Using Best-Worst Scaling Methodology to Investigate Consumer Ethical Beliefs Across Countries

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Abstract

This study uses best-worst scaling experiments to examine differences across six countries in the attitudes of consumers towards social and ethical issues that included both product related issues (such as recycled packaging) and general social factors (such as human rights). The experiments were conducted using over 600 respondents from Germany, Spain, Turkey, USA, India, and Korea. The results show that there is indeed some variation in the attitudes towards social and ethical issues across these six countries. However, what is more telling are the similarities seen and the extent to which individual variation dominates observable demographics and country based variables.

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Companies, especially multinational enterprises (MNEs), are increasingly being scrutinized by consumers and the media for their conduct with respect to social and ethical issues (Spar and La Mure, 2003). In response to this growing pressure, many public corporations have developed extensive corporate social responsibility (CSR) programs and a burgeoning industry has arisen to provide them with information about the salient issues to a society. For example, the number of firms on the London FTSE 100 that report on social and environmental issues has increased from 20 in 1994 to 76 in 2003 (Harrison, 2003). According to the Association of Chartered Certified Accountants approximately 2,000 companies worldwide are now producing "sustainability" reports (Jagger, 2004) and firms like Nike and Adidas—operating in an industry that has become a lightening rod for anti-corporate social activism—spend large amounts of money to monitor working conditions in hundreds of overseas factories (Harrison, 2003; Smith, 2003).

The implications of CSR practices are broad ranging and can affect the strategic decisions firms are making—from entering and selling into foreign markets to outsourcing work to specific countries. For example, the importance consumers attach to the use of child labor in production can affect decisions about the use of offshore production, the selection of a country in which to produce, the human resources policies of sub-contractors, and/or whether or not to sell a particular product in a specific country market. The salience of societal factors such as these was brought to light in the 2004 pre-election debate in the U.S. over "offshoring" of jobs—evidenced by the 1 March 2004 *Time* magazine cover asking "Are too many jobs going abroad?"—and the reaction of companies such as Infosys announcing that they were increasing their hiring "aggressively" in the US (Bjerklie, 2004). Hence, there is growing anecdotal evidence pointing to the increasing influence that both organized and

unorganized individuals and groups can have on many of the decisions associated with local and international business operations.

The emergence of a large number of consumer and other activist groups that focus their attention on issues such as the use of child labor, the impact of production and consumption on the environment, and the use of animals in product testing highlights the growing importance that the involved individuals place on specific ethical issues. For example, Elliott and Freeman (2001) identified over 40 anti-sweatshop organizations in the US alone, a large number considering the focus on a single issue. On-going protests and demonstrations against MNEs at the meetings of international organizations such as the WTO, World Bank, and IMF point to a similar trend on a global basis. Yet, as Harrison (2003, p. 127) notes, "most substantial CSR programmes are best understood as a defensive organizational response to a growing pressure from civil society" and they are quite clearly being targeted at governments, regulators, investors and employees in the first instance and consumers and the general public only secondarily (Jagger, 2004). This begs the question of where do the preferences of the individual consumers come into the equation?

Not understanding the general public and its awareness (or lack thereof) of social and ethical issues is to deny the extent to which specific economic, technological and social changes relate to the nature of individual preferences and the degree to which society is made up of a people with heterogenous preferences. In addition, failure to understand what a society means by "social responsibility" can lead to ineffective policies and practices not just on the part of firms but by non-governmental (NGO) and governmental organizations as well. From a global perspective this is important because many firms argue that while they may not be meeting the standards associated with Western democratic traditions when operating in second- or third-world countries, they are operating within the norms, regulations and standards applicable to the local culture. However, such norms, regulations and standards

themselves may be imposed through autocratic governmental and social structures and may not be reflective of the needs and wants of the general population. Hence, one of the first steps in understanding social responsibility from a global perspective is arriving at a picture of the extent to which societies are similar or different with respect to their social and ethical dispositions. It is this issue that the present work seeks to address.

In this study we investigate the relative value that individuals from six countries attach to a set of sixteen social issues. These issues span issues relating to product production and consumption (such as labor rights and environment) and general social viewpoints (such as gender equality and human rights). In addition, we introduce a unique experimental methodology, best-worst (or maximum difference scaling) experiments, that permits us to compare issues and people across countries in a way that minimizes differences due to scale use and/or cultural response orientations. Best-worst (BW) experiments are a major contribution of this study to the cross-cultural ethics literature since the approach produces a unidimensional interval-level scale that reduces the problem of scalar inequivalence and greatly facilitates comparisons across countries (Cohen and Markowitz, 2002; Cohen and Neira, 2003; Finn and Louviere, 1992; Marley and Louviere, 2005). Also, we used experimental design principles to construct our survey instrument, which allowed us to obtain more data from each respondent, which in turn increases the effective sample size allowing us to obtain reliable estimates of preferences with smaller sample sizes.

The value of our results will be seen in asking two related questions: (1) what are the preference orderings that individuals have with respect to different social and ethical issues and (2) do these orderings differ across countries? In some regards, the second question is the most interesting. If there are no differences, then one can argue that corporate excuses that standards from one country do not apply in another can be countered with a response that all the preferences are the same. If they are different, then one can ask the question what

adjustments are necessary to address the differences? This study does not seek to answer these questions beyond a reasonable doubt but is an exploration into whether or not these differences do exist.

The paper is structured as follows. The next few sections will discuss some of the background to the study including a brief review of the literature on corporate social responsibility, the motivation for increased consumer activism, and cross-cultural consumer ethics and ethical consumerism. All three areas are important antecedents to our work. The research methodology and sample are then described followed by a detailed discussion of the results and conclusion.

Literature Review

Corporate Social Responsibility

The growth in the importance of corporate social responsibility is evidenced by the large and growing number of articles published on this topic in both the academic literature and the popular press (Sen and Bhattacharya, 2001; Spar and La Mure, 2003). In its broadest conceptualization, CSR describes the relationship between business and the larger society (Hill et al., 2003). In effect, CSR incorporates the notion that "business corporations have an obligation to work for social betterment" (Smith, 2003, p. 53). However, social betterment is not the sole reason for implementing CSR programmes.

According to Swanson (1995), there are three main motivations for CSR adoption among business corporations. First is the positive duty view, which proposes that businesses may be self-motivated to have a positive impact on society. In effect, this first view of CSR is equivalent to the social betterment explanation presented above. Smith (2003) refers to this motivation for CSR as the normative case and states that few firms adopt CSR exclusively for this purpose.

Second, businesses may follow a more utilitarian view of CSR and regard it as a way to help achieve business objectives. The utilitarian view of CSR suggests that it may provide a basis upon which businesses can differentiate themselves, especially in highly competitive markets (Smith, 2003). Recent research lends partial support to this view and suggests a positive relationship between CSR actions and consumer attitudes toward a company (Sen and Bhattacharya, 2001) and the value of the company's intangible assets (Konar and Cohen, 2001). Third is the negative duty approach, which proposes that businesses adopt CSR in order to conform to stakeholder norms (Maignan and Ralston, 2002). This view of CSR is also supported by empirical research, which shows that consumers are more sensitive to negative CSR information than positive CSR information (Sen and Bhattacharya, 2001).

The utilitarian and negative duty views of CSR focus more specifically on the firm's main stakeholders instead of the broader societal focus of the positive duty (i.e., normative) view. In the business literature, stakeholders refer to a variety of groups and organizations such as employees, investors, business partners, and customers. Evidence suggests that CSR programmes can have a positive impact on all of these stakeholders. For example, Smith (2003) proposed that the relatively low employee turnover rate, approximately one third the average for the retail food industry, at Starbucks can be partly attributed to its socially responsible practices.

However, most researchers agree that activists and consumers are the driving forces behind the emergence of CSR programs. In effect, organizations have implemented CSR as a response to consumer pressure and organized boycotts from groups like PETA and Greenpeace (Harrison, 2003). As The Economist (1990, p. 69) stated,"pressure groups are besieging American companies, politicizing business and often presenting executives with impossible choices. Consumer boycotts are becoming an epidemic for one simple reason: they work." More importantly for MNEs, consumer activism and boycotts are not restricted

to American firms, but have become global phenomena with several large non-U.S. MNEs having been the targets of consumer groups (Klein et al., 2002).

Consumer Interest in Corporate Social Responsibility

Besides the relative success of boycotts, several other factors have been proposed to explain the growing interest of consumers in the social and ethical behavior of businesses. We focus our discussion specifically on consumers given the nature of our study, but we also wanted to acknowledge the impact of the other aforementioned factors. The most common factors include the process of economic globalization and the emergence of the MNE, the ubiquity of global media, the rising incomes and educational levels of large numbers of consumers, the appearance of ethical products, and the greater variety and availability of quality products.

Many observers argue that consumers in the developed world are changing and that these changes are contributing to the growth in activism. Simply put, today's consumers: (1) have more product choices available than at any other time (and these choices tend to be of higher and more uniform quality), (2) are wealthier and better educated, and (3) are increasingly brand conscious (Harrison, 2003). When these changes are combined with the increasing availability of ethical products (e.g., green, organic, fair trade, etc.) then it might be expected that consumers are more likely to become socially conscious and active simply because they now have an opportunity to do so.

