Conceptual Ability, Emotional Intelligence and Relationship Management: A Multinational Study

Robert L. Engle
Quinnipiac University

Chad Nehrt
Quinnipiac University

We examine the degree to which conceptual ability, emotional intelligence, and relationship management impact each other, as well as whether or not country cultural differences have an impact on these relationships, while controlling for gender differences. The subjects are 496 university business students from the United States, France, and Germany. This is the first research study of which we are aware that examines this set of relationships. Our results support the hypotheses which suggest positive relationships between these variables.

INTRODUCTION

The job of today’s manager is becoming increasingly complex and challenging. Hill (2004) argues that as organizations become leaner and more flexible, managers are finding themselves with more direct reports and even multiple bosses. Effective team building and the need to partner with larger numbers of people across organizational and national boundaries requires the ability to build and manage relationships across what may be very different cultures. Yet, researchers and top management do not yet fully understand the forces that lead to a successful global manager/leader.

In a study of managers in 62 societies Javidan, Dorfman, Howell a& Hanges (2010) report identifying seven global leadership styles. Each leadership style appeared to be based in cultural characteristics of the society in which it could be mainly found. For example, in societies that value humane orientation (being friendly, caring, and kind to others), a complementary relationship-oriented leadership style would tend to be very effective. Countries that tend to be at the median or above with respect to their valuing of humane orientation include, for example, Nigeria, Finland, Spain, France, the United States, Turkey and Germany (Kabasakal & Bodur, 2004).

In order to be an effective manager and leader in today’s environment, Hill (2004) suggests managers must accept the importance of relationship management skills, and so develop their emotional intelligence by learning about themselves, being able to cope with stress, and also coping with their own and other’s emotions. Emotions have been defined as “a high-level mental property” which may be seen to be closely tied to conceptual abilities and the ability to see the “larger picture” (Schulze, Roberts, Zeidner & Matthews, 2005). However, there is little in the research literature which examines some of these relationships and whether or not they might vary among countries. Therefore, the purpose of this paper is to further our knowledge in this area by examining the degree to which conceptual ability, emotional
intelligence, and relationship management impact each other, as well as whether or not country cultural
differences have an impact on these relationships. The subjects used in this study will be university
business students from the United States, France, and Germany. This is the first research study of which
we are aware that examines these relationships. The knowledge gained by this study may assist teachers
and business mentors in the development of the important skill set of relationship management, as well as
assist researchers in their theoretical development of the relationship management construct.

This paper will briefly review the literature regarding the key variables (relationship management,
emotional intelligence, conceptual ability, and national culture), followed by a summary of the
methodology, results, and a discussion of these results along with study limitations and suggested areas of
future research.

RELATIONSHIP MANAGEMENT

Relationship management at a very basic level may be seen as one of two behavioral patterns observed
in leaders – the other being task management – and used by leaders to accomplish their goals (e.g., Blake
& Mouton, 1964; Katz & Kahn, 1951; Stogdill, 1974). Task management has as its purpose the assisting
of subordinates in achieving their objectives, while relationship management has as its purpose to “help
subordinates feel comfortable with themselves, with each other, and with the situation in which they find
themselves” (Northouse, 2004, p.65). Being good at assigning work and helping employees to
understand how to accomplish their work (task management) can get a team partway to accomplishing its
goals. However, if employees don’t feel a personal connection to each other, their boss and the goals
themselves then they may be less likely to fully commit. Relationship management is considered an
integral skill for any successful manager or leader, especially in those cultures that value the behaviors
encompassed by the concept of relationship management (Javidan et al., 2010).

What we now call Relationship Management has in the past been called by various names:

- “consideration” or building mutual esteem, trust and solidarity between leaders and followers
  (Stogdill, 1974 cited in Northouse, 2004, p.66);
- “employee orientation” or engaging subordinates as human beings and taking account of the
  individuality and personal needs (Katz & Kahn, 1951 cited in Northouse, 2004, p.67);
- “concern for people” or building trust with employees, ensuring good working conditions and
  equitable salaries for them, and in general furthering good social relations between leaders and
  employees (Blake & Mouton, 1964 cited in Northouse 2004, p.69); and
- “social skills” or what has been aptly described as “friendliness with a purpose” (Goleman, 1998).

