

Local Food Purchasing: Balancing Egoistic and Altruistic Motivations

Abstract

Local food purchasing has been linked to egoistic motivations such as concern for health and safety, as well as altruistic motivations, such as concern for the environment and ethical consumption. Indeed, today's more mindful consumers are changing their attitudes toward food consumption in an attempt to balance egoistic and altruistic motivations. This study investigates the relative importance of egoistic versus altruistic motivations in influencing attitudes toward, and purchase frequency of, local food. Findings reveal ethical self-identity, health consciousness and food safety are positively associated with favourable attitudes toward local food, propensity to buy local food, and interest in food traceability. Ethical self-identity and health consciousness influence purchase frequency, while food safety and environmental concerns do not.

Key words: local food; altruistic; egoistic; ethical self-identity; health consciousness; food safety; environmental consciousness

Track: Food Marketing

1.0 Background

Consumers are becoming increasingly disengaged by distant and impersonal global industrialised food production and distribution systems (Hinrichs, 2000). Many are concerned by the negative consequences and lack of transparency surrounding the industry, including environmental impacts, sustainability and concerns about health and food safety (e.g. Eden, Bear, and Walker, 2008). Across the globe, this growing lack of trust in the dominant agro-industrial food paradigm, due in part to a number of food safety crises, has led to a consumer backlash whereby many consumers are now sourcing more local food (Chambers, Lobb, Butler, Harvey, and Traill, 2007). A review of the extant literature reveals numerous drivers and barriers influencing local food purchasing (e.g. Megicks, Memery, and Angell, 2012) which aim to understand why consumers consume local food. Whilst these studies focus on uncovering the main reasons behind consumer decisions with regard to local food (e.g. SERIO 2008), research into the *types* of motivation underlying these decisions has received rather less attention. Therefore the focus of this paper is on the role of egoistic and altruistic motivations in local food consumption and how they affect attitude and purchase frequency of local food.

2.0 Factors driving the purchase of local food

Local food purchasing can be viewed as a global phenomenon, with similar drivers of local food purchasing being seen across international boundaries. UK consumers select local food for better taste, to support local growers, reduce environmental damage, patriotism, freshness, safety and better quality (Kemp, Inch, Holdsworth, and Knight, 2010); critical drivers for US consumers are freshness, taste, and nutritional value, followed by support for local farmers, availability, appearance, price, variety, grown locally, environmentally friendly, easy to prepare, and organically grown (Selfa and Qazi, 2005); Australian consumers consider key drivers to be freshness, flavour, support of local production and traceability (PIRSA, 2010).

A number of food choice studies have centred around motivational and attitudinal influences on consumption behaviour that have helped further understand consumers food buying behaviour generally (e.g. Shepherd, 1990), as well as in relation to specific food types e.g. organic produce (e.g. Baker, Thompson, Engelken, and Huntley, 2004) and genetically modified food (e.g. Burton, Rigby, Young, and James, 2001). Whilst these have established the main 'drivers' behind consumers decisions to purchase local food, they do not go further to establish the *types* of motivation underlying these decisions i.e. egoistic and altruistic.

3.0 Egoistic versus altruistic motivations influencing the purchase of local food

Past studies indicate differences in the types of qualities/benefits most influential in consumers' local food purchasing decisions. Knight (2013) found intrinsic qualities associated with egoistic motivations were the most important, with social benefits associated with altruistic motivations to be of secondary importance. MacMillan Uribe, Winham, and Wharton (2012) support this by revealing consistent supply of safe and nutritious quality (egoistic), followed by local support for farmers and being environmentally sustainable (altruistic) as key advantages of community supported agriculture membership. Dukeshire, Garbes, Kennedy, Boudreau, and Osborne (2011) found key factors influencing food purchasing decisions to be taste and nutritional value, followed by locally grown, price, ease of preparation, and organic. Conversely, other studies have found that the social benefits associated with altruistic motivations, including support for local farmers/producers/retailers (Birch, 2012), ethical consumption, and concern for the environment (Megicks, Memery, and Williams, 2008), are the most important considerations when purchasing local food. The purpose of this study is to explore the role of egoistic and altruistic motivations in local food purchases. Hence it focuses on key qualities and benefits identified through the literature as being linked to these motivations: health consciousness, food safety (egoistic); environmental concern, ethical self-identity (altruistic). These will be briefly outlined before the hypotheses are proposed:

Health consciousness concerns the extent to which a person is aware of, and concerned about, their health and the health of those close to them. It reflects the willingness of a person to engage in healthy behaviours and undertake actions directed at improving their health, quality of life and well-being (Michaelidou & Hassan, 2008). Health involvement or interest in eating health foods is closely correlated with food consumption and has been found to be a key driver of local food consumption (Weatherell, Tregear, and Allinson, 2003). *Food safety* has become an increasing concern for many consumers in terms of the use of, for instance, artificial additives, (Yee, Yeung, & Morris, 2005) as well as concerns associated with genetically modified foods (Evans & Cox, 2006). Local food for many is associated with being 'natural' and 'wholesome' therefore its purchase has been linked with intrinsic qualities related to reduced food safety risks (Peters, Bills, Wilkins, and Fick, 2008). *Environmental issues* have been a concern for consumers over a number of decades, with past research suggesting attitudes toward the environment may predict food choice and sustainability-related behaviours (e.g. MacMillan Uribe, Winham, and Wharton, 2012), especially where a product can be associated with reducing impact on the natural environment. *Ethical self-identity* refers to the extent to which a consumer is driven by ethical motives, e.g. fair prices, when making consumption choices (Shaw & Shiu, 2002). Particularly, ethical values are found to be associated with the consumption of local food (McEachern, Warnaby, Carrigan, and Szmigin, 2010) and organic foods (Honkanen, Verplanken, and Olsen, 2006).

4.0 Hypotheses

The role of egoistic motivations associated with health consciousness and food safety, and altruistic motivations linked to ethical self-identity and environmental consciousness are studied in line with attitude, purchase frequency, interest in traceability, and propensity to buy based on the synopsis that if a consumer is more concerned with a particular issue (favourable attitude) then they will be motivated to behave in a particular manner. Thus it is proposed:

H1a: Purchase frequency of local food is positively associated with egoistic motivations.

H1b: Purchase frequency of local food is positively associated with altruistic motivations.

H2a: Favourable attitudes toward purchasing local food are positively associated with egoistic motivations.

H2b: Favourable attitudes toward purchasing local food are positively associated with altruistic motivations.

H3a: Interest in traceability of food is positively associated with egoistic motivations.

H3b: Interest in traceability of food is positively associated with altruistic motivations.

H4a: Propensity to buy local food is positively associated with egoistic motivations.

H4b: Propensity to buy local food is positively associated with altruistic motivations.

5.0 Methodology

An online survey was administered to 677 Australian grocery shoppers in the state of South East Queensland. Respondents were screened to ensure they were over 18 years of age and the main/joint decision maker in food shopping decisions for the household. Of those responding 57% were female and 43% were male. 36% were aged 55 years+, 24% were aged 45-54 years, 23% were 35-44 years, 12% were 25-34 years, and 5% were 18-24 years. The survey tool was informed by the findings of previous studies. Health consciousness (3 items) and food safety (3 items) were measured with scales borrowed from SERIO (2008). Six items adapted from the New Ecological Paradigm scale (Dunlap, Van Liere, Mertig, and Jones, 2000) measured ecological attitudes. Ethical identity (3 items) was taken from SERIO (2008). Attitude was measured on a 5-item scale. 'Propensity to buy' and 'interest in traceability' were measured on a single item each. A 7-point Likert scale (strongly agree-strongly disagree) measured each item. Purchase frequency was measured on a 6-point scale (never-frequently).

