

Customers' Values, Beliefs on Sustainable Corporate Performance, and Buying Behavior

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ABSTRACT

Sustainable corporate performance (SCP) requires balancing a corporation's economic, social, and environmental performance. This research explores values, beliefs about the importance of SCP, and buying behaviors of supermarket customers from within a stakeholder framework. Beliefs about the importance of SCP (both social and environmental, but not economic) were found to be related to values. Also, it was found that customers' environmentally responsible buying behaviors were related to their beliefs about the importance of environmental SCP. However their socially responsible buying was not related to their beliefs about the importance of social SCP. Responsible buying behavior may be facilitated by providing reliable information about environmental and social aspects of products. Marketing professionals have a central role to play in moving towards a greater level of corporate transparency and sustainability. © 2007 Wiley Periodicals, Inc.

Sustainable corporate performance (SCP) requires balancing a corporation's economic, social, and environmental performance (Ranganathan, 1998). While there is fairly general agreement about these three dimensions of SCP, how exactly SCP is to be achieved is far from obvious. One approach suggested to be useful is based on stakeholder theory.

According to stakeholder theory (Clarkson, 1995; Freeman, 1984; Jones, 1995), a corporation can ensure that it is taking care of its responsibilities (or acting sustainably) by acting in line with the demands of all its stakeholders, that is all those who have a “stake” or an interest in the activities of the corporation. Stakeholders have been variously defined but the most widely cited definition is that of Freeman: “any group who can affect or is affected by the achievement of the firm’s objectives” (1984, p. 25). Much debate has ensued since the publication of Freeman’s definition as to exactly who (or what) qualifies as a stakeholder. Freeman’s own list included suppliers, customers, employees, stockholders, and the local community, as well as management in its role as agent for these groups. Others have suggested various additions to this list. For example Henriques and Sadosky (1999) suggest the inclusion of the media, community representatives and activists, government, competition, and professional associations. Still others suggest the inclusion of various “voiceless” stakeholder groups such as future generations and the natural environment (e.g., Starik, 1995; Steg et al. 2003).

Customers are among the most important stakeholders a corporation must take into account when deciding corporate policies and priorities. Customers exercise their power as a stakeholder group by their buying behavior. By buying, or refusing to buy particular products, or from particular stores or companies, customers are able to powerfully influence corporations. In a recent study, managers reported that customers are the stakeholders most frequently responsible for initiating change within their organization (Solomon, 2001). Managers also report that customers are their most salient stakeholder group—that is, that they receive the most priority from the management team (Agle, Mitchell, & Sonnenfeld, 1999). As they are necessary for the survival of a corporation, customers are “primary” stakeholders (Hillman & Keim, 2001). Thus, if customers demand responsible social and environmental performance, corporations must respond by behaving accordingly or risk the demise of the corporation. Although customers’ beliefs have been frequently studied from a market research perspective, to find out what products and services they require, they have rarely been studied from the perspective of stakeholder theory, as (potentially) aware and active stakeholders with opinions about the corporations themselves rather than just about their products and services. This is surprising, since such opinions may influence buying behavior as well.

Empirical work in the stakeholder field has focused on the views and behaviors of managers with respect to their dealings with stakeholder groups, among which are customers. Very little attempt has been made to examine the views and perceptions of customers themselves. This is probably because there are serious difficulties in collecting and analyzing customers’ views. Customers may not have a full overview of relevant

corporate activities. Moreover, customers have inadequate time and resources to be watchdogs for all the corporations in which they hold a stake. They are often inadequately informed and have limited ways of checking the information they do have. Thus, customers' views are likely to be inaccurate or incomplete. This is not to say, however, that companies may neglect customers' views; inaccurate or incomplete views may still affect customers' buying behavior.

As customers do not always have insight into and an overview of a corporation's activities, asking for their views on the SCP of a corporation in an open interview or case-study style approach, as is often done with managers and other highly involved stakeholders (e.g., Driscoll & Crombie, 2001; Maignan, Farrell, & Hult, 1999; Maignan & Farrell, 2000) would lead to an incomplete and unwieldy view of the corporation and its performance. Thus a theoretical framework is needed in order to tap the beliefs of customers about SCP. A comprehensive model of corporate sustainable performance developed at the University of Groningen (see Appendix A) was used. This is a theory-based model of sustainable corporate performance that addresses the question: What enhances the long-term survival of corporations? The model has been developed by a multidisciplinary team including sociologists, economists, environmental scientists, and psychologists and is not necessarily in line with mainstream management theories of sustainability, since these, while widely studied, may represent a limited, corporation-centered perspective of corporate responsibility. The model contains aspects that fall under three categories: economic performance, social performance, and environmental performance (Steg et al., 2003). This model is advanced by its authors as the basis for a practical measurement and reporting system. This model of SCP enables one to better understand and manage corporate performance from a sustainable-development perspective. In addition to enabling the measurement of actual SCP, this model can also be used to check stakeholder views on the importance of various aspects of SCP and of the performance of a corporation on these aspects (Steg et al., 2003). In this paper, this model is used to establish what customers believe are important aspects of corporate sustainable performance.

Listening to and understanding customers' (and other stakeholders') beliefs on the importance of various SCP aspects is essential to effective (stakeholder) management and marketing, as this may assist managers and marketers to set their priorities concerning these issues. This is especially important when these beliefs affect consumer behavior. Beliefs about importance of SCP aspects may influence consumer behavior negatively as well as positively. On the one hand, beliefs indicating that a firm is not adequately considering important SCP aspects may lead to boycotts and protests. On the other hand, customers may support the corporation in considering important SCP aspects via their purchasing behavior.

