The Mindful Consumer: Balancing egoistic and altruistic motivations to purchase local food

Dr Dawn Birch

*Professor Juliet Memery

Maheshan De Silva Kanakaratne

*Dawn Birch, Faculty of Management, Bournemouth University, Executive Business Centre, 89 Holdenhurst Road, Bournemouth, UK. BH8 8EB.
Email: dbirch@bournemouth.ac.uk Tel: +44 (0) 1202 963537

*Juliet Memery, Faculty of Management, Bournemouth University, Executive Business Centre, 89 Holdenhurst Road, Bournemouth, UK. BH8 8EB.
Email: jmemory@bournemouth.ac.uk Tel: +44 (0) 1202 968743

Maheshan De Silva Kanakaratne, Faculty of Management, Bournemouth University, Fern Barrow, Poole, Dorset, UK. BH12 5BB.
Email: mdesilvakanakaratne@bournemouth.ac.uk Tel: +44 (0) 12029 65047

* For correspondence
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ABSTRACT

Today’s more “mindful” consumers’ food consumption decisions are changing as they attempt to balance egoistic and altruistic motivations. This study explores the relative importance of these types of motivations in influencing Australian consumers’ attitudes towards, and purchase frequency of, local food. Factors examined include ethical self-identity, environmental consciousness, health consciousness and food safety. Results indicate egoistic motivations may influence local food consumption decisions more strongly than altruistic motivations. Recommendations for producers and retailers of local food in appealing to more “mindful” consumers suggest more focused marketing and communication strategies, clearer branding and labelling of produce, and training of service staff.

Key words: local food; egoistic and altruistic motivations; ethical self-identity; health consciousness; food safety; environmental consciousness
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1. Introduction

Consumers have become increasingly disengaged by distant and impersonal industrialised food production and distribution systems controlled by larger multinational enterprises (Autio, 2013; Feagan, 2007). Many are concerned about the adverse consequences and lack of transparency surrounding existing global food systems, particularly negative environmental impacts, sustainability and health, and food safety issues (de Jonge et al., 2008; Dukeshire et al., 2011; Eden et al., 2008; Hendrickson and Heffernan, 2002). This has been exacerbated by a number of high profile food safety crises over the past two decades, including Bovine Spongiform Encephalopathy (BSE), Foot and Mouth Disease and the Horsemeat Scandal in the UK (Barbarossa, et al., 2016; BBC News, 2013; Grunert, 2005; Morris and Buller, 2003; Tregear and Ness, 2005) and salmonella in Australian peanut paste (Powell, 2012). Such food scares have amplified consumers’ awareness of food supply chain activities and the potential health risks associated with them. This, alongside increasing concern over production and supply methods has fuelled interest in the provenance, sourcing and traceability of produce further.

Across the globe, this growing lack of trust in the dominant agro-industrial food paradigm has led to a consumer backlash whereby many consumers are choosing to source more ‘local food’. Indeed Mintel (2017) found consumers ranked ‘British-made’ and ‘locally-sourced’ as two of the most important factors when shopping for food and drink. This has led to an increase in specialist retailers who are appealing to consumers desire for localism through their use of local producers and short supply chains, with sales through specialist food and drink stores found to be worth over £12.4 billion in 2015 and set to increase by 6% to an
estimated value of £13.2 billion by 2021 (Mintel, 2017). In Australia, over 90 percent of fresh food on Australian tables is grown and produced by local (Australian) farmers (DAFF, 2012). Despite much of this being sold through the two dominant supermarkets, Coles and Woolworths, the local food movement in Australia is gaining momentum as illustrated through the increased popularity of farmers markets and food festivals (Caskey, 2014).

The local food movement is a “search for food with integrity” Ikerd (2011, p. 52), with local food becoming increasingly fashionable as people become more concerned with issues of lifestyle and “food purism” (Heslop, 2007, p. 29). Knight (2013, p. 29) argues that “localness is one of the hottest trends in the world of food” with more socially responsible and ethically-minded food consumers seeking “environmentally and socially sustainable food” (Selfa and Qazi, 2005, p. 452). Indeed, ethical consumption involving choice based on personal and moral beliefs (Carrigan et al., 2004) and with a stronger focus on social concerns is growing across a wide range of product categories (Bucic et al., 2012), and this is particularly the case for food. However, despite the notion that the consumption of local food may provide individual and societal benefits, limited studies have focused on what underlying motives drive a person to purchase such produce.

