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W. Daher, D. Larocque, S. Taboubi

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Walid Daher
Denis Larocque

GERAD and Department of Management Sciences
HEC Montréal
3000, chemin de la Côte-Sainte-Catherine
Montréal (Québec) Canada H3T 2A7

walid.daher@hec.ca
denis.larocque@hec.ca

Sihem Taboubi

GERAD and Department of Marketing
HEC Montréal
3000, chemin de la Côte-Sainte-Catherine
Montréal (Québec) Canada H3T 2A7

sihem.taboubi@hec.ca

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Abstract

This study examines simultaneously the effect of personal, contextual, and product-related factors on purchasing behaviour of fair-trade products. The results show that people who perceive that their individual actions can make a difference and those who have positive attitudes toward environmentally friendly products are more likely to buy fair-trade products. People who perceive that these products are more expensive and those with larger families are less likely to be buyers. Findings provide marketing managers of fair-trade organizations valuable information on the characteristics of buyers. This can help them identify target segments, products attributes, and arguments for advertising and promotional campaigns.

Key Words: Fair Trade products; Ethical Consumption; Personal Factors; Contextual Factors; Product-Related Factors.

Résumé

Cet article examine simultanément les effets des facteurs personnels, des facteurs contextuels, et des facteurs reliés aux produits sur le comportement des consommateurs québécois de produits équitables. Plus précisément, cet article étudie l'impact des attitudes et des caractéristiques (pratiques) sociales et de consommation des acheteurs de produits équitables et mesure l'influence des principaux attributs relatifs aux produits (comme les prix, le goût, et la qualité) sur le comportement d'achat du consommateur. Les résultats montrent que les gens qui perçoivent que leurs actions individuelles pourraient aider les producteurs du tiers-monde sont plus susceptibles à acheter des produits équitables que les gens sceptiques. En outre, la perception des consommateurs que les prix des produits équitables sont élevés a un effet négatif sur la consommation. Les gens sont moins susceptibles d'acheter des produits équitables quand les prix sont perçus comme étant plus élevés. De plus, les consommateurs ayant des attitudes favorables envers l'achat des produits verts sont plus susceptibles d'acheter des produits équitables. Finalement, la probabilité d'acheter des produits équitables est plus faible chez les familles de grande taille. Les résultats de cette étude peuvent fournir à tout gestionnaire voulant commercialiser des produits équitables des informations indispensables pour réussir sa stratégie marketing. En effet, de telles informations peuvent permettre d'identifier des segments cibles, des attributs importants à considérer pour la commercialisation des produits équitables, et des arguments convaincants pour les compagnes promotionnelles et de publicité.

Mots clés : Produits équitables; Produits éthiques; Facteurs personnels; Facteurs contextuels; Facteurs reliés aux produits.

Introduction

Poll after poll indicates that people have favourable attitudes toward ethical products and ethical behaviour. For instance, 57 per cent of respondents in a survey stated that they would not buy a product if they knew that children were involved in the production (Rogers, 1998). Creyer and Ross (1997) revealed that consumers take into consideration the company's level of ethical behaviour when making their purchasing decision. Despite these findings, demand for ethical products in general and for fair-trade products in particular is still low. According to TransFair Canada[1], 27% of coffee drinkers in Canada were aware of fair-trade coffee in the year 2005, but only 16% of them bought it. Evidently, consumers' positive attitudes toward ethics and ethical products are inconsistent with their purchasing behaviour. To explain this attitude-behaviour gap, some researchers have examined personal characteristics of consumers who buy ethical products, while others looked for factors that encourage and factors that hinder ethical products purchasing, and still others studied the influence of ethics on the purchasing behaviour. It's important to note that this literature assumed that consumers of ethical and organic products share common characteristics: they're both ethically and environmentally concerned consumers. Thus, people who buy these products might also be influenced by similar factors. Consequently, most of the variables identified as factors that affect attitudes and behaviour toward fair-trade products have been borrowed from the literature on green and organic products and the related literature on ethical consumption in general. Researchers like De Pelsmacker et al. (2005a) assessed the importance of product-related factors such as ethical labels, label issuer, amount of information provided, distribution, promotion strategy and branding to Belgian consumers of ethically labelled coffee. In another study, De Pelsmacker et al. (2005b) measured the consumers' willingness to pay for fair-trade coffee, and then they determined the characteristics of the people who buy fair-trade coffee. In a more recent study, De Pelsmacker et al. (2006) examined the attitudes and beliefs of the Belgium consumers vis-à-vis Fair Trade. Shrum et al. (1995) constructed a psychographic profile of the green consumer in terms of variables directly related to the purchasing behaviour. Also, Straughan and Roberts (1999) studied the effect of demographic variables, psychographic variables, and altruism factors on ecologically conscious consumer behaviour. Carrigan and Attalla (2001) conducted a qualitative study to examine the influence of ethics on the purchasing behaviour. Tanner and Kast (2003) were the only researchers who examined simultaneously the influence of contextual and personal factors on green products purchases. However, their work was based on the Swiss consumer green consumption.

