Who's responsible here? US resident perceptions of food retailer social responsibility

RESEARCH ARTICLE

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Abstract

Perceptions of corporate social responsibility (CSR) for prominent food retailers (Walmart, Costco, Kroger, Target, Trader Joe's, Whole Foods, and Amazon.com) were analyzed through best-worst scaling methodology, which resulted in a relative ranking of perceived CSR for each retailer. Seemingly unrelated regression was used to investigate determinants of CSR rankings by the sample of 299 US residents. Of the retailers included in this analysis, Whole Foods was perceived to be the most socially responsible (37%), followed by Trader Joe's (16%). Respondent characteristics, including gender, children in household, knowledge of retail food business practices, and familiarity with particular food retailers were determinants of the relative CSR rankings. Understanding relationships between demographics and perceptions of food retailers contributes to understanding consumer preferences and demands, which may inform firm decisions.

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1. Introduction

Corporate social responsibility (CSR) appeared in 1950 defined as philanthropic actions conducted by businesses to meet societal values. This definition continued to evolve with the purely philanthropic nature of CSR campaigns called into question (Hack *et al.*, 2014). Today CSR includes orchestrated campaigns that individual businesses use to build relationships with customers and stakeholders (Hack *et al.*, 2014). Retailers may pursue CSR programs or strategies in order to enhance their brand image (Ganesan *et al.*, 2009). Initiatives in CSR are part of core business activities throughout the food sector, particularly for firms that have high-value consumer brand associations (Dlott *et al.*, 2006).

Customer reception of CSR initiatives is critical. Even the responses to CSR initiatives by non-customers (i.e. the public) may be of interest to corporations. Perceptions in the marketplace develop as both customers and non-customers express their opinions to their social circles. CSR that does not align with customer values may turn potential customers away. Younger shoppers are more sensitive to the opinions of those close to them in regards to their shopping behavior, including where they shop (Kinley *et al.*, 2010). While CSR has received attention from researchers, especially in non-food industries, little is known about how demographic variables and attitudinal factors about CSR may be reflected in shopping behavior and public perceptions of US food retailers. Understanding perceptions of CSR for major food retailers is important to retailers who invest in initiatives to improve CSR perceptions and members of the larger retailing sector who seek to understand how consumer attitudes shape purchasing decisions. For example, Assiouras *et al.* (2013) found that the level of CSR perceived by consumers impacted food industry ability to recover from product harm crises.

Views on CSR activities at their most fundamental level have been long been debated. In the neoclassical view of the firm (i.e. Friedman (1970)), the firm's only social responsibility is to remain within the legal frameworks in place while increasing profits. In contrast, Bolton and Mattila (2015) state that in order to be effective, CSR programs must be perceived as being society-serving rather than self-serving. According to Hartmann (2011), CSR can be considered the provision of a good with at least some public good characteristic or a positive externality. Similarly, CSR could include aspects of reduction of a negative externality. While the impacts of perceptions of CSR remain a point of contention, Hartmann (2011) concludes that responsible firm conduct can influence customer loyalty, product consideration, company consideration and evaluation, and even willingness to pay.

Beyond more traditional media such as print and TV, CSR campaigns for food businesses are also critiqued by bloggers and social media (Lee, 2013). Lee *et al.* (2013) found that CSR campaigns had a more positive impact if the promotion fit in with the core business. However, the impact of blog 'buzz' can also create negative sentiment surrounding CSR. Food retailers are the first and often only aspect that consumers see and interact with directly. Thus, food retailers are often at the forefront of public perceptions and may at times be held responsible for the social practices of the entire farm, agribusiness, and retail food system. Some companies are proactive with CSR initiatives, such as community involvement or environmental protection, while others are reactive, waiting until governmental regulations and societal pressures force changes, and still others are inactive. Across all types of retailers, food retailers communicate the highest volume of CSR messages and tend to emphasize social and environmental programs in these discussions (Lee *et al.*, 2009).