6.0 Analysis and results

Items were tested for the basic assumptions of multivariate analysis (Schumacker and Lomax, 2004) after which Exploratory Factor Analysis (EFA) was conducted using Principal Components extraction and Varimax rotation (see Table 1). Analysis of substantive explanations and the scree plot criterion (Nunnally and Bernstein, 1994) indicated a four factor solution as appropriate. Following the advice of Hair, Black, Babin, Anderson, and Tatham (2009) (i.e. removal of items with factor loadings $<.40$ and cross loading $>.50$) 3 items were removed from the analysis. A second EFA revealed a four factor solution with more acceptable sampling adequacy ($KMO = .63$; $df = 66$; $p = 0.00$), which accounted for just over 83% of the total variance (see Table 1). These factors were interpreted as '*health consciousness*', '*ethical self-identity*', '*food safety*', '*environmental consciousness*', and found to be supportive of factors identified in previous studies in the area.

To determine the role the four egoistic and altruistic factors in explaining frequency of purchasing of local food, respondents were grouped into three categories: those who reported never or infrequently purchasing local food (25.7%); those neither frequently nor infrequently purchasing local food (36.8%); those purchasing local food frequently to very frequently (37.5%). The relationships between egoistic and altruistic motivations and attitudes toward

local food were investigated using an aggregated mean for 'favourable attitude. The two measures, 'propensity to buy' local food and 'interest in traceability' were also included.

Table 1:
Exploratory factor analysis for factors influencing local food purchases

Statements	HC	ES-I	FS	EC
I am very conscious about my health and the health of others for whom I shop in the household	.809			
I take responsibility for the state of my health and the health of others for whom I shop in the household	.849			
I am very involved with my health and the health of others for whom I shop in the household	.876			
I think of myself as an ethical consumer		.887		
Ethics are important to me when making buying decisions		.899		
I think of myself as someone who is concerned about ethical issues		.882		
The safety of food nowadays concerns me			.824	
Nowadays most foods contain residues from chemical sprays and fertilizers			.866	
I am very concerned about the amount of artificial additives and preservatives in food			.665	
The balance of nature is strong enough to cope with the impacts of modern industrial nations				.876
The so-called ecological crisis facing human kind has been greatly exaggerated				.853
Humans have the right to modify the natural environment to suit their needs				.795
Variance explained (%)	47.85	16.92	12.28	6.08
Cronbach's coefficient alpha	.94	.93	.87	.80

HC = Health Consciousness; ES-I = Ethical Self-Identity; FS = Food Safety; EC = Environmental Consciousness

ANOVA reveals that people who purchase local food more frequently score higher on ethical self-identity ($F=7.37$, $p = 0.01$), health consciousness ($F = 6.12$, $p = 0.01$) and food safety ($F = 3.35$, $p = 0.04$). However, there are no statistically significant differences with respect to environmental consciousness across the three purchasing frequency groups. ANOVA also reveals that people who purchase local food more frequently are more likely to have favourable attitudes toward purchasing local food ($F=53.12$, $p = 0.00$), have greater propensity to buy local food ($F=59.67$, $p = 0.00$), and are more likely to be interested in traceability ($F= 25.20$, $p = 0.00$).

Bivariate correlations were calculated to assess the association between the variables. Purchase frequency is moderately associated with propensity to buy local food (0.39), favourable attitudes (0.37) and interest in traceability (0.26), and weakly associated with ethical self-identity (0.17), and health consciousness (0.16). Ethical self-identity is moderately associated with health consciousness (0.57), interest in traceability (0.50), concern for food safety (0.46), favourable attitudes (0.42) and propensity to buy (0.34), but only weakly associated with environmental consciousness (0.17) and purchase frequency (0.17).

Linear regression analysis reveals a very weak relationship (Adjusted $R^2 = 0.04$) between the egoistic and altruistic variables tested in this study and reported purchase frequency (see Table

2). However, this weak relationship may be partially explained by the multiplicity of factors (drivers and barriers) influencing local food purchasing, as well as, the overall very low levels of purchase (Birch, 2012; Knight, 2013). In terms of the four factors, ethical self-identity is the strongest predictor of reported purchase frequency, followed by health consciousness. Previous studies have focused on the benefits of reduced food safety risks (Peters, Bills, Wilkins, and Fick, 2008) and being kinder to the environment (Tregear and Ness, 2005). However, in this study concern for food safety and environmental consciousness are not associated with reported purchase frequency.

