An empirical analysis of Australian and Portuguese consumers within the context of CSR and environmentalism

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Abstract

This cross country study examines the potential environmental predictors of consumers’ green behaviour. It uses consumer’s self reported environmental behavioural intentions and examines its potential influence on corporate practice of social responsibility (CSR). A conceptual model was developed and was subjected to empirical verification using survey research design. It was hypothesised that CSR improves green behavioural purchase intensity. PLS was used to estimate the measure of respondents’ overall perception of green products and their intention to purchase. It was found that in both countries, Australia and Portugal, CSR influenced purchase intentions. In both cases there was evidence of association between CSR and the consumers’ intention to purchase environmentally safe products.

Keywords: Green Products, Green behaviour, Corporate Social Responsibility, Purchase Intention, Consumer Environmentalism
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Introduction

Often businesses use corporate social responsibility (CSR) to portray themselves as being environmentally benign. While there is no universally accepted definition of CSR, the World Business Council for Sustainable Development (WBCSD) defines CSR as establishing a commitment towards sustainability (WBCSD, 2002). CSR incorporates environmentalism, which has been strongly debated in much of the literature (Aguilera et al., 2007; Barin-Cruz et al., 2007; Basu and Palazzo, 2008; Mackey et al., 2007).

Since environmentalism falls under the practices of CSR it would be important to understand the nature of the impact of CSR on consumer behavioral intentions. While this study’s contribution is focused primarily on pro environmental behaviour it also draws on a two country comparison on environmental issues and social responsibility in three ways. First, it examines Australian and Portuguese consumers’ beliefs on environmentalism. Second, it attempts to identify and provide a test of potential consumers’ environmental (green) behavioural predictors. Third, the study is designed to contribute to a better understanding of consumers’ self reported environmental behaviour and its impact on corporate social responsibility.

Consumer Environmentalism

The extant research on consumer environmentalism is categorised into two main streams, (1) those that focus on socio-demographic factors that are associated with environmentalism and (2) the studies of values, beliefs and other social psychological constructs related to environmentalism and green behaviour (Dietz, Stern and Guagnano, 1998). Socio-demographic factors as indicators of environmentalism have been examined in various studies (McKenzie, 1991; Roberts, 1996; Titterington et al., 1996; Brown and Wahlers, 1998). Factors that have been frequently related to environmentalism are age and education (Jones and Dunlap, 1992; Van Liere and Dunlap, 1980). While other factors, such as gender and race, have a weaker and less consistent relationship to environmentalism, the strongest appears to be the age or birth cohort (Dietz, Stern and Guagnano, 1998). Age is regarded as a useful basis for environmental market segmentation; however, the findings have been adverse; suggesting that younger individuals are likely to be more sensitive to environmental issues (Straughan and Roberts, 1999: Kanagy, Humphrey, and Firebaugh, 1994).

The other category of environmentalism includes social psychological factors, such as beliefs, values, and opinions. Pro-environmental beliefs can be considered as predictors of responsible environmental behaviour (Obregon-Salido and Corral-Verdugo, 1997). According to Converse (1964, p. 207) a belief system can be defined as "a configuration of ideas and attitudes in which the elements are bound together by some form of constraint of functional interdependence", in other words, pro-environmental behaviours are influenced by particular beliefs suggesting that norms create a social ideal of what comprises sound environmental behaviour (Obregon-Salido and Corral-Verdugo, 1997). Whilst individuals coming in contact
with these ideals or conventions could develop ‘symbolic beliefs’ based on social convention (Cary, 1993), environmental conservation based on experiences of the individual could enhance the development of ‘instrumental beliefs’ (Obregon-Salido and Corral-Verdugo, 1997). Both symbolic and instrumental beliefs have a tendency to affect pro environmental behaviour.

There is a significant correlation between instrumental behaviour and some beliefs, particularly if the level of specificity for such relationship is greatly congruent (Fishbein & Ajzen, 1975). Secondly, beliefs evolve by interactions of the individual with transitiuational events (example: social ideals, past experiences) due to their transitiuational character, beliefs that relate to environmental practices may not necessarily impose a specific behaviour (being environmentally friendly) but an association with convention i.e. the social ideal of environmentalism instead (Obregon-Salido and Corral-Verdugo 1997).

