Corporate Codes of Ethics in Australia, Canada and USA: Measurement and Structural Properties of a Cross-Cultural Model

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Abstract

The objective is to test the consistency of measurement and structural properties in a model of corporate codes of ethics (CCE) on an aggregated level and across multiple samples derived from three countries, namely Australia, Canada and the USA. The properties of four constructs of CCE are described and tested, these being: surveillance/training, internal communication, external communication, and guidance. The conclusion is that the measurement and structural models on an aggregated level have a satisfactory fit, validity and reliability. Furthermore, they are consistent when tested on each of the three samples (i.e. cross-validated). The cross-cultural model makes a contribution in addition to previous mostly descriptive studies and theory in the field using confirmatory factor analysis and structural equation modeling.

Introduction

In a model that goes beyond philosophically-based ethics, Stajkovic and Luthans (1997) use social-cognitive theory as a means to identify factors that influence business ethics standards and conduct. They propose that a person’s perception of ethical standards and subsequent conduct is influenced by institutional factors (e.g. ethics legislation), personal factors (e.g. moral development), and organizational factors (e.g. code of ethics). Within the cultural context, the key antecedent factors interact together to influence the ethical standards of people and organizations (Stajkovic and Luthans, 1997). A Corporate Code of Ethics (CCE) is an important organizational factor, which is the focus of our research that we report in this study.

Berenbeim (2000) cites three trends as evidence of the growing importance of CCE: the globalization of markets and the need for core principles that are universally applicable; the acceptance of these codes as a part of corporate governance as illustrated by increased participation of boards in their development and the improved ethical literacy of senior managers as illustrated by the increasing sophistication of the codes. While globalization has led to increased competition that may lead to unethical corporate conduct, there is also the possibility that globalization may have facilitated the spread of corporate ethics programs. Hence, a CCE is viewed as an important adjunct in developing ethical standards in organizations in areas such as surveillance and training, internal and external communication, as well as guidance (e.g. Svensson et al., 2009). These areas are described further in our theoretical framework. Our outlined framework is in part based upon Wood’s (2002) partnership model of corporate ethics, however, our approach is different from Singhapakdi and Vitell (2007) who focused on the ‘institutionalization of ethics’ and its consequences. Their definition of institutionalization is limited to the degree to which an organization explicitly and implicitly incorporates ethics into its decision-making processes. Our study is restricted to examine the measurement and structural properties between constructs, such as surveillance/training, internal communication, external communication and guidance in large companies (e.g. Svensson et al., 2009).

Our objective is to test the consistency of measurement and structural properties of a proposed CCE-model on an aggregated level and across multiple samples derived from three countries, namely Australia, Canada and USA. Consequently, we adopt a cross-cultural approach to CCE amongst the largest companies in these countries. Cross-cultural samples are not common in the field. Nevertheless, Arnold et al. (2007) applied a cross-cultural sample in Western Europe that
examined whether the perceptions of an activity’s ethicality relates to elements found in company codes of conduct and if they vary by country or culture. They conclude that the individual’s country has a more influential impact. We examine the inherent measurement and structural properties of the CCE put in place by the largest companies in these three countries.

Measurement and Structural Models

The measurement and structural properties of our CCE-model, the constructs surveillance/training, internal communication, external communication, and guidance are positioned as essential elements in conjunction to CCE. Previous studies and theories guided the definition of these four distinct constructs.

- **Internal communication** is used in the context of CCE, as consisting of four elements of corporate ethics programs derived from previous studies and theory, namely: (i) communication to all employees, (ii) inform new employees, (iii) consequences for violation, and (iv) support to whistleblowers. These organizational artefacts support and enforce the provisions of the CCE (e.g., McLain and Keenan, 1999; Singh et al., 2005; Stevens, 1999; Schwartz, 2002). We posit that the construct of internal communication is closely related to the constructs of external communication and surveillance/training as there is a need for harmony and balance between what is established, maintained and enhanced internally/externally through surveillance/training. Consequently, the primary purpose of our defined construct of internal communication is to inform and communicate with employees. In sum, internal communication is considered to be an important construct in the field of CCE to inform and communicate within the organization.