Table 2:
Regression Analysis

Variable	Adjusted R ²	Ethical t-value	Environment t-value	Health t-value	Food Safety t-value
Purchase Frequency	0.04	3.87**	-1.66	3.33*	0.66
Favourable Attitudes	0.24	9.33**	-0.32	8.89**	6.93**
Propensity - Specifically look for local food to try	0.15	8.00**	-3.01*	5.94**	4.33**
Traceability - Interest in where and how food is grown/produced	0.31	12.32**	-0.28	10.31**	7.25**

**p > 0.01 *p > 0.05

A slightly stronger relationship (Adjusted R² = 0.24) was found between egoistic and altruistic motivations and favourable attitudes toward local food purchasing, with ethical self-identity being the strongest predictor, followed by health consciousness, and food safety concerns. Environmental consciousness is not associated with favourable attitudes toward purchasing local food. A weak relationship (Adjusted R² = 0.15) was found between propensity to purchase local food and the four egoistic and altruistic motivations. Once again, ethical self-identity was the strongest predictor followed by health consciousness, food safety, and environmental consciousness. A moderate relationship (Adjusted R² = 0.31) was found between traceability and the four factors. Ethical self-identity was found to be the strongest predictor of interest in traceability, followed by health consciousness, and food safety. Environmental consciousness is not associated with interest in where local food is grown or produced. Overall this analysis resulted in support for four of the proposed hypotheses (H1a, H2a, H3a, H4a), and partial support for the others.

7.0 Conclusions

The aim of this research was to understand further the *types* of motivations behind local food purchasing behaviour, and identify the balance of egoistic motivations against altruistic motivations. Results confirm previous research that, within this market, consumers base their consumption decisions on both reasons of self-interest and those that ‘do good’ for the wider community. It extends the literature further by establishing that not all motivations are equal in importance, and that a ‘trade-off’ does take place, with the altruistic motivations relating to ethical self-identity being the strongest indicator of local food purchase, although the egoistic motivations of health consciousness and food safety also play an important role.

References

Baker, S., Thompson, K.E., Engelken, J., & Huntley, K. (2004). Mapping the values driving organic food choice: Germany versus the UK. *European Journal of Marketing*, 38, 995 – 1012.

Birch, D. (2012). Understanding drivers and barriers to consumption of South East Queensland local and regional food, Queensland Government Regional Services, Maroochydore. Retrieved from <http://www.rdasunshinecoast.org.au/wp-content/uploads/2012/08/FINAL-REPORT-Local-Food-and-Beverage-Dawn-Birch.pdf>.

Burton, M., Rigby, D., Young, T., & James, S. (2001). Consumer attitudes to genetically modified organisms in food in the UK. *European Review of Agricultural Economics*, 28, 479-498.

Chambers, S., Lobb, A.E., Butler, L., Harvey, K. & Traill, W.B. (2007). Consumer attitudes towards local, national and imported foods: a qualitative study. *Appetite*, 49, 208-213.

DAFF (Department of Agriculture Fisheries and Forestry). (2012). Australian food statistics 2011–12. Retrieved from http://www.daff.gov.au/_data/assets/pdf_file/0007/2269762/daff-foodstats-2011-12.pdf

Dukeshire, S., Garbes, R., Kennedy, C., Boudreau, A., & Osborne, T. (2011). Beliefs, attitudes and propensity to buy locally produced food. *Journal of Agriculture, Food Systems and Community Development*, 1, 19-29.

Dunlap, R., Van Liere, K., Mertig, A., & Emmet Jones, R. (2000). New trends in measuring environmental attitudes: Measuring endorsement of the New Ecological Paradigm: A revised NEP scale. *Journal of Social Issues*, 56, 425–442.

Eden, S., Bear, C., & Walker, G. (2008) Understanding and (dis)trusting food assurance schemes: Consumer confidence and the 'knowledge fix'. *Journal of Rural Studies*, 24, 1-14.