On the other hand environmental labeling on products is an effective way of green promotion. Environmental labels portray environmentally safe symbols or messages. Their primary aim in addition to informing the customer of the safety characteristics of the product is to assist corporations to position themselves as environmentally concerned organizations (D'Souza et al., 2005). D’Souza et al. (2005) reported that labels are characterised as providing support to a firm in two ways: Products endorsed should be ‘environmental compatible’ i.e. having minimal impact on the environment, thus restoring consumer confidence in green products. Secondly, the aim of environmental labelling is to project a green image, or being socially responsible. It is, therefore, hypothesised that CSR improves green behavioural purchase intension; that is the higher levels of CSR positively associate with higher levels of consumers green purchase intentions.

The rationale behind selecting Portugal in this comparison with Australia is due to the fact that since the 1990s, Portugal’s economic growth has been supported with considerable investment in their environmental infrastructure aimed to encourage environmentally sound management practices (OECD, 2008). There have been high standards set by the European Union’s environmental policies, and Portugal continues to utilise EU funds to congregate with other EU members in their strife towards environmental protection. Given that environmental governance within Australia and Portugal are similar, it would be useful to investigate the extent to which consumer approaches in these countries towards CSR and environmentalism are also similar.

**Methodology**

To quantify and test the objectives of this study a survey research was planned and implemented. The research instrument used in this study was drafted based on prior qualitative research and the relevant literature review. The resulting instrument included items to measure customers’ beliefs on social responsibility; evaluating pro-environmental behaviour on products, product ingredients, product labels, and government responsibility. The instrument was pre-tested and modified to include all variables contributing to the customers’ information processing on various dimensions.

The model was tested by the use of partial least squares (PLS) procedure (Hullard, 1999; Ranganathan, Dhaliwal, and Teo, 2004). PLS is a second-generation modeling technique that
simultaneously assesses the quality of measurement of research constructs and the interrelationships between the constructs (Ranganathan et al., 2004, p. 19). PLS explains the relationships within a model (Fornell and Bookstein, 1982) and is a technique well suited for small sample size (Cassel, Hackl & Westlung, 1999). It also assesses the relationships between constructs, and between the constructs and their measurement items, so that the error variance is reduced (Ranganathan et al., 2004).

Furthermore, it enables a simultaneous analysis of whether the hypothesised relationships at the theoretical level are empirically confirmed (Khalifa and Liu, 2003). Thus from a more practical approach PLS is a preferred instrument for analyses of exploratory models where explanation of the construct interrelationship is desired (Ranganathan et al., 2004).

In the case for individual item reliability, Hulland (1999, p. 198) recommends that “a rule of thumb employed by many researchers is to accept items loading of 0.7 or more, which implies that there is more shared variance between the construct and its measure than error variance.” The traditional reliability measure of Cronbach’s $\alpha$ assumes equal weight for the items measuring the construct and is influenced by the number of items in the construct (Ranganathan et al., 2004). In PLS, however, composite reliability relies on actual readings to compute the factor scores and is a better indicator of internal consistency. Similarly, Fornell and Larcker (1981) argue that composite reliability is superior to Cronback’s alpha since it uses the items loadings obtained within the nomological network (or causal model). All composite reliability estimates ranged from .0.74 to .83.

For the Australian sample, the unit of analysis was determined as the main buyers of food from supermarkets in a household irrespective of gender. A random sampling approach was undertaken using the telephone directory of Victoria (Australia) including both metropolitan and regional areas. The telephone survey was administered over one weekend. The number of completed responses amounted to 155, which were used for data analysis. The random telephone dialling (CATI) was used, which is expected to provide a representative sample of the target respondents, the supermarket shoppers’ population. No non-response rate was reported as the automatic telephone dialling would select the next call to replace the unsuccessful call.

The Portuguese sample consisted of the enrolled students in the MBA course selected from a University in Lisbon Portugal. The research instrument used for the Portuguese study was the translation of the Australian questionnaire, which was pretested to ensure accuracy and equivalency with the original. The questionnaire was mailed to the students. A total of 169 completed questionnaires were returned and used for data analysis. In both studies all measurements were subjective assessments by the respondents using a seven-point Likert type scale (Wrenn 1997). The data was analysed using both descriptive measures and partial least squares to identify and validate the items contributing to each component in the study. The respondents profile appears to be similar in both countries (Tables 1 and 2). The age group for both Portugal and Australia seemed to be concentrated on the upper end of the bell curve (i.e. ages of over 35 years). From an employment status perspective, the participants are either in full time or part time employment. As for retirees, both countries seem to have around the same number of respondents.

