National Homogeneity vs. Regional Specificity: 
An Examination of the Canadian Cultural 
Mosaic and Whistle-Blowing*

Brent MacNab (contact author)          Reg Worthley and Richard Brislin 
The University of Sydney                   The University of Hawai'i 
Faculty of Business                         College of Business Administration 
International Business                      2404 Maile Way 
Building H03, #306                           Honolulu, HI 96822 
NSW 2006 Australia                           Email: worthley@hawaii.edu 
Email: brentmacnab@yahoo.com            Email: rbrislin@hawaii.edu 

Bella L. Galperin                              Terri R. Lituchy 
The University of Tampa                      Concordia University 
John H. Sykes College of Business           JMSB, GM 503-3 
401 W. Kennedy Blvd.                        1455 de Maisonneuve Blvd West 
Tampa, FL 33606-1490                       Montreal, QC H3G 1M8 Canada 
Tel: 813-235-6221 x 3506                    Email: BGalperin@ut.edu 

Introduction

Contrary to a majority of research which has focused on ethics management in the 
United States, this study investigates select intra-cultural nuances within Canada 
and relates this to the ethics management topic of whistle-blowing. While there is 
ample research on inter- and cross-cultural examinations of management and 
ethics management topics, there has been a void for the intra-cultural level of 
examination (Huo and Randall 1991) and a tendency for management research to 
minimize the cultural complexity found within Canada. 

With the introduction of the North American Free Trade Agreement between

* Authors thank Catherine Federspiel, University of Sydney Research Assistant, for her valuable 
  assistance in editing this manuscript.
Canada, the U.S. and Mexico (NAFTA) over a decade ago, there has been an augmentation of trade between these countries. Consequently, it has become increasingly important that American and Mexican managers better understand potential cultural nuances within Canada. A greater comprehension of Canadian culture, its potential complexity within the nation, and how cultural dimensions relate to aspects of management will enhance the accuracy of management research and effectiveness of practice. Intra-cultural examination of Canada may serve as an example for better understanding of other culturally complex nations which the U.S. is developing trade agreements with, including other “Anglo” culture types.  

There is a void in the literature for understanding the potentially important aspect of intra-cultural dynamics related to management topics (McSweeney 2002). Specifically, there has been a tendency to examine whistle-blowing from a culturally-bound perspective (Tavakoli et al 2003) while intra-cultural examination is even less available. This work examines the specific ethics management topic of whistle-blowing and how this relates to the intra-cultural examination within Canada – a nation where regional diversity has been argued as potentially significant in examining management phenomena (Huo and Randall 1991). The constructs of ethics management, ethics, whistle-blowing and culture will first be discussed along with an overview of research supportive of cultural diversity in Canada.

**Ethics Management**

Ethics refers to a set of standards used to judge the rightness or wrongness, or “goodness”, in terms of concepts like truth and justice (Mosley et al 1991). Ethics includes the collective cognitions and values a society uses to establish that which is right or wrong behavior (Donaldson and Dunfee 1999; Weaver 2001). In particular, business ethics relates specifically to a set of principles that direct how organizations, companies and their employees ought to operate. Ethics management examines how to operationalize those standards within a work or organizational context. Ethics management is defined as the artifacts, activities and concepts that people use to influence their organization’s moral climate or direction (MacNab et al 2007).

---

1. Hofstede (1980) places the following nations within a culture type that is identified as “Anglo” with low power distance, low uncertainty avoidance and individualistic: U.S., Sweden, New Zealand, Netherlands, Great Britain, Ireland, Denmark, Canada and Australia. These cultural clusters are often examined in research with the assumption of cultural parity (Griffith et al 2000). Assumptions of cultural homogeneity for culturally complex nations have been called into question (McSweeney 2002) with a specific emphasis on particular “Anglo” nations like Canada and the U.S. (Huo and Randall 1991). Our examination of cultural homogeneity in Canada involves two of the cultural dimensions used in a typical “Anglo” culture typing: uncertainty avoidance and individualism / collectivism. If cultural homogeneity is not apparent on these two dimensions for one of the nations within this typical cultural cluster it would tend to exemplify questioning the larger projection of cultural typing within a multi-nation “Anglo” framework.
While a variety of ethics management tools exists (e.g., ethics ombudsman, ethics audits, reporting lines, codes of conduct), our study focuses on whistle-blowing. A number of whistle-blowing definitions exist in the literature but the following elements are often apparent and representative (Miceli and Near 1992; Jubb 1999; Tavakoli et al 2003):

- communication or information sharing that is unauthorized by the target organization;
- normally voluntary;
- reported by a person or group currently or formerly associated with the target organization;
- focusing on potentially illegal, unethical or improper acts;
- to an empowered entity;
- external to the target organization (e.g., a government regulatory body);
- with a potential or desired outcome or consequence.