In addition, it is important to know where customers' beliefs come from. For example, are they based on short-term societal trends or media-generated hypes only? Or are they rooted in individuals' enduring personal values as well? The answer to this question has important consequences for understanding how changeable or robust these beliefs are—that is, if customers' beliefs are rooted in general values that are stable over time, they will be less susceptible to change as compared to when they are based on short-term trends and hypes (as will be explained in the next section). If customers beliefs are not based in some enduring personality construct (such as values), then management and marketing strategies with respect to SCP can afford to be ad hoc and based on trends, dealing with each issue as it arises. However, if customers' beliefs are rooted in enduring personal values, then it is essential that corporations listen and respond to these beliefs in a coherent way, focusing on making SCP not just an “add on” but an integral part of the business' (marketing) strategy.

This article aims to examine how customers' beliefs about the sustainable corporate performance of companies they buy from are influenced by their personal values, and how these beliefs and values affect their consumer behavior. These issues have practical consequences for corporate strategies for management and marketing. As a case in point, this article focuses on customers' beliefs about the importance of aspects related to the sustainable corporate performance of supermarkets. First, the relationships between values, beliefs, and behavior are outlined and elaborated. Next, the results of an empirical study aimed to study these relationships in more detail are presented and discussed.

CUSTOMERS' VALUES, BELIEFS, AND BEHAVIOR

Schwartz defines values as “desirable goals, varying in importance, that serve as guiding principles in people's lives” (1994, p. 88). To put it differently, values serve as a guiding principle for selecting or evaluating behavior, people, and events. Values are abstract and transcend specific situations—for example, values may affect beliefs and behavior of different kind. Within individuals, values are relatively stable across time (Gardner & Stern, 1996; Rokeach, 1973). Schwartz (1992) developed one of the most widely used value typology, which is composed of 57 values. Of these 57 values, 46 can be grouped into 10 value clusters that help describe individual differences in values: conformity, tradition, universalism, benevolence, power, achievement, hedonism, stimulation, self-direction, and security. The first four value clusters refer to social values, while the other six clusters reflect individualistic values. The remaining 11 values are for use in cross-cultural studies and are not used in studies of individual behavior within a single culture. Schwartz's scale has

been tested and validated in many countries around the world, including the Netherlands (e.g., Schwartz, 1992).

Values are supposed to affect individual beliefs and behavior of different kinds. Beliefs are more specific than are values, as they typically refer to specific domains of life. For example, one may have beliefs about corporate sustainability, about one's own behavior, or about the behavior of a corporation. Compared to values, beliefs may be more easily changed in the presence of new and contradictory information, due to fads and fashions in political and social thinking or by the influence of a new social circle for example.

The relationships between values, beliefs, and behavior with regard to sustainability (e.g., pro-environmental behavior) have been extensively studied within the field of environmental psychology. A common finding in studies on relationships between values and behavior, regardless of the way values are measured, is that individuals who hold collective, society-directed values are more likely to engage in environmentally and socially responsible behaviors than those who hold individualist, self-directed values (e.g., Karp, 1996; Schultz & Zelezny, 1999; Stern et al., 1999). For example, Schultz and Zelezny (1999) examined the relationships between Schwartz's ten value clusters and pro-environmental behavior, finding that environmentalism is positively related to universalism. The values that fall into this cluster are: equality, a world at peace, unity with nature, wisdom, a beautiful world, social justice, broad mindedness, and protecting the environment (Schwartz, 1992). They also found that environmentalism was negatively related to power and tradition. These findings make sense: those who strongly value all humans, animals, and the environment (universalism) are likely to behave pro-environmentally, as doing so benefits the things they value. Those motivated by power are likely to regard the environment as less important than their own personal advancement and convenience and those motivated by tradition may hold conservative views such as that the environment should be a lower priority than human economic interests.

Although values are related to behavior, this relationship is generally rather weak. It is generally believed that values affect behavior indirectly, i.e., the relationship between values and behavior is supposed to be mediated by more specific factors, such as individual beliefs (Ajzen, 1985; Stern et al., 1999; Stern, 1992, 2000). That is, values directly influence individual beliefs on a wide range of topics, which in turn determine individual's (environmentally or socially directed) behavior. As beliefs are more specific than are values, they are likely to be more strongly related to behavior (cf. Ajzen & Fishbein, 1980). The relationship between beliefs and behavior has been supported empirically for a number of environment-directed behaviors (e.g., Allen & Ferrand, 1999; Bamberg & Schmidt, 2003; Gatersleben, Steg, & Vlek, 2002; Heath & Gifford, 2002; Steg & Sievers, 2000), and the proposed mediation of the values—behavior

relationship by beliefs has received some empirical support (Bamberg, 2003; Collins & Chambers, 2005; Steg, Dreijerink, & Abrahamse, 2005).

When considering beliefs about SCP, the relevant beliefs relate not only to one's own capacity and responsibility to mitigate environmental and social threats, but also to the capacity and responsibility of the corporation (such as the supermarket) to do so. In this way the study of environmentalism may be extended beyond the individual level. Individuals consider not only "can I make a difference (by buying this product, joining this boycott, or picketing this store)?" but also "should this corporation make a difference (by stocking organic foods, providing a safe working environment for employees, or refusing to source from suppliers who use child labor)?" It is assumed that these beliefs have their basis in personal values as well. So, it is expected that values influence not only individuals' beliefs about what they individually can and/or should do in relation to the environment and society, they also influence individuals' beliefs about what corporations can or should do in these domains. More specifically, it is assumed that the extent to which people rate aspects contributing to the sustainable corporate performance of supermarkets as important is related to their individual values. In turn, it is expected that consumer behavior is not only related to beliefs about what individuals themselves should do, but to beliefs about what corporations should do in this respect as well. That is, consumers who believe their supermarket should act in a socially- and environmentally-responsible manner should be more likely to take into account social and environmental consequences of their own buying behavior as well.