What has been at issue is not whether consumers have the potential to become socially conscious and active but which of the plethora of social causes resonate most effectively with them and how might that affect their choices at the checkout lane and their response to CSR initiatives. In addition, few, if any studies, address the issue of whether these attitudes are specific to wealthy countries or are representative of a general tendency independent of the level of development or where a country stands in the global value chain (see, e.g., Belk et al. (2005)).

Social and Ethical Issues Across Countries

Despite the importance of these issues, a comprehensive review of the academic literature did not yield a single cross-country study that examined the attitudes of consumers with respect to social and ethical issues. This gap in the literature offers an opportunity to make a significant contribution, but also makes it exceedingly difficult to generate hypotheses about the likely differences in consumer attitudes towards ethical and social issues across a number of countries. However, there is a well-developed literature on cross-cultural consumer ethics and ethical consumerism as well as on broader concepts such as cultural and human values that can provide useful insights for the research here.

Research on cross-cultural consumer ethics has focused primarily on empirical tests of the Muncy and Vitell (1992) consumer ethics scale. The consumer ethics scale examines the extent to which consumers believe that certain questionable behaviors in a shopping or purchasing context are either ethical or unethical. In a recent review, Vitell (2003) came to the conclusion that consumer ethical judgements, across a variety of cultures, are based on four dimensions: 1) whether or not the consumer actively sought an advantage, 2) whether or not the consumer passively sought an advantage, 3) whether or not the activity might have been perceived as illegal, and 4) whether or not there is any perceived harm to the seller (i.e., no harm/no foul). Hence, results from several cross-cultural studies have shown a fair amount of consistency in the structure of the scale itself (e.g., Polonsky et al., 2001; Rawwas, 2001).

Of more relevance to the present study, are the empirical studies that have directly compared the extent to which the four dimensions are viewed as either ethical or unethical by consumers from different cultures under different scenarios. The evidence to date is mixed. Generally, most studies have found that consumers believe that actively benefiting from an illegal activity is universally illegal and unethical. This is not surprising given that the

activity is labelled as illegal, but does point towards some universal beliefs about the ethical conduct of consumers. Most differences occur when there is greater doubt about the legality of the activity, especially for the no harm/no foul dimension. For example, Rawwas et al. (1996) compared U.S. and Australian consumers and found that Australian consumers were significantly more tolerant of questionable actions (all dimensions except for actively benefiting from an illegal activity) than their U.S. counterparts. They found that Australian consumers were also more Machiavellian, which could explain some of the differences. A similar study by Al-Khatib et al. (1997) found that U.S. consumers were significantly more ethical than Egyptian consumers (once again on all but one dimension), but less idealistic and relativistic.

On the other hand, several other studies found few differences between different countries. For example, Polonsky et al. (2001) examined consumers in seven European countries (Germany, Denmark, Scotland, The Netherlands, Spain, Italy, Greece, and Portugal) and found few differences between groups of consumers from Northern and Southern Europe. Rawwas et al. (1998) also found little difference between Northern Irish and Lebanese consumers though both groups tended to be insensitive to consumer ethical issues. Overall, research on cross-cultural consumer ethics has yielded a mixture of results. It is quite clear that consumers from a variety of countries appear to agree that benefiting from an illegal activity is unethical. However, the evidence is not nearly as clear when the activity is questionable but not necessarily illegal.

For its part, research on ethical consumerism focuses on the impact of ethical and social issues on the purchase behavior of consumers. Most commonly, the issues under investigation have included environmental (e.g., use of recycled materials) and labor issues (e.g., use of child labor). As such, studies on ethical consumerism are much closer in focus to the present study. Though some researchers have argued that research on ethical

consumerism is inherently unreliable (e.g., Carrigan and Attala, 2001; Ulrich and Sarasin, 1995), most empirical studies have found that some consumers are willing to pay a premium for more socially acceptable products (Elliott and Freeman, 2001; Marymount-University, 1999; Uusitalo and Oksanen, 2004). For example, Auger et al. (2003) used structured choice experiments to examine the willingness of Hong Kong and Australian consumers to pay for more socially acceptable products. Their results show that some consumers were willing to pay a premium for more socially acceptable, especially for more sensitive issues such as the use of child labor and the use of animal testing. However, it was equally clear that consumers, from both countries, were not willing to sacrifice basic functional features for socially acceptable ones (see Auger et al. (2005) for a follow-up to this work).

In a more recent study, Belk et al. (2005) used video ethnography techniques with consumers from nine countries to get a deeper understanding of the underlying rationale for the purchase (or non-purchase) of socially desirable products. Though their sample was limited in size due to the nature of their methodology, their results yielded several relevant contributions. First, they found that culture had a much a smaller effect on perceptions of consumption ethics than expected. That is, ethical beliefs across the countries in their sample were fairly consistent. Second, ethical behavior on the part of businesses can influence ethical behavior on the part of consumers. That is, a large number of consumers in their sample cited the apparent lack of ethical conduct by business as a rationale for their own behavior. Third, although beliefs and perceptions differed, behavior was less variable. Few consumers acted on their beliefs but rationalized that inaction in very different, culturally consistent, ways. Once again, these results were consistent across all countries in their sample.

Lastly, cultural values are also relevant to the present study since they represent shared abstract ideas about what is good, right, and desirable in a society (Williams, 1970). From a

business perspective, values are often regarded as critical since they can directly influence the needs of consumers and, hence, their purchase behavior (Dibley and Baker, 2001; Kamakura and Novak, 1992; Kim et al., 2002; Manyiwa and Crawford, 2002).

Most of the theoretical and empirical research on cultural and human values is based on the seminal works of Rokeach (1973), Schwartz (1992), and Hofstede (1980). The focus of this research has been primarily on defining and characterizing the multiple dimensions of cultural and human values, and then using these dimensions to classify countries. In effect, these studies are based on the notion that certain types of values are regarded as more important to individuals in one country than to individuals in another country (Kim et al., 2002). For example, Hofstede (1980) identified four dimensions of culture: power distance, uncertainty avoidance, masculinity/femininity, and individualism/collectivism. Of these dimensions, the individualism/collectivism dimension (this dimension is more formally defined in the results section) is the most researched and has been linked to constructs such as consumer ethnocentrism (Balabanis et al., 2002b) and the perceptions of consumers with respect to the country of origin of products (Balabanis et al., 2002a).

For his part, Schwartz (1992) expanded on the work of Hofstede (1980) and Rokeach (1973) and developed a more comprehensive conceptualization with ten types of values: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. Interestingly, Schwartz also proposed that his ten dimensions are closely related to individualism and collectivism with power, achievement, hedonism, stimulation, self-direction linked to individualism and benevolence, tradition, and conformity linked to collectivism. The exact nature of Schwartz's ten dimensions is not particularly relevant for this study, since we are not specifically using them in our analyses.

What is relevant is that different countries can be classified based on these dimensions and that groups of countries sharing similar values emerge from this classification. In fact,

Schwartz (1999) was able to identify six groups of countries (Western European nations, English-speaking nations, Far Eastern nations, East European nations, Latin American nations, and Islamic nations) from his study of over 35,000 individuals from 49 countries. Based on this prior research, we expect to uncover differences in the way consumers from different countries order their preferences with respect to a variety of social and ethical issues. Furthermore, we also expect that groups of countries would emerge from these preferences.

However, Schwartz (1999) also postulated that there exists individual variation in value priorities within a culture (or country) due to the unique experiences and personalities of different individuals. Hence, we also expect a certain level of heterogeneity among individuals with respect to social and ethical issues within countries. Of greater interest is whether the level of heterogeneity in preferences varies between countries. That is, are there countries that demonstrate greater (or lower) level of heterogeneity? A related issue is to determine whether this within-country heterogeneity leads to groups of individuals (i.e., segments) that cross national boundaries. That is, are there groups of individuals that share similar preferences with respect to ethical and social issues across countries?

To summarize, three research questions that focus on both the differences and similarities of consumers with respect to social and ethical issues are proposed and guide this research:

1. What are the preference orderings that individuals have with respect to different social and ethical issues?
2. Do these orderings differ across countries?
3. Are there segments of consumers who share similar attitudes towards ethical and social issues across a variety of countries?

Research Approach

The experiment presented in this article was part of a larger study that examined the preferences of consumers with respect to social and ethical features of products across six countries. The larger study utilized two experimental methodologies, namely choice modelling and best-worst scaling. The work presented in this article describes the results from the best-worst scaling experiment only.

One of the biggest challenges in determining the relative importance of a set of issues across multiple countries is the existence of scalar inequivalence (Cohen, 2003). Scalar inequivalence arises primarily because of differences in response styles, which are defined as "tendencies to respond systematically to questionnaire items on some basis other than what the items were specifically designed to measure" (Paulhus, 1991, p. 17). More importantly for this study, there is now ample empirical evidence to show that countries differ significantly in their response styles (Chen et al., 1995; Steenkamp and Baumgartner, 1998; Steenkamp and Ter Hofstede, 2002) and that these differences can lead to seriously biased conclusions (Baumgartner and Steenkamp, 2001). For example, Cohen (2003) argued that differences in international market segmentation studies may be due more to differences in scale use than to true differences in consumer needs and preferences.