Although the above seven parameters provide good detail, a straightforward definition has been proposed as the unauthorized and voluntary reporting of illegal or improper acts within an organization to authorities outside the organization (Courtemanche 1988). Others have made a case for understanding the important nuances of internally reported versus externally reported in relation to the topic of whistle-blowing (MacNab et al 2004; Miceli and Near 2002). In this regard, our research focuses on whistle-blowing of the external type (i.e. to an authority outside the organization).

The act of whistle-blowing has become increasingly important in the literature because it is often viewed as risky for the target organization in terms of legal cost, legal sentencing, decreased sales, negative publicity and loss of goodwill (Keenan and Krueger 1992; Vinten 1992). However, some have supported more long-term, organizational benefits from whistle-blowing such as, overall operational improvement (Brief and Motowidlo 1986; Ferrell et al 1998; Hooks et al 1994; Miceli and Schwek 1991). While these studies have increased our knowledge of whistle-blowing, a majority of these studies have been conducted in the United States.

While there is some agreement regarding the basic definition and components describing the general term whistle-blowing (Miceli and Near 2002), recent studies have clearly identified important nuances. For example, MacNab and colleagues (2007) developed a four part typology for general types of “whistle-blowing” including: Internal reporting; internal whistle-blowing; external reporting and external whistle-blowing. It is theorized that each of these varieties of whistle-blowing have important and unique distinguishing nuances. Each variety might therefore involve different mediation as related to individuals, cultures and context. Additionally, MacNab and colleagues (2007) examined how culture might influence whistle-blowing activity. The findings suggest that culture will play a role in determining propensities toward, or comfort with, whistle-blowing activity. Finally, MacNab and Worthley (2007) developed an examination of individual traits which might influence whistle-blowing behaviors and found support that an individual’s level of self-efficacy was influential. While there have been whistle-
blowing examinations on the cultural and individual level, there remains a more noticeable void for examinations on the intra-cultural level. Canada provides an excellent cultural landscape for such an examination.

In an attempt to expand understanding of whistle-blowing this study is focused on whistle-blowing in Canada as potentially related to certain cultural dimensions. Next, some central components of Canadian culture are discussed.

**Canada: The Cultural Mosaic**

A cultural system can be defined as people sharing similar beliefs, customs and norms (Brislin et al 1973). Triandis (1977) emphasizes a subjective context to culture by which he means a group’s characteristic way of perceiving its social environment. Most definitions about culture share the following elements: 1. human made elements; 2. shared and passed along through communication; 3. increasing the probability for survival and; 4. resulting in greater satisfaction for those in the community. Additionally, culture is to a region or people what personality is to individuals and includes the objective (e.g., food, artifacts and clothing) as well as the subjective (e.g., attitudes, beliefs and values).

One metaphor that is used to describe Canadian culture is that of the mosaic (Bowman 2000). Huo and Randall (1991) argue that at least four of the national level cultures, Canada, the U.S., Malaysia and Belgium, examined by Hofstede (1980) contain significant sub-cultural identities. The Canadian mosaic, like pieces of cloth on a quilt, has been woven together allowing differences to remain noticeable while existing together. Yet one is able to find a continuation of the cultural homogeneity assumption for certain research examining culturally robust nations like Canada. Exemplifying the mosaic and related to language, Québec holds French as its official language while New Brunswick holds both English and French as its official languages, the only officially bi-lingual province in the nation. About thirty percent of Canadians hold French as their primary language or are officially bilingual with English and French (Statistics Canada 2001).

Recent research has uncovered regional differences in Canada (Berry 1999; Hui et al 1997; Uëlschy et al 2004), calling into question cultural homogeneity assumptions for Canada. A cultural homogeneity assumption for Canada would argue that Canadian culture is relatively uniform across territories and provinces. Some researchers describe Canada as the least culturally homogeneous of all Western nations (Kurian 1991). This cited research prepares a platform for this current effort which examines sub-regional nuances in Canada.

In particular, a number of studies have recognized cultural difference between French speaking and English speaking Canadians. Uëlschy et al (2004) found important regional differences between French-Canadians in Québec and English-Canadians in Ontario. Hui et al (1997) suggest that French-Canadian identity includes an inherent pride toward one’s own cultural group (i.e. a stronger in-group orientation). Similarly, Bowman (2000) argues that Canada’s most important minority group, the French speaking Canadians of Québec, represent a unique and thriving culture.
While studies have argued that regional cultural uniqueness exists in Canada, some researchers, particularly notable in the management field, continue making the cultural homogeneity assumption for Canada (e.g., Abramson et al 1996). In some extreme cases, researchers have even used the U.S. as a proxy for Canadian culture (Griffith et al 2000), assuming a type of North American homogeneity based on the “Anglo” culture cluster. While some similarities may be present, important research has advocated meaningful difference between the U.S. and Canada (Adair 2005). Based on the literature which questions cultural homogeneity for Canada (Huo and Randall 1991), one goal of this study is to examine the issue of cultural homogeneity within Canada using select cultural dimensions and a multi-province sample.