Given the above, our definition of relationship management for the purposes of this paper is: building
mutual esteem, solidarity and good social relations with those individuals with whom we work. Because
relationship management is such a critical dimension of leadership, it is important to understand the
precursors to the construct. While relationship management has been the subject of considerable research,
for the purposes of our study we will focus on the association between relationship management and three
potential antecedents: culture, conceptual ability and emotional intelligence. We look at two models in
our attempt to unveil something of the nature of the links between these constructs. The first can be seen
in Figure 1. Here we first establish the relationships between the independent variables culture and
conceptual ability, and the dependent variable emotional intelligence, with gender as a control variable.
This allows us to understand more about emotional intelligence before including it as an independent
variable in a model with relationship management as the dependent variable. The second model (see
Figure 2) takes culture, cognitive ability and emotional intelligence as the independent variables, and
relationship management as the dependent variable. We move now to hypotheses development.
For culture, we take a very simple approach - one step beyond considering whether just a difference in country would have explanatory power. Others (e.g., Bateman & Farrell, 2006) have used separate cultural explanations for the different dependent variables of emotional intelligence and relationship management. However, because of our linkage of the models shown above – with emotional intelligence as the dependent variable in Figure 1 but as an independent variable in Figure 2 in which relationship management is the dependent variable – we searched for one cultural factor that might best explain country differences using such an approach. In looking at various cultural measures (Hofstede, 1991; House, Javidan, Hanges & Dorfman, 2002; Trompenaars & Hampden-Turner, 1997) we decided that House et al.’s (2002; 2004) “humane orientation” was the best single cultural dimension to consider when explaining the relationship between country origin on one hand and the dependent variables (emotional intelligence and relationship management) on the other hand. Humane orientation is defined as “the degree to which individuals in organizations or societies encourage and reward individuals for being fair,
altruistic, friendly, generous, caring and kind to others” (Kabasakal & Bodur, 2004, p.569). Humane orientation has been used by other scholars in studies on relationship management (e.g., Hytter, 2007). We have not to date been able to find evidence of humane orientation having been used in studies on emotional intelligence.

We propose that countries where humane orientation is higher will be countries in which there is greater emotional intelligence. We believe cultures that reward individuals for being friendly, caring and kind to others will create an environment that encourages the development of emotional intelligence. Individuals who are friendly, caring and kind to others are more apt to be more aware of their own emotions and those of others, better regulate their own emotions and to use their emotions to achieve goals (all signs of greater emotional intelligence). We know of no previous research linking humane orientation and emotional intelligence, however House et al. (2002) found that the United States had a statistically higher (i.e. test banding, see Hanges, Dickson & Sipe, 2004) level of humane orientation (4.17 – Band C) than either France or Germany (both at 3.40 – band D). Consequently, our first hypothesis is:

**H1a: The United States will have greater emotional intelligence than either France or Germany.**

For relationship management, Hytter (2007) developed a set of propositions examining the impact of the GLOBE dimensions (House et al., 2002) on retention rates in France and Sweden. This is the only study we could find that considered Humane Orientation and a dependent variable related to relationship management. The study proposed that greater humane orientation would lead to a preference for a leadership style that focused on relationships. A study by Beckman, Colwell & Cunningham (2009) found that companies with a more humane orientation were more likely to recognize the importance of good relationship management with their various stakeholders. From these two examples, we argue that countries where humane orientation is higher will be countries in which there is greater relationship management. As mentioned above, the GLOBE project places the United Stated in a higher category of humane orientation than either France or Germany. Consequently, our hypotheses are

**H1b: The United States will have greater relationship management than either France or Germany.**

**CONCEPTUAL ABILITY**

Conceptual ability is distinct from general intelligence (IQ) or cognitive ability (Mumford et al., 2000). It allows an individual to generalize from observations and experiences as well as develop abstract thought (White, 1971) and that is how we will define it for the purposes of this study. As such, conceptual ability can be seen as an antecedent of effective problem solving and social judgment skills, and of sophisticated understanding of experiential knowledge (Mumford et al., 2000).