Because of lack of studies on ethical products in general and on fair-trade products in particular that examine simultaneously the influence of personal, contextual, and product-related factors on the purchasing behaviour of consumers, we assess jointly the effect of all three types of factors on the purchasing behaviour. We believe that it is essential to examine the influences of these factors simultaneously because people might possess personal characteristics and attitudes that make them potential fair-trade products buyers

but their purchasing action might be impeded by other factors such as product-related factors or contextual factors.

In the following sections, we start by reviewing the literature concerning the effects of the factors mentioned above on ethical and organic products buying behaviour. In the second section we describe the methodology and the main results of this study. These results are discussed in details in Section three, and finally, in Section four, we conclude with the limitations and implications of this study and make suggestions for future research.

1 Literature review

Variables previously identified in the literature on ethical consumption originate mainly from studies on green and organic products. These variables can be classified into three categories: (1) Personal variables, (2) Contextual variables, and (3) Product related variables.

The first category includes variables such as personal norms, attitudes (toward fair-trade commerce and genetically modified food), perceived social responsibility, ethical (more precisely, environmental) concerns, and perceived consumer effectiveness (PCE). Practice and attitudes toward activities related to health and ethics (such as sports, recycling, nutritional habits, voluntary and religious activities) are also included in this category.

Contextual variables are neither attitudinal, nor perceptual variables. We include in this category demographic and socioeconomic factors describing the characteristics of the person, and variables describing the characteristics of the shopping experience. Among these variables, we find gender, age, revenue, education, household's size, time available for shopping, and type of stores visited. Finally, product related variables are quality, appearance, taste, and price. Quality and price can be effective (i.e. an assessment after the buying or consumption of the product) or perceptual (i.e. only beliefs). All the variables identified in these categories and their effects are summarized in Table 1.

1.1 Personal variables

Personal norms belong to this category of variables. They are a set of explicit and implicit rules that influence peoples' thoughts and behaviours (Fransson and Biel, 1997). Since ethical products' purchasing is morally demanding, some authors suggested that consumers who buy them must necessarily possess particular subjective rules that drive them to turn their thoughts into action. Most of these studies found that personal norms have a positive impact on environmental behaviour and green food purchasing. The only exception is Tanner and Kast (2003).

A positive attitude toward the ethical mission of fair-trade commerce is also a personal variable that should normally have a positive impact on the act of purchasing fair-trade products. Although this statement seems logical, the relationship between both variables is

Table 1: Summary of variables (and their effects) identified in the literature

Type of product Authors	Fair-trade[e]	Green[e]	Organic
Arnot et al. (2006)	Price (ns)		
Boulstridge & Carrigan (2000)	Social responsibilities (ns)		
Brown et al. (2000)	Price (-)		
Carrigan & Attalla (2001)	Revenue (+), Education (+)		
Cobb et al. (1995)	Attitudes (ns)		
De Pelsmacker et al. (2006)	Gender (ns), Age (+) Revenue (ns), Education (ns)		
Fotopoulos & Krystallis (2002)			Revenue (ns), Price (-)
Hopper & Nielson (1991)		Personal norms (+)	
Lea & Worsley (2005)			Religiosity (ns), Price (-), Gender*
Maignan & Ferrell (2001)	Revenue (+), Education (-)		
Roberts (1996a and 1996b)	Revenue (+) Education (+)	Perceived consumer effectiveness (+) Revenue (+), Education (+)	
Schlegelmilch et al. (1996)		Environmental concerns (+)	
Shaw (1999)	Perception of time (-)		
Sikula & Costa (1994)	Gender (ns)		
Sriram & Forman (1993)		Environmental concerns (+)	
Stern & Dietz (1994)		Personal norms (+)	
Stern et al. (1986)		Personal norms (+)	
Straughan & Roberts (1999)		Environmental concerns (+) Perceived consumer effectiveness (+) Gender (ns) Revenue (ns)	
Tanner & Kast (2003)		Health (ns), Perception of OGM (ns) Environmental concerns (+) Perception of time (-), Personal norms (ns), Attitudes toward Fair Trade (+) Revenue (ns), Education (ns) Household size (ns), Taste (ns), Price (ns), Gender*	
Tsalikis & Ortiz-Buonafina (1990)	Gender (ns)		
Vining & Ebreo (1992)		Personal norms (+)	

ns = not significant

\+ = significant with same direction relation

\- = significant with opposite direction relation

* Women are more inclined to buy these products

not always proven. This can be explained by the Theory of Reasoned Action by Fishbein-Azjen (1975) and the developments around this theory suggesting the existence of mediating variables in the relation between attitudes and behaviour. A person's beliefs on his capacity to influence the outcome of a problem, called by Thogersen (1999) the Perceived Consumer Effectiveness (PCE) and the social norms that lead people to give socially desirable answers to ethical subjects (Cobb and Ruble, 1995) are some of these mediating variables.