Large food corporations face a complex challenge of addressing consumer demand for production, processing, and procurement practices while not maintaining direct control over product suppliers. A shortcoming of the US food industry is its complex supply chains that may limit ability to address a myriad of consumer concerns through CSR activities at the processing and production levels (Maloni and Brown, 2006). Although food retailers generally demonstrate concern for CSR, little research in the US has examined how these efforts impact attitudes of consumers, perceptions of food retailers, and shopping behavior. The objectives of this work were to explore consumer perceptions of food retailer CSR by: (1) considering how US residents rank

the CSR practices of prominent food retailers, and; (2) examining how attitudes and shopping behaviors may relate to those rankings.

2. Materials and methods

An online survey was utilized to collect data from US residents from March 31st to April 4th, 2016. In addition to demographics including shopping behavior, a total of 299 participants completed the best-worst experiment indicating preferences for 'most' and 'least' socially responsible food retailers. The survey was conducted using Qualtrics™ and a link to the survey was distributed through LightSpeed GMI™, an online opt-in panel provider, to a sample of individuals targeted to be representative of the US population according to gender, age (for adults), household income, and geographic region of residence. Respondents were required to be at least 18 years old to participate. Respondents were asked to report general household demographics, including numbers of adults and children in the household, and food expenditures.

Respondents were also asked to report their knowledge of food retailing and CSR perceptions of food retailers. Food retailers examined included (in no particular order) Walmart, Costco, Kroger, Target, Trader Joe's, Whole Foods, and Amazon.com. These seven retailers were selected to represent prominent nationally recognizable food retailers. Participants were asked about their perceptions of retailer CSR in eight areas as defined by Maloni and Brown (2006). These included (in no particular order) procurement, labor, animal welfare, health and safety, fair trade, biotechnology, environment, and community. Specifically, respondents were asked the following question: 'for each area of social responsibility, select the store you believe is the most socially responsible', from which selections were made for the *most* socially responsible food retailer in each of the eight areas of CSR.

2.1 Best-worst scaling methodology

The best-worst scaling (BWS) methodology used in this study presented seven choice tasks or choice scenarios to participants in which they were asked to choose their most and least preferred options, forcing tradeoffs between food retailers. This method, originating in random utility theory, was developed by Jordan Louviere in the late 1980's and extends Thurstone's method of paired comparison (Erdem *et al.*, 2012). The type of BWS used in this study is also called maximum-difference scaling (Flynn, 2010), because the resulting choices made by participants reflects the maximum difference between their most and least preferred options (Louviere, 1993).

Previous studies have used BWS to evaluate consumer preferences for food attributes including production and responsibility. For example, Lusk and Briggeman (2009) used BWS to force respondent tradeoffs for 'most important' and 'least important' food values, finding that food safety was the most important value. Erdem *et al.* (2012) studied consumer and farmer perceptions of relative responsibility of food safety through BWS choice scenarios with respondents tasked to choose the 'most responsible' and 'least responsible' stage of the food supply chain. This analysis focuses on US resident perceptions of social responsibility of food retailers by asking respondents to choose the 'most socially responsible' and the 'least socially responsible' food retailers within presented BWS choice scenarios.

Each of the seven unique choice tasks contained a subset of four food retailers, from which respondents indicated two choices, their selection for the 'most' and 'least' socially responsible food retailers. Figure 1 displays an example choice task.

This BWS experimental design allowed respondents to choose any given food retailer up to four times. Respondent choices represent perceived corporate social responsibility amongst food retailers along a continuum of underlying importance (Lusk and Briggeman, 2009). Following Lusk and Briggeman's (2009)

Most Socially Responsible		Least Socially Responsible
☐	Costco	☐
☐	Amazon.com	☐
☐	Kroger	☐
☐	Trader Joe's	☐

Figure 1. Example food retailer best-worse choice scenario.

study, λ_j represents the location of food retailer j on the preference scale of social responsibility and ε_{ij} is the random error term. Thus, the unobservable level of social responsibility I_{ij} for respondents i is denoted:

$$I_{ij}=\lambda_j+\varepsilon_{ij}.$$

The probability that consumer i chooses j as the most socially responsible retailer and k as the least socially responsible retailer is the probability that the difference between I_{ij} and I_{ik} is greater than all J(J-1)-1 potential differences available from the choice combinations. Under the assumption that the error term is independently and identically distributed, the multinomial logit (MNL) form (Lusk and Briggeman, 2009) characterizes the probability of choosing a most-least socially responsible combination:

$$\text{Prob } (j \text{ is chosen best and } k \text{ is chosen worst}) = \frac{e^{\lambda_j-\lambda_k}}{\sum_{l=1}^{J} \sum_{m=1}^{J} e^{\lambda_l-\lambda_m}-J} \tag{1}$$