We selected the best-worst scaling method since it could effectively overcome a variety of problems in the use of rating scales across countries. BW scaling is a multiple-choice extension of the paired comparison approach that is scale-free and forces respondents to make a discriminating choice among the issues under consideration. As Finn and Louviere demonstrated (1992, p. 13), "BW scaling models the cognitive process by which respondents repeatedly choose the two objects in varying sets of three or more objects that they feel exhibit the largest perceptual difference on an underlying continuum of interest".

In this research, the underlying continuum is the respondents' degree of concern about a set of social and ethical issues (i.e., the objects). Specifically, the BW experiment examined sixteen social and ethical issues: (1) animal rights in product testing, (2) use of animal byproducts; (3) product biodegradability; (4) products made from recyclables; (5) product safety information provided (6) human rights; (7) packaging recyclability; (8) product disposability; (9) payment of minimum wages; (10) unions allowed; (11) minimum living conditions met; (12) sexual orientation rights; (13) safe working conditions guaranteed; (14) use of child labor in production; (15) genetically modified material usage; (16) gender, religious and racial rights. These issues were selected based on the available literature on CSR and ethical consumerism and covered broad issues of concern for business and consumers such as the environment, labor and worker rights, animal rights, human and individual rights, and product safety.

The experiment required each individual to examine twenty sets of four issues and indicate which issue of the four they considered "most important" and which they considered "least important". As such, there is a significantly reduced likelihood that we would encounter bias in the use of a rating scale since there is only one way to choose something as most (or least) important (Cohen and Neira, 2003). That is, BW scaling eliminates differences in the way that human subjects use rating scales, including cultural differences in rating styles if they exist. Appendix A provides a technical overview of BW scaling and the reader is directed to Marley and Louviere (2005) for a more complete description of the scale properties of the approach. Appendix B presents an explanation of the experimental task, definitions for the sixteen social and ethical issues, and an example of the actual experiment with the first eight groups of issues.

Two of the most important properties of BW scaling are that it measures all issues on a common scale and the resulting scale has known measurement properties, either an interval

or a ratio scale. Furthermore, interpreting the scale is relatively simple, as revealed by Marley and Louviere (2005). They show that the simple difference in BW scores (i.e., simply taking the number of times an item is considered "best" and subtracting the number of times it is considered "worst") is a close approximation of the true scale values (i.e., the scale values obtained from Multinomial Logit analyses as detailed in Appendix A). These properties allow for a quick and simple examination of the relative value of an issue by simply scaling the number of times an issue is considered "best" against the number of times it is considered "worst". Following this approach, we calculated our BW score for each of the 16 issues by subtracting the number of times an issue was selected as "least important" from the number of times that same issue was selected as "most important". The results of these calculations are individual-level scales for each of the 16 issues that are easily comparable across the entire sample. In this study, each of the 16 issues appeared a total of five times in the experiment so that the individual-level scales for each issue can range from +5 to -5. For example, a value of +3 could be obtained if a respondent selected an issue as most important four times and selected the same issue once as least important.

Sample

The sample for the study consisted of over 600 'middle class' respondents from six countries (i.e., approximately 100 respondents per country): Germany, Spain, USA, Turkey, India, and Korea. The respondents were recruited by a professional market research firm located in each country and selection was based on socio-demographic criteria—e.g., gender, age, income, and education—that identified them as representative of the middle class in each country. Hence, the sample is representative of the respective 'middle class' in each country where that is defined based on associated income and socio-demographic statistics as well as purchasing power, not a random sample of the entire country. Furthermore, the characteristics of middle class consumers across our six countries are inherently different due

to differences in economic and social development (see Table 1 for basic respondent characteristics by country). Those differences are especially prominent between the developed and developing countries in our sample where the middle class tended to be more educated than in developed countries. Surveys were translated into the appropriate language as required (i.e., German, Spanish, Turkish, Korean, and Hindi) and back translated into English to ensure consistency. However, respondents in India were presented with the choice of completing the survey in Hindi or English, and all respondents opted for the English version.

Data collection was conducted using either mall intercepts (USA, Germany, India, and Spain), or at the home or office of the respondent (Turkey and Korea) depending on standard practice in each country. The countries were chosen to purposely maximize the variance in: (1) the dominant religion practiced in the country, (2) the cultural traditions in the country, (3) differences on traditional measures of cultural distance, and (4) likelihood of expected variation in social attitudes to the issues listed above.

Results

Sample Results

A variety of statistical analyses were conducted to identify patterns in the data and help us answer our research questions. Our first analysis was simply to rank order from highest to lowest the BW scores for each country. In other words, our first analysis compared the average of the simple BW scores (i.e., the number of times an issue was selected as most important minus the number of times that same issue was selected as least important) for each country. These results are presented in Table 2 and an easier-to-interpret graphical representation is included as Figure 1. The results presented in Figure 1 are quite revealing. First, four issues clearly received consistently high ratings across all countries—human rights, child labor (although Koreans give it a neutral rating), safe working conditions, and

good living conditions. Second, four other issues clearly and consistently received low ratings across all countries—recycled packaging, use of animal by-products, recycled material usage, and genetically modified materials. The remaining eight issues are viewed quite differentially by country. For example, the issue of animal rights is rated higher than average by Germany, Spain, and India, but lower than average by USA, Turkey, and Korea. In fact, animal rights has the lowest rating of any issue for the Korean sample. Hence, these analyses show a high level of consistency across the entire sample for half of the issues and major differences between the countries on the other half of the issues. What this indicates is all the countries are consistent with respect to extreme evaluations and differ mainly in what might be considered to be middle range ethical and social concerns.

Cluster Analyses

Next we utilized Ward's hierarchical cluster method to classify respondents based on the simple BW scores of the 16 issues. We followed a systematic procedure to select the best clustering method and the optimal number of clusters. First, we evaluated two clustering methods, Ward's and farthest neighbour, by comparing the Log Likelihoods of Multinomial Logit regression models (MNL)—with the cluster membership as the dependent variable and the simple BW scores of the 16 issues as the independent variables—for clustering solutions ranging from two to eight clusters. The Ward's method was consistently superior to the farthest neighbour method in all cases with the exception of the four-cluster solution. Furthermore, the farthest neighbour method could not yield an adequate solution greater than six clusters due to very low membership in some of the clusters. Hence, we selected Ward's as the best method.

Second, we used a similar procedure to arrive at an optimal number of clusters for the Ward's method. Specifically, we compared the Log Likelihoods of MNL models for clustering solutions ranging from two to ten clusters. The Log Likelihoods declined through

ten clusters with a levelling off at about ten clusters. However, the unconditional MNL models—the MNL Discriminant analysis that maps the simple BW scores for the 16 issues back into the clusters—failed to converge past eight clusters. Hence, the eight-cluster solution proved optimal and is used in the remainder of this article.

The mixture of issues that matters to the different clusters is very complex as presented in Table 3. The table presents the t-statistic of the best-worst ratings for each cluster against the (grand) mean for the entire sample. For example, respondents in cluster 1 tended to rate animal rights, human rights, unions allowed, safe working conditions, gender-religious-racial rights significantly higher than the average for all respondents. Conversely, those same respondents rated use of animal-by-products, product biodegradability, use of recyclable materials, recyclable package, product disposability, and sexual rights significantly lower than the average. Hence, the results indicate that some clusters are relatively easy to describe while others are much more convoluted. For example, cluster 2 is very strong on environmental issues with ratings for the four environmental issues significantly higher than the average. In fact, the lowest t-statistic for the four environmental issues is 11.43, which is very high for our analyses. The results in Table 3 also enable us to compare different clusters to each other. For example, clusters 6 and 7 are very similar in their emphasis on animal rights, human rights, and gender-religious-racial rights. However, the two clusters are extremely different in their views of the environment with cluster 7 rating environmental issues significantly lower than the average and cluster 6 ratings these same issues either higher than average or no different from the average.

This mixture of results makes labelling the different clusters extremely difficult. As such, we aggregated the issues into six categories—environment, animal rights, worker rights, individual rights, consumer protection, and labor rights—to simplify the interpretation of the clusters. We obtained these six categories through a factor analysis of the simple BW scores

for the 16 issues using the Principal Component Extraction method and Varimax rotation. The six categories explained almost 68 percent of the variance and a score for each category was obtained by averaging the simple BW scores of the respective component issues. Specifically, the categories included the following issues: 1) Environment (product biodegradability, recyclable materials used, recyclable package, and product disposability), 2) Animal rights (animal rights and animal by-products used), 3) Worker rights (minimum wage paid, minimum living conditions, safe working conditions, and no child labor), 4) Individual rights (human rights, sexual rights, and gender, religious, racial rights), 5) Consumer protection (safety information provided and genetically modified materials used), and 6) Labor rights (unions allowed).