Consumer consciousness about ethical concerns, his perception of social responsibility, and his involvement (through the practice of social and environmental activities) are also personal variables that could affect his behaviour. Schlegelmilch et al. (1996) for example found that environmental knowledge, environmental attitude, recycling behaviour, and political action are influential predictors of pro-environmental purchasing behaviour. Sriram and Forman (1993) found that consumers consider the environmental factor to be important only when the product involved is frequently bought. However, when purchasing a high involvement product, the environmental factor importance diminishes considerably. Schahn and Holzer (1990) emphasized the importance in distinguishing between knowledge about facts and knowledge about actions. Knowledge about facts is when knowing that something is harmful to the environment, whereas knowledge about action is when knowing which activities are good or harmful to the environment. They concluded that knowledge about actions is more influential in determining behaviour. From another perspective, Carrigan and Attalla (2001) found that consumers are more likely to react to a social cause when they're directly affected. Therefore, consumers are more likely to react to an environmental issue that has a direct impact on them rather than an issue such as Fair Trade that does not affect them directly (Strong, 1997). Similarly, Boulstridge and Carrigan (2000) stated that social responsibility is not a priority to people. They found that consumers reaction to unethical corporate activities is directly proportionate to the level at which these activities affect them.

Finally, some authors considered that the involvement of consumers in some social and environmental activities could be a good predictor of their ethical behaviour. This relationship is explained by two aspects: First, many religious communities and churches are very involved in fair-trade commerce, and second, one of the fair-trade principles encourages the green and organic food production. Hence, fair-trade could attract people that tend to have a negative attitude toward genetically modified food, good nutritional habits, health consciousness, and religious and sportive activities.

1.2 Contextual variables

With regard to demographic variables, many studies revealed that gender does not influence ethical buying behaviour. The only exceptions are Tanner and Kast (2003) and Lea and Worsley (2005) who found that women are more inclined to buy green or organic products than men. This result is explained by the fact that most of the studies on ethical consumption are related to food products, and the designed person to shop for food in the household is still the women. Hence, women are found in both groups of buyers and non buyers of ethical products.

As for age, the results are not clear cut. De Pelsmacker et al. (2006) found that age is strongly significant in determining the propensity to purchase fair-trade products. Older people, for instance, are more likely to purchase fair-trade products. Conversely, Straughan and Roberts (1999) found age to be a weak predictor of ecologically conscious consumer

behaviour. Another demographic variable introduced by Tanner and Kast (2003) and found to have a negative impact on green food purchasing is the size of the household.

Research findings on socio-economic variables are also mixed. Some of them found that income and level of education are not significant (Fotopoulos and Krystallis, 2002; De Pelsmacker et al., 2006, Tanner and Kast; 2003; Straughan and Roberts, 1999) while others found links that allow them to describe the ethical consumer as a more educated person with a higher income (Carrigan and Attalla, 2001; Maignan and Ferrell, 2001; Roberts, 1996a). Finally, another contextual variable investigated in this literature is the perception of available time for food shopping. In Shaw (1999), respondents complained about the fact that it takes more time and effort to shop for ethical products because they are not available in all major supermarkets and food stores. As a result, they bought less ethical products. Similarly, Tanner and Kast (2003) found that the respondents' perceived need to save time diminishes the chances of buying green food.

1.3 Product-related variables

Results on the effects of prices on ethical consumption vary between no influence (Tanner and Kast, 2003; Arnot et al., 2006), or a negative one (Lea and Worsley, 2005; Fotopoulos and Krystallis, 2002). Concerning the quality of products, we expect good quality to enhance the probability of buying them. Hence, taste should have a positive effect on fair-trade products buying behaviour. The only variable related to quality that has been tested in the literature is taste, but the authors did not confirm the existence of such effect (Tanner and Kast, 2003).

2 Methodology and results

2.1 Population, questionnaire, sampling and data collection

Martin (2005) created a questionnaire to collect the data that we use in this study. The survey was done in an urban, francophone population in the province of Quebec in Canada. The questions used in our study appear in Table 2.

