	.03**	-.04**	-.20**	-.09**	.39**	.50**	
11 Masculinity	56.66	14.85	.07**	-.03**	.07**	.07**	.01	.18**	.02*	.08**	-.06**	-.15**

Note. * $p < .05$, ** $p < .01$.

TABLE 2.
Summary of the Research Variables by Country
(N of managers = 12,546, N of organizations = 437, N of countries = 32).^a

	# of managers	Consideration	Initiating structure	Gender ratio	Hierarchical structure	Power distance	Individualism	Uncertainty Avoidance	Masculinity
Arab Countries	47	4.45	3.16	0.07	4.72	80	38	68	53
Argentina	159	4.23	3.37	0.14	5.00	49	46	86	56
Australia	862	4.09	2.80	0.20	5.33	36	90	61	31
Austria	44	4.09	2.90	0.23	5.27	11	55	70	79
Canada	284	4.15	2.77	0.28	5.18	39	80	48	52
Columbia	55	4.28	3.20	0.16	5.27	67	13	80	64
Finland	10	3.92	2.90	0.19	5.17	33	63	59	26
France	439	3.92	3.17	0.24	4.89	68	71	86	43
Germany	312	3.98	2.80	0.24	5.27	35	67	65	66
Greece	34	4.35	3.18	0.32	5.23	60	35	112	57
Hong Kong	22	4.16	2.85	0.27	5.34	68	25	29	57
India	149	4.12	3.11	0.22	5.28	77	48	40	56
Indonesia	88	3.81	3.53	0.2	5.03	78	14	48	46
Ireland	203	4.11	2.99	0.35	4.99	28	70	35	68
Israel	39	4.28	3.05	0.31	5.19	13	54	81	47
Italy	154	4.06	3.07	0.26	5.23	50	76	75	70
Japan	169	4.06	3.1	0.26	5.32	54	46	82	80
Malaysia	335	4.02	3.61	0.26	5.1	104	26	36	50
Mexico	718	3.96	3.54	0.15	5.23	81	30	82	69
Netherlands	616	3.90	2.77	0.15	5.41	38	80	53	14
New Zealand	262	3.98	2.79	0.21	5.16	22	79	58	30
Philippines	26	4.19	3.27	0.32	5.10	94	32	44	64
Scuth Korea	29	4.40	3.18	0.24	5.23	60	18	85	39
Singapore	88	4.07	3.19	0.20	5.32	74	20	8	48
South Africa	148	4.11	2.92	0.16	5.28	49	65	49	63
Spain	79	3.98	3.16	0.21	5.28	57	51	86	42
Taiwan	40	4.18	3.22	0.37	5.33	58	17	69	45
Thailand	39	4.22	3.44	0.45	5.14	64	20	64	34
Turkey	65	4.30	3.21	0.29	4.88	66	37	85	45
United Kingdom	2193	4.10	2.67	0.28	5.36	35	89	35	66
United States	4609	4.16	2.82	0.35	5.20	40	91	46	62
Venezuela	229	4.28	3.68	0.20	5.12	81	12	76	73

^a) SOURCE of the four culture dimensions: Hofstede (2001).

TABLE 3.

Distribution of Variance for the Three Levels in the Empty Model
(N of managers = 12,546, N of organizations = 437, N of countries = 32).

	Dependent variable	
	Consideration	Initiating Structure
Level		
- Manager	93%	79%
- Organization	5%	11%
- Country	2%	10%
Total	100%	100%

Note. * $p < .05$, ** $p < .01$.

Table 4.
Mixed-Effects Regression Analyses for Leadership Styles
(N of managers = 12,546, N of organizations = 437, N of countries = 32).

	Consideration						Initiating Structure					
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE
Intercept	4.09**	.02	4.02**	.03	4.02	.03	3.10**	.04	2.90**	.02	2.90**	.02
<i>Individual Level</i>												
- Gender			.16**	.01	.16	.01			.13**	.01	.13**	.01
- Educational Level			-.04**	.01	-.04	.01			-.03**	.01	-.03**	.01
- Hierarchical Level			-.03**	.01	.03	.01			-.02**	.01	-.02**	.01
<i>Organizational Level</i>												
- Gender Ratio			.18**	.05	.21	.06			-.22**	.05	.27**	.07
- Hierarchical Structure			-.03	.02	-.03	.02			-.05*	.02	-.08**	.02
<i>Country level</i>												
- Power Distance			-.00	.00	-.00	.00			.01**	.00	.01**	.00
- Individualism			-.00	.00	.00	.00			-.01**	.00	-.00**	.00
- Uncertainty Avoidance			.00	.00	.00	.00			.00	.00	.00**	.00
- Masculinity			.00	.00	.00	.00			.00	.00	.00	.00
<i>Cross-Level Interactions</i>												
- Gender * Gender Ratio					-.07	.08					.13**	.08
- Gender * Hierarchical Structure					.02	.03					.09	.03
-2 Log Likelihood	-12545.14		-12449.51		-12452.86		-11799.50		-		-	
Δ -2Log Likelihood				95.63**		3.35			11741.06		11739.32	
									58.44**		1.74	

Note. * $p < .05$, ** $p < .01$.