Table 4 presents the results for the six categories (i.e., t-statistics of the category means for each cluster against the category means for the entire sample) and shows clear patterns among the clusters. One of the most interesting aspects of BW experiments is that they also show quite explicitly which issues respondents were willing to abandon. Hence, the clusters can not only be described by the issues that people favor, but also by the ones they are willing to abandon when forced to make a trade-off. For example, respondents in cluster 1 clearly favored worker and labor rights, but were also willing to abandon environment and consumer protection issues for those rights. Similarly, people in cluster 2 unambiguously favored environmental issues (as well as consumer protection issues) and were willing to abandon all other issues as a consequence. Table 5 summarizes the description of the clusters based on high and low ranking issues. The table reveals a number of interesting characteristics of our clustering solution. First, the clusters are clearly different with different sets of issues being ranked high or low in the different clusters. Second, all six groups of issues are represented in both the high and low ranking categories. Finally, the trade-off patterns are relatively consistent across the different clusters.

Having described the clusters in terms of issues, our next set of analyses focused on describing the clusters in terms of membership. That is, the remaining analyses focus on the nature and characteristics of respondents within the individual clusters. Table 6 presents cluster differences based on demographic characteristics using simple univariate comparisons. A quick overview of the results suggests that there are no gender or age differences between the clusters, but that significant differences based on income, university education, and country of origin are present.

The most interesting differences are between the six different countries. For country of origin, the table shows the percentage of respondents that make up a cluster for a specific country. For example, cluster 5 is composed almost entirely of Koreans (72.55%) with the rest of the cluster coming from the US (11.76%), Turkey (7.84%), India (3.92%), and Germany and Spain (1.96% each). The Chi-square statistics at the bottom of the table are an indication of the level of homogeneity among cluster membership within a country. For example, Korea has, by far, the highest Chi-square statistic (187.21) indicating that Korean respondents are concentrated within a few of the clusters. In fact, most Korean respondents belong to one of three clusters, namely Clusters 2, 5, and 8. Conversely, the U.S. sample shows the lowest Chi-square at 24.91, which indicates that respondents are more evenly spread among the eight clusters.

Cultural differences may explain some these differences between countries. The last row in Table 6 includes Hofstede's (1980; 1983) "individualism" measure of cultural distance, which measures the extent to which individuals in a society are concerned mainly with their personal interests and the welfare of their families (Rawwas, 2001). Conversely, a low score on the individualism measure, such as Korea's (18), indicates that individuals are viewed as part of a larger group. It is important to note that we used the published country-level scores for Hofstede's measures of cultural distance. In other words, we did not measure these

variables in the present study. In effect, Hofstede's measures can be treated as country-level variables that incorporate slightly more information than simple country dummy variables. A closer examination of the individualism scores and the Chi-square values for each country shows an interesting pattern. Interestingly, the Chi-square values seem to be negatively correlated to the individualism scores. For example, the US has the highest individualism score (91) and the lowest Chi-square (24.91). These results suggest that the more individualistic the country, the more evenly distributed individuals are among the clusters. Conversely, the less individualistic the country (e.g., Korea), the more concentrated individuals are among a few clusters. As such, the more individualistic countries (e.g., USA and Germany) tend to be more heterogeneous with respect to their views of social issues while the more collectivist countries (e.g., Korea, Spain, India, and Turkey) are more homogeneous.

Multinomial Logit Analyses

Despite these interesting results, univariate comparisons yield a limited amount of useful information and are subject to all sorts of spurious effects and interpretations. To better understand the complicated nature of the relationships between cluster membership and demographics we conducted a series analyses to address the following issues: 1) to what extent do the 16 constructs significantly discriminate the clusters in the sense of having a significant effect on explaining differences between seven of the clusters and a reference cluster, and 2) can we identify individual difference variables such as gender and country domicile that explain differences in the clusters.

Because a number of our individual difference variables are qualitative in meaning (e.g., gender), we used multinomial logit analysis to address these issues. Used in this way, multinomial logit analysis provides a discrete discriminant model that does not require one to satisfy joint multivariate normality as would be the case with Discriminant Analysis (Aldrich

and Nelson, 1984). For example, the estimates in Table 9 can be interpreted simply as the log-odds that a particular observation falls into clusters 1 to 7 relative to the reference cluster (8) as a function of each predictor variable. Hence, the estimate for the gender effect associated with cluster 1 is –0.644, which implies that if a respondent is male, the log-odds of being in cluster 1 relative to cluster 8 decreases by –0.644.

These analyses are presented in Tables 7–9. Specifically, Tables 7 and 8 include only demographics as independent variables whereas Table 9 includes the individual ethical issues (i.e., the simple BW scores) and some demographics as independent variables. We used a variety of measures in Tables 7 and 8 to get as complete a picture on the impact of demographics on cluster membership. Table 7 incorporates age, income, gender, education, ethnicity, marital status, and Hofstede's four measures of cultural distance—power distance, individualism, masculinity, and uncertainty avoidance (once again using the published country-level measures). To account for the fact that specific demographics will be skewed by country—e.g., income in less developed countries will by definition be lower—we country-mean centered income and age—so as not to confound the results. This does not completely remove the problem of the issue of comparability of our samples—i.e., what it means to be 'middle class'—but ensures that we are not picking up spurious country effects in measures such as income.

The results indicate that country specific effects (i.e., Hofstede's measures) in combination with education, are strong in determining social issue orientation when one does not account for that orientation (in other words, leaving out exactly which orientation one is concerned about). The other demographics—age, income, gender, and ethnicity—are much less important. This is also the case if we do not mean center income and age.

Of the more identifiable clusters (i.e., the less ambiguous ones), we see some patterns. For example, cluster 2 (the environmentalists) tend to be more educated and less individualistic.

Similarly, cluster 4 (individual rights) is composed of individuals that are more individualist, more masculine, and more demanding of structured environments (i.e., higher levels of uncertainty avoidance). Finally, cluster 5 (labor rights) is made up of individuals who are less comfortable with inequality in power (i.e., lower power distance) and more collectivist (i.e., lower individualism).

Table 8 presents similar results, but uses country groupings—Western versus Asian countries—instead of the Hofstede measures. As expected, the impact of non-country demographics is similar with education the only important variable. For their part, the country groupings are helpful in determining social issue orientation. For example, the environmentalist cluster (cluster 2) is more Asian, which is a logical result given the greater levels of pollution and environmental issues in both India and Korea (the two Asian countries in our sample). For their part, the individual rights clusters (clusters 4 and 6) have less representation from Asia, which might be explained by their more collectivist orientation compared to Western countries (see Table 10 for a correlation matrix for all variables). Overall, the models with the Hofstede measures were slightly better at correctly classifying individuals (32.7% versus 31.0% for country groupings) and had a better ρ^2 (15.7% versus 12.4%). This is not surprising as the four Hofstede measures incorporate a greater amount of information about cultural differences than the country groupings. However, we must keep these results in perspective; overall, there is not much additional explanatory power coming from the Hofstede measures than would have arisen from just knowing the countries themselves (32.7% correctly classified is not significantly different from 31.0% correctly classified based on the improvement in log likelihood).

Table 9 presents the last MNL models and includes the ethical issues as independent variables as well as gender and the four measures of cultural distance (note that we could have used country dummies but only present the Hofstede measures to save space). This

allows us to decompose the results based on heterogeneity in individual preferences (the ratings of the social issues), heterogeneity due to demographics (e.g., gender, income, etc.) or heterogeneity due to country specific factors (e.g., the Hofstede measures). As expected, the models correctly classify a very large percentage of individuals into the different clusters since they were formed with the ethical issues. More interestingly, the four measures of cultural distance have very little impact in determining social issue orientation. In fact, only individualism (for clusters 2 and 3), power distance (for cluster 3), and uncertainty avoidance (for clusters 4 and 6) are significantly related to social issue orientation. Hence, the effect of the original ethical issues in this last MNL model overwhelms all of the demographic variables. What this indicates is that once we control for the constructs in the model (i.e., the simple BW scores for the 16 issues), then other factors have negligible predictive power. That is, country or individual demographics play a much smaller role once you ask the question conditional on the ethical orientation of the individual.

Discussion

We started this study with a relatively simple goal of addressing an issue of growing importance to governments, NGOs, and businesses operating in the global environment, the attitudes of consumers towards social and ethical issues. Although there has been a growing amount of discussion surrounding issues such as corporate social responsibility, ethical consumerism and civil society in general, the amount of empirical research on consumer attitudes towards social and ethical issues in different countries is extremely limited, either in terms of its scope or the sophistication of the methods employed to study individual preferences. This is a significant gap in the academic literature given the increasingly vast sums of money firms are investing in social responsibility programs, the growing popularity of consumer boycotts on a global basis, and the willingness of some consumer groups to pay a premium for socially acceptable products. Although the average consumer can not be seen

at the vanguard of the drive for more social accountability of business, particularly multinationals, there is little doubt that such initiatives will ultimately wither without either an alignment of these activities with some substantial collection of consumers or without some effective means of educating consumers about their veracity for society at large. Hence, a better understanding of the underlying attitudes of these consumers towards social and ethical issues is the first step in creating better alignment between business operations, NGO influence and governmental policy, both locally and globally.