In addition to the MNL model, which assumes homogeneous preferences among individuals, the random parameters logit (RPL) model was estimated because it allows for heterogeneity among individuals (Lusk and Briggeman, 2009). Maximum likelihood estimation was used to estimate λ_j, which represents the importance or perceived social responsibility relative to some option that was normalized to 0 (zero) to prevent the dummy variable trap (Lusk and Briggeman, 2009). The coefficients from the MNL and RPL models are not directly interpretable, so preference shares for each food retailer was calculated as:

$$share_j = \frac{e^{\lambda_j}}{\sum_{k=1}^{J} e^{\lambda_k}} \tag{2}$$

Shares of preference necessarily sum to one across all seven food retailers studied. In addition, individual-specific coefficients from the RPL model were used to calculate preference shares for each respondent (n=299), in order to further analyze the relationship between preference shares and demographics.

2.2 Seemingly unrelated regression analysis

In order to gain insight into determinants of respondent perceptions of CSR of food retailers, a seemingly unrelated regression analysis (SUR) was estimated in Stata/SE 13.1. The objective of the SUR was to identify statistically significant determinants of the size of individual preference shares for each of the food retailers. Specifically, SUR was used because this analysis allows for simultaneous estimation of the set of models (UCLA Statistical Consulting Group, 2015). Past studies have employed SUR to attempt to understand significant determinants of the size of preference shares estimated through best-worse analyses (Cummins *et al.*, 2016), while others have employed correlations to explore preference shares in relation to other attributes of interest (de Magistris *et al.*, 2011).

The preference share for each food retailer was the dependent variable. The independent variables, which did not vary across models, were respondent demographic characteristics including gender, age, college education, status of children in the household, income, and self-reported knowledge of business practices in food retail. Independent variables that varied by model included shopping practices for each food retailer. Shopping practices were included in two ways: if the retailer was the respondent's self-declared regular

supermarket and whether they shopped in each retailer either occasionally or regularly. The Wald test was employed with the null hypothesis that the coefficient estimate for an independent variable across the set of SUR equations was congruently equal to zero.

3. Results and discussion

Summary statistics of demographics for the sample, n=299, are displayed in Table 1. In total 51% of respondents were female which matched the US census. Household incomes were collected in seven categories, but for the purposes of SUR analysis, income was aggregated into three categories, expressed in terms relative to one another: lower ($34,999 or less), medium ($35,000 to $99,999), and higher ($100,000 or greater). 34% of participants were of the low income, 45% medium income, and 21% high-income categories. The average respondent spent $145.04 per week on household food expenditures (for both in home and away from home). The reported weekly food expenditure was higher than findings by the Bureau of Labor Statistics (2015) and a national-scale study by McKendree *et al.* (2013) who found an average weekly expenditure of $129.98 and $132.77, respectively.

Respondents were asked to indicate their highest level of education, and for the purposes of this study were divided into either 'no college degree' or 'college degree'. Of the respondents 58% had a college degree (Table 1). This sample was more educated than the general US population (US Census Bureau, 2016).

3.1 Demographics and retail shopping habits

In addition to sample demographics allowing comparisons to census targets, respondent's connections or experience with each of the seven food retailers studied were collected. The majority of respondents reported shopping at Walmart (78%), Amazon.com (77%) and Target (67%). The largest percentages, 45% and 40% respectively, claimed they regularly shop at Walmart and Amazon.com. A majority of respondents did not shop at the other food retailers studied. Claiming not to shop because a food retailer was not accessible was the most common response for Kroger (45%), Trader Joe's (38%) and Whole Foods (37%). With respect to Costco, 35% of respondents claim they do not shop there because they choose not to.