Cultural Dimensions

While numerous cultural approaches exist in the literature (Bond 1987; Fiske 1990; Schwartz 1994; Triandis 1982-1983; Trompenaars 1993, 1998), Hofstede’s (1980) framework is used in this study. Hofstede (1980) proposed that cultures differ based on four dimensions: uncertainty avoidance, power distance, individualism / collectivism, and femininity / masculinity. Theoretically, select Hofstede cultural dimensions are used in this study because of their relation to both whistle-blowing and because of their relevance to normal culture typing of Canada and other “Anglo” cultures including the U.S., Australia, New Zealand and the U.K. (1). Tavakoli et al (2003) suggest that the individualism / collectivism and uncertainty avoidance combination of cultural dimensions will particularly have an important impact on the tendency to whistle-blow because of their relation to perceptions of wrongdoing. Additionally, other research indicates the particular importance of examining the individualism / collectivism dimension in relation to whistle-blowing research (Brody et al 1999). Finally, uncertainty avoidance and individualism / collectivism are important dimensions often included in a typical Canadian cultural profile included in the “Anglo” category (Griffith et al 2000; Hofstede 1980) and therefore also become highly relevant for the intra-Canadian cultural examination of this research effort. The Hofstede cultural dimensions that are used in this study will be discussed below.

Uncertainty avoidance indicates how threatened a society will be by ambiguous contexts and the degree to which it will attempt to avoid these situations by not

2. A fifth cultural dimension related to the Hofstede cultural framework is called Confucian dynamism (aka: long-term orientation) (Bond 1987). Confucian dynamism is related to aspects of culture like the importance of “face”, filial piety and frugality. Femininity v. masculinity is related to multi-dimensional aspects of culture having to do with strength of traditional gender roles, importance of material success and conflict resolution style. Power distance relates to the acceptability of unequal levels of authority within a society.

3. Since power distance has been theoretically linked to individualism /collectivism (Schermerhorn and Bond 1997) for parsimony it was decided to focus on the individualism/collectivism dimension for this research effort.
tolerating deviant ideas or behaviors, and a belief in absolute truths (Hofstede 1980). In high uncertainty avoidance cultures people prefer to operate with formalized rules and regulations within the business environment. Conversely, in low uncertainty cultures people feel more comfortable with few rules and prefer leaving issues left to interpretation. Lower uncertainty avoidance has sometimes been related to higher risk activities like entrepreneurial endeavors (Hofstede 1997).

Individualism/collectivism refers to the degree to which cultures look after themselves or group members in exchange for loyalty. Individualism is characteristic of cultures with loose-knit social frameworks. In individualistic cultures, people are expected to watch out for themselves and in-group/out-group distinctions are less of a focus. Collective societies are organized by tight social frameworks with higher degrees of loyalty and in-group/out-group distinction.

The Hofstede cultural dimensions, although not without valid critique (McSweeney 2002), have been widely used in the literature and researchers have found these dimensions to hold a general value. While Hofstede’s framework has been largely used to examine cross-cultural differences, it is expected that intra-cultural differences may exist in Canada as supported by the previous literature review (e.g., Huo and Randall 1991). In an attempt to explore regional-cultural differences within Canada, the following hypotheses are presented which focus on the two Hofstede dimensions used in this study:

- **Hypothesis 1a:** Canada will demonstrate regional difference in relation to the uncertainty avoidance cultural dimension.
- **Hypothesis 1b:** Canada will demonstrate regional difference in relation to the individualism/collectivism cultural dimension.

## Culture and Whistle-Blowing

The link between culture and ethics has been well established in the literature. Ethics research suggests that differences in moral practices may be the result of differences in values across cultures (Allmon et al 1997; Becker and Fritzschke 1987; England 1975; Husted et al 1996; Preble and Reichel 1988). A main thrust of this research is the position that intra-cultural ethics research (e.g., significant sub-regions of a complex nation) may also reveal noteworthy implications. In a multi-ethnic country a national culture may be highly complex due to the existence of a mosaic and micro-cultural environment (Sarwono and Armstrong 2001). Managers entering culturally diverse environments with complex tasks may need to go beyond the general and traditional national level of awareness and into a more detailed understanding of the regional-specific.

Vygotsky’s activity theory (Ratner 2001; Vygotsky 1978) provides a general theoretical platform for linking the relationship between culture and whistle-blowing. Vygotsky (1978) theorized that human activity is driven by certain needs and people wishing to achieve a purpose or goal (e.g., running an ethical organization). This activity is mediated by instruments and tools (e.g., whistle-blowing),
all of which are influenced by culture. With activity theory, poor culture-to-instrument fit will result in poor subject-to-instrument interaction or mediation. In this regard, the effectiveness of an instrument (e.g., whistle-blowing) is related to the individual and the individual related to culture.4

Next, hypotheses targeting the cultural constructs used in this study, uncertainty avoidance and individualism/collectivism, are examined and their theoretical relation to whistle-blowing developed.