All personal and product-related variables were on a scale ranging from 1 (totally disagree) to 5 (totally agree). The variables "level of education", "gross annual revenue per household", and "age" were measured on ordinal scales. "gender" was a binary variable (0 for male and 1 for female) and "number of persons per household" was integer valued. Negatively worded questions were reversed in coding when they were part of a factor that also included positively worded questions. The minimum age was 18 years old, and only household's primary shoppers were interviewed. Two types of people were targeted: people that are familiar with Fair Trade but don't buy fair-trade products and people who know Fair Trade and buy fair-trade products. In order to reach both people who buy and people who don't buy these products, two separate data collections were conducted. A questionnaire was handed out in various stores that sell fair-trade products to reach the first

Table 2: Measurement items identified in Martin (2005)

Predictor (Cronbach alpha)	Label	Item(s) in factor
Good nutritional habits (0.600)	Nutritional habits	1. Health issues play an important role in determining my daily food menu 2. When I purchase food, I make sure that they do not contain substances that are bad for the health
Perception of genetically modified food (0.692)	GMF	1. Genetically modified food are dangerous for human beings 2. Genetic manipulation should be used more frequently in agriculture in order to make some produce better adapted to our climate 3. I am opposed to genetically modified food for moral and ethical issues
Attitude toward the purchase of environmentally friendly products (0.731)	Environment	1. The protection of the environment is something very important to me when I buy food 2. Buying food products that are better for the environment is far from being a priority to me 3. If I had the choice between a biological food product or conventional food product, I would choose the biological one 4. It's not important to me whether the food I buy is biological or regular
Perception of available time for food shopping (0.851)	Time	1. I buy my food with attentiveness 2. I have limited time for food shopping 3. I finish my food shopping quickly because I have other things to do 4. I have enough time for my weekly food shopping 5. Because of lack of time, I am dependant on the availability of products in the store where I normally do my food shopping
Perceived consumer effectiveness in helping third-world producers (0.669)	Effectiveness	1. My efforts to help third-world producers are useless since others are doing nothing 2. Simple citizens can't do much against the negative effects of globalization 3. I believe every small act/step can make a difference in helping small third-world producers
Personal norms vis-à-vis fair-trade products purchasing (0.715)	Personal norms	1. I feel a moral obligation to buy available fair-trade products 2. People should buy fair-trade products even if theses products were more expensive 3. Everybody should encourage Fair Trade by buying available fair-trade products
Attitude toward fair-trade commerce	Attitude FT commerce	1. Would you say that your are, from strongly not favourable to strongly favourable, to fair-trade commerce
Perceived social responsibility toward the working conditions of labourers	Social responsibility	1. People should feel responsible for working conditions of the producers
Frequency of religious activities	Religious activities	1. Would you say that you participate daily, weekly, monthly, annually or never in religious activities
Importance of taste in food purchasing	Taste	1. To me, taste is the most important aspect of buying food
Perceived quality of fair-trade products	Quality	1. Fair-trade products have poor quality
Perception of fair-trade products prices	Price	1. Fair-trade products are too expensive
Gender (0=women, 1=men)	Gender	
Age (18-24, 25-34, 35-44, 45-54,>55)	Age	
Gross annual revenue per household (<35K, 35-50, 50-65, 65-80, >80K)	Revenue	
Level of education (<High-school, High-school, Vocational school, CEGEP, University)	Education	
Number of persons in household	N. persons in household	

Table 3: Samples statistics

Variable	Min.	Max.	Mean n = 184	Std Dev	Mean of buyers n = 125	Mean of non buyers n = 59
Nutritional habits	1.00	5.00	4.19	0.79	4.26	4.04
GMF*	1.33	5.00	3.98	0.90	4.20	3.52
Environment*	1.00	5.00	4.12	0.79	4.38	3.58
Time	1.00	5.00	2.66	1.03	2.66	2.68
Effectiveness*	1.67	5.00	4.15	0.81	4.48	3.45
Personal norms*	1.00	5.00	4.06	0.78	4.29	3.57
Attitude FT commerce*	1.00	5.00	4.67	0.60	4.86	4.27
Social responsibility*	1.00	5.00	4.41	0.81	4.59	4.02
Religious activities	1.00	5.00	1.57	1.14	1.49	1.75
Gender (women=1, men=0)	0.00	1.00	0.69	0.46	0.70	0.68
Age*	1.00	5.00	2.89	1.60	2.71	3.27
N. persons in household*	1.00	12.0	2.30	1.37	2.03	2.88
Education	1.00	5.00	4.58	0.85	4.62	4.49
Revenue	1.00	5.00	2.27	1.48	2.29	2.23
Taste **	1.00	5.00	3.79	1.13	3.69	4.02
Quality	1.00	5.00	1.44	0.71	1.25	1.85
Price	1.00	5.00	2.76	1.09	2.47	3.36

* p-value of both the Wilcoxon test and t-test < 0.05 (chi-squared used test for gender).