- **External communication** refers to the artefacts in place to spread the message of the CCE outside of the organization (e.g., Fraedrich, 1992; Gellerman, 1989; Stead et al., 1990). We define the construct of external communication in the context of CCE as consisting of three items derived from previous studies and theory, namely: (i) suppliers informed, (ii) customers informed, and (iii) displayed for all to view. We posit that the construct of external communication is also closely related to the constructs of internal communication and surveillance/training as there is the similar need for harmony and balance between what is, established, maintained and enhanced internally/externally through surveillance/training. Consequently, the primary purpose of our defined construct of external communication is to inform and communicate with suppliers, customers and other stakeholders in the marketplace/society. In sum, external communication is considered to be an important construct in the context of CCE to inform and communicate outside of the organization.

- **Guidance of CCE** refers to measures in place to monitor and apply the CCE of the organization (e.g., Lefebvre and Singh, 1992; Robin and Reidenbach, 1987; Trevino and Brown, 2004). We define the construct of guidance in the context of CCE as consisting of four items derived from previous studies and theory in the field, namely: (i) assists with ethical dilemmas in the marketplace, (ii) assists the bottom line, (iii) guide to strategic planning, and (iv) ethical performance as a criterion in employee appraisal. We posit that the surveillance/training of CCE is related positively to the guidance of CCE. The construct of guidance may be seen as an outcome of the construct of surveillance/training of CCE, and the construct of surveillance/training’s correlational relationships with the
constructs of internal communication and external communication. In sum, the construct of guidance is defined as an endogenous construct in CCE, while the others described previously are exogenous.

Subsequently, we test the measurement properties of the constructs of surveillance/training, internal communication, external communication, and guidance in a CCE-model. We also test the structural properties where the construct of surveillance/training of CCE is hypothesized to positively relate to the construct of guidance of CCE.

Methodology

A questionnaire that was non-sponsored and unsolicited was sent to the top 500 companies operating in the private sector within Australia (BRW, 2005), Canada (Financial Post, 2005) the USA (Fortune, 2007). Each respondent was assured of complete anonymity as the results of the questions were to be aggregated. A response rate of those having a code: 15.2% (n=76) was achieved in Australia, Canada 20.4% (n=102) and 16.4% (n=82) in the USA. This paper examines the responses of companies that filled in a questionnaire and that also did possess a code: Australia (n=76), Canada (n=102) and the USA (n=82). Measures for the four constructs of CCE were adopted from a corporate code of ethics scale from Svensson et al. (2009). In order to try to minimize common methods bias, subjects were reassured that their answers would be anonymous. They were also told that there were no right or wrong answers and that they should answer questions as honestly as possible. According to Podsakoff et al. (2003, p. 887), “These procedures should reduce people’s evaluation apprehension and make them less likely to edit their responses to be more socially desirable, lenient, acquiescent, and consistent with how they think the researcher wants them to answer.” The measures in this study used the same Likert scales for all four constructs of CCE anchored by (5) very strongly agree and (1) very strongly disagree (see Table 1). Although it is not uncommon for researchers to measure different constructs with similar scale formats (e.g., Likert scales) and similar scale anchors (e.g. “strongly agree” vs. “strongly disagree”) making it easier for the subject to answer questions, this may also increase the possibility that some of the covariation observed among the constructs examined may be the result of the consistency in the scale properties rather than the content of the items (Podasakoff et al. 2003). This is one limitation of this study.

<table>
<thead>
<tr>
<th>Surveillance/Training</th>
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<tbody>
<tr>
<td>a) Our company believes that we should have a standing ethics committee or its equivalent.</td>
</tr>
<tr>
<td>b) Our company believes that we should have an ethics training committee or its equivalent.</td>
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<tr>
<td>c) Our company believes that ethics training should be conducted for all staff of our organization.</td>
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<tr>
<td>d) Our company believes that we should have an ethics ombudsman or its equivalent.</td>
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<th>Internal Communication</th>
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<tr>
<td>a) Our company believes that the Code should be communicated to all our organization’s workers.</td>
</tr>
<tr>
<td>b) Our company believes that we should inform new staff of the Code.</td>
</tr>
<tr>
<td>c) Our company believes that there should be consequences for a violation of the Code.</td>
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<tr>
<td>d) Our company believes that we should have formal guidelines for the support of whistleblowers (i.e., someone who blows the whistle on his/her organization for its wrongdoing).</td>
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<th>External Communication</th>
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<tr>
<td>a) Our company believes that all our suppliers should be informed of the existence of the Code</td>
</tr>
<tr>
<td>b) Our company believes that our customers should be informed of the existence of the Code</td>
</tr>
<tr>
<td>c) Our company believes that the Code should be displayed in our organization for all stakeholders to view.</td>
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<th>Guidance</th>
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<tr>
<td>a) Our company believes the Code will assist the bottom line.</td>
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<tr>
<td>b) Our company believes the Code should be used to assist us with resolving ethical dilemmas in the</td>
</tr>
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c) Our company believes that the Code should guide our strategic planning.