Our concern in the present study was to examine whether or not consumers were similar or dissimilar in their trade-offs amongst social and ethical concerns. The method employed was unique in that we were not concerned with whether people were concerned with any specific issue but how they prioritized issues. The use of BW experimentation allowed us to make substantive comparisons between consumers in different countries with less concern about scalar inequivalence. In addition, the efficiency of the use of an experimental design approach allows us to create a much clearer picture of the similarity and differences between countries and heightened the importance of individual differences.

Our findings reveal some interesting similarities and differences with respect to the attitudes of consumers to social issues across our sample of six countries. The most striking results may be the similarities, not the differences. Our results clearly show that four issues—human rights, the use of child labor, the availability of safe working conditions, and the availability of good working conditions—are rated higher than the average issue by individuals in all the countries studied. Another issue, paying minimum wages, was also rated positively by all countries but only marginally so by most. Furthermore, four other issues—the use of genetically modified materials, the use of recyclable materials, the use of animal byproducts, and the use of recyclable packaging—are rated lower than the average issue by all countries. What this reveals is that some universal beliefs about social issues do

exist with respect to human and certain worker rights subject to less compromising by individuals in all countries we examined. Similarly, individuals in all these countries were willing to sacrifice certain issues much more readily.

The remainder of the issues were rated differentially across our sample, but the pattern of differences is not clearly evident. The only obvious pattern among the eight issues appears to be that Korean respondents rated most of these issues consistently differently from most other respondents. For example, Korean respondents rated animal rights much lower than any other country and rated product disposability, biodegradability, and the right of unionization much higher than any other country. In the end, it is these "middle concern" issues that drive all of the country level differences that we see when we examine the results with more sophisticated analysis.

A more sophisticated analysis points to some interesting issues that we need to investigate further. First, patterns of cluster membership by country showed clear differences. The most revealing is that cluster membership within a country tends to be more homogeneous for the more collectivist countries. That is, respondents from countries that are more collectivist (i.e., lower individualism score) tend to be concentrated in fewer clusters than respondents from more individualistic countries. These results are easy to explain since more collectivist countries should exhibit less variance with respect to individual beliefs and attitudes given that they want to be part of a group. In other words, if the underlying theory behind these measures is correct, individuals from collectivist countries are more likely to defer to group norms than their counterparts in more individualistic countries, which reduces the variance in beliefs and attitudes. An intriguing implication of these results, which would have to be confirmed by a larger sample of countries and individual measures of cultural orientation, is that more culturally similar individuals in different countries are more likely to hold similar social preferences.

Second, as most clusters had significant membership from a number of countries, we are fairly confident in saying that country of origin is only one predictor, and a potentially small one at that, of social attitudes. For example, in only one case (cluster 5; strong labor rights) was a cluster dominated by one country (Korea). In the case of 5 clusters (1, 4, 6, 7, and 8) four countries have strong representation (i.e., more than 10% membership). In the two other cases (clusters 2 and 3), three countries have heavy representation. What this implies is that rough segmentation approaches based on aggregate demographics must be approached with extreme caution. However, this does not mean that they are useless for specific groups. For example, individuals in cluster 2 (the environmentalists) tend to be more highly educated and come from countries that are more collectivist, on average. As such, products targeted at "green consumers" may be more appropriate for countries that fit that profile (e.g., educated consumers in Korea and India for our sample). However, the results of MNL analyses also demonstrate that demographic characteristics and measures of cultural distance offer only limited information about the composition of the clusters, especially after controlling for the individual social issues. Hence, one may be much better off with more direct preference based segmentation.

Implications for Decision Makers

Our research has some direct implications for decision makers, whether in the policy or management arenas.

First and foremost is the fact that there are more similarities in preferences across countries than there are differences. At one level this might imply that universal norms do exist with respect to some important social issues. However, the second implication complicates things considerably; our finding that there exist considerable differences in preferences within countries. The implication is that universal communication strategies may have some relevance to commercial companies and NGOs but these must be very specific.

The wide variety and the complexity of the preferences when looking at multiple social issues at one time is such that they may be very difficult to disentangle in a comprehensible and generalizable manner.

This leads to a second implication. Invariably the popular press attempts to create simple and dichotomous groups when talking about social issue supporters. For example, all left leaning liberals care and all right leaning conservatives are little more than social Darwinists. The reality is considerably more complex. Although we did not collect information about political preferences and other general attitudes, Auger, et al. (2003, 2005) and Auger and Devinney (2005) did collect information about people's attitudes—Machiavellianism, moral relativism and ethical idealism—and general preferences—using a replication of a common Mori poll—and found that these were unrelated to structured preferences even when one compared across groups as wide ranging as undergraduates, MBA students and Amnesty International supporters. Finding simple characterizations of people's social preferences is unlikely to be easy and stereotypical generalizations will not work.

A third implication that follows on further from this discussion is that cause related marketing approaches by companies or associated NGOs need to be approached with considerable caution. For example, we find that within the eight segments, there is only one, segment 2 (Environmentalists), which could be considered singular in its preferences. Every other group showed a willingness to make trade offs amongst many of the issues. What this implies is that companies need to not only pay attention to the 'good' issues—i.e., those for which consumers have a preference—but also to pay attention to the other issues which they are willing to trade-off. In a world where companies are increasingly engaging in cause related marketing exercises they must be prepared to do battle over which social issues resonate best and which resonate best with their customers in which combination.

The final implication is perhaps the most important. Marketing managers like to have observable a priori segments of consumers to target. Our results show that because of the complexity of individuals' social preferences, such a priori segmentation is not likely to be useful. As noted earlier, little if any of the segment differences can be predicted using observable demographics. Whether this is possible with an expanded set of demographic and behavioral questions is an empirical question. However, what we do know is that you can not just understand an individual's social issue preferences by looking at simple factors such as gender, income, education, ethnicity and so on.

Implications for Ethics Researchers

Our research has some direct implications for those conducting research in business ethics, particularly those examining ethics across cultures.

The first implication for researchers is in the use of rating scales. The approach used here allows for two benefits that we feel researchers should embrace. The first is that the use of an experimental design approach to discerning individual's attitudes, beliefs and preferences has significant efficiency characteristics that should be applied. This allows for more information being drawn from an instrument with any specific sample size. Second, experimental design approaches allow for better alignment of the underlying decision model to the instrument (as outlined in the Appendix). Using such an approach would allow for a deeper understanding not just of ethical preferences but ethical decision models.

The second implication is that forced choice trade-offs create more opportunities for creating incentive compatible scale instruments. A major problem in ethics related research is how to get the individual to answer in a manner that is 'truthful' or representative of what they would do in more realistic circumstances. One solution is expensive, to create realistic circumstances or to monitor individuals in realistic environments. Forced choice experiments

are a good second alternative as there is little gaming or deception possible if the instrument is designed carefully.

The third implication is that more innovative instruments allow us to be able to understand cultural difference and similarities more effectively. Scale equivalence across cultures is a well-known problem and one with which we all struggle. In circumstances where one wants to neutralize the effects of cultural bias in response patterns, techniques like BW scaling can be a useful technique and one that is relatively simple to implement. As every semantic differential or Likert-based instrument can be rewritten as a BW instrument, it is possible to rethink how we develop scales in cross-cultural research.

Limitations of the Current Work

Like all research, our research suffers from a number of weaknesses that restrict the generalizability of our results. First, we sampled a limited number of countries. Though we tried to select countries that were culturally different, the generalizability of our results is limited to the six countries in our sample. Second, we restricted ourselves to a relatively narrow set of labor, environmental and animal rights issues. However, these issues span at least five of the areas covered by the Universal Declaration of Human Rights, the International Convention on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights—working under favorable conditions, the right to rest and leisure, the right to food, clothing and housing, children's rights, and the right of procreation. However, even with these limitations we found some consistent and interesting results that have potentially profound implications for public policy and the way corporations' view their customers.

In addition, as we did not go deeper into the factors affecting these preferences, we do not know why specific individuals in specific contexts have such attitudes. For example, we do not know how malleable these preferences are nor do we know if they would change based

upon new information or events. We certainly do not understand how things like group dynamics affect preferences, nor do we know what would be necessary to alter people's preference structures. Current work is aiming to address these issues by examining not just a wider range of issues, but issues in different contexts—e.g., information, the price of supporting a cause, and social context of decision making—across a wider range of countries, with more representative samples, and with more understanding of the individuals religious, political and social behavior.