Uncertainty Avoidance and Whistle-Blowing

Researchers have proposed a higher propensity for specific types of ethics reporting with increasing levels of uncertainty avoidance and that the two are positively correlated (Tavakoli et al 2003). People in such cultures seek structure in their organizations, making events clearly interpretable and predictable (Hofstede 1997). It is arguable that people in high uncertainty avoidance cultures will want to maintain established reporting structures and abide by them. Not adhering to organizational policy and not reporting rule-breaking activity in a high uncertainty-avoiding context would cause agent stress. The uncertainty avoidance dimension suggests that such cultures will be more likely to perceive an ethical violation as more severe (Tavakoli et al 2003) and therefore are expected to have higher propensities toward whistle-blowing (Sims and Keenan 1999). Formal reporting structures and avenues (either internal or external to the organization) will tend to placate high uncertainty avoidance societies (Weaver 2001). In this manner the following is proposed:

Hypothesis 2a: Uncertainty avoidance will be positively related to propensity for whistle-blowing.

Individualism/Collectivism and Whistle-Blowing

In relation to whistle-blowing, it has been suggested that collectivism is potentially related to lower propensities for engaging in the activity (Patel 2003; Sims and Keenan 1999). Reporting questionable peer or supervisor activity to an out-group reflects activity that is potentially disruptive to the in-group harmony. In fact, collectivistic cultures would be prone to cover up the flaws of others in order to save face and protect coveted group harmony (Cohen et al 1992). In an organiza-

4. There are generally two avenues for cross-cultural research in relation to using individual responses for generating societal or national-level analysis (Peterson 2004): 1) Construct measures from concepts using data at the individual level. These individual level responses are then examined and analyzed to determine if they show enough consistency within societies and differences between societies for the use of study at the aggregate level. 2) Aggregation of individual items to a regional level, then evaluate the measurement structure at that level. Aspects of both avenues are used in this work.
tion operating within a collective context, employees look out for their in-group interests. It has been argued that because collectivism embraces social behaviors that are highly influenced by norms, duties or obligations (Bontempo and Rivero 1992) members are less likely to exhibit non-conforming or disruptive behavior (Thomas and Au 2002). Finally, collectivism has been linked to stronger propensity for organizational loyalty (Kim et al 1994); something some have suggested whistle-blowing violates (Duska 1997). While there is some conflicting evidence for the relation of collectivism to whistle-blowing (Tavakoli et al 2003) the meta-analysis of the literature suggests the following relation:

Hypothesis 2b: Collectivism will be negatively related to propensity for whistle-blowing.

Method

Participants

Our research effort gathered samples from four regions in Canada during 2003-2004. These provinces represent about 85% of Canada’s population. Because a nation’s regional-cultural diversity can be profound (McDonald 2000; Sarwono and Armstrong 2001; Schaffer and Riordan 2003), and especially in relation to Canada (Huo and Randall 1991), samples were collected in Vancouver, B.C. (80), Hamilton, Ontario (160), Québec City and Montréal, Québec (150) and Halifax, Nova Scotia (86). Samples were collected in multiple regions in an attempt to recognize the potential for regional diversity; these samples then forming regional aggregates. The average age of participants is 30.25 years, average work experience is 8.1 years, a majority having management experience and 40% female.

As suggested by van de Vijver and Phalet (2004) subject acculturation can create certain bias in multi-cultural studies and they suggest seven potential safeguards for such bias. While our work examines intra-cultural nuances we address the potential of acculturation bias by:

- Addressing the potential for translation issues in French-Canadian;
- Sampling only from advanced, executive study programs in Canada;
- Noting that participants have been in Canada for a minimum of over one year;
- Evidence for convergent and divergent item validity as suggested by goodness of fit measures outlined later in this work.

The survey was administered by a university research collaborator who instructed participants that the study was examining aspects of cross-cultural management. Research collaborators collected the data in five locations in Canada where executive training and education programs were being conducted. The participants were provided between 15 and 20 minutes to complete the survey which included a participant agreement form and general demographic information which could not be used to identify the participant.
TABLE 1 Demographic Breakdown by Region

<table>
<thead>
<tr>
<th>Subject Category</th>
<th>Ontario</th>
<th>British Columbia</th>
<th>Quebec</th>
<th>Nova Scotia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>48%</td>
<td>41%</td>
<td>38%</td>
<td>28%</td>
</tr>
<tr>
<td>With Mgmt. Exp.</td>
<td>50%</td>
<td>79%</td>
<td>64%</td>
<td>56%</td>
</tr>
<tr>
<td>Avg. Work Exp.</td>
<td>4.7</td>
<td>12.4</td>
<td>11.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Avg. Age</td>
<td>27.2</td>
<td>34.7</td>
<td>32.5</td>
<td>27.8</td>
</tr>
</tbody>
</table>

Questionnaire

The quantitative questions were measured using a seven-point, Likert-scale format that also included descriptive anchors. For participants from Québec the survey was carefully back translated as prescribed by Brislin et al (2004). The original instrument was translated into French-Canadian by a native French-Canadian collaborator. This version was then translated back into English by a second native French-Canadian collaborator. The two English versions were compared for differences and some adjustments were made to the instrument.