d) Our company believes that employees’ ethical performance should be a criterion for employee appraisal.

Table 1 – Overview of Item Measures.

Goodness of Fit Measures – Measurement Models

Confirmatory factor analysis (CFA) was run with a four construct measurement model (15 indicator variables) using the SPSS/AMOS 16.0 software. When the initial measurement model was tested the goodness-of-fit measures were on an aggregated level above recommended guidelines (Hair et al., 2006). However, an examination of the model diagnostics revealed some differences of factor loadings and variance extracted among indicator variables across the three countries’ measurement models. It was revealed that the goodness-of-fit measures of measurement models varied across countries to some extent. As a result, four indicator variables were removed (Surveillance/Training – item d; Internal Communication – item d; External Communication – item c; Guidance – item d) and the final four construct model was represented by 11 indicator variables.

The three country measurement model Chi-square was 68.825 with 38 degrees of freedom and was statistically significant (p = 0.002). Given that this may have been due to the sample size (N = 258), other fit statistics were examined. The normed Chi-square ($X^2$/df) was 1.811 while the IFI was 0.982, the CFI was 0.981, and RMSEA was 0.056 (confidence interval 90%: 0.034-0.077), all of which are well within recommended guidelines and support the significance of the model (Hair et al., 2006). The goodness-of-fit measures of the measurement model were also tested on each national sample. In conclusion, the aggregated measurement model appears also to be consistent across the three samples with only minor variations, where all four constructs provide a framework for testing the structural properties hypothesized previously.

Goodness of Fit Measures – Structural Models

The three country structural model Chi-square was 110.796 with 40 degrees of freedom and also proved to be statistically significant (p = 0.000). As is common practice, the other fit statistics were re-examined to confirm the significance of the structural model. The normed Chi-square ($X^2$/df) was 2.770 while the IFI was 0.982, the CFI was 0.981, and RMSEA was 0.083 (90% confidence interval: 0.065-0.102), all of which, again, are still mostly well within recommended guidelines (Hair et al., 2006: 745-749). The regression weight (0.691) for the causal relationship between the constructs of surveillance/training and guidance was significant (p = 0.000). Subsequently, the goodness-of-fit measures of the structural model were also tested on each national sample. The conclusion is that the aggregated structural model appears to be consistent across the three samples, where the surveillance/training had a significant impact on the guidance of CCE and the other correlational relationships between surveillance/training, internal communication and external communication were also significant.

Assessment of Construct Validity and Reliability

Several measures were used to assess the validity of the constructs of the structural model. Convergent validity is the extent to which the individual items in a construct share variance between them (Hair et al., 2006) and is measured based on the variance extracted from each construct. The variance extracted for all constructs exceeds the recommended 50 percent.
Reliability is also considered when evaluating constructs. All constructs exhibit composite trait reliability levels that exceed 0.77 (Hair et al., 2006: 777).

Discriminant validity examines whether the constructs are measuring different concepts (Hair et al., 2006) and is assessed by comparing the variance extracted to the squared interconstruct correlations. The variance extracted should be larger than the corresponding squared interconstruct correlations and this condition was met in all cases. Consequently, the model exhibits discriminant validity. Nomological validity means the direction of the relationships between the constructs is consistent with theory. The significant construct correlations are all consistent with theory, thus confirming nomological validity. The recommended guidelines for convergent, discriminant and nomological validity, as well as construct reliability, were all met, therefore, the measurement and structural aspects of the model indicate satisfactory validity and reliability.