A model was constructed to demonstrate and estimate the anticipated associations (Figure 1). Partial Least Squares (PLS) regression is said to be a multivariate data analysis technique which is used to relate several dependent response (Y) variables to several predictor
explanatory (X) variables (Fornell and Larcher, 1981). It will attempt to identify the underlying factors. All factors were examined for their construct validity and internal reliability.

<table>
<thead>
<tr>
<th>Table 1 Respondents age profile</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>No.</td>
<td>%t</td>
</tr>
<tr>
<td>A8-24</td>
<td>7</td>
<td>4.5</td>
</tr>
<tr>
<td>25-29</td>
<td>5</td>
<td>3.2</td>
</tr>
<tr>
<td>30-34</td>
<td>18</td>
<td>11.6</td>
</tr>
<tr>
<td>35-39</td>
<td>22</td>
<td>14.2</td>
</tr>
<tr>
<td>40-44</td>
<td>17</td>
<td>11.0</td>
</tr>
<tr>
<td>45-49</td>
<td>26</td>
<td>16.8</td>
</tr>
<tr>
<td>50-55</td>
<td>11</td>
<td>7.1</td>
</tr>
<tr>
<td>Over 55</td>
<td>49</td>
<td>31.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2 Respondents employment profile</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>No.</td>
<td>%t</td>
</tr>
<tr>
<td>Full time</td>
<td>45</td>
<td>29.0</td>
</tr>
<tr>
<td>Part time/casual</td>
<td>33</td>
<td>21.3</td>
</tr>
<tr>
<td>Self employed</td>
<td>13</td>
<td>8.4</td>
</tr>
<tr>
<td>Retired</td>
<td>35</td>
<td>22.6</td>
</tr>
<tr>
<td>Unemployed</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>Home duties</td>
<td>20</td>
<td>12.9</td>
</tr>
<tr>
<td>Student</td>
<td>3</td>
<td>1.9</td>
</tr>
<tr>
<td>Volunteer</td>
<td>4</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Findings and Discussion

In the case of Australia (see figure 1), there seems to be a negative significant association between labelling between labelling and CSR. It would suggest that the lesser the emphasis on safety labelling by companies, the greater the level of CSR of the companies.

The PLS estimates also suggest that companies that have product labels may not be reconciling with their level of CSR and labelling, or the consumer may be over burdened by too much information on labels of products. Too much information may have had a negative connotation. However in the case of the Portuguese consumers, they seemed to see the congruence in relation to labelling and company’s level of CSR (hence the positive path coefficient). From the context consumers’ “Green Behaviour” to CSR, the path coefficients for both samples is positive. On close scrutiny of the findings, it was seen that the elements contributing to “Green Behaviour” for Australia seemed to be of intrinsic nature to the product (composition of green ingredients in the manufacture of the product). However, in relation to the Portuguese consumers, their antecedents were more of an extrinsic nature (aspects in relation to brand and quality of the product). Portuguese consumers (see Figure 1 - Italics) seem to also have higher Beta for their relationship between CSR and the purchase of environmentally savvy products in comparison to the Australian consumers. This would suggest that Portuguese consumers find it more important to allow for companies’ level of CSR to dictate the purchase of environmentally savvy products as compared to their Australian counterparts. The higher path coefficient for the Portuguese consumers also accounted for higher variation of the overall model towards purchase of environmentally savvy products as compared to the Australian consumers (17.7% variation for Portugal as compared to 14.9% for Australia).
In summary, the understanding of the CSR and green behaviour, potentially, has a number of applications. There is a need for management to support environmentally sound green objectives which will build a strong competitive advantage for the product. Environmental labels need to position a positive and ethical corporate image. Socially responsible companies should strive to meet customers’ expectations for green products if they intend improving market share and achieving longer term profit potentials. For further research it would be useful to revisit the effectiveness and efficiency of environmental processes adopted by companies and to review and search for the possibility of achieving a lower cost based operation. This may assist with providing cost effective value for a green product.

Conclusions

A comparative study was undertaken to identify the impact of corporate social responsibility on consumers’ beliefs about environmentalism. The analysis focuses on the tenets of consumer beliefs about corporate social responsibility and its relationship to purchase environmentally savvy products by consumers in Australia and Portugal. For both countries CSR was used as a mediator variable. In both cases there seems to be a significant association between CSR and the purchase of environmentally savvy products. The level of companies’ CSR seems to dictate the purchase of environmentally savvy products. The higher the level of manufacturers’ CSR, the consumer associates a greater propensity to accept their products as environmentally savvy and safe. Further research is required to evaluate other variables that impact CSR and it antecedents.
References


OECD, 2008. OECD Economic Outlook, 2.