Evans, G., & Cox, D. (2005) Australian consumers' antecedents of attitudes towards foods produced by novel technologies. *British Food Journal*, 108 (11), 916-930

Hair, J.F., Black, W.C., Babin, J.B., Anderson, R.E., & Tatham, R.L. (2009). *Multivariate data analysis*. (6th ed). Pearson Education Inc., Upper Saddle River, New Jersey.

Hinrichs, C.C. (2000). Embeddedness and local food systems: Notes on two types of direct agricultural market. *Journal of Rural Studies*, 16, 295–303.

Honkanen, P., Verplanken, B., & Olsen, S. (2006). Ethical values and motives driving organic food choice. *Journal of Consumer Behaviour*, 5, 420-431.

Kemp, K., Inch, A., Holdsworth, D.K., & Knight, J.G. (2010). Food miles: Do UK consumers actually care? *Food Policy*, 35, 504-513.

Knight, A.J. (2013). Evaluating local food programs. *Evaluation and Program Planning*, 36, 29-39.

MacMillan Uribe, A.L., Winham, D.M., & Wharton, C.M. (2012). Community supported agriculture membership in Arizona. An exploratory study of food and sustainability behaviours, *Appetite*, 59, 431-436.

Megicks, P., Memery, J., & Angell, R. (2012). Understanding local food shopping: unpacking the ethical dimension. *Journal of Marketing Management*, 28, 264-289.

Megicks, P., Memery, J., & Williams, J. (2008). Influences on ethical and socially responsible grocery shopping: Evidence from the UK grocery sector. *Journal of Marketing Management*, 24, 637-659.

Michaelidou, N., & Hassan, L.M. (2008). The role of health consciousness, food safety concern and ethical identity in attitudes and intentions towards organic food. *International Journal of Consumer Studies*, 32, 163-170.

Mintel Group Ltd. (2013). *Provenance in Food and Drink - UK - March 2013*. London: Mintel.

Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.

PIRSA (Primary Industry and Regions South Australia). (2010). *Food consumption and consumers: Who, what, where and why?* Retrieved from http://www.pir.sa.gov.au/__data/assets/pdf_file/0005/165974/safood_consumers_report.pdf

Peters, C., Bills, N., Wilkins, J., & Fick, G. (2008). Foodshed analysis and its relevance to sustainability. *Renewable Agriculture and Food Systems*, 24, 1-7.

Schumacker, R.E., & Lomax, R.G. (2004). *A beginner's guide to structural equation modeling*, (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Selfa, T., & Qazi, J., (2005). Place, taste, or face-to-face? Understanding producer-consumer networks in 'local' food systems in Washington State. *Agriculture & Human Values*, 22, 451-464.

SERIO. (2008). *Understanding of consumer attitudes and actual purchasing behaviour with reference to local and regional foods*, Socio-economic Research Intelligence Observatory, Retrieved from <http://www.serio.ac.uk/resources/files/Understanding%20of%20Consumer%20Attitudes%20and%20Actual%20Purchasing%20Behaviour.pdf>

Shaw, D.S., & Shiu, E. (2002). The role of ethical obligation and self-identity in ethical consumer choice. *International Journal of Consumer Studies*, 26, 109-116.

Shepherd, R., (1990). Overview of factors influencing food choice. In M. Ashwell (ed) *Why we eat what we eat*, The British Nutritional Foundation, *Nutrition Bulletin*, 15, 12-31.

Tregear, A., & Ness, M. (2005). Discriminant analysis of consumer interest in buying locally produced foods. *Journal of Marketing Management*, 21, 19-25.

Weatherell, C., Tregear, A., & Allinson, J. (2003). In search of the concerned consumer: UK public perceptions of food, framing and buying local. *Journal of Rural Studies*, 19, 233-244.

Yee, W., Yeung, R., & Morris, J. (2005). Food safety: Building consumer trust in livestock farmers for potential purchase behaviour, *British Food Journal*, 107, 841-854.