Significant effort has been placed on linking supermarket shopping behaviors with socioeconomic factors and food selection/buying decisions. Both socioeconomic status and food choices contribute to healthfulness of diets, making them of interest in broader literature focused on food shopping (Pechey and Monsivais, 2015). The relationships between demographic factors, patronage or shopping activity at various food retailers (whether occasionally or regularly), and other pertinent demographics are shown in Table 2. Results indicated that of respondents who indicated shopping at Costco, 60% were male. The only significant differences in shoppers across age brackets were found for Amazon.com. It is likely not surprising that those respondents who indicated shopping at Amazon.com were younger respondents with 37% in the 25 to 44 years of age category, which was a significantly higher proportion than respondents in the age category of 65+ years (13.9% of Amazon.com shoppers).

Nearly half of Costco and Target shoppers were in the medium income bracket. Both Costco and Target shoppers had statistically larger proportions of shoppers in the medium and high-income brackets than in the low-income bracket. For respondents who shopped at Trader Joe's and Whole Foods, a larger proportion of shoppers were in the high-income category than in the low-income category. Both Trader Joe's and Whole Foods rely on word of mouth to convey their brand image. When they do advertise, their campaigns include highly visible CSR information which may be more impactful due to the rarity of traditional advertising (Grewal *et al.*, 2017).

Connections between consumer attitudes about CSR and actual shopping behavior were considered by Smith (2003), who stated that, despite consumer claims of being influenced by CSR, large variances exist in consumer buying practices as well as the perceived practices of sellers. In a study of ten large supermarkets

Table 1. Sample demographics.

Variable description	Food stores sample (n=299, % of respondents)	Census US (% of population)
Female	51	51
Age		
18 to 24 years	14	13
25 to 44 years	35	35
45 to 64 years	34	35
65 years and older	17	17
Household income		
Less than $25,000	24	23
$25,000-$34,999	10	11
$35,000-$49,999	12	14
$50,000-$74,999	22	18
$75,000-$99,999	11	12
$100,000-$149,999	13	13
$150,000 or more	8	9
Region (defined according to the US Census Bureau, 2014)		
Northeast	18	18
South	35	38
Midwest	26	22
West	21	22
Education		
Did not graduate from high school	2	
Graduated from high school, did not attend college	18	
Attended college, no degree	22	
Attended college, associate or trade degree	14	
Attended college, bachelor's (BSc or BA) degree	27	
Attended college, advanced (MSc, PhD, Law School) degree	17	
Other	0	
Knowledge of business practices in food retail		
Unknowledgeable	48	
Neutral	24	
Knowledgeable	28	

in the United Kingdom, Jones *et al.* (2007) suggested that one of the reasons for this lack of connection may be poor integration of CSR efforts into food retailer marketing communications. Of the 100 US companies studied by Lee *et al.* (2009), only 42 included company principals of CSR on their websites. Thus, while companies may be actively investing in CSR practices, they vary greatly in terms of the degree in which they communicate about those activities to their patrons. Despite these concerns, Wang (in press) found that CSR has a positive effect on corporate image and can result in price premiums and a higher purchase intention in customers. Hartmann (2011) argues that firms with a positive CSR record are better able to attract morally motivated employees and supply chain partners. Deselnicu *et al.* (2012) found that Walmart and Costco placed pressure on their suppliers to adhere to their CSR standards in order to mitigate negative publicity.

Respondent connections to each of the seven food retailers provided insights into the relationship between perceptions and shopping habits.[1] For example, 90% of respondents who believe Walmart is socially responsible likely shop there because of this perception. A more complex explanation involves cognitive

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[1] The aspect of familiarity and rankings is explored in depth in the seemingly unrelated regression analysis and is presented in Supplementary Table A1.

Table 2. Relationships between sample demographics and food retailer shopping (n=299, % of respondents).