During early stage instrument development and validity testing, using a separate holdout sample of university students, scales for exogenous cultural items, uncertainty avoidance and individualism/collectivism, did emerge. Additionally, a scale for whistle-blowing, the model’s endogenous item, also proved acceptable and useful.

AMOS 5.0 provides an approach to structural equation modeling where tools are provided for systematically fitting many different candidate models for selection of the best model based on fit, parsimony and interpretability (Arbuckle 2003). Inasmuch, the BIC specification search in AMOS 5.0 was used during initial validity testing to generate the specific scale items, establishing a total of nine items to measure the three latent constructs of this study (MacNab et al 2004). See Appendix 1 for a sample listing of items. All of the scales used in this model demonstrate divergent, convergent and measurement equivalence validity as exemplified by excellent goodness of fit measures: individualism/collectivism (GFI = .99, CFI = .96), uncertainty avoidance (GFI = .97, CFI = .92) and whistle-blowing (GFI = .99, CFI = .99). In structural equation modeling, acceptable or strong goodness of fit measures indicate that the structural model researchers have constructed mirrors reality as described in the actual data.

Results

Testing Cultural Homogeneity in Canada

The progression of this study essentially develops two categories of hypotheses all enveloped within structural equation modeling analysis. The first set of hypotheses (Hypotheses 1a and 1b) test the cultural homogeneity assumption in Canada with the second set of hypotheses (Hypotheses 2a and 2b) examining theorized, struc-

5. Bayes Information Criterion (see Byrne 2001: 86)
### TABLE 2 Summary of Models and Goodness-of-Fit Tests for Testing Equality of Regression Weights and Latent Means

<table>
<thead>
<tr>
<th>No.</th>
<th>Model Description</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta df$</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Measurement Intercepts</td>
<td>159.89</td>
<td>136</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.0</td>
<td>Equal Regression Weights: All</td>
<td>169.45</td>
<td>142</td>
<td>9.56</td>
<td>6</td>
<td>.144</td>
</tr>
<tr>
<td>3.0</td>
<td>Equal Regression Intercepts: All</td>
<td>177.98</td>
<td>145</td>
<td>8.52</td>
<td>3</td>
<td>.036</td>
</tr>
<tr>
<td>3.1</td>
<td>Equal Regression Intercepts: NS free</td>
<td>171.02</td>
<td>144</td>
<td>1.57</td>
<td>2</td>
<td>.457</td>
</tr>
<tr>
<td>4.0</td>
<td>Equal Latent Means: CO, UA</td>
<td>209.05</td>
<td>150</td>
<td>38.03</td>
<td>6</td>
<td>.000</td>
</tr>
<tr>
<td>4.1</td>
<td>Partially Equal Latent Means</td>
<td>172.45</td>
<td>148</td>
<td>1.44</td>
<td>4</td>
<td>.837</td>
</tr>
</tbody>
</table>

### No. | Goodness-of-Fit Measures | $\chi^2$ / df | CFI | RMSEA | PCLOSE |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Measurement Intercepts</td>
<td>1.18</td>
<td>.945</td>
<td>.019</td>
<td>1.00</td>
</tr>
<tr>
<td>2.0</td>
<td>Equal Regression Weights: All</td>
<td>1.19</td>
<td>.936</td>
<td>.020</td>
<td>1.00</td>
</tr>
<tr>
<td>3.0</td>
<td>Equal Regression Intercepts: All</td>
<td>1.23</td>
<td>.924</td>
<td>.022</td>
<td>1.00</td>
</tr>
<tr>
<td>3.1</td>
<td>Equal Regression Intercepts: NS free</td>
<td>1.19</td>
<td>.937</td>
<td>.020</td>
<td>1.00</td>
</tr>
<tr>
<td>4.0</td>
<td>Equal Latent Means: CO, UA</td>
<td>1.39</td>
<td>.863</td>
<td>.029</td>
<td>1.00</td>
</tr>
<tr>
<td>4.1</td>
<td>Partially Equal Latent Means</td>
<td>1.16</td>
<td>.943</td>
<td>.019</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Note:**
1. CO = Collectivism; UA = Uncertainty Avoidance; WB = Whistle-blowing.
2. Table 2 presents a nested hierarchy of six models. Model 1.0 requires that form, factorial and intercept invariance be established for the four regions under consideration. This establishes measurement invariance and is a requirement for testing all of the 4 hypotheses in this study. Model 2.0 assumes that both Model 1.0 has good fit and that the *regression weights* (slopes) relating the cultural constructs to whistle-blowing are constant across the four regions. Model 3.0 assumes that Model 2.0 has a good fit and that the *intercepts* in the equation relating the cultural constructs to whistle-blowing are constant across the four regions. Model 3.1 is a variant of Model 3.0 that allows the intercept in Nova Scotia to differ from the other three regions for purpose of providing a model with acceptable fit to be able to test hypotheses concerning latent means of the cultural constructs. Model 4.0 assumes Model 3.1 to be of acceptable fit and that *latent means* are equal across all four regions. Model 4.1 allows all means for the cultural constructs to be equal with the exception of individualism/collectivism in Quebec and uncertainty avoidance in British Columbia.