This study explored relationships between values, beliefs about importance of aspects of SCP, and buying behavior. As explained previously, values are general and abstract and refer to what individuals find important for their own life in general. In contrast, beliefs are more specific, i.e., they refer to beliefs on a specific topic only. More specifically, in this study, beliefs refer to what corporations should do (according to consumers) to improve their SCP. Schwartz's value clusters were used as the values measure. Following from Schwartz's *a priori* definition of universalism, as the "understanding, appreciation, tolerance and protection for the welfare of *all* people and for nature" (1992, p. 12; emphasis in original), and from Schultz and Zelezny's (1999) finding that, in line with theoretical considerations, universalism appears to be the primary value cluster associated with environmentalism, it is expected that universalism is the most influential of the value clusters in explaining pro-environmental and pro-social beliefs and behaviors. That is, individuals who hold universal values are expected to indicate a stronger belief in the importance of the environmental and social aspects of the performance of their supermarket. While this study considers individuals' beliefs about the economic sustainability of their supermarket, it is assumed that these are less important to customers as corporations by and large

can be counted on to look out for their own economic welfare. The stakeholder group more relevant to economic sustainability is shareholders. Based on the previous theory, the following hypotheses are advanced.

H1a: Beliefs of individual customers about how corporations should behave are related to the values held by the individuals.

H1b: Beliefs about the importance of the environmental and social performance of corporations are most strongly (positively) related to the universalism value cluster.

It is assumed that customers more or less freely choose which supermarket to shop at and that this choice may be (partially) based on judgments about the SCP of the supermarket chain. Following Stern (Stern et al., 1999; Stern, 2000), from individuals who believe their supermarket should act in a socially- and environmentally-responsible manner, one might expect consumer behavior that reinforces the desired behavior by the supermarket. That is, such individuals would be expected to more often purchase socially and environmentally responsible products. More specifically, one might expect:

H2a: Those who believe social aspects of the supermarket's performance are very important buy socially responsible products relatively more frequently than those who believe this is less important.

H2b: Those who believe environmental performance is very important buy ecologically responsible products relatively more frequently than those who believe this is less important.

If customers are acting consistently, one expects coherence among their values, beliefs, and behavior. Thus it is expected that individuals' values affect their beliefs about how corporations (in which they hold a stake) should behave, which in turn affect the behavior of the individual in relation to these corporations (in this case, customers' buying behavior). The relationships hypothesized here can be conceptualized within a mediation framework (see Stern, 2000). While values have been consistently demonstrated to predict behavior, their effect is generally small. As explained earlier, this is thought to be, in part, because the relationship between individuals' values and their behavior is mediated by their beliefs towards the related specific behaviors. Thus, it is expected that:

H3: The relationship between customers' values and their behavior is mediated by their beliefs about the importance of the sustainable corporate performance of their supermarket.

METHOD

Participants

A total of 300 surveys were distributed to customers outside Aldi and Albert Heijn supermarkets in the city of Groningen, in the Netherlands. Of these 209 surveys were returned, representing a response rate of 69.7%. As 11 of these were not completed, 198 surveys were used in the analysis. Participants were 87 males and 111 females ranging in age from 17 to 81 years with a mean age of 43.5 years (SD 16.35). In total 31% of participants indicated that their net salary was “less than 1200 euro/month,” 30% “between 1200 and 2200 euro/month,” 35% “more than 2200 euro per month,” and for 4% of the respondents these data were missing. This was considered an even spread of participants across income levels; however, it is slightly lower than national figures. This is probably due to the relatively low household incomes in the province of Groningen; households in Groningen have the lowest net income in the Netherlands (CBS, 2003). The distribution of highest educational level attained showed 3% had completed primary school, 21% had completed a technical or vocational secondary school education, 29% had completed the highest level of secondary education, 47% had attained a college or university degree or equivalent. Compared to national figures this study’s sample has an overrepresentation of people who have completed high school and an underrepresentation of those who have completed university (CBS, 2003). This probably reflects the fact that Groningen is a student city and so, compared to the general population, contains an overrepresentation of university students (i.e., people whose highest education level is “secondary school” but who are on their way to being university qualified).

Procedure

Customers were approached outside supermarkets and asked if they were willing to participate in the study. Those who agreed to participate received a 12-page survey in Dutch, a reply-paid envelope, and a small gift (a pen). Two different questionnaires were distributed. These were identical except for the name of the supermarket, i.e., participants were given the questionnaire with the name of the supermarket they were recruited at: Aldi or Albert Heijn, as appropriate. Participants completed the survey at their leisure and returned them anonymously via reply-paid mail. Mailing addresses had been recorded for those participants who were willing to receive a reminder letter and the same was sent to these participants two weeks after the questionnaire was distributed. These participants also received a short summary of the findings at the conclusion of the study.

MATERIALS

Values. Participants' values in their own life were assessed using Schwartz's universal values scale, composed of 57 values. As suggested by Schwartz, subjects were asked to rate the importance of these values as a guiding principle in their lives on an 8-point scale, ranging from 0 "not at all important" to 7 "of supreme importance." Thus, rated the importance of the values for them individually. Participants also had the option of indicating that they are opposed to the value (−1). According to Schwartz, of these 57 values, 46 can be grouped into 10 value clusters as described previously. Only these 46 values were analyzed in this study, however, participants were presented with the complete survey including all 57 values. The multiple group method (MGM),* a simple and effective type of confirmatory factor analysis (e.g., Nunally, 1978; Ten Berge & Siero, 2001) revealed 10 distinct value clusters, identical to those reported by Schwartz. Cronbach's alphas for the value clusters were acceptable ranging from .73 to .81. As Schwartz's scale has been extensively validated elsewhere, this analysis is not reported here. For the purpose of analysis, for each value cluster the mean score given to values within the cluster by an individual was used as an indication of the extent to which the value was held.

Beliefs. Participants were asked to rate on a scale of 1 to 10 how important they thought each of 28 aspects of a three-pronged model of corporate sustainability (see Appendix A) was in their view for the sustainability of the supermarket at which they were recruited (Aldi or Albert Heijn). Thus, beliefs referred to the extent to which participants think various economic, social, and environmental indicators are important to the sustainable corporate performance of supermarkets. For example, participants were asked: "How important do you think the following aspects are for the sustainability of Albert Heijn (Aldi):

- Contributing to the economic growth in the region (economic)
- Providing a safe work environment (social)
- Minimizing negative effects on plants and animals (environmental).