A review of the extant literature reveals numerous drivers and barriers influencing local food purchasing which aim to understand why (or why not) consumers consume local food. However, whilst these studies focus on uncovering the main reasons or ‘drivers’ behind consumer decision-making with regard to local food (e.g., FSA, 2007; IGD, 2005; Megicks et al., 2012; Weatherell et al., 2003), research into the types of motivation underlying these decisions has received rather less attention. Identifying whether these stem from an individual’s self-interest (i.e., egoistic motivations) or wider social concerns (i.e., altruistic motivations) would aid retailers and manufacturers’ decision-making in a plethora of ways e.g., advertising, labelling, positioning, etc. Therefore, the focus of this paper is on the role of
egoistic and altruistic motivations in local food consumption. It seeks to establish how these seemingly contradictory motivations are balanced in the consumer’s mind during the decision-making process. To do so it investigates health consciousness and concern for food safety (egoistic motivations) along with ethical self-identity and environmental consciousness (altruistic motivations) and how they affect beliefs and purchase frequency of local food.

2. Literature Review

2.1 Defining local food and factors driving its purchase

The term ‘local food’ is most commonly used to describe “local food systems or short food chains where the food is produced near the consumer” (Roininen et al., 2006, p. 20). However, defining the ‘locality’ aspect of local food has led to a number of interpretations and much debate (see for example, Durham et al., 2009; Feldmann and Hamm, 2015; Lang et al., 2014; Morris and Buller, 2003; Ricketts Hein et al., 2006), but is generally based around two characteristics: the origin of the produce and consumer recognition of the produce coming from a local source (Pearson et al., 2011).

Past studies have found a range of drivers to purchasing local food, including ethical considerations, e.g., support for local farmers, producers and retailers (Bianchi and Mortimer, 2015; Dukeshire et al., 2011; Memery et al., 2015; Mintel, 2015), environmental concerns (Kareklas et al., 2012; Tregear and Ness, 2005), food provenance and traceability (IGD, 2012; Megicks et al., 2012), and food safety (Bellows et al., 2010). In addition factors relating to health consciousness, e.g., nutritional value (Selfa and Qazi, 2005), food quality, e.g., taste, freshness, (Chambers et al., 2007; Roininen et al., 2006; Murphy, 2011), and more traditional shopping requirements, e.g., convenience, availability, and price (Chambers et al., 2007; Tregear and Ness, 2005) have also been found to be important. Furthermore, local food consumption can be viewed as a global phenomenon with similar drivers of local food
purchasing being seen across international boundaries. For example, UK consumers select local food for better taste, to support local growers, reduce environmental damage, patriotism, freshness, safety and better quality (Kemp et al., 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); and likewise, Australian consumers consider important 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., Furst et al., 1996; Keane and Williets, 1994; Shepherd, 1990), as well as in relation to specific food types e.g. green foods (Je Schuitema and De Groot, 2015), organic produce (e.g., Nasir and Karakaya, 2014) and genetically modified food (e.g., Burton et al., 2001). However, whilst these have established the main reasons or ‘drivers’ behind consumers decisions to purchase local food (e.g., COI/FSA, 2007; IGD, 2005; Megicks et al., 2012), limited studies have delved deeper into the types of motivation underlying these decisions i.e., egoistic and altruistic. Identifying how these motivations affect buying behaviour and beliefs with regard to local food will help gain greater insight into the consumer psyche and assist local producers to more effectively target their markets.

2.2 Egoistic versus altruistic motivations influencing the purchase of local food

The consumption of locally produced food has been associated with intrinsic and extrinsic qualities, as well as, societal benefits (Knight, 2013). Extrinsic qualities of local food concerning marketing related factors (e.g., price, branding, packaging, labelling, promotion) are typically associated with barriers to local food purchasing (Megicks et al., 2012).
However, extrinsic qualities such as environment, welfare and origin (Tregear and Ness, 2005), as well as intrinsic qualities and societal benefits can be related to drivers of such consumption. These, in turn, can be linked to different types of motivation, with intrinsic qualities (e.g., quality, appearance, freshness, taste, healthiness, safety) being associated with egoistic motivations or self-interest, and selected extrinsic qualities and societal benefits (e.g., supporting local producers, retailers and economies, preserving agricultural land, increased food security) with altruistic motivations or doing ‘wider good’.