** p-values: Wilcoxon (0.046), t-test (0.062).

group, and a telephone poll was conducted to survey the second group. For phone polling, telephone numbers from the island of Montreal were chosen randomly and a preliminary question was asked to filter out people who buy fair-trade products. The two samples were combined and 14 questionnaires were discarded because of missing data. Sixty-nine percent of the respondents were female and 73% held a university degree. All analyses were obtained with SAS software version 9 (SAS Institute, 2002).

2.2 Sample statistics

The descriptive statistics about the separate groups and the whole sample are shown in Table 3.

With the exception of the variables "perception of available time for food shopping", "frequency of religious activities", age, gender, and number of persons per household, the mean values for variables in the buyers sample are higher than the mean values of the variables in the non-buyers sample. Significance differences, at the 5% level, between buyers and non-buyers are found for all variables except "nutritional habits", "perception of available time for food shopping", "frequency of religious activities", gender, education and revenue. The variable "Importance of taste in food purchasing" is lying in a grey zone with p-values of 0.046 (Wilcoxon) and 0.062 (t-test). Interpretations of the effects are provided in the Discussion section later.

2.3 Logistic regression models

Since the dependent variable measuring the buying behaviour is a binary one (1 for buyers of fair-trade products and 0 for non-buyers), we opted for logistic regression models. The validity of using logistic regression for designs where data are collected by sampling according to the value of the dependent variable (i.e. a case-control design) is given in Prentice and Pyke (1979). To assess the significance of factors taken simultaneously on fair-trade products purchasing behaviour, we used a logistic regression model with all these factors. We then used a stepwise logistic regression to reduce their number. We also selected a model according to the Bayesian Information Criterion (BIC) and found that it selected the same variables as the Stepwise approach. This model is referred to as the stepwise-BIC model. Results of all regressions are presented in Table 4.

The logistic regression model with all factors had an R^2 of 64.27%, while the stepwise-BIC model had an R^2 of 59.91%. The logistic regression model with all predictors indicated that three factors, "PCE in helping third-world producers", "number of persons in household", and "perception of fair-trade products prices" were significant at the 1% level. These factors were also significant at the 1% level in the stepwise-BIC model. The stepwise-BIC model, however, yielded two more factors "attitude toward the purchase of environmentally friendly products" and "perception of available time for food shopping" significant at the 1% level. The factor "perception of available time for food shopping" was significant too but only at the 5% level. Finally, the categorical variable for people who abstained from answering the question about their household income was significant only in the stepwise-BIC model.

2.4 Tree classification

To find which predictors discriminate the most between fair-trade products buyers and non-buyers, we built a classification tree with all predictors as input variables and with the variable "buyer" as the target variable. As Figure 1 shows, the tree algorithm chose the predictor "PCE in helping third-world producers" for the first tree split. This tells us that this variable discriminates the most between buyers and non-buyers in the sample.

The tree in Figure 1 indicates that respondents who have no opinion or somewhat disagree or totally disagree that individual actions can make a difference in helping small third-world producers are mostly non-buyers (33 out of 39 or 84.6%). This implies that people are less likely to buy fair-trade products when they perceive that their actions are not effective. On the other hand people who somewhat or strongly agree that their actions are effective are mostly buyers of fair-trade products (119 out of 145 or 82.1%). Next, the tree shows that respondents who somewhat or strongly agree that their actions are effective and totally or somewhat disagree that fair-trade products prices are too expensive are almost all buyers, more precisely 95.2% of them are buyers. On the other hand, people who somewhat or totally agree that their actions can be effective but somewhat or totally agree that fair-trade products prices are too expensive are less likely (64.5%) to buy fair-

Table 4: Results of the logistic regression models (sample size = 184)