Again, an MGM was carried out to verify the *a priori* classification of items empirically. Corrected correlations between items and components are reported in Appendix B. The MGM supported the *a priori* classification of the aspects into "economic" (Cronbach's alpha = 0.65), "environmental"

*Following the MGM, each component was defined as the mean score on values supposedly related to the concept at hand (i.e., value clusters). Next, a check was run to see whether the value items indeed correlated highest with the component to which they are assigned on theoretical grounds, while correcting for "self-correlation" (i.e., the fact that items automatically correlate high with components in which they take part).

($\alpha = 0.94$), and “social” ($\alpha = 0.90$) SCP. For the purpose of analysis, the mean importance rating given to aspects in each domain (economic, social, and environmental sustainability) was computed for each individual and used in the analyses reported further as in this article.

Behavior

Participants were asked to indicate how frequently they buy various environmentally friendly products (i.e., organic potatoes, other organic vegetables, organic fruit, organic meat, other organic food products, and environmentally-friendly cleaning agents) and socially responsible products (those that have been certified by Max Havelaar, an independent organization that promotes fair trade on coffee, tea, bananas, and chocolate) on a five-point scale, from 1 “(almost) never” to 5 “(almost) always.” In the case of organic meat, non-meat eaters were also coded as 5. An MGM supported the existence of two separate behavioral domains: eco-friendly products (Cronbach’s $\alpha = .83$) and Max Havelaar products ($\alpha = .88$). For the behavioral variables the mean frequency of purchase of the two product types (i.e., environmentally- and socially-responsible) was computed.

Finally, participants were asked their age, gender, educational, and income level, their relationship to the relevant supermarket (e.g., whether they are also an employee or a shareholder), and whether they are a member of any social or environmental non-governmental organizations (NGOs).

RESULTS

Data Manipulation and Quality Checks

Following Schwartz (1992), respondents who did not differentiate adequately between the values were dropped before the relevant analyses were carried out, that is if they used response 7 (“extremely important”) more than 21 times, or used any other response more than 35 times. Data for respondents who had not rated at least 41 of the listed values were excluded from the analyses. A similar procedure was used to filter out non-differentiating respondents on the beliefs scales. This left 155 respondents for whom value and belief data were analyzed.

The resulting data set was checked for normality. Beliefs about the importance of social and environmental performance showed a slight negative skew. This was thought to be due to the previously mentioned greater interest of customers in social and environmental performance than in economic performance. The behavioral variables showed a strong positive skew indicating floor effects in these variables. In the case of socially responsible purchasing this skewing was so extreme that the

planned regression analyses were impossible (the assumption of normality of residuals was consistently violated, and transformations were ineffective at solving this). Likewise, logistic regressions in which the data were dichotomized (that is, two groups were distinguished: those who (ever) purchased Max Havelaar products and those who had never purchased Max Havelaar products) were ineffective at explaining any trends in the data and so no regression analyses using social purchasing behavior are reported here. Although the assumption of normality of residuals also applies to correlation analyses this generally thought to not be a problem with sample sizes greater than 100 (StatSoft, 2003) and so correlation analyses using the social purchasing data are reported here. The other variables did not demonstrate obvious non-normality, nor did they contain extreme outliers.

Importance of Economic, Social, and Environmental Performance

As discussed previously, a background assumption of this study is that when thinking about corporate sustainability, customers are more concerned about the social and environmental performances of their supermarket than about its economic performance. As shown in Table 1, this assumption was justified. Independent *t*-tests revealed that customers rated economic performance as significantly less important to the sustainability of their supermarket than social and environmental performance.

Values and Beliefs

Bivariate correlations and multiple regression analyses were performed to look at the relationships hypothesized between values and beliefs. A Bonferroni correction was applied (i.e., a *p*-value of .1 per belief domain was adopted, thus $\alpha = .01$ per value cluster was used). The results are reported in Table 2.

In line with Hypothesis 1a, that individual stakeholders' beliefs about how corporations should behave are related to values, each of the three belief domains showed significant correlation with at least two of the value clusters. In addition, each value cluster, with the exception of hedonism, was significantly related to at least one belief domain. Schwartz's

Table 1. Mean Importance of the Three Dimensions of Sustainable Corporate Performance According to Customers.

Dimension	Mean
Economic	6.5
Social	7.8
Environmental	7.8

Table 2. Correlations Between Customers' Values and Their Beliefs about the Importance of Various Aspects of SCP.

Beliefs \ Values	Mean rating of the importance of economic aspects of sustainability	Mean rating of the importance of social aspects of sustainability	Mean rating of the importance of environmental aspects of sustainability
Conformity ¹	.335***	.224**	-.039
Tradition ¹	.273**	.252**	-.074
Benevolence ¹	.123	.223**	.127
Universalism ¹	.126	.312***	.291***
Self-direction ²	.166	.238**	.024
Stimulation ²	.223**	.018	-.063
Hedonism ²	.190	.114	-.001
Achievement ²	.333***	.054	-.076
Power ²	.351***	.032	-.233**
Security ²	.309***	.239**	.096

** $p < .01$ (two-tailed).

*** $p < .001$ (two-tailed).

¹ = social value.

² = individualistic value.,

value clusters may be split into “social” (conformity, tradition, benevolence, and universalism) and “individualist” (self-direction, stimulation, hedonism, achievement, power, security) values. For this group of participants most of the individualist values, except self-direction and hedonism, correlated moderately with beliefs regarding the importance of economic performance, while all the social values correlated moderately with beliefs regarding the importance of social performance. These trends accounted for most of the significant relationships observed. Environmental performance beliefs only showed small to moderate correlations with power (negatively) and universalism (positively).