Table 1: Demographic Characteristics of Respondents by Country

	USA	Germany	Spain	Turkey	India	Korea	Total
Age (Median Grouping)	30–39	30–39	30–39	30–39	30–39	30–39	30–39
Age (Percent < 19)	9.10	6.00	17.00	16.20	17.00	2.00	11.33
Age (Percent > 50)	29.33	17.00	32.10	14.10	11.00	22.00	21.00
Gender (Percent Female)	60.6	52.5	59.4	50.5	49.0	70.0	57.0
Income (Median Grouping, $000)	25–40	15–25	15–25	15–25	15–25	15–25	15–25
Income (Percent < $15,000)	7.20	26.10	15.70	54.63	27.80	5.00	22.70
Income (Percent > $40,000)	51.47	28.40	19.10	11.30	3.10	7.00	19.90
Education (Percent Univ Educated)	20.70	8.90	22.60	62.70	60.80	39.00	35.70
Marital Status (Percent Married)	39.80	33.33	50.90	31.33	50.00	66.00	45.30
Percent Muslim	0.00	1.20	0.00	94.90	11.00	0.00	17.70
Percent Non-White	35.10	3.60	2.70	98.20	100.00	100.00	56.10
Sample Size	99	100	106	100	100	100	605
Sample Method		Mall Intercept		Home	Mall Intercept	Home/office	

Table 2: Rank Order of Social Issues Based on Best – Worst Differences by Country

Rank	USA	Germany	Spain	Turkey	India	Korea
1	human rights	human rights	human rights	human rights	human rights	human rights
2	no child labor	no child labor	safe working conditions	no child labor	no child labor	product disposability
3	gender, racial, religious rights	safe working conditions	gender, racial, religious rights	safe working conditions	safe working conditions	biodegradability
4	animal rights	good living conditions	no child labor	gender, racial, religious rights	good living conditions	safe working conditions
5	good living conditions	minimum wages	good living conditions	good living conditions	safety information	unions allowed
6	safe working conditions	animal rights	minimum wages	sexual rights	minimum wages	good living conditions
7	Biodegradability	gender, racial, religious rights	product disposability	minimum wages	animal rights	sexual rights
8	minimum wages	biodegradability	Safety information	safety information	biodegradability	minimum wages
9	product disposability	animal byproducts	animal rights	animal rights	animal byproducts	no child labor
10	sexual rights	safety information	unions allowed	Biodegradability	product disposability	gender, racial, religious rights
11	recyclable materials	recyclable materials	sexual rights	unions allowed	recyclable materials	gm used
12	gm used	unions allowed	gm used	animal byproducts	gm used	safety information
13	unions allowed	product disposability	animal byproducts	gm used	gender, racial, religious rights	recyclable materials
14	safety information	sexual rights	recyclable materials	product disposability	sexual rights	recyclable package
15	animal byproducts	gm used	biodegradability	recyclable materials	recyclable package	animal byproducts
16	recyclable package	recyclable package	recyclable package	recyclable package	unions allowed	animal rights

Figure 1: Best-Worst Ratings of Social Issues by Country (Ranked from High to Low)

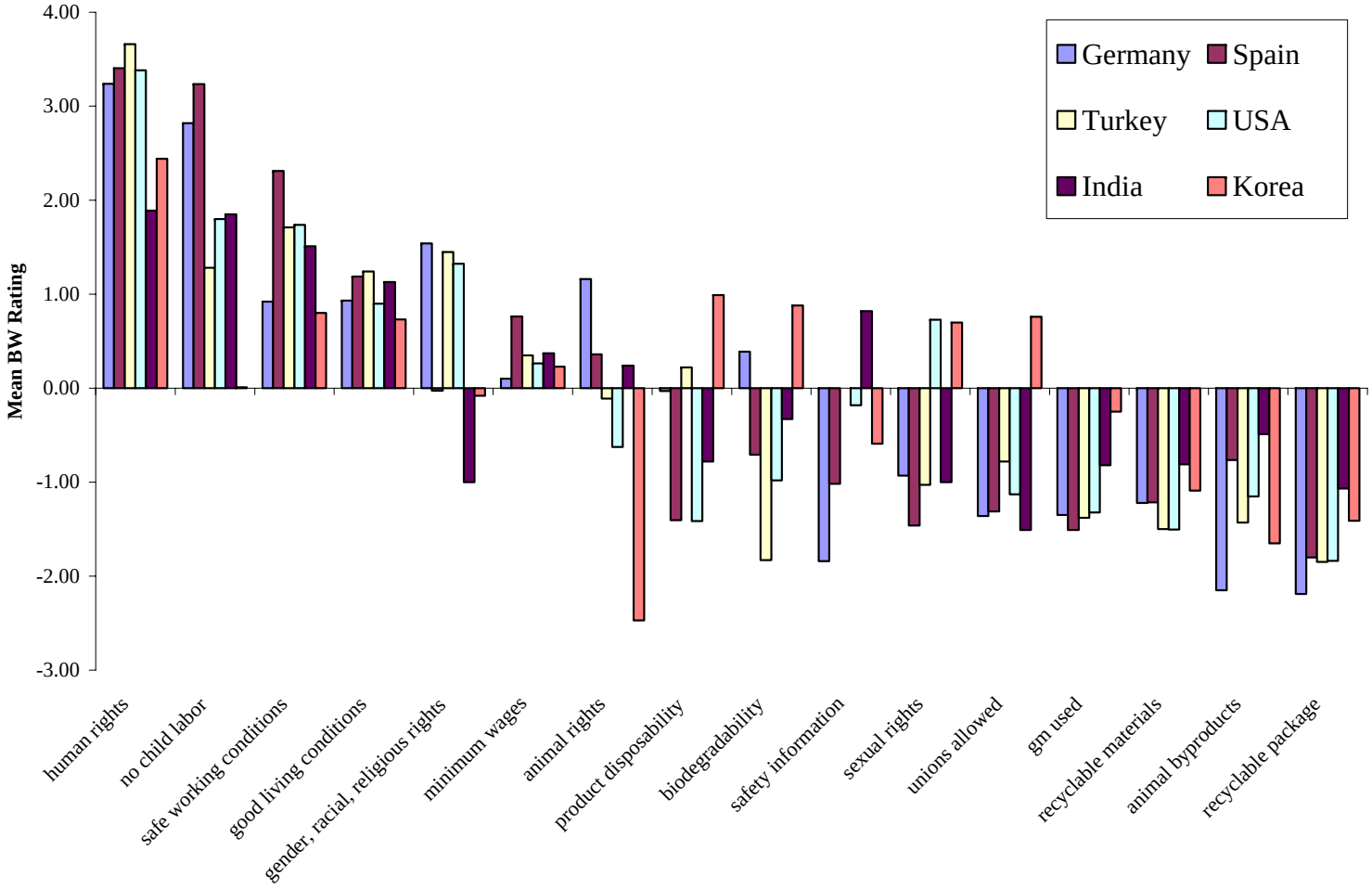

Table 3: Cluster Groups and t-Statistics for Mean Best–Worst Scores

Cluster	Animal rights	Animal by-products used	Product biodegradability	Recyclable materials used	Safety info provided	Human rights	Recyclable package	Product disposability	Minimum wage paid	Unions allowed	Minimum living conditions	Sexual rights	Safe working conditions	No child labor	Genetically modified materials used	Gender, religious, racial rights	*Percent of Sample*
1	**3.76**	*–4.08*	*–7.28*	*–4.48*	2.32	**4.44**	*–4.21*	*–3.21*	2.71	**8.88**	1.54	*–10.55*	**6.97**	1.77	–2.82	**3.76**	12.1
2	–2.69	0.83	**12.53**	**12.29**	**6.77**	*–7.86*	**13.49**	**11.43**	*–8.62*	–2.38	*–8.76*	*–6.50*	*–6.42*	*–6.43*	**4.84**	–2.69	10.4
3	2.76	1.61	**3.50**	2.65	1.74	*–3.62*	**4.95**	2.97	**3.11**	*–8.34*	0.64	*–10.30*	**3.90**	**7.61**	*–3.21*	2.76	16.3
4	**3.03**	–1.80	*–3.40*	*–5.95*	*–6.85*	**6.88**	*–7.31*	*–5.77*	0.70	*–6.01*	**5.58**	**8.31**	0.80	**3.78**	*–5.26*	**3.03**	18.4
5	*–15.40*	1.11	–2.00	*–8.03*	*–6.94*	0.62	*–5.09*	–1.15	1.12	**8.82**	1.03	**13.18**	*–3.02*	–1.89	**8.09**	*–15.40*	8.5
6	**8.38**	*–3.70*	2.44	4.07	*–4.11*	**3.67**	1.78	2.25	*–4.71*	*–3.66*	*–11.61*	**8.23**	*–5.82*	*–3.31*	*–3.07*	**8.38**	10.1
7	**6.39**	**5.81**	*–6.44*	*–6.16*	*–4.12*	**4.27**	*–10.46*	*–11.01*	**7.67**	–1.32	**7.00**	–0.31	2.96	**8.99**	–1.61	**6.39**	11.9
8	*–5.35*	0.09	–1.95	2.32	**10.80**	*–4.11*	2.61	2.30	–0.75	**4.97**	**4.67**	–1.55	2.43	*–6.82*	2.47	*–5.35*	12.3
Total	0.11	–0.02	–0.33	–0.41	–0.05	0.54	–0.53	–0.28	0.15	0.12	0.01	0.06	0.23	0.46	–0.07	0.11	
Rank	6	9	13	14	10	1	15	12	4	5	8	7	3	2	11	6	

Note: Total is the average best – worst score for the issue. Rank is the rank order based on Total. **Bold** indicates a t > 3.00 (strong above average orientation). *Italics* indicates a t < –3.00 (strong below average orientation).