With regards to the connection between conceptual ability and emotional intelligence we see greater conceptual ability as tied to greater introspection (Northouse, 2004) and greater insight into the functions and attitudes of relevant stakeholders (Zaccaro et al., 1991), and so we hypothesize a positive connection:

**H2a: The higher the conceptual ability the higher the emotional intelligence.**

With regards to the connection between conceptual ability and relationship management we see greater conceptual ability as tied to a greater awareness of the need to actively involve others in problem solving (Mumford et al., 2000), and so we hypothesize a positive connection:

**H2b: The higher the conceptual ability the higher the relationship management.**
EMOTIONAL INTELLIGENCE

Thorndike’s (1920) concept of social intelligence is perhaps the origin of the construct “emotional intelligence.” The concept of emotional intelligence developed rapidly in the 1980’s with Walters & Gardner’s (1986) work on multiple intelligences including “interpersonal intelligence” and “intrapersonal intelligence.” Salovey & Mayer (1990) introduced the first widely recognized definition and formal model of emotional intelligence, and the term “emotional intelligence” became a common household term with the publication of Goleman’s (1995) book titled the same. Mayer & Salovey (1997, p.10) defined emotional intelligence as “the ability to regulate emotions to promote emotional and intellectual growth” and suggested it consisted of these four dimensions:

1. Appraisal and expression of emotion in the self
2. Appraisal and recognition of emotion in others
3. Regulation of emotion in the self
4. Use of emotion to facilitate performance

Cherniss & Goleman (2002) and Goleman, et al (2002) suggested that the foundation factor of the overall emotional intelligence construct is “self-awareness.” From it, the individual may develop the “self-control” component of self-management as well as “social awareness”. Self-awareness, self-management, and social awareness in turn lay the developmental ground work for successful “relationship management” or “social skills.” Rahim & Psenicka (2002) confirmed that self-awareness significantly impacted self-regulation (.76) and that these two together impacted empathy and social skills. In a later study, Rahim & Psenicka’s (2005) results suggested that social skills had a direct impact on leadership and an indirect impact (mediated by empathy). As Goleman (2001) and Rahim & Psenicka (2002) point out this developmental order has implications for individuals and organizations attempting to develop these abilities within employees/subordinates/students. For example, students must concentrate on developing a strong awareness of their own emotional make-up and how they react to their emotions before they can develop a better awareness of others, and the better they can accomplish those goals the better they will be at relationship management.

During the early years of emotional intelligence research two primary types of instruments were developed to test emotional intelligence: trait or mixed instruments, and performance or ability tests (Petrides, Furnham & Frederickson, 2004). It was assumed by virtually all researchers that both types of instruments were measuring the same construct, which led to confusion as different results were seen. It was eventually found that trait and ability measures were in fact two different constructs – although both depend on the same four dimensions of emotional intelligence. Both constructs of emotional intelligence have their supporters and detractors, and research continues using both constructs.

Stogdill (1948) noted that leaders differed from followers in traits including insight (such as insight into how others feel and the reason for their actions) and self-confidence (which might be seen as related to emotional intelligence), in addition to sociability (which might be seen parallel to relationship management). Even more importantly, he noted that a leader was not necessarily such in all situations but rather someone who, in a given situation, was able to most effectively manage relationships with other stakeholders. Or, as Stogdill & Shartle (1948, p. 286) stated “…leadership is not a unitary trait, but is rather a function of a complex of individual, group, and organizational factors in interaction. Leadership resides in individuals but only by virtue of their interaction with other persons.”

In addition, the trait literature often centers on whether or not leaders are born with certain traits (which followers do not have), or whether identified traits are in fact skill sets that can be developed by more than just a chosen few (Mumford, et al., 2000; Northouse, 2004). Mumford, et al. (2000) distinguished between individual attributes with which one is generally born (general cognitive ability, crystallized cognitive ability, motivation and personality) and competencies which one can develop (problem-solving skills, social judgment skills and knowledge) and posit that both are necessary for a leader to solve a given problem. Under social judgment skills they discuss (1) self-reflection and awareness of different constituencies (both suggesting emotional intelligence); and (2) the fact that in order to implement her or his plan, a leader must do so “within a distinctly social context, marshaling...
support, communicating a vision, guiding subordinates, and motivating others” (suggesting
the importance of relationship management). They further note “[k]nowledge and skills are developed
capabilities that emerge over time as a function of education and experience” (Mumford, et al., 2000,
p.21) which we take as critical to our goal of understanding the current orientation of business school
students, who are the potential business leaders of tomorrow.