Beliefs about the importance of economic performance were regressed onto the value clusters. The relationship was non-significant, $R^2 = 12.0$, $F(10, 110) = 1.50$, $p = .15$. When regressing beliefs about the importance of social performance onto the value clusters, 18.8% of the variance in social beliefs was accounted for by values $F(10, 107) = 2.47$, $p = .01$. Only universalism ($\beta = .28$, $p = .02$) made a significant unique contribution to this model. However, after a Bonferroni correction was applied (α per value = .01), no single value cluster made a unique contribution to the model. Finally beliefs about the importance of environmental performance were regressed onto the value clusters. Twenty-three percent of variance in environmental beliefs was accounted for by values $F(10, 109) = 3.26$, $p = .001$. Only universalism ($\beta = .47$, $p < .001$) made a significant unique contribution to this model. This contribution remained significant after a Bonferroni correction was applied.

In sum, beliefs about the importance of corporate economic performance were not significantly related to customers' personal values, while

beliefs about the importance of social and environmental performance showed small to moderate relationships with values. From the multiple regression analyses the only significant relationship between a single value and belief domain is the relationship between universalism and environmental beliefs. Thus Hypothesis 1b, of the particular importance of universalism to social and environmental beliefs, is confirmed only in relation to environmental beliefs.

Beliefs and Behavior

The second cluster of hypotheses dealt with the relationship between customer beliefs and their behaviors. Table 3 shows significant correlations only for environmental beliefs and the purchase of environmentally and socially responsible products. Thus from the correlation analyses Hypothesis 2b was supported, and Hypothesis 2a was not.

To further check these relationships a simple multiple regression technique was used. The purchasing of environmentally responsible products was regressed onto beliefs in the three domains. In total 10.7% of the variance in this behavior was explained by the measured beliefs, $F(3, 136) = 5.45, p = .001$. A Bonferroni correction was applied. An analysis-wise p -value of $p = .1$ was used, giving an alpha value of .033 per belief domain. Only environment-related beliefs made a significant unique contribution to the model ($\beta = .30, p = .001$). This analysis provided added support for Hypothesis 2b.

Values, Beliefs, and Behavior

The final hypothesis predicted that the relationship between values and behavior is mediated by an individual's beliefs. Correlations between the values and behaviors were calculated to test for any direct relationship between values and environmentally and socially responsible purchasing behavior. A Bonferroni correction was applied (using an α value of .01 per value, i.e., $\alpha = .1$ per behavior). Only universalism and environmentally responsible purchasing behavior appeared to be correlated ($r = .21, p = .011$).

Table 3. Two-Tailed Correlations Between Beliefs and Consumer Behaviors.

	Economic beliefs	Social beliefs	Environmental beliefs
Purchasing behavior—			
Environmental	-.114	.119	.287***
Purchasing behavior—			
Social	.029	.137	.230**

** = $p < .01$.

*** = $p < .001$.

Since a particular role was hypothesized for universalism in this study, the relationship between universalism and purchasing behaviors was tested in a separate analysis using simple linear regression. The purchase of environmentally responsible products showed a weak but significant relationship with universalism, $F(1, 143) = 6.59, p < .011$.

Since values were found to significantly affect behavior in only one instance (the relationship between universalism and environmentally responsible purchasing), this is the only relationship for which mediation can be tested. The mediation hypothesis was tested using Baron and Kenny's (1986) approach. First, the regression of environmental beliefs on universalism was significant $F(1,144) = 13.28, p < .001$. Second, as reported previously, the regression of environmental purchasing behavior on universalism was significant. Finally, in the regression of environmentally responsible purchasing on universalism and environmental beliefs, $F(2, 140) = 7.72, p = .001$, only the mediator (beliefs) contributed significantly to the regression model ($\beta = .24, p = .006$), while universalism was not significantly related to behavior when beliefs were controlled for. Thus, according to Baron and Kenny, mediation holds in this case (Sobel test: $t = 2.22, p = .027$).

DISCUSSION

This research aimed to look at the relationships between values, beliefs about the importance of various aspects of sustainable corporate performance, and buying behaviors of customers in relation to the sustainable corporate performance of two large supermarket chains in the Netherlands. First, whether customers' beliefs about the importance of aspects for the sustainability of their supermarket are related to individual values was explored: Are the customers who demand good social and environmental performance from corporations from which they buy also the customers who hold collective, society-directed values, or are values irrelevant to stakeholder demands? Second, whether customers behave in line with the beliefs they hold was investigated: Do customers who believe the social and environmental performance of a company to be important, support the corporation in behaving in socially and environmentally sustainable ways? Third, this study examined whether relationships between values and buying behavior were mediated by beliefs.

Hypothesis 1a, that individual stakeholders' beliefs about how corporations should behave are related to values, was supported by the data. Values appeared to be related to economic, social, and environmental beliefs. Although economic beliefs related significantly to six of the value clusters, the regression of economic beliefs on the values clusters was non-significant. Similarly, six value clusters were significantly related to social beliefs. The regression of social beliefs on values was significant, but no single value clusters made a unique contribution to this model.

Thus, individual values were not unique predictors of economic or social beliefs. Regression of environmental beliefs on the value clusters revealed that only universalism showed a unique relationship with environmental beliefs. These results suggest that beliefs are broadly value-based rather than directly related to a particular value.

These findings have implications for marketing strategy and corporate priority setting. If beliefs would be based on changing trends and media influences only, businesses may choose to wait them out or use their marketing to attempt to influence these trends rather than respond to them. If, however, as this study seems to indicate, beliefs about appropriate corporate behavior are related to enduring personal values as well, marketing strategies may be less successful in influencing these beliefs. Time alone is also unlikely to change these beliefs. Of course, based on this study, one cannot rule out the possibility that beliefs are based on short-term societal trends and hypes as well. Nevertheless, since beliefs are (at least partly) value-based, corporations would be well advised (1), to seek to know what their stakeholders believe they should be doing and (2), to be seen taking pro-active action in these areas of corporate performance and communicating these actions to the public.