	Walmart	Costco	Kroger	Target	Trader Joe's	Whole Foods	Amazon. com
Percent of respondents who report shopping at specified retailers[1]							
Shop at	78	31	36	67	33	31	77
Cross-tabulations of shopping at specified retailers, by key demographics[2]							
Gender							
Male	50.9	60.0[a]	50.5	52.8	49.5	42.6	50.9
Female	49.1	40.0[b]	49.5	47.2	50.5	57.4	49.1
Age							
18-24	14.2	13.7	15.0	14.6	11.1	14.9	14.8
25-44	32.8	35.8	40.2	34.7	35.4	38.3	37.0[a]
45-64	35.8	36.8	32.7	34.7	33.3	33.0	34.3
65+	17.2	13.7	12.1	16.1	20.2	13.8	13.9[b]
Income level							
Low	36.6	18.9[a]	27.1	25.6[a]	22.2[a]	23.4[a]	30.9
Medium	43.1	51.6[b]	48.6	49.7[b]	47.5	48.9	46.5
High	20.3	29.5[b]	24.3	24.6[b]	30.3[b]	27.7[b]	22.6
Education							
College degree	53.9[a]	70.5[a]	63.6	60.8	68.7[a]	72.3[a]	59.1
No college degree	46.1[b]	29.5[b]	36.4	39.2	31.3[b]	27.7[b]	40.9
Region of residence							
Northeast	15.9[a]	18.9	4.7[a]	20.6	17.2	19.1	17.8
South	38.8[b]	27.4[a]	34.6[b]	31.2	26.3[a]	36.2	34.3
Midwest	25.0	20.0[a]	34.6[b]	26.1	27.3	24.5	27.4
West	20.3	33.7[b]	26.2[b]	22.1	29.3[b]	20.2	20.4

[1] Includes the aggregate percentage of respondents who indicated 'occasionally shopping' or 'regularly shopping' at each of the respective food retailers.

[2] Significant difference at the 5% level between 'a' and 'b' per food retailer for the particular demographic.

dissonance theory (Festinger, 1957), which would suggest that Walmart buyers shape their attitudes to justify their behavior rather than the converse. Nonetheless, one cannot accurately assess respondent retailer perceptions without quantifying their experiences with those retailers.

3.2 Explaining perceived corporate social responsibility of food retailers

US resident perceptions of food retailers examined using MNL and RPL models are displayed in Table 3. Whole Foods, with a mean preference share of 36.7%, was perceived to be the most socially responsible food retailer relative to other food retailers. Trader Joe's with 15.9% mean preference share was perceived to be the second most socially responsible food retailer. Target (10.5%), Costco (9.9%), Amazon.com (9.7%), and Kroger (9.5%) were not different from one another with respect to respondent perceptions of their relative social responsibility.

Relationships existed between patronage of various retailers and demographic and household factors (see Table 2). Relationships between respondent demographics and perceived social responsibility of food retailers (sizes of preference shares) were explored through the use of SUR. The SUR model results, including coefficient estimates, R-squared, and chi-squared statistic information are displayed in Table 4. The results show that each of the seven models was statistically significant at the 0.1% level.

Table 3. Coefficients (standard errors) and derived preference shares.[1,2]

Retailer	MNL Coefficient	RPL Econometric Estimations		RPL Mean Shares of Preferences
		Coefficient	**Standard deviation**	
Costco	0.6386***	0.2299**	1.3971***	0.099
	(0.0569)	(0.0945)	(0.1060)	
Kroger	1.0258***	0.1889***	0.5258***	0.095
	(0.0584)	(0.0691)	(0.1397)	
Target	-0.0680	0.2898***	0.8974***	0.105
	(0.0555)	(0.0799)	(0.1119)	
Trader Joe's	0.1431**	0.7015***	2.1122***	0.159
	(0.0560)	(0.1212)	(0.1323)	
Whole Foods	-0.1412**	1.5390***	2.0165***	0.367
	(0.0558)	(0.1265)	(0.1196)	
Amazon	0.4543***	0.2087**	1.4184***	0.097
	(0.0561)	(0.0936)	(0.1097)	
Walmart	0.00	0.00		0.079

[1] MNL: multinomial logit, RPL: random parameters logit.

[2] Statistical significance at 1%*** and 5%** levels.