Concluding Thoughts

We believe that the proposed CCE-model makes an initial contribution to both theory and practice in the field of CCE. The cross-cultural model makes a contribution in addition to previous studies that were mostly descriptive and theory in the field using confirmatory factor analysis and structural equation modeling. For example, this study makes a contribution to theory as it outlines a set of introduced constructs, all of which are positioned in a tested model that has been cross-validated across three countries consisting of measurement and structural properties in the context of CCE for the benefit of other researchers.

The CCE-model may be seen as considering cross-cultural properties. In fact, it appears to be a cross-cultural model. It is rather unique as it is based upon multiple national samples seldom seen in literature. Whilst the outcome of the CFA and structural equation modeling indicated a satisfactory fit, validity and reliability on both the aggregated and country levels, there are some research limitations that should be acknowledged. First, it should be stressed that the CCE-model has been tested on samples consisting of large companies in each country’s corporate culture, which may indicate less applicability to smaller and medium sized companies. Second, another limitation may be the fit, validity and reliability across other national samples. Third, the three survey samples contain a mix of companies, but they are not covering all of the major areas of business and they are not equally represented across the samples. Fourth, a potential limitation is that the three national samples do not only consist of companies having their headquarters within the country. Arnold et al. (2006) conclude that differences of ethical perceptions may rather be associated with the country to a much greater degree than with the company.

Nevertheless, these limitations provide opportunities for further research in testing the CCE-model in other cultural and corporate settings. One proposal for further research is to test the CCE-model in other countries or cultures that differ from and/or are similar to the three countries surveyed in our study. Hofstede’s (1983) dimensions of national cultures may be useful to target different or similar national corporate samples. It would be valuable to examine if there are similarities amongst other cultures of similar characteristics and/or if there were similarities or dissimilarities across other countries that are decidedly different from the three countries in focus. Like all survey research on a selected sample, we are confident that the CCE-model is accurate for the national samples examined, but additional studies in other samples, cultures and countries are required. It may need to be refined and extended if it is to be seen as a true measure for those samples, cultures and countries too.
References


Revision Report

Comments to the Author:

*** As reviewer 2 notes, you have made progress in investigating a complex theory. However, readers will find your work difficult to understand and a more detailed explanation of the constructs and how these were estimated is required. ***

In the revised paper we define our constructs and provide research and theoretical evidence that guided their development. This should provide the reader with a better understanding of the overall process used in the development of our model.

*** As reviewer 1 noted, the response rate is extremely low and, given the topic, raises serious concerns about non-response error. Please comment on this error potential and discuss NR as a limitation of the study. ***

This paper focus on the ones that had a code – the total response rate was higher, but it is beyond our control whether the companies have a code or not.

*** It is not clear what respondents answered or how the constructs were explored with them. More information about the survey instrument is necessary. This would help create stronger links with the results section, which is currently not clearly integrated with the earlier sections. ***

The survey instrument and specific measurement items are now included in Table 1. The text also lists the four items that were eliminated from the analysis.

*** The paper does not address the “so what” question. Reviewer 2 raises concerns about the validity of the results and suggests they may be affected by common measures bias. Please respond to this concern in your revised paper. ***

We have added the following sentences to the text under methodology:

The measures in this study used the same likert scales for all four constructs of CCE anchored by (5) very strongly agree and (1) very strongly disagree (see Table 1). Although it is not uncommon for researchers to measure different constructs with similar scale formats (e.g., Likert scales) and similar scale anchors (e.g., “strongly agree” vs. “strongly disagree”) making it easier for the subject to answer questions, this may also increase the possibility that some of the covariation observed among the constructs examined may be the result of the consistency in the scale properties rather than the content of the items (Podasakoff et al. 2003). This is one limitation of this study.

*** The paper does not follow the ANZMAC style sheet; please amend it prior to resubmission as the track chairs cannot make these revisions on your behalf. ***

The revised paper has been corrected.
*** As a general point, we suggest it is good practice to anonymise self-citation or, at least, to insert self-citations following the initial review. ***

We see the point raised, but we have just referenced one article, though we could have referenced a handful. We needed to reference relevant and similar work.