The data partially supported Hypothesis 1b, that the most important value cluster for beliefs about the importance of the environmental and social performance of corporations is universalism, with universalism being the only value cluster to make a significant unique contribution to one of the regression models—the environmental model. In this finding, this study is in line with many of its predecessors (e.g., Cameron, Brown, & Chapman, 1998; Karp, 1996, Schultz & Zelezny, 1999), i.e., environmentalism is related to concerns for people and things outside one's immediate environment. Although universalism was related to social beliefs, it did not emerge as significantly more important than the other values in predicting social beliefs after an analysis-wise Bonferroni correction was applied.

Notably the value clusters showed quite distinct patterns of correlations to the social and environmental beliefs, with only the relationship with universalism common to the two belief domains. This adds further weight to the growing evidence that there is a biospheric or ecological value domain quite separate to social and altruistic values (see for example Grendstad & Wollebaek, 1998; Steg, Dreijerink, & Abrahamse, 2005; Thøgersen & Grunert-Beckmann, 1997; De Groot & Steg, in press). This is an area of particular interest to environmental psychology, but is also relevant to understanding consumer behavior and warrants further research. The other trends observed in the correlational data (i.e., the correlation between social values and social beliefs and between individualist values and economic beliefs) make sense intuitively and merit further investigation.

Hypothesis 2a, that those who give high importance to social aspects of the supermarket's performance more often buy socially responsible products, was not supported by the data. The correlation between social

beliefs and behavior was non-significant. However, in contrast to expectation, beliefs regarding environmental performance were significantly related to social buying behavior, suggesting that environmental beliefs may promote social as well as environmental behavior. This is highly interesting from a management and marketing point of view, i.e., stronger beliefs about environmental performance may promote the purchase of both socially and environmentally responsible products. The regression of socially responsible consumer behavior on the three belief domains violated the assumptions of multiple regression analyses. This is likely to be due to the extreme floor effect observed in the social purchasing behavior variable. More than half of the participants reported that they “(almost) never” purchased Max Havelaar products. The observed floor effect may reflect an unwillingness to pay for better social performance. However, it may be that the measure of socially responsible consumption was inadequate in some way, perhaps due to a lack of consumer awareness of the Max Havelaar endorsement or the fact that there are other socially responsible options. For example, Albert Heijn’s own brand of coffee was also a “fair trade” product.

Hypothesis 2b, that those who give high importance to environmental performance more often buy ecologically responsible products, was supported to some extent. The regression of environmentally responsible consumer behavior on the belief domains yielded a modest but significant relationship, with environmental beliefs contributing uniquely to this relationship.

The weak relationship, in the case of environmental consumerism, and the lack of relationship, in the case of socially aware consumerism, between beliefs and behavior indicates a lack of congruence between stakeholders’ expectation of corporate performance and their own behavior. Weak relationships between beliefs and behavior are not unusual in the study of environment- and society-directed behaviors, especially in the case of difficult, inconvenient, or expensive behaviors (Black, Stern & Elworth, 1985; Gatersleben, Steg, & Vlek, 2002; Guagnano, Stern, & Dietz, 1995). Usually environmentally and socially responsible products represent an expensive alternative to functionally equivalent products also available. This highlights that other actors should play a role in the promotion of socially and environmentally responsible consumer behavior as well, including corporations and the government. This issue will be further addressed later on.

Hypothesis 3, that the relationship between customers values and their consumer behavior is mediated by their beliefs about the importance of the sustainable corporate performance of their supermarket, was supported in the case of the only relationship between values and behaviors found to be significant: that of universalism and environmentally responsible purchasing. So indeed, there is an indication that the values—behavior relationship may be mediated by beliefs. However, as only this one relationship could be tested for mediation, the results should be interpreted cautiously.

That values were only weakly related to consumer behavior is unlikely to indicate rather than there is no relationship, but that the relationship is indirect, operating via beliefs and other intermediary factors. Potential intermediary factors suggested by previous research include personal and societal norms (Azjen, 1985; Stern et al., 1999), beliefs that (in this case, both corporate and personal) pro-social action will make a difference (Schwartz, 1973), ascription of responsibility (in this case to both oneself and to the relevant corporation) to take action (Schwartz, 1973), and individuals' personal ability and opportunities to take specific actions (Ölander & Thøgersen, 1995).

This study examined the value-basis of beliefs related to SCP only. As values appeared to explain a relatively small percentage of the variance in beliefs, it is very likely that next to values, other factors play a role as well, such as specific attitudes, or media coverage of specific sustainability topics. Measurement of the extent to which beliefs are trend-based rather than value-based only is a point for consideration in designing further studies.

This study focused on beliefs about the importance of economic, social, and environmental aspects of corporate performance. This information is highly relevant for companies and marketeers, as they make clear on which SCP aspects companies should best focus on in order to meet customers' demands. In addition, perceptions of the performance of companies on relevant SCP aspects should be studied, so as to inform companies which SCP aspects are up for improvement, or whether performance should be (better or more clearly) communicated to customers where customers' perceptions are incomplete or inaccurate. Beliefs about performance may be more easily changed, via well-planned marketing strategies, than are beliefs about importance of SCP aspects. Marketers will have an important role to play in this respect.