The Measurement Intercepts model fits the data very well showing no significant deterioration from an unconstrained model. The fit measures are excellent ($\chi^2$/df = 1.18, CFI = .945, RMSEA = .019 and PCLOSE = 1.00). The above model reveals that all sampled regions in Canada have a similar conceptualization and interpretation of our instrument items (measurement invariance), which is particularly important given the multi-linguistic reality of the sample and given our multi-group, hierarchical testing.

The homogeneity hypothesis in Canada will be put to the test in examination of Hypotheses 1a and 1b. Model 3.1 has excellent model fit ($\chi^2$/df = 1.19, CFI = .937, RMSEA = .020 and PCLOSE = 1.00) and represents a model that assumes...
Table 3 presents the results that suggest there is evidence for regional, cultural variability among our subject areas for Canada in relation to the specific cultural dimensions. Table 3 shows that Québec has a significantly (p < .001) higher level of collectivism than the other regions. Therefore, Hypothesis 1b, that there will be difference in the sampled Canadian regions in relation to collectivism is supported.

Collectivism in Canada, between our sampled regions and subjects, is not homogeneous. As shown in the above table, it is clear that, for our sample, the province of Québec has a much higher level of collectivism than the other subject regions and that there is no significant difference in this cultural dimension for our samples in B.C., Ontario and Nova Scotia. In short, Québec stands out as a region demonstrating higher levels of collectivism than the other regions sampled.

Table 3 also addresses Hypothesis 1a that some difference will exist in the sampled Canadian regions in relation to uncertainty avoidance. As evidence from information in the mentioned table, it is clear that, for our sample, the province of British Columbia has a significantly (p < .001) lower level of uncertainty avoidance than the other subject regions and that there is no significant difference between Ontario, Québec and Nova Scotia in this dimension. In short, British Columbia stands out as a region demonstrating lower levels of uncertainty avoidance (potentially higher levels of ambiguity tolerance) than the other regions sampled. Overall, the cultural homogeneity assumption in Canada is not supported by our findings.

<table>
<thead>
<tr>
<th>Mean Difference</th>
<th>Difference</th>
<th>SE</th>
<th>CR</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collectivism (Québec, higher)</td>
<td>.480</td>
<td>.124</td>
<td>3.86</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Uncertainty Avoidance (B.C., lower)</td>
<td>-.724</td>
<td>.160</td>
<td>-4.53</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>
TABLE 4 Parameter Estimates and Std. Errors for the Factor Loadings and Regression Slopes in Model 2.0

<table>
<thead>
<tr>
<th>Measure</th>
<th>Factor loadings</th>
<th>All 4 Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>SE</td>
</tr>
<tr>
<td>WB1</td>
<td>1.0</td>
<td>--</td>
</tr>
<tr>
<td>WB2</td>
<td>.80*</td>
<td>.12</td>
</tr>
<tr>
<td>WB3</td>
<td>.91*</td>
<td>.13</td>
</tr>
<tr>
<td>CO1</td>
<td>1.0</td>
<td>--</td>
</tr>
<tr>
<td>CO2</td>
<td>.80*</td>
<td>.12</td>
</tr>
<tr>
<td>CO3</td>
<td>.98*</td>
<td>.14</td>
</tr>
<tr>
<td>UA1</td>
<td>1.00</td>
<td>--</td>
</tr>
<tr>
<td>UA2</td>
<td>.49*</td>
<td>.09</td>
</tr>
<tr>
<td>UA3</td>
<td>.99*</td>
<td>.16</td>
</tr>
<tr>
<td>Relation</td>
<td>Slope</td>
<td>SE</td>
</tr>
<tr>
<td>UA-WB</td>
<td>.28*</td>
<td>.07</td>
</tr>
<tr>
<td>CO-WB</td>
<td>.023</td>
<td>.08</td>
</tr>
</tbody>
</table>

Note: 1. * = Significant at the .005 level

Culture and Whistle-Blowing

We now address the hypotheses that examine whether the relationships between the two cultural constructs and whistle-blowing are in the predicted direction. Table 2 establishes equality of the regression weights linking the cultural constructs to whistle-blowing in the hierarchical test comparing Model 2.0 with Model 1.0 ($\chi^2 = 9.56$, df = 6, p-value = .144).