Table 4: Aggregated Issues by Cluster Groupings

Cluster	Environment	Animal Rights	Worker Rights	Individual Rights	Consumer Protection	Labor Rights
1	*–4.80*	–0.16	**3.25**	–0.78	*–5.05*	**8.88**
2	**12.44**	–0.93	*–7.56*	*–5.68*	**8.69**	–2.38
3	**3.52**	2.19	**3.82**	–3.72	0.15	*–8.34*
4	*–5.61*	0.62	2.72	**6.07**	–4.33	*–6.01*
5	*–4.07*	*–7.15*	–0.69	–0.53	3.05	**8.82**
6	2.64	2.34	*–6.36*	**6.76**	–0.32	–3.66
7	*–8.52*	**6.10**	**6.66**	3.45	–4.03	–1.32
8	1.32	–2.63	–0.12	*–3.67*	0.26	**4.97**

Note: Total is the average best – worst score for the issue. Rank is the rank order based on Total. **Bold** indicates a $t > 3.00$ (strong above average orientation). *Italics* indicates a $t < -3.00$ (strong below average orientation).

Table 5: Description of Clusters based on High and Low Ranking Issues

Cluster	High ranking issues	Low ranking issues
1	Worker and labor rights	Environment and consumer protection
2	Environment and consumer protection	All others
3	Environment and worker rights	Individual and labor rights
4	Individual rights	Environment, consumer protection, and labor rights
5	Labor rights	Environment and animal rights
6	Individual rights	Worker and labor rights
7	Animal and worker rights	Environment and consumer protection
8	Labor rights	Individual rights

Table 6: Cluster Groups Descriptive Statistics

Cluster	Age	Income ($000)	Gender (percent female)	University Educated (percent)	Americans (percent)	Germans (percent)	Spaniards (percent)	Indian (percent)	Turks (percent)	Koreans (percent)
1	37.30	20.02	53.42	19.18	13.70	17.81	9.59	16.44	38.36	4.11
2	35.17	26.65	52.38	38.10	7.94	15.87	7.94	23.81	6.35	38.10
3	39.04	27.68	61.22	35.71	5.10	21.43	30.61	28.57	6.12	8.16
4	37.30	32.17	60.91	20.72	26.13	27.03	24.32	1.80	20.72	0.00
5	36.63	21.86	64.71	19.61	11.76	1.96	1.96	3.92	7.84	72.55
6	37.26	29.69	49.18	29.51	19.67	26.23	9.84	8.20	21.31	14.75
7	36.38	29.82	59.15	36.11	22.22	12.50	31.94	22.22	9.72	1.39
8	35.58	25.02	52.70	20.27	18.92	0.00	9.46	27.03	20.27	24.32
Mean	36.59	27.12	57.00	35.70	16.40	16.50	17.50	16.50	16.50	16.58
χ^2			5.77	17.13**	24.91***	38.08***	46.97***	46.59***	45.89***	187.21***
F	0.97	2.74***								
Individualism					91	67	51	48	37	18

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 7: Multinomial Logit Estimates of Cluster Segments versus Demographics and Hofstede Measures without Ethical Issues

Cluster	Age (Mean Centered)	Income (Mean Centered)	Gender (Female Dummy)	High School Dummy	University Dummy	White Ethnicity	Muslum Ethnicity	Married Dummy	Power Distance	Individualism	Masculinity	Uncertainty Avoidance	*Percent Classified Correctly*
1	0.025	0.002	0.138	0.891***	0.592	0.094	–0.235	–0.206	0.108***	0.044***	0.247***	0.128***	*32.8*
2	–0.010	0.000	0.003	0.577	1.554***	1.168	–0.865	0.383	–0.041	–0.064***	0.072	–0.010	*12.9*
3	0.013	0.000	0.393	0.459	1.250***	1.689**	–1.060	0.648	0.072***	0.010	0.137**	0.060**	*45.1*
4	0.004	0.000	0.610*	–0.080	0.174	0.360	0.761	–0.644	0.122*	0.128***	0.374***	0.234***	*63.6*
5	0.006	–0.002	–0.031	0.060	0.090	–1.617	–0.702	0.143	–0.142***	–0.043*	–0.126	–0.061	*66.0*
6	0.018	0.000	0.027	0.554	1.036**	–0.827	0.163	–0.045	–0.006	–0.015	0.196***	0.076***	*10.3*
7	0.012	0.000	0.548	0.349	1.043***	0.855	0.266	–0.127	0.091**	0.045*	0.166*	0.086**	*6.1*
8													*11.1*
ρ^2	15.7										Total Classified Correctly		*32.7*
–2LL	2094.24												

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 8: Multinomial Logit Estimates of Cluster Segments versus Demographics and Country Aggregates without Ethical Issues

Cluster	Age (Mean Centered)	Income (Mean Centered)	Gender (Female Dummy)	High School Dummy	University Dummy	White Ethnicity	Muslum Ethnicity	Married Dummy	Western Country	Asian Country	*Percent Classified Correctly*
1	0.023	0.002*	0.020	0.766*	0.610	0.596	–0.690	–0.302	–0.523	–1.665***	*32.8*
2	–0.006	0.000	0.049	0.614	1.272***	1.393*	–1.500**	0.286	0.333	1.083*	*17.7*
3	0.008	–0.001	0.249	0.084	1.027**	0.611	0.716	0.603	1.536**	0.578	*35.2*
4	0.003	0.000	0.521	–0.226	0.076	0.832	–0.099	–0.797*	0.635	–3.142***	*68.7*
5	0.007	0.000	0.291	0.429	0.299	–1.572	–1.750	0.124	0.281	1.150*	*44.0*
6	0.019	0.000	–0.018	0.534	0.940*	0.149	–1.157**	–0.191	0.409	–1.008**	*6.9*
7	0.008	–0.001	0.436	0.051	0.966**	0.096	0.526	–0.208	1.477**	0.081	*3.0*
8											*19.4*
ρ^2	12.4								Total Classified Correctly		*31.0*
–2LL	2064.08										

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 9: Multinomial Logit Estimates of Cluster Segments versus Hofstede Measures and Gender Cluster Groups with Ethical Issues

	A	B					C
Cluster	Ethical Issues Only (Percent Classified Correctly)	Gender	Power Distance	Individualism	Masculinity	Uncertainty Avoidance	Percent Classified Correctly
1	86.3§	–0.644	–0.081	–0.093	0.225	0.061	*89.0*
2	88.9§	2.483***	–0.131	–0.135**	0.042	–0.118	*90.5*
3	78.6§	1.490**	–0.179***	–0.205***	0.145	–0.024	*86.7*
4	83.8§	0.154	0.190	0.096	0.333	0.244**	*86.4*
5	98.0§	–5.693	0.136	–1.106	2.735	–0.156	*98.0*
6	82.0§	0.997	0.142	0.089	0.240	0.237**	*85.2*
7	79.2§	0.208	0.060	–0.005	0.261	0.132	*84.5*
8	74.3§						*82.4*
ρ^2	79.8§					Total Classified Correctly	*83.6*
–2LL	2472.69§					–2LL of Full Model	*2465.04*

* p < 0.10, ** p < 0.05, *** p < 0.01

Note: Column A represents the percentages and estimates based on a MNL using only the ethical issues. It is included to allow for a comparison.

§ Estimates using a model with ethical issues as independent variables.

Table 10: Correlations Amongst Demographics and Hofstede Measures

	Age (Mean Centered)	Income (Mean Centered)	Gender (Female Dummy)	High School Dummy	University Dummy	White Ethnicity	Muslim Ethnicity	Married Dummy	Power Distance	Individualism	Masculinity	Uncertainty Avoideance	Western Country
Income	0.091**												
Gender	0.104**	–0.050											
HSD	–0.079**	–0.030	0.075*										
University	0.033	0.150***	–0.076*	–0.521***									
White	0.098	0.360***	–0.012	0.185***	0.031								
Muslim	0.037	0.319***	–0.011	0.015	0.074*	0.591***							
Married	0.593**	0.065	0.144**	–0.051	–0.068	–0.041	–0.026						
PD	–0.101**	–0.394***	–0.033	–0.257***	0.055	–0.625***	–0.140***	0.092*					
IND	0.035	0.378***	–0.036	0.061	0.144***	0.549***	0.353***	–0.137**	–0.659***				
MAS	–0.005	0.217***	–0.068*	0.004	0.158***	0.403***	–0.007	–0.144**	–0.563***	0.808***			
UA	0.043	–0.120***	0.056	0.174***	–0.267***	–0.082**	–0.052	0.044	0.049	–0.624***	–0.765***		
Western	0.098**	0.409***	0.011	0.241***	0.013	0.714***	0.378***	–0.078	–0.813***	0.767***	0.474***	–0.102**	
Asia	–0.031	–0.117***	–0.039	–0.095***	0.140***	–0.045	0.186***	0.183**	0.541***	–0.075*	–0.194***	–0.165***	0.015

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Appendix A: A Simple Model for Best-Worst Judgments

Best-Worst Scaling (hereafter, BWS) is a fairly general scaling method that extends Thurstone's (1927) Random Utility Theory-based model for paired comparison judgments to judgments of the largest/smallest, best/worst, most/least, etc., items, objects or cues in a set of three or more multiple items. Specifically, BWS assumes that there is some underlying subjective dimension, such as "degree of importance", "degree of concern", "degree of interest", etc., and the researcher wishes to measure the location or position of some set of objects, items, etc., on that underlying dimension. We refer to the process of assigning numerical values that reflect the positions of the items on the underlying scale as "scaling". The BWS approach is based on the view that such measurement arises from theory, and that theory and associated measurement are inseparable. Thus, the scale values derived from BWS are those that best satisfy a theory about the way in which individuals make best-worst judgments.