	Model with all variables			Stepwise[c]-BIC model		
Predictor	Parameter estimate	p-value	Odds ratio	Parameter estimate	p-value	Odds ratio
good_nutritional_habits3.5[a] (respondents with a score of 3.5)	-1.05	0.467	0.351			
good_nutritional_habits 4[a] (respondents with a score of 4)	-1.68	0.181	0.186			
good_nutritional_habits 4.5[a] (respondents with a score of 4.5)	-0.61	0.688	0.544			
good_nutritional_habits 5[a] (respondents with a score of 5)	-2.86	0.047**	0.057			
perception of genetically modified food	0.44	0.248	1.550			
attitude toward the purchase of environmentally friendly products	0.70	0.161	2.012	1.08	0.002*	2.945
perception of available time for food shopping	0.70	0.036**	2.012	0.72	0.008*	2.050
perceived consumer effectiveness in helping third-world producers	2.55	<.0001*	12.835	2.42	<.0001*	11.262
personal norms vis-à-vis fair-trade products purchasing	0.41	0.429	1.505			
attitude toward fair-trade commerce	0.70	0.267	2.008			
perceived social responsibility toward working conditions of workers	-0.02	0.952	0.976			
frequency of religious activities	-0.09	0.759	0.915			
gender	0.48	0.458	1.617			
age	0.36	0.123	1.438			
answer_household_income[b] > 35,000	0.33	0.644	1.385			
no_answer_household_income[b]	-1.69	0.130	0.185	-2.07	0.012**	0.126
number of persons per household	-0.88	0.005*	0.415	-0.85	0.001*	0.426
level of education	0.42	0.297	1.528			
importance of taste in food purchasing	-0.19	0.544	0.829			
perceived quality of fair-trade products	-0.39	0.405	0.678			
perception of fair-trade products prices	-1.00	0.002*	0.367	-0.96	<0.0001*	0.383
-2 Log (L)	87.90			103.01		
AIC	131.90			117.01		
BIC	202.63			139.51		
R^2	64.27%			59.91%		

* significant at p<.01 (two-tailed test)

** significant at p<.05 (two-tailed test)

[a] Preliminary analysis showed that the ordinal variable "good nutritional habits" exhibited a non-monotonous relation with the dependent variable. Consequently, this variable was entered into the models as a categorical variable through dummy variables with the values 3 and below (i.e. people with no opinion or people who strongly or somewhat disagree that they possess good nutritional habits) acting as the reference category. All other predictors had fairly monotonous relations with the dependent variable and were thus modelled with only one parameter.

[b] Around eight percent of the sample respondents either did not know their household income or refused to answer the question. Therefore, we replaced the variable "revenue" with two categorical variables "no_answer_household_income" for respondents who either refused to or did not know the answer and "answer_household_income" for people with a household income greater than $35,000.

[c] The significance level for entering and leaving for the stepwise logistic regression is 0.05.