Stakeholder research largely indicates that customers are the most important stakeholders to corporate decision-makers, so their opinion counts (e.g., Solomon, 2001). Customers' power as stakeholders comes from the fact that they control the money that corporations want. If customers are undiscerning in their buying behavior, then corporations and their marketers can afford to ignore their preference for social and environmental sustainability, since customers will continue to part with their money either way. It is only if customers back up their beliefs with matched consumer behavior that corporations are forced to take notice and perform according to customers wishes. This study indicates that for this sample there are weak relationships between customers values and beliefs and their buying behavior. If customers expect corporations to conform to their wishes they may have to increase the congruence between these wishes and their behavior. This does not imply, however, that customers are fully responsible for the SCP of the corporations from which they buy. Although potentially consumers may be an extremely powerful stakeholder group, individually they may feel powerless and

they may lack the information and resources to act in the most desirable ways. Therefore, other parties should take their responsibility as well. Most notably, corporations and governments have important roles to play in this respect. They can facilitate an increase in value, belief, and behavior congruence by implementing interventions to limit the structural barriers (such as the high cost and limited accessibility of socially and environmentally responsible products) to responsible consumer behavior. The link between product availability and price (e.g., socially and environmentally responsible products exact a higher price due to the higher costs of obtaining, transporting, and storing a small quantity of specialized goods) provides an opportunity for suppliers and retailers to begin breaking down the barriers to responsible consumerism. Greater availability and visibility of these products (the initial cost of which may have to be offset by corporations themselves or by the government rather than passed onto consumers) will eventually lead to lower costs for suppliers, retailers, and consumers. Furthermore, the provision of reliable consumer information about the environmental and social aspects of products would facilitate informed, responsible consumption. This need for information provision gives a central role to marketing professionals in moving towards a greater level of corporate transparency and sustainability. Reducing taxes on socially and environmentally responsible products may further promote responsible consumer behavior.

Marketing professionals can contribute to SCP by keeping consumers informed about the social and environmental aspect of products and services, as well as about how the company as a whole operates in relation to these aspects of SCP. This research suggests that these issues are of enduring interest to consumers and so should be consistently (rather than erratically or reactively) considered when planning marketing campaigns.

REFERENCES

- Agle, B. R., Mitchell, R. K., & Sonnenfeld, J. A. (1999). Who matters to CEOs? An investigation of stakeholder attributes and salience, corporate performance, and CEO values. *Academy of Management Journal*, 42, 507–526.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behavior*. Heidelberg: Springer.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Allen, J. B., & Ferrand, J. L. (1999). Environmental locus of control, sympathy, and proenvironmental behavior: A test of geller's actively caring hypothesis. *Environment and Behavior*, 31, 338–353.
- Bamberg, S. (2003). How does environmental concern influence specific environmentally related behaviors? A new answer to an old question. *Journal of Environmental Psychology*, 23, 21–32.

- Bamberg, S., & Schmidt, S. (2003). Incentives, morality or habit? Predicting students' car use for university routes with the models of Ajzen, Schwartz and Triandis. *Environment and Behavior*, 35, 264–285.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychology research: Conceptual, strategic, and statistic considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Black, J. S., Stern, P. C., & Elworth J. T. (1985). Personal and contextual influences on household energy adaptations. *Journal of Applied Psychology*, 70, 3–21.
- Cameron, L. D., Brown, P. M., & Chapman, J. G. (1998). Social value orientations and decisions to take proenvironmental action. *Journal of Applied Social Psychology*, 28, 675–697.
- CBS (Statistics Netherlands) (2003). *Statistical Yearbook of the Netherlands*. Voorburg: CBS.
- Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20, 92–118.
- Collins, C. M., & Chambers, S. M. (2005). Psychological and situational influences on commuter-transport-mode Choice. *Environment and Behavior*, 37(5), 640–661.
- De Groot, J., & Steg, L. (in press). Value orientations and environmental beliefs in five countries: Validity of an instrument to measure egoistic, altruistic and biospheric value orientations. *Journal of Cross-Cultural Psychology*.
- Driscoll, C., & Crombie, A. (2001). Stakeholder legitimacy management and the qualified good neighbor: The case of Nova Nada and JDI. *Business and Society*, 40, 442–471.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman: Marshfield.
- Gardner, G. T., & Stern, P. C. (1996). *Environmental problems and human behavior*. Boston: Allyn & Bacon.
- Gatersleben, B., Steg, L., & Vlek, C. (2002). Measurement and determinants of environmentally significant consumer behavior. *Environment and Behavior*, 34, 335–362.
- Grendstad, G., & Wollebaek, D. (1998). Greener still? An empirical examination of Eckersley's ecocentric approach. *Environment and Behavior*, 30, 653–675.
- Guagnano, G. A., Stern, P. C., & Dietz, T. (1995). Influences of attitude-behavior relationships: A natural experiment with curbside recycling. *Environment and Behavior*, 27, 699–718.
- Heath, Y., & Gifford, R. (2002). Extending the theory of planned behaviour: Predicting the use of public transportation. *Journal of Applied Social Psychology*, 32, 2154–2185.
- Henriques, I., & Sadorsky, P. (1999). The relationship between environmental commitment and managerial with curbside recycling. *Environment and Behavior*, 27, 699–718.
- Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line. *Strategic Management Journal*, 22, 125–140.
- Hopper, J. R., & Nielson, J. M. (1991). Recycling as altruistic behavior: Normative and behavioral strategies to expand participation in a community recycling program. *Environment and Behavior*, 23, 195–220.
- Jones, T. M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of Management Review*, 20, 404–442.