Hypothesis 2a states that uncertainty avoidance will be positively related to propensity for whistle-blowing across the Canadian sample. Information in Table 4 demonstrates that the regression coefficient equals 0.28 (se = .07) yielding a p-value less than .001. This hypothesis is fully confirmed and we can state that uncertainty avoidance has a strong direct relationship with the propensity for whistle-blowing in Canada.

The last hypothesis, 2b, states that collectivism will be negatively related to the propensity for whistle-blowing. The results from Table 4 show no support for this hypothesis with a regression coefficient of .023 (se = .08) showing that the coefficient is not significantly different from zero. We observe that individualism/collectivism does not have a significant relationship, either positive or negative, with the propensity for whistle-blowing in Canada.6

---

6. For each hypothesis, analysis for individual level measures (e.g., age, work experience, gender, management experience) were controlled for and found not to be significant. While gender is recognized as being a relevant area for examination (Best 2001) our findings were more significant at the cultural level of measurement than with any of the individual trait indicators, including gender.
Discussion

Often in management and ethics management research, samples are drawn from one area of a diverse nation and assumed to be representative of the entire nation (Abramson et al. 1996); thus representing what some refer to as a fundamental flaw in Hofstede-like approaches (McSweeney 2002). The results of this study put cultural homogeneity specifically to the test in Canada by examining four geographically distinct regions of the nation while also examining select dimensions of culture’s influence on whistle-blowing.

Departure from Cultural Homogeneity Assumptions in Canada

The findings support a departure from the assumption of intra-cultural parity in Canada. While this finding may not particularly surprise most readers of this journal, these results should be heeded by others who continue to assume cultural parity within Canada and even between Canada and other “Anglo” type nations like the U.S. Our findings also provide support to other researchers who have advocated multi-cultural, regional realities within Canada (e.g., Bowman 2000). As noted previously in our study, this oversight is sometimes a particular concern within management research which can tend to over-exaggerate regional similarities.

Both cultural dimensions tested, individualism/collectivism and uncertainty avoidance, demonstrated significant intra-Canadian difference for specific regions (Québec higher on collectivism and B.C. lower on uncertainty avoidance). Because these two dimensions have been linked to a large number of ethics management issues (Beekun et al. 2003; Tsui and Windsor 2001) and collectivism with personality and contextual considerations (Church et al. 2003) a more disaggregate approach in examining these issues within Canada, and potentially in other nations, is recommended – with particular emphasis in the management sciences. Supportive of others (Huo and Randall 1991; Matsumoto 2003; McSweeney 2002) the findings present caution when sampling one region of a diverse nation and applying the results as “national”, an approach that could also be called pseudo-emic in some cases. Further concern is developed when culture types are grouped together and automatic assumptions of cultural parity are associated (e.g., Griffith et al. 2000).

National Homogeneity vs. Regional Specificity

Expanding on the concept of cultural homogeneity, research often groups Canada and the U.S. together under an “Anglo” type of culture which also includes other nations like Australia, New Zealand, Ireland and the U.K. (2) These clusters of cultural parity are usually based on data from the Hofstede (1980) study (e.g., Griffith et al. 2000). A cultural type refers to human groups that display cultural homogeneity or parity (Hofstede 1980; Asai and Lucca 1988). The assumption is
that standardization of management (and other social) practices can be developed with relative ease among culture groups within the same type or cluster (Griffith et al 2000). The question stands: Are there cultural differences within these types that could influence the effectiveness for developing the most accurate management research and practice? Culture typing holds value when only a very general indication of culture is required; however, it can also obscure real cultural differences or emergent shifts, something potentially problematic when high cultural precision is required in relation to the target goals. As pointed out by other researchers, while similarities exist with some Anglo typed nations there are meaningful nuances that require understanding and particularly between the U.S. and Canada (Adair 2005).

If intra-cultural complexity is evident on a national level, as was exemplified in the findings of our study with Canada, researchers will need to carefully consider whether the more generalized culture typing, such as the Anglo cluster, is appropriate over more detailed, and perhaps accurate, representations. As articulated by McSweeney (2002) there are significant concerns about making the assumption of intra-cultural, national homogeneity based on the Hofstede (1980) findings. These same concerns would tend to intensify as blocks of nations are forged into culture types or clusters. Researchers are lured into following these typing assumptions without bothering to question or test the potential for true intra-cultural complexity.

Our research lends additional support for the cultural mosaic metaphor others have used to describe Canada. It appears that while Canada retains national cultural distinguishing features it also demonstrates important regional cultural nuances that should not be ignored by researchers, managers, or organizations. It is not reasonable to assume that standardization of management practices across Canada is the best approach. In relation, it is even less reasonable to assume that standardization of management practices will easily and seamlessly translate between the U.S. and Canada.