For this study we use Wong & Law’s (2002) trait instrument for measuring emotional intelligence,
which was based upon the Mayer & Salovey (1997) four-dimension model. We use the trait construct
because we are interested in the self-perceived personality characteristics (traits) of the respondents and in
how the respondents perceive that they will act in certain circumstances. This leads us to our last
hypothesis:

\[ H3: \text{The higher the emotional intelligence the higher the orientation towards relationship}
\text{management.} \]

METHODOLOGY

Data Gathering

To gather our data, we administered surveys to university business students at one university in the
United States, two in France and one in Germany. We considered this population particularly appropriate
so the results of this study might be used by university and business mentors working with current
students and recent graduates could understand where they stood in the three countries regarding
conceptual ability, and emotional intelligence and relationship management skills, and could tailor
interventions as necessary to develop talented global leaders.

The total sample size was 496 and the numbers of respondents by country were 185 (United States),
143 (France) and 168 (Germany). Below, we discuss the details of the survey. To ensure that the versions
used by the students in France and Germany were as undistorted from the original as possible, the survey
was translated into French and German from the English original by native speakers and then translated
back into English by a different set of native speakers, and adjustments were made as necessary (Brislin,
1980).

Cross-cultural researchers have observed a tendency for subjects from different countries to respond in
characteristically different ways (Triandis, 1994). Unfortunately our study did not have the large range of
constructs measured and thus were not able to perform a response bias check as recommended in House
et al. (2004). House et al. 2004, however, found no response bias for the United States, France or
Germany for the Human Orientation construct (as practiced) which suggests this might be true for our
study as well.

Construct Creation

From the responses, we needed to determine the reliability of the constructs and their
unidimensionality. We used Reliability Analysis (SPSS release 18.0.0) on the variable constructs to
obtain Cronbach’s alphas for measuring reliability. However, Cronbach’s alpha should not be used as a
measure of the unidimensionality of a construct (Cortina, 1993; Hattie, 1985; Schmitt, 1996). Hattie
(1985) details the many different measures that have been used to test for unidimensionality and notes
they all have flaws. For our purposes, we chose several measures of unidimensionality and traded off our
findings on the measures with our desire to maintain comparability of the items in our constructs with
other studies. In assessing unidimensionality we used principal components analysis (SPSS release
18.0.0) to obtain Eigenvalues of components (a solitary component that has an Eigenvalue greater than 1
indicates unidimensionality); factor loadings on the first component (generally when all factors have
loadings greater than 0.30 this indicates unidimensionality); and factor loadings in the various
components (unidimensionality is indicated when the factor loadings are all greater in the first component
than in the second). To further assess unidimensionality we used Reliability Analysis to obtain the inter-
item correlation matrix (unidimensionality is indicated when all of the inter-item correlations are
positive); the corrected item-total correlations (unidimensionality is indicated the corrected item-total correlations are all above 0.20); and the Cronbach’s alpha if the item were deleted (unidimensionality is indicated when the value for any given item of “Cronbach’s Alpha If the Item Were Deleted” is not greater than the Cronbach’s alpha including the item). In order to test our hypotheses we used ordinary least squares analysis and one-way ANOVA.

**Variable Operationalization – Emotional Intelligence**

We operationalized the variables as follows. For emotional intelligence, the dependent variable in the first model, the survey included an instrument developed by Wong & Law (2002) and validated in subsequent research by, e.g., Law, Wong & Song (2004), Brannick et al. (2009) and Whitman, et al. (2009). The Cronbach’s alpha on the construct was 0.794, which is an acceptable level of reliability (Nunnally, 1978). As for the unidimensionality of the emotional intelligence construct, this is actually a construct that we expect not to be unidimensional in the traditional sense of the term. Remembering our discussion from above, emotional intelligence consists of four sub-constructs: self-emotional awareness, others-emotional awareness, regulation of emotion and use of emotion. What we found when we looked at the principal components analysis was exactly four components with Eigenvalues greater than 1.0, together explaining 58.7% of the variance. When we looked at the Reliability Analysis, we found that for only one of the 16 items: (1) were there very small negative correlations with other questions; (2) was the corrected item-total correlation somewhat below the cut-off of 0.20; and (3) did the value of the emotional intelligence Cronbach’s alpha rise (from 0.794 to 0.801) if the item were deleted. While these latter results suggest that the measure could have been improved by dropping one of the 16 items we felt that the very marginal improvement would not have been worth the loss of strict comparability to other studies that used the full 16-item construct.