Table 4. Seemingly unrelated regression results.[1]

	Walmart	**Costco**	**Kroger**	**Target**	**Trader Joe's**	**Whole Foods**	**Amazon. com**
Female	-0.0205***	-0.0616***	-0.0211***	-0.0187*	0.0431*	0.1136***	-0.0318*
18 to 24 years	-0.0097	0.0097	-0.0123	-0.0266	-0.0689	0.0726	0.0185
25 to 44 years	-0.0182**	-0.0265	-0.0234*	-0.0296*	-0.0362	0.1048**	0.0237
45 to 64 years	-0.0117	-0.0134	-0.0156	-0.0145	0.0162	0.0166	0.0122
Graduated from college	-0.0108*	-0.0048	-0.0030	-0.0365***	0.0102	0.0524*	-0.0147
Children	0.02427***	0.0326*	0.0243**	0.0312**	-0.0043	-0.1374***	0.0250
Medium income	-0.0054	-0.0029	-0.0148	-0.0078	0.0481*	-0.0193	-0.0140
High income	-0.0023	-0.0113	-0.0188*	-0.0080	0.0114	0.0096	-0.0068
Knowledgeable of business practices in food retail	0.0148**	0.0028	0.0161*	0.0278**	-0.0588**	-0.0393	0.0298
Shop [2]	0.0079**	0.0215	0.0067	0.0214**	0.0319**	-0.0156	0.0279**
Regularly shop [2]	0.0028	0.0565**	-0.0023	0.0522***	0.0530	0.0592	0.0043
Constant	0.0759***	0.1444***	0.1030***	0.1128***	0.1740***	0.2466***	0.1016***
R-squared	0.1531	0.1187	0.0933	0.1088	0.1083	0.1117	0.0490
Chi-squared	57.13	36.82	29.96	49.86	28.50	40.53	17.58
P-value	0.0000	0.0001	0.0016	0.0000	0.0027	0.0000	0.0919

[1] Statistical significance at 1%***, 5%** and 10%* levels.

[2] Response correlates with the corresponding heading.

Results from the SUR reveal that being female, in the 25 to 44 years of age category, and having graduated from college were statistically significant negative determinants of the size of the preference share for Walmart. In contrast, having children in the household, self-reporting being knowledgeable of business practices in food retail, and indicating being a Walmart shopper were positive determinants of the size of preference share for Walmart. Similarly, being female had a negative impact on the preference share size, while having children, and reported regular shopping at Costco were positive determinants of the CSR preference share for Costco.

Significant determinants for the size of preference share for Kroger with negative coefficient estimates were being female, being 25 to 44 years of age, and reporting household income in the high category. While having children in the household and self-reporting being knowledgeable of business practices in food retail had positive coefficient estimates and were statistically significant determinants for the size of preference share for Kroger.

With regard to the size of the preference share for Target, as indicated by the SUR results, being female, being 25 to 44 years of age, and having graduated from college had negative coefficient estimates and were statistically significant determinants. Having children in the household, self-reporting being knowledgeable of business practices in food retail, shopping (whether occasionally or regularly), and reporting regularly shopping at Target for groceries had a positive coefficient estimate and were statistically significant determinants of the size of preference share for Target.

Self-reporting being knowledgeable about business practices in food retail was a negative determinant of the relative perceived CSR of Trader Joe's, which is in contrast to the positive sign associated with self-reported knowledge for Walmart, Kroger, and Target. Reporting being female, 25 to 44 years of age, and having graduated from college all had positive coefficient estimates and were statistically significant determinants of the size of preference share for Whole Foods. Conversely, reporting having children in the household had a negative coefficient estimate and was a statistically significant determinant for the size of preference share for Whole Foods.

Few significant determinants were found for the size of preference share for Amazon.com. Being female had a negative coefficient, while indicating shopping at Amazon.com had a positive coefficient estimate. Given the novelty of Amazon.com relative to the other retailers studied, especially with regard to online-only presence and limited food or grocery offerings in much of the country at the time of this research, the lack of significant determinants was not entirely unexpected.