To begin, we assume that there is a master set of K items to be scaled, $\{I_1, I_2, \ldots, I_K\}$. The items are to be placed in C subsets, $\{i_1\}$, $\{i_2, \ldots \{i_C\}$, and some sample of individuals of interest is asked to identify, respectively, the best and worst items in each of the subsets (or in each of some subset of the subsets). If there are K total items to be scaled, then the total number of subsets that could be presented to the individuals is "K, pick 3", which grows exponentially with K. Thus, one needs some systematic way to pick the subsets that makes sense, and as noted by Finn and Louviere (1992), constructing the sets from a 2^K orthogonal main effects design or some higher resolution design in the 2^K family of designs is a good approach, which coincides nicely with previous design theory for the case of only "best" choices (Louviere and Woodworth, 1983). There are other ways to construct appropriate sets, such as balanced incomplete block designs (BIBDs), and we illustrate the use of such designs in this paper.

Thus, BWS assumes that there is some underlying dimension of interest, and one wants to assign scale values to the K items on that single underlying dimension. It assumes that the choice

of a pair of items from any subset is an indicator of that pair of items in that subset that are the farthest apart on the underlying dimension. That is, in any subset, say the c-th subset, there are K(c–1)/2 pairs of items that could be chosen best and worst, and an additional K(c–1)/2 pairs of items that could be chosen worst and best. Thus, for any given subset presented to an individual like the c-th subset, the individual implicitly chooses from 2 x K(c–1)/2 pairs. Let us denote the quantity 2 x K(c–1)/2 as M, and for ease of exposition (and because it reflects the case in this paper), we assume that P is constant in every subset (e.g., balanced incomplete block designs lead to subsets of fixed size, M). Now, we can formulate this choice process as a random utility model as follows:

$$D_{ij} = \delta_{ij} + \varepsilon_{ij}, \quad (1)$$

Where, D_{ij} is the latent or unobservable true difference in items i and j on the underlying dimension;

δ_{ij} is an observable component of the latent difference that can be observed and measured; and

ε_{ij} is an error component associated with each ij pair.

Because of the presence of the ε_{ij} component, the choice process of any individual is stochastic when viewed by the researcher because we cannot know what the individual is thinking. Thus, we can formulate the model as a probability model to capture the probability that the individual chooses the ij pair in each subset:

$$P(ij|C) = P[(\delta_{ij} + \varepsilon_{ij}) > \text{all other } M–1 \ (\delta_{ik} + \varepsilon_{ik}) \text{ pairs}], \quad (2)$$

where all terms are as previously defined. This problem can be solved by making assumptions about the distribution and properties of ε_{ij}. A simple assumption that leads to a tractable model form that has seen many applications in the social and business sciences is that ε_{ij} is distributed independently and identically as an extreme value type 1 random variate (equivalently, as a Gumbel, Weibull or double exponential). It is well know that these assumptions lead to the

multinomial logit (MNL) model (e.g., Ben-Akiva and Lerman, 1985; Louviere et al., 2000; Louviere and Woodworth, 1983), which is the form of analysis used in this paper. That is, the choice probabilities can be expressed as:

$$P(ij|C) = \exp(\delta_{ij}) / \Sigma_{ik} \exp(\delta_{ik}), \text{ for all M } \delta_{ik} \text{ in } i_C. \quad (3)$$

We can express δ_{ij} as a difference in two scale values, say s_i and s_j, or $s_i - s_j$. Hence, we can rewrite the model as:

$$P(ij|C) = \exp(s_i - s_j) / \Sigma_{ik} \exp(s_i - s_k), \text{ for all M } \{s_i, s_k\} \text{ pairs in } i_C. \quad (4)$$

Thus, the scale values of interest are s_i and s_j, which reflect the location of each item on the underlying scale.

If the subsets are constructed in such a way that the joint probability of choosing items i and j across all subsets can be estimated independently of the marginal probabilities (e.g., by using a 2^k orthogonal main effects design + its foldover, or a BIBD + its complement), then the model implied by equation (4) can be estimated directly from the observed counts associated with each best-worst, worst-best pair summed over all subsets in the experiment. If the experiment does not allow one to calculate the total choices of all implied best-worst, worst-best pairs across the subsets (e.g., if one only uses the orthogonal main effects design or only the BIBD as discussed by (Finn and Louviere, 1992), one can approximate the desired scale values by taking differences in the marginal best and worst counts for each item. That is, the simple score $\delta(b_i w_i)$ = total best i – total worst i, approximates the unknown difference $s_i - s_j$ for each individual or subset of individuals who exhibit the same underlying ordering of the items (apart from judgmental errors). We state this without proof, but note that one can easily see that this must be true by constructing an experiment that permits the joint choice probabilities for all the implied pairs to be estimated independently of the marginal probabilities, assuming an ordering of the items in that experiment, and simulating choices of the items with the highest and lowest rank in the order in each subset. It

is easy to show that the total choices over all subsets for the implied pairs will be consistent with MNL, and once one obtains the MNL estimates, one can easily see that the $best_i - worst_i$ differences are perfectly proportional to the MNL estimates.

Appendix B: Best-Worst Experiment

In this section, we will present you with sixteen social and ethical issues. These will be organized in groups of four over the next two pages (a total of twenty groups or questions). For each group, select the **one issue** among the four that is **least important** to you and the **one issue** that is **most important** to you. Please make sure that you select only one least important and one most important for each group of four issues. We have included a description of the issues below; please keep them in mind throughout the rest of this section.

- **Animal rights**—describes the general treatment of animals for commercial purposes such as the use of animals for product testing, the displacement or killing of animals for natural resource exploitation (e.g., logging), or the cruel use of animals for entertainment.
- **Animal byproducts used**—Indicates that the product is made using animal byproducts such as animal fat or lard.
- **Product biodegradability**—indicates that the materials used to make a product can be broken down naturally and hence are safer for the environment.
- **Products made from recyclables**—indicates that some or all of the materials used to make a product were obtained from recycled sources.
- **Product safety information provided**—means that information about the safe use of a product and/or potential dangers from using a product is/are included with the product.
- **Human rights**—describes the basic rights of all people as stated in the Universal Declaration of Human Rights such as the right to food, clothing, housing, education, etc.
- **Packaging recyclability**—indicates that part or all packaging materials can be recycled for future use (e.g., product packages, food containers, shipping boxes, etc.).
- **Product disposability**—indicates that a product can be disposed of without causing undue damage to the environment.
- **Paying minimum wages**—signifies that companies adhere to the minimum wage standards of the country (ies) in which they are operating.
- **Unions allowed**—indicates that unionization is legal within a country and that companies producing in that country do not attempt to prevent or curtail the unionization of their workers.
- **Minimum living conditions met**—means that companies supply their employees with basic and acceptable living accommodations when required.
- **Sexual rights**—indicates that discrimination against individuals based on their sexual orientation is not allowed.
- **Safe working conditions**—signifies that companies follow a set of procedures to create a safe working environment for their workers.
- **Child labor not used**—means that companies do not use workers under the minimum working age in the country (ies) in which they are operating.
- **Genetically modified material used**—indicates that the use of genetically modified (GM) materials is allowed within a country and that companies use GM materials in their products.
- **Gender, religious, racial rights**—indicates that discrimination based on gender, religion, or race is not allowed.

—EXAMPLE—

In this example, sexual rights are least important and human rights are most important. Please notice that only **one issue** was selected in **each column** (**Least Important** and **Most Important**).

	Least Important		Most Important
A	Only one ⇨	Animal rights	
	√	Sexual rights	
		Human rights	√ ⇦ Only one
		Gender, religious, racial rights	

Question No.	**Which issue matters LEAST to you? (tick ONLY ONE box for each question)**	**Sets of social and ethical issues for you to consider**	**Which issue matters MOST to you? (tick ONLY ONE box for each question)**
1		Animal rights	
		Product biodegradability	
		Products made from recyclables	
		Product safety information provided	
2		Human rights	
		Product biodegradability	
		Packaging recyclability	
		Product disposability	
3		Product biodegradability	
		Paying minimum wages	
		Unions allowed	
		Minimum living conditions met	
4		Sexual rights	
		Product biodegradability	
		Safe working conditions	
		Animal byproducts used	
5		Gender, religious, racial rights	
		Product biodegradability	
		Child labor not used	
		Genetically modified material used	
6		Human rights	
		Animal rights	
		Gender, religious, racial rights	
		Sexual rights	
7		Animal rights	
		Packaging recyclability	
		Paying minimum wages	
		Safe working conditions	
8		Animal rights	
		Product disposability	
		Genetically modified material used	
		Minimum living conditions met	