**Variable Operationalization – Conceptual Ability**

For conceptual ability we included in the survey an instrument from Northouse (2004). Since Northouse did not report a reliability or unidimensionality for his instrument it was particularly important to do so here. The Cronbach’s alpha on the construct was 0.592, which is acceptable (Schmitt, 1996). For this construct, we expected a true unidimensionality. The findings mostly pointed at a unidimensional construct. Principal components analysis showed us two components with an Eigenvalue greater than 1.0. However, the six factors all loaded on the first component with loading values greater than the minimum cut-off of 0.30. The lowest loading was 0.361 and only for that factor was its loading on the second component greater than on the first component. Reliability analysis showed us all positive figures in the correlation matrix. The item that came into some question in the PCA had a corrected item-total correlation of 0.201 (just above the minimum of 0.20), and it was the only item that, if dropped, would have raised the Cronbach’s alpha (from 0.592 to 0.594). With only one of the six items in the conceptual ability construct marginally suggesting that the six item construct is not unidimensional, we decided to stay with the full six items for reasons of comparability to other studies. Items in the construct focused on how much the respondent enjoyed working with abstract ideas, how much s/he is intrigued by complex problems, seeing the big picture, and so on.

**Variable Operationalization – Culture**

Insofar as culture is concerned, we used a dummy variable for country, coded 1 if the respondent was from the United States and 0 otherwise. A dummy variable struck us as most appropriate because we hypothesize that the United States is different from France and Germany which had the exact same Humane Orientation score.

**Variable Operationalization – Relationship Management**

For relationship management, the dependent variable in the second model, we included an instrument in the survey also developed by Northouse (2004). Items in this instrument seemed to fit the descriptions found in the literature well as it focused on issues such as helping others feel comfortable in the group,
treating others fairly, showing concern for the personal well-being of others, and so on. However, once again no reliability or validity data were presented by Northouse. The Cronbach’s alpha for the construct was 0.763, an acceptable level (Nunnally, 1978). Principal Components Analysis showed two components with Eigenvalues of 3.337 and 1.16 (this last just barely over the minimum of 1.0). Importantly, all twelve items loaded on the first component with values greater than 0.30 (the smallest was 0.401). Two of the twelve items had factor loadings on the second component larger than on the first (0.401 on the first versus -0.450 on the second; and 0.444 on the first versus 0.551 on the second). All of the inter-item correlations were positive, all of the corrected item-total correlations were greater than 0.20 and for only one of the items would the construct’s Cronbach’s alpha have been greater if it had been deleted (0.766 with that item deleted versus 0.763 with all twelve items). On the whole, this appears to be a fairly unidimensional construct.

Variable Operationalization – Gender

Finally, we used Gender as a control variable. Due simply to the order in which these choices appeared on the survey, men were coded 0 and women were coded 1: a larger parameter estimate would indicate that women exhibit greater emotional intelligence or relationship management. As regards emotional intelligence, some scholars have found that women have a greater number of such emotional intelligence traits or abilities than men, or perceive it as more important (Brody, 1997; Day & Carroll, 2004; Engle, 2006; Gossman & Wood, 1993; Mandell & Pherwani, 2003; Van Rooy et al, 2005) while others have found no significant gender differences in relation to emotional intelligence (Austin et al, 2005; Nikolaou & Tsousis, 2002; Whitman, et al., 2009). As regards relationship management, Paris, Howell, Dorfman & Hanges (2009) found across 27 countries that men and women showed an equal preference for humane-oriented leadership. This suggests no difference in how they view relationship management. Given the range of findings across our two dependent variable constructs, we will be conservative and not posit a direction to the influence of gender on emotional intelligence or on relationship management.