Following the regression analysis, a set of tests was completed to determine if each independent variable was statistically different from zero across all models. The null hypothesis was that the coefficient for an independent variable across the set of equations is concurrently equal to zero. Across these tests, three variables were significantly different from zero across all models: being female, having graduated from college, and reporting having children in the household. Explaining relative rankings of retailers using demographics of individuals and their households allows some insight into what factors may be of interest for individual retailers. Interestingly, gender was a statistically significant determinant of the size of the preference share for all seven food retailers studied and appears as a significant determinant of rankings in other studies. Gender has been found to be a significant determinant (in a SUR model) of preference shares for pork attributes, including animal welfare, price, food/pork safety, and taste in a study which evaluated seven pork attributes (Cummins *et al.*, 2016). Cummins *et al.* (2016) also identified age and income as significant determinants of many of the product attributes studied. While looking at preference for wine attributes, de Magistris *et al.* (2011) found significant correlations between preference shares and both gender and age (in addition to knowledge of the product and education). The inclusion of product knowledge in previous studies is roughly comparable to the inclusion of shopping experience in the present study. Indeed, having shopped at the retailer in question was a significant (and positive) determinant of the preference share for numerous retailers studied.

The most directly comparable studies to this analysis ranked top fast food restaurants and employed both national samples (Morgan *et al.*, 2016a) and samples of college students (Morgan *et al.*, 2016b). While the sample consisting of only college students may offer limitations in its comparability to other samples, it is worth noting that gender and classification of upper versus lower classmen status were correlated with rankings of at least some of the 11 fast food restaurants studied (Morgan *et al.*, 2016b). In the more directly comparable national sample, Morgan *et al.* (2016a) found significant correlations between the size of preference shares for fast food restaurants, gender and knowledge of fast food practices. Furthermore,

Morgan *et al.* (2016a) reported limited evidence for relationships between preference shares and age or income, and no evidence of relationships between preference shares and education (represented by college degree). Thus, while evidence exists of relationships between size of preference shares for food retailers and education, other studies looking at fast food restaurants do not find such evidence. It is possible that determinants of preference shares differ across time, across industry, across products, or that differences may arise due to the use of varying methods. Investigation using correlations versus SUR may explain some potential differences in findings (or the strength of such findings). However, given the potential for individual firms to employ findings about which demographics may be related to perceptions or ranking of their firm relative to competitors, additional study is warranted to ensure findings surrounding determinants of rankings are robust.

4. Conclusions and implications

Retailers across various industries and sectors are increasingly focused on social responsibility and factors beyond the basic function of providing goods and services in exchange for payment. The potential for CSR practices to create economic consequences for retailers, whether directly or indirectly, exists and is increasingly recognized. Food retailers are increasingly concerned about consumer perceptions, building and maintaining goodwill with key stakeholders, and managing social expectations.

The application of best-worst ranking methodology to prominent retailers for the purposes of ranking according to resident perception is a novel contribution of this research. Whole Foods was found to possess the largest mean share of preference for corporate social responsibly. While occurring after the data for this analysis was collected and analyzed, the acquisition of Whole Foods by Amazon.com is certainly deserving of further study in terms of the implications for consumers and the food retail space as a whole. Additional region-specific or locale-specific studies may be warranted before significant management changes are pursued by retailers.

This analysis also uncovered drivers of perceptions of CSR by prominent food retailers. Across the retailers studied, gender, familiarity with individual retailers, self-reported perceptions of food retailing knowledge, and the presence of children in the household were associated with relative ranking outcomes for food retailers. Given the scale of investment required for retailers to make changes in their CSR policies, food marketers must be able to convert CSR into advantageous shopping behaviors. This means directing messages to specific audiences that care about them most, without being seen as self-serving. Interestingly, while CSR might not play a role in determining whether or not a customer shops at a particular store, retailers may wish to further investigate relationships between being a customer and perceptions of corporate responsibility. In order to navigate the fine balance of targeted communication, retailers must understand not only how the perceptions of their stakeholders are formed, but also which demographic and household factors may be related to those views. Furthermore, retailers may wish to target patrons and non-patrons separately with regard to CSR communications as being a patron (or not) was found to contribute, at least in part, to the perception of CSR of individual retailers, whether based on experience of simply perception.

Supplementary material

Supplementary material can be found online at https://doi.org/10.22434/IFAMR2017.0057.

Table A1. Respondents' perceptions of the most responsible food retailer in each area of corporate social responsibility studied.

Conflict of interest

The authors declare there is no conflict of interest.

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