- Karp, D. G. (1996). Values and their effect on pro-environmental behavior. *Environment and Behavior*, 28, 111–133.
- Maignan, I., & Farell, O. C. (2000). Measuring corporate citizenship in two countries: The case of the United States and France. *Journal of Business Ethics*, 23, 283–297.
- Maignan, I., Farell, O. C., & Hult, G. T. (1999). Corporate citizenship: Cultural antecedents and business benefits. *Journal of Academy of Marketing Science*, 27, 283–469.
- Nunally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
- Ölander, F., & Thøgersen, J. (1995). Understanding of consumer behavior as a prerequisite for environmental protection. *Journal of Consumer Policy*, 18, 317–357.
- Ranganathan, J. (1998). Sustainability rulers: Measuring corporate environmental and social performance. *Sustainable Enterprise Perspectives* 1–8. Available at <http://www.wri.org/meb/sei/state.html>
- Ranganathan, J. (1999). Signs of sustainability, measuring corporate environmental and social performance. In M. Bennett, P. James & L. Klinkers (Eds.), *Sustainable measures, evaluation and reporting of environmental and social performance* (pp. 475–495). Sheffield: Greenleaf Publishing.
- Rokeach, M. (1973). *The structure of human values*. New York: The Free Press.
- Schultz, P. W., & Zelezny, L. (1999). Values as predictors of environmental attitudes: Evidence for consistency across 14 countries. *Journal of Environmental Psychology*, 19, 255–265.
- Schwartz, S. H. (1973). Normative explanations of helping behavior: A critique, proposal, and empirical test. *Journal of Experimental Social Psychology*, 9, 349–364.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1–65.
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50, 19–45.
- Solomon, E. (2001). The dynamics of corporate change: Management's evaluation of stakeholder characteristics. *Human Systems Management*, 20, 257–265.
- Starik, M. (1995). Should trees have managerial standing? Toward stakeholder status for non-human nature. *Journal of Business Ethics*, 14, 207–218.
- StatSoft. (2003). *Basic Statistics*. <http://www.statsoftinc.com/textbook/stbasic.html>, accessed: 1 October 2003.
- Steg, L., Dreijerink, L., & Abrahamse, W. (2005). Factors influencing the acceptability of energy policies: Testing VBN theory. *Journal of Environmental Psychology*, 25, 415–425.
- Steg, L., & Sievers, I. (2000). Cultural theory and individual perceptions of environmental risks. *Environment and Behavior*, 32, 250–269.
- Steg, L., Vlek, C., Lindenberg, S., Groot, T., Moll, H., Schoot Uiterkamp, T., & Van Witteloostuijn, A. (2003). *Towards a comprehensive model of sustainable corporate performance: Second interim report of the Dutch SCP project*. University of Groningen, Groningen, The Netherlands.
- Stern, P. C. (1992). Psychological dimensions of global environmental change. *Annual Review of Psychology*, 43, 269–302.
- Stern, P. C. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*, 56, 407–424.

- Stern, P. C., Dietz, T., Abel, T., Guagnano, G. A., & Kalof, L. (1999). A value belief norm theory of support for social movements: The case of environmental concern. *Human Ecology Review*, 6, 81–97.
- Stern, P. C., Dietz, T., & Kalof, L. (1993). Value orientations, gender, and environmental concern. *Environment and Behavior*, 25, 322–348.
- Ten Berge, J. M. F., & Siero, F. W. (2001). The basic ideas of factor analysis. *Metodologia de las Ciencias del Comportamiento*, 2, 217–232.
- Thøgersen, J., & Grunert-Beckmann, S. C. (1997). Values and attitude formation towards emerging attitude objects: From recycling to general, waste minimizing behavior. *Advances in Consumer Research*, 24, 182–189.

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Appendix A. Overview of Main Categories of Economic, Social, and Environmental Performance Variables (Steg et al., 2003) Modified Model Showing Only the Variables Included in this Study.

Economic performance: Profitability and growth in market value	Social performance: Impacts on and relations with stakeholders	Environmental performance: Global environmental effects
1. Economic market value	1. Employee satisfaction	1. Sustainable use of scarce resources
2. Economic performance drivers	a. Good relations	a. Decrease use of non-renewable resources
3. Value chain performance	b. Commitment to basic rights	b. Increase share of renewable resources
4. Economic externalities	c. Care for well-being of employees	2. Reduce generation of emissions and waste
	2. Customer satisfaction	a. Reduce generation of final waste
	a. Good relations	b. Reduce emissions of
	b. Commitment to basic rights	• polluted waste water
	c. Care for well-being of customers	• non-CO ₂ greenhouse gases
	d. Commitment to chain effects	• acidifying gases
	3. Community satisfaction	• ozone depleting gases
	a. Good relations	3. Reduce negative effects on life support systems
	b. Commitment to basic rights	4. Commitment to chain effects
	c. Care for well-being of community	• i.e., “cradle-to-grave” issues
	4. Supplier satisfaction	
	a. Good relations	
	b. Commitment to basic rights	
	c. Commitment to chain effects	
	5. Competitors satisfaction	
	a. Good relations	
	b. Commitment to basic rights	

Appendix B. Corrected Correlations between Items Reflecting Economic, Environmental, and Social Beliefs and the Economic, Environmental, and Social Belief Components (Multiple Group Method).

	Economic	Environmental	Social
Economic			
Increasing profit	0.46	-0.08	0.08
Wanting to be the best supermarket in the Netherlands	0.70	-0.01	0.08
Delivering a good product through working together with suppliers and customers	0.51	0.28	0.31
Contributing to economic growth in the region	0.60	0.21	0.33
Environmental			
Using less finite resources	0.14	0.86	0.30
Using more recyclable resources	0.10	0.86	0.24
Minimizing waste	0.10	0.89	0.38
Minimizing harmful emissions	0.08	0.90	0.29
Minimizing negative effects on plants and animals	0.06	0.85	0.39
Minimizing the impact of negative environmental chain effects	0.07	0.89	0.38
Social			
Good relations with employees	0.23	0.27	0.56
Respecting employees' rights	0.18	0.35	0.65
Caring for employees	0.13	0.26	0.67
Good relations with customers	0.22	0.20	0.63
Respecting customers' rights	0.22	0.15	0.65
Caring for customers	0.26	0.31	0.66
Good relations with the community	0.20	0.16	0.71
Respecting human rights	0.07	0.37	0.70
Caring for the community	0.19	0.38	0.74
Good relations with suppliers	0.14	0.24	0.77
Respecting suppliers' rights	0.13	0.31	0.83
Expecting suppliers to be committed to the same principles of social sustainability	0.13	0.33	0.77
Good relations with competitors	0.21	0.20	0.69
Respecting competitors' rights	0.21	0.22	0.66
Cronbach's alpha	0.65	0.94	0.90

Note: For each item, the highest correlation between item and component is printed in bold. The correlations between items included in a scale and the specific scale itself were corrected for "self-correlations." In this case, corrected-item total correlations are printed.