RESULTS AND DISCUSSION

Table 1 indicates the number of subjects in each country as well as gender, age, and work experience. The proportion of men to women varies from a high of 57% in France to 55% in Germany and down to 46% in the United States. Men represent about 10% more of the sample in the European countries compared to the United States. It should be noted that the German respondents averaged six to seven years older than the French or American respondents however they did not have more work experience. This may be due to the observation that given government support and little or no tuition, very few of them work outside of school and they have less incentive to finish as students in the U.S. with the result that German students may take an average of 6 years or more to complete their degree.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>SAMPLE DEMOGRAPHICS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>France</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
</tr>
<tr>
<td>Men</td>
<td>82</td>
</tr>
<tr>
<td>Women</td>
<td>61</td>
</tr>
<tr>
<td>Age-Mean</td>
<td>22</td>
</tr>
<tr>
<td>Work exp/yrs</td>
<td>0.5</td>
</tr>
</tbody>
</table>
### TABLE 2
**VARIABLE DESCRIPTIVE STATISTICS (TOTAL SAMPLE OF 496)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (Female=1, Male=0)</td>
<td>0.53</td>
<td>0</td>
<td>1</td>
<td>0.50</td>
</tr>
<tr>
<td>Country (USA=1, non-USA=0)</td>
<td>0.37</td>
<td>0</td>
<td>1</td>
<td>0.48</td>
</tr>
<tr>
<td>Conceptual Ability</td>
<td>3.59</td>
<td>2</td>
<td>5</td>
<td>0.54</td>
</tr>
<tr>
<td>Emotional Intelligence</td>
<td>3.78</td>
<td>2.31</td>
<td>4.94</td>
<td>0.43</td>
</tr>
<tr>
<td>Relationship Management</td>
<td>3.99</td>
<td>2.6</td>
<td>5.0</td>
<td>0.42</td>
</tr>
</tbody>
</table>

In Table 2 we see that 53% of the respondents are women and that 37% are from the United States. Interestingly, we see that for none of the variables conceptual ability, emotional intelligence or relationship management did any respondent answer with a “1” (“Not true,” “Never” or “Strongly disagree”), so that the sample minimum becomes 2. In each case with these variables, the mean is above the midpoint of the sample range (3.59 versus 3.50 for conceptual ability, 3.78 versus 3.625 for emotional intelligence, and 3.99 versus 3.80 for relationship management).

### TABLE 3
**CORRELATIONS**

<table>
<thead>
<tr>
<th></th>
<th>Relationship Management</th>
<th>Gender (Female=1, Male=0)</th>
<th>USA (USA=1, non-USA=0)</th>
<th>Conceptual Ability</th>
<th>Emotional Intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship Management</td>
<td>1.00</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Gender</td>
<td>0.059*</td>
<td>1.00</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>USA</td>
<td>0.261**</td>
<td>-0.095*</td>
<td>1.00</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Conceptual Ability</td>
<td>0.324**</td>
<td>-0.056</td>
<td>0.027</td>
<td>1.00</td>
<td>--</td>
</tr>
<tr>
<td>Emotional Intelligence</td>
<td>0.505**</td>
<td>-0.035</td>
<td>0.304**</td>
<td>0.346**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* Significant at p<.10  ** Significant at p<.000

Correlations for all study variables are shown in Table 3. Referring to Figure 1 in which we regress emotional intelligence on country and conceptual ability (with gender as a control variable) we can observe that there is very little evidence of collinearity between the independent variables in this equation. However, when we look at the correlations between the independent variables for the model in Figure 2, in which we regress relationship management with country, conceptual ability and emotional intelligence (with gender as a control variable), we see that emotional intelligence is moderately correlated with country and with conceptual ability. We completed variance inflationary factor (VIF) calculations on combinations of variables in both data sets to ascertain the likelihood of excessive collinearity with the result that no combination of variables had a VIF score above 2.0. It has been conservatively suggested that VIF scores below 5.0 are acceptable; indicating that collinearity is not a significant problem with these data sets (Levine et al., 2005; Snee, 1973).

Results from the hypothesis testing can be seen in Table 4: Regression Results. It should be noted that we also ran the models after dropping outliers and influential observations. The model fits, not surprisingly, improved (up to an R^2 of 0.385 for Model 7). The signs of all of the parameter estimates were unchanged and a comparison of standardized betas did not indicate any change in the relative impact.
of the independent variables on the dependent variables. Our findings are robust to the outliers and influential observations. We report the more conservative findings here.

We will follow the model development in our discussion and discuss first the relational representation shown earlier in Figure 1 and illustrated in Table 4 below by models 1 through 3.