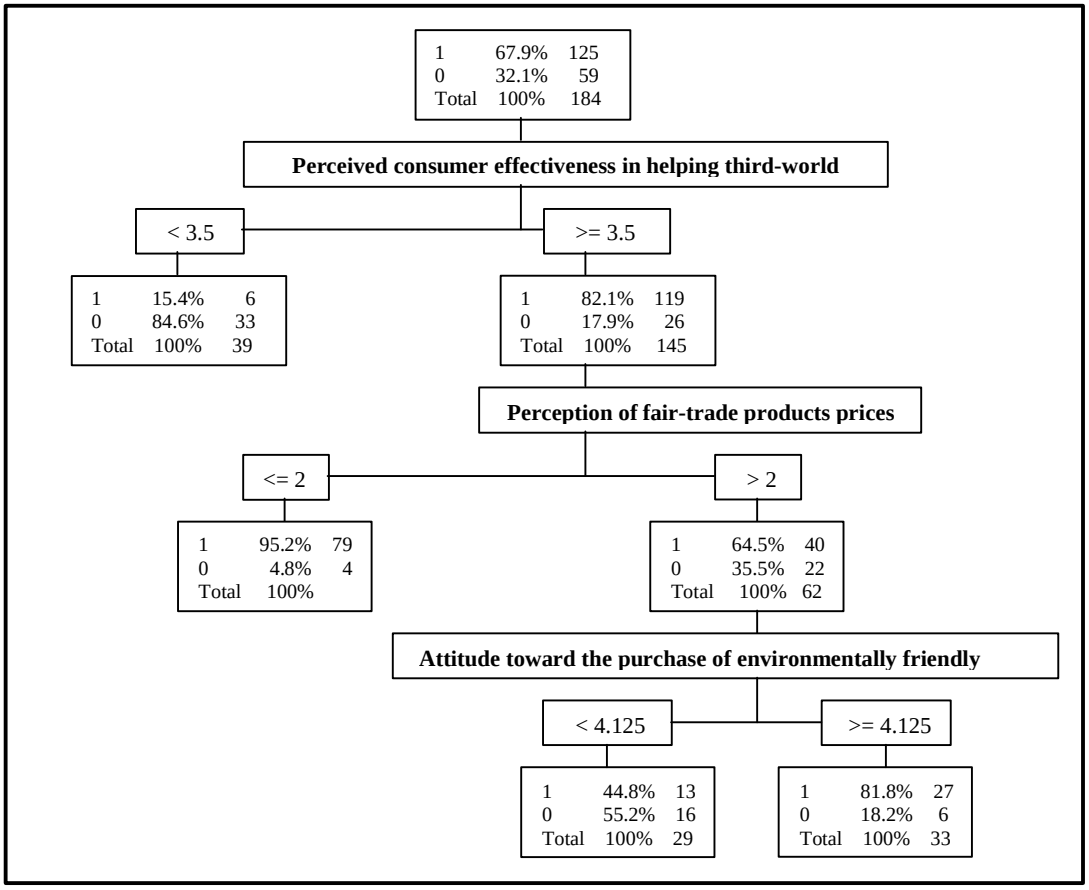

Figure 1: Classification tree with the binary target variable buyer (1=buyer, 0=non-buyer)

trade products than those who don't believe that fair-trade products are too expensive. Finally, 81.8% of respondents who believe that their action can be effective, who perceive prices of fair-trade products as expensive, and who have a very positive attitude toward the purchase of environmentally friendly products are buyers. On the other hand, respondents who believe that their action can be effective and perceive prices of fair-trade products as expensive, but who have a less positive attitude toward the purchase of environmentally friendly products are almost split in half between buyers (44.8%) and non-buyers. Overall, the tree provides another view at the data and also confirms the results from the logistic regression models since the same variables are involved.

3 Discussion

Not surprisingly, all regression models indicate that the factor "PCE in helping third-world producers" is very significant in determining fair-trade products buyers. Moreover, the tree classification shows that this factor discriminates more than any other factor between buyers and non-buyers. Also, all models (including the tree) reveal that there is a positive relation between this predictor and the dependent variable "buyer". In other words, consumers are far more likely to buy fair-trade products when they believe that their individual actions can make a difference in helping third-world producers. These findings are consistent with the results of Straughan and Roberts (1999) and Roberts (1996b) who found that PCE is very significant in predicting ecologically conscious consumer behaviour. Similarly, the predictor "perception of fair-trade products prices" is significant at the 1% level in all regression models. Moreover, this variable was also used in a split in the classification tree. This predictor has a negative relation with the dependent variable in the logistic and stepwise-BIC models. In other words, respondents are less likely to purchase fair-trade products when they perceive prices as high. The tree model also agrees that perception of high prices negatively influences purchasing behaviour. These results confirm the findings of Lea and Worsley (2005) and Fotopoulos and Krystallis (2002) who indicated that higher costs hinder organic food consumption. However, the tree model also revealed that a large percentage of people who believed that their individual actions could help third-world producers and agreed that prices were too high still bought fair-trade products, albeit at a lower percentage (64.5% vs. 95.2%) than people who did not consider prices to be high. It appears that a considerable number of people are still willing to pay extra when they are confident that the premium they pay can help improve the lives of producers. Browne et al. (2000) came to the same conclusion about ethical products. So did Arnot et al. (2006) who suggested that fair-trade coffee consumers are driven by ethical and socially responsible consumption and not by price and Tanner and Kast (2003) who suggested that highly environmentally motivated people are willing to pay extra for green products.

The factor "attitude toward the purchase of environmentally friendly products" is significant at the 1% level in the stepwise-BIC models and was also selected in the classification tree. However this variable is not significant in the logistic model that includes all variables. It's likely that the correlation between this factor and other factors in the model affected the outcome. In all models, including the tree, this factor has a positive relation with the dependent variable "buyer". This means that people with positive attitude toward the purchase of environmentally friendly products are more likely to purchase fair-trade products than people who are less positive. This finding is in line with the conclusion of Schlegelmilch et al. (1996) and with the finding of Tanner and Kast (2003).

As for the demographic variable "number of persons in household", it has a negative effect significant at the 1% level in all regression models but was not present in the tree. In other words, people with larger families are less likely to buy fair-trade products. This conclusion, however, is not consistent with the finding of Tanner and Kast (2003) who

examined this relation for green food purchasing. This contradiction in results can reveal some differences between green and fair-trade products consumers.

The fifth and last significant factor in all the regression models is "perception of available time for food shopping". This factor is significant at the 5% level in the full model and at the 1% level in the stepwise-BIC model. Moreover, the parameters for this variable are positive. This means that people with limited time for food shopping are more likely to buy fair-trade products. This finding was unexpected and contrary to the finding of Tanner and Kast (2003).