Collectivism in Québec

The findings suggest that Québec was more collectivist compared to the other provinces. Unlike the other Canadian provinces, the majority of Québec’s population is French Canadian (Laroche et al 1996). Studies have shown that French Canadians tend to have a more collectivism orientation compared to English Canadians (Lortie-Lussier and Fellers 1991; Major et al 1994), something supported in our findings. The comparatively collectivist culture in Québec (Galperin 2002; Lortie-Lussier and Fellers 1991; Major et al 1994) may have a tendency to decrease the overall degree of individualism in Canada for national studies that include this province. A strong collective sense in Québec has led to what some view as unique provincial realities for the region related to cultural affairs, education, business, politics, education, and social services (Douglas 1992). While others suggest that special cultural nuances for this region have developed two principal civic identities (one Canadian and one Québécois) for this region (Page et al 2004).
Uncertainty Avoidance in British Columbia

Our findings also support a lower level of uncertainty avoidance for the British Columbia sample. Of the Canadian provinces, British Columbia is sometimes viewed as the “Western frontier”. In this manner, it could be a location that attracts people interested in new possibilities and therefore open to higher ambiguity acceptance (associated with lower uncertainty avoidance).

Historically, British Columbia’s economic advantage resided in natural resources (mining, lumber and fishing) which related to its major industries (timber, coal, potash, paper, sulfur and food). Changes in the global economy during the 1990s have required the province to embrace a shift from these resource-intensive industries to also include more entrepreneurial and innovation-intensive services like entertainment and high tech. Entrepreneurial activity has been linked to innovativeness which is also linked to lower levels of uncertainty avoidance (Mueller and Thomas 2001). In May of 2002, the University of British Columbia (UBC) examined indications of entrepreneurial activity in B.C. compared to other provinces in Canada. The study found that the province of B.C. is primed for greater entrepreneurial activity but that over-regulation may be acting to suffocate some of this activity in the province. During the late 1990s the number of new business starts in B.C. was higher than the Canadian national average. Our research, indicating lower uncertainty avoidance in B.C., seems to support some positions within the UBC (2002) research.

Culture and Whistle-Blowing

The findings also demonstrated that the sampled regions of Canada hold a common set of relationships regarding individualism/collectivism and uncertainty avoidance’s influence on the propensity to engage in whistle-blowing. All regions show consistency in the lack of relationship between individualism / collectivism and the propensity to whistle-blow and also show consistency in the significant relationship between uncertainty avoidance and the propensity to whistle-blow.

Adherence to rules is important to people in high uncertainty avoidance contexts and they will seek organizational and other avenues for rectifying a possible violation. All else being equal, for organizations operating in high uncertainty avoidance contexts the findings suggest that employees would be more prone to use whistle-blowing as an option.

Future Study and Limitations

This effort did not exhaustively examine every region in Canada holding potentially unique cultural meaning. While care was given in regionally identifying our sample based on provinces which represent most of Canada’s population, it is

---

recommended that other provinces and territories, not included in this study, be examined to further this effort. In relation to other nations of the “Anglo” type, such as the U.S., Australia and New Zealand, the findings suggest caution in assuming intra-cultural parity. It is suggested that each of these nations be examined for potentially meaningful intra-cultural nuances, a position advocated by others (McSweeney 2002). For theoretical reasons, this study focused on individualism / collectivism and uncertainty avoidance, however, other cultural dimensions could be examined for potential intra-cultural meaning and their relation to whistle-blowing.

This effort examined measures related to the propensity for whistle-blowing (i.e. how acceptable the act is) and not the actual act itself. Although this is not out of line with other research in the area (Keenan 1995), it would be possible to conduct experimental research that more directly measures engagement in the act. Our subjects were well educated with significant work experience and a majority having management experience in a variety of industries. While this sample provides good insight into specialized segments of the Canadian population and for a management context, it could be replicated with a more random sampling of Canadians to determine the ecological validity of results.

Appendix 1:
List of Sample Manifest items Per Latent Variable

- Uncertainty Avoidance, Sample Item: People should have outlines of proper worker conduct, clear and in writing, or else there will be too much ambiguity/confusion.
- Individualism/Collectivism, Sample Item: It is more important for people to have harmonious social relations than to gain independent success.
- Whistle-blowing, Sample Item: I generally admire someone who reports the inappropriate activity of an employer to an outside party.

References


Becker, H. and D. Fritzche. 1987. “A Comparison of the Ethical Behavior of


Fiske, A. 1990. Structures of Social Life: The Four Elementary Forms of Human
MacNab, B., R. Worthley, R. Brislin, B. Galperin, S. Jenner, T. Lituchy, T. Mu-


Schermherhorn, J. and M. Bond. 1997. “Cross-Cultural Leadership Dynamics In