**TABLE 4
REGRESSION RESULTS**

<table>
<thead>
<tr>
<th>Parameter Estimates (Significance of t-values in parentheses)</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-0.030</td>
<td>-0.006</td>
<td>0.010</td>
<td>0.050</td>
<td>0.072</td>
<td>0.086</td>
<td>0.082</td>
</tr>
<tr>
<td></td>
<td>(0.435)</td>
<td>(0.883)</td>
<td>(0.767)</td>
<td>(0.188)</td>
<td>(0.052)</td>
<td>(0.013)</td>
<td>(0.010)</td>
</tr>
<tr>
<td>USA</td>
<td>--</td>
<td>0.272</td>
<td>0.266</td>
<td>--</td>
<td>0.235</td>
<td>0.229</td>
<td>0.125</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Conceptual Ability</td>
<td>--</td>
<td>--</td>
<td>0.272</td>
<td>--</td>
<td>--</td>
<td>0.253</td>
<td>0.147</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Emotional Intelligence</td>
<td>DV</td>
<td>DV</td>
<td>DV</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.389</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.000)</td>
</tr>
<tr>
<td>Relationship Management</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>DV</td>
<td>DV</td>
<td>DV</td>
<td>DV</td>
</tr>
<tr>
<td>F-Score</td>
<td>0.611</td>
<td>25.201</td>
<td>42.743</td>
<td>1.735</td>
<td>20.088</td>
<td>35.812</td>
<td>54.112</td>
</tr>
<tr>
<td>Significance of F-Score</td>
<td>0.435</td>
<td>0.000</td>
<td>0.000</td>
<td>0.188</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>R²</td>
<td>0.001</td>
<td>0.093</td>
<td>0.207</td>
<td>0.003</td>
<td>0.075</td>
<td>0.179</td>
<td>0.306</td>
</tr>
<tr>
<td>N</td>
<td>496</td>
<td>496</td>
<td>496</td>
<td>496</td>
<td>496</td>
<td>496</td>
<td>496</td>
</tr>
</tbody>
</table>

**Emotional Intelligence [as a Function of Gender, Country, Conceptual Ability]**

In models 1 through 3 the control variable, gender, was not found to be statistically significant suggesting no significant impact on emotional intelligence. However, the results for models 1-3 indicate the parameter estimates for country (USA) are positive and statistically significant. This supports our Hypothesis H1 that “The United States will have greater emotional intelligence than either France or Germany.” We premised our hypothesis on the fact that Americans scored higher on humane orientation in the GLOBE study (House et al., 2002) compared to the French and Germans. To the best or our knowledge, ours is the first study to investigate the linkage between humane orientation and emotional intelligence. Our finding suggests that a higher predisposition to humane orientation leads to greater emotional intelligence.

Our choice of humane orientation was driven by the following process. We searched through the Hofstede (1991), Trompenaars & Hampden-Turner (1997), and House et al. (2002) dimensions for a single dimension that we believed to be a precursor to emotional intelligence and to relationship management. We focused on House et al. (2002) because the scores for each country for each dimension had been placed into bands that were statistically different from one another. This would allow us to focus on dimensions that contained sufficient variance between the country scores for the connection to show through. From the spectrum of House et al. (2002) dimensions we developed a list of five that we felt were conceptually connected to emotional intelligence and to relationship management: gender egalitarianism, humane orientation, in-group collectivism, institutional collectivism and power distance. We then chose humane orientation because of the five dimensions, it showed the greatest variance among the country scores with a range of 0.88 (the others had ranges of 0.56, 0.12, 0.53 and 0.52 respectively). It may be that these other dimensions also had an impact on our findings. For instance: (1) the United States had the highest score for institutional collectivism (though statistically indistinguishable from that of
France) which would suggest higher emotional intelligence and relationship management; (2) higher gender egalitarianism would suggest higher emotional intelligence and relationship management, and on this dimension the United States scored between France and Germany so this may in fact have attenuated our findings somewhat; (3) for power distance one might expect lower values to result in higher scores on emotional intelligence and relationship management, and for this dimension the United States had the lowest score of the three countries. Future researchers may want to consider investigating a combination of these dimensions to assess their relative explanatory power.

Finally for models 1 through 3 with emotional intelligence as the dependent variable, we look at conceptual ability. We find that conceptual ability is positive and strongly statistically significant (t-value equals 8.277), supporting our hypothesis H2a as well as the studies by Zaccaro et al (1991), Mumford et al. (2000) and Northouse (2004).