Past research indicates differences in which types of qualities/benefits (and hence motivations) are most influential in consumers local food purchasing decisions. Knight (2013) found intrinsic qualities (e.g., taste) associated with egoistic motivations or self-interest were the most important benefits, while social benefits associated with altruistic motivations were of secondary importance. Support for this was found from MacMillan Uribe et al. (2012) who revealed that consistent supply of safe and nutritious quality (egoistic), followed by local support for farmers and being environmentally sustainable (altruistic) were key advantages of community supported agriculture membership. Conversely, other studies have found that the social benefits associated with altruistic motivations, including support for local farmers, producers and retailers (Birch, 2012; Memery et al., 2015; Mintel, 2015), ethical consumption and concern for the environment (Megicks et al., 2008), are the most important considerations when purchasing local food. Whereas Kareklas et al. (2014) found that egoistic and altruistic factors concurrently predicted consumers’ attitudes and purchase intentions toward organic food.

Whilst a number of studies have looked at what drives decision-making regarding food choice, the purpose of this study is to explore the role of egoistic and altruistic motivations in the purchase of local food. To do this, the study focuses on key qualities and benefits identified through the literature as being linked to these motivations, namely health
consciousness and food safety (egoistic), and environmental concern and ethical issues (altruistic), which will now be discussed further.

2.2.1 Egoistic motivation factors

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 (Gould, 1988). 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 (Becker et al., 1977; Michaelidou and Hassan, 2008). Dutta-Bergman (2005, p. 4) argues that health orientation or health conscious behaviour arises from “an intrinsic interest rather than an interest that is prompted by situational factors in the environment”. Health involvement or interest in eating healthy foods has been found to be closely correlated with food consumption (Marshall and Bell, 2004; Pieniak et al., 2008), and in particular, for fruit and vegetables and organic and free range products (Brunsø and Scholderer, 2001; Michaelidou and Hassan, 2010; Nasir and Karakaya, 2014). Health consciousness has also been found to be a key driver of local food consumption (Weatherell et al., 2003), although others have found taste to be a stronger predictor of food choice than health (Brunsø et al., 2009; Wardle, 1993).

Many consumers have become increasingly concerned about the safety of food in terms of the use of chemicals, pesticides, hormones, preservatives and artificial additives, (Brewer and Rojas, 2008; Canavari et al., 2002; Honkanen et al., 2006; Yee et al., 2005) as well as fears around genetically modified foods (Bellows et al., 2010). 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 et al., 2008). A study of UK consumers found that after quality, safety from food borne disease was the second most important factor in patronising farmer’s markets (Conner et al., 2010), with consumers in Australia regarding
bacterial contamination, storage times and the use of growth hormones to be the most important food safety issues (FSANZ, 2008).

2.2.2 Altruistic motivation factors

Environmental issues have been identified as a concern for consumers over a number of decades with much initial awareness being attributed to Rachel Carson’s (1962) book *Silent Spring*. Past research has suggested that attitudes toward the environment may predict food choice and sustainability-related behaviours (Grankvist and Biel, 2001; MacMillan Uribe et al., 2012; Tanner and Wölfling Kast, 2003; Wandel and Bugge, 1997), especially where a product can be clearly associated with a reduced impact on the natural environment, such as organic food (Lockie et al., 2002). COI/FSA (2007) identified environmental factors such as reducing food miles and pollution as one of the main reasons for buying local food. This is supported by Dukeshire et al. (2011) who found relatively high levels of concern for the environment in their study of Nova Scotians resulting from heightened awareness of issues such as food miles, global warming, and the need for more responsible consumption (Jacobsen and Dulsrud, 2007; Vermeir and Verbeke, 2006). Conversely, other studies of local food reveal lower ratings on concern for the environment (Schneider and Francis, 2005; Selfa and Qazi, 2005; Zepeda and Li, 2006), with Kemp et al. (2010) finding that only 3.6% of their UK consumer sample selected food based on it being less harmful to the environment. Similarly, in a survey