All other factors and variables are not significant in determining fair-trade products purchasing. The predictor "attitude toward fair-trade commerce", for instance, is not significant in any of the models. This implies that attitudes do not determine fair-trade products purchasing behaviour. This finding corresponds to the conclusion of Cobb and Ruble (1995) who stated that attitudes are not good predictors of marketplace behaviour. Also, the factor "genetically modified food" is found not to be significant. This finding confirms the results of Tanner and Kast (2003) who found no link between green purchasing and genetically engineered food. Next, the predictor "personal norms vis-à-vis fair-trade products purchasing" is also not significant. This finding confirms the finding of Tanner and Kast (2003). In the same way, the factor "perceived social responsibilities toward the working conditions of workers" is not significant. This conclusion is in line with all previous studies on Fair Trade and green products that stated that social responsibility remains insignificant as long as it does not affect consumers directly (Boulstridge and Carrigan, 2000; Carrigan and Attalla, 2001; Strong, 1997). Furthermore, the predictor "frequency of religious activities" is not significant in any model. This implies that religion does not have an effect on fair-trade products purchasing behaviour. This conclusion reaffirms the finding of Lea and Worsley (2005). Moreover, the predictors "importance of taste in food purchase" and perceived quality of fair-trade products" are not significant in the models. These results coincide with the conclusion of Tanner and Kast (2003) for green food. In addition, with the exception of the variable "number of persons in household", and the categorical variable for respondents who abstained from giving an answer to the question about their household income, all other socio-economic and demographic variables are not significant in all regression models. The categorical variable for respondents who abstained from giving an answer to the question about their household income is significant at the 5% level in the stepwise-BIC model and has a negative parameter. This means that respondents who refused to answer or did not know the answer to the question about their household income are less likely to purchase fair-trade products. Lastly, the categorical variable for people who strongly agree that they possess good nutritional habits is barely significant (p-value of 0.0471) at the 5% level. However, the variable "good nutritional habits" is not significant overall.

4 Implications, limitations, and suggestions for future research

This study clearly shows that three factors in particular are very significant in determining fair-trade products purchasing behaviour. The two factors "PCE in helping third-world producers" and "perception of fair-trade prices" are strongly significant in all regression models, and the factor "attitude toward the purchase of environmentally friendly products" is strongly significant in the stepwise-BIC model. All three predictors were also selected in the classification tree. In fact, the tree classification shows that the variable "perceived consumer effectiveness in helping third–world producers" discriminates the most between buyers and non-buyers in the sample.

Secondly, this study suggests that there is a link between green and fair-trade products consumption. People with positive attitude toward the environment and toward green consumption are more likely to buy fair-trade products. Thirdly, all models agree that price negatively influences fair-trade products purchasing behaviour. The probability of buying fair-trade products diminishes as prices increase. However, the tree model also indicates that high prices become irrelevant to some consumers when they perceive that their individual actions can be effective in helping third-world producers. In other words, this particular segment of consumers still bought fair-trade products even when they perceived that prices were high. Finally, the demographic variable "number of persons per household" was found to be significant in determining fair-trade products purchasing behaviour. People with large families are less likely to buy fair-trade products. These findings have important implications for fair-trade organizations. Marketing managers of fair-trade organizations, for instance, should consider emphasizing the message in their advertising campaigns that individual contributions can make a difference in improving the lives of third-world producers. This might persuade sceptical consumers to buy fair-trade products. Also, emphasizing how poor producers benefit from the purchase of fair-trade products might offset the negative impact of the perception of high prices of fair-trade products on purchasing behaviour. Marketing managers should also target the green consumers segment. One suggestion is to sell fair-trade products in stores where green products are found or to place fair-trade products on shelves right next to green products in supermarkets.

This study expands on previous studies on fair-trade products by assessing jointly the effect of personal, contextual, and product-related factors on fair-trade products purchasing behaviour. It is important to note that this is an exploratory study with the aim of adding some knowledge about fair-trade products purchasing behaviour. This research paper, however, did not examine consumers' preferences for the types of stores where they would like to buy fair-trade products nor did it explore the types of promotions consumers prefer. Future research on fair-trade products could explore the influence of these two aspects of Fair Trade on Canadian consumer buying behaviour. In addition, budget restriction limited the size of our sample and the area from which the sample was collected. As a result, our sample was biased toward an urbanized, French-speaking population. To confirm this

study's findings, a similar research should be conducted but with a much larger sample collected form several Canadian provinces. Another possibility is to replicate this study but on different types of ethical products.

Notes

Non-profit certification and public education organization promoting Fair Trade Certified products in Canada. Information retrieved on August 31, 2007 from the website `http://www.transfair.ca`.

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