**Relationship Management [as a Function of Gender, Country, Conceptual Ability, Emotional Intelligence]**

When examining models 4-7 in Table 4 where relationship management is the dependent variable it can be observed that the control variable, gender, is positive and statistically significant in models 5, 6 and 7. As the statistical significance of the construct increases from models 4 through 7, this suggests that the model specification improves with each iteration. We find, in short, that women have higher relationship management self-reports than do men. How do these findings compare to previous work, and what do they mean? As discussed in the hypothesis development section, some scholars have found that women have a greater number of such relationship management traits or abilities than men (e.g., Brody, 1997; Engle, 2006; Gossman & Wood, 1993; Van Rooy et al., 2005), while others have found no significant gender differences with regards to relationship management (e.g., Austin et al, 2005; Nikolaou & Tsaoousis, 2002; Whitman, et al., 2009). Our findings support the former set of researchers.

Models 5, 6 and 7 clearly show that respondents from the United States are more likely to engage in relationship management than are respondents from France or Germany: parameter estimates for USA across the models are positive and strongly significant. This supports our hypothesis H1b as well as the findings of Beckman et al. (2009). Our discussion above, to do with humane orientation and emotional intelligence, applies equally here as well, and we also encourage scholars to investigate relative and interactive effects of cultural variables on relationship management.

Finally, our third hypotheses suggesting that greater emotional intelligence will lead to greater relationship management was supported as the parameter estimate is positive with a t-value of 9.449. Our findings reinforce those of, e.g., Mumford et al. (2000) and Northouse (2004). Individuals who have developed their emotional intelligence are more likely to do well with relationship management which is one of the truly critical tasks of managers and leaders in today’s increasingly complex world.

**Implications and Future Research**

There are a number of limitations to this study including the sample selection where only one university was selected in the U.S. and Germany and only two were selected in France. The variation in ages while perhaps appropriate give the difference in the education processes in these countries could conceivably make a difference and future research needs to address these limitations. There is still a great deal of variance to be explained as only 21% of the variance was explained in the emotional intelligence model (Model 3) and 31% explained in the relationship management model (Model 7). Future research needs to introduce other variables to better specify the models. In addition, this study did not differentiate between full and part-time work experience and the types of work experience, something that might have an impact on both dependent variables.

Within the limitations of our study, what do our findings suggest to business faculty and students, to business managers/mentors, and to researchers? To male students, first of all, we would simply point out that even though they may be on a par with their female counterparts insofar as development of emotional intelligence is concerned, their female counterparts are more apt to use the critical tool of emotional intelligence and apply it to relationship management when they move into their business careers. Male
students would be wise to leverage their emotional intelligence abilities to further develop their relationship management capabilities. For business faculty in all three countries, the message seems to be that their male students in particular might benefit from additional experiential exercises in developing their relationship management capabilities.

For business faculty in France and Germany, there is a fairly clear message that their students are behind American students in developing relationship management. As corporations and indeed nations around the world continue to work together to solve common goals, it is increasingly important that those doing the actual work have strong emotional intelligence and relationship management skills. Business mentors in France and Germany face the same message. It is clear at both the university and the corporate levels that mentors will want to enhance the opportunities for their mentees to develop these critically important skills. For the U.S. these results suggest that the relationships between conceptual ability and emotional intelligence and relationship management are significant with the implication that even stronger conceptual and emotional intelligence abilities will lead to stronger relationship management skills.

For researchers our results support previous work that found women more likely to engage in relationship management than men. The jury, however, is still out on this matter, and more research remains to be done. Second, our results support previous research on the positive relationship between conceptual ability and emotional intelligence, and between conceptual ability, emotional intelligence and relationship management. Third, much work remains to be done on internationalizing this research stream, and on the interactions between the independent variables of interest. For example, according to House et al. (2004), the United States represents a separate regional cultural cluster (Anglo), one different from France (Latin Europe) and Germany (Germanic Europe). We believe that fruitful insights remain to be uncovered in the area of how culture affects these relationships. This study was the first we know of to investigate the linkage between humane orientation and emotional intelligence, but confirmatory studies are needed and a much deeper understanding of the relationships remains to be developed.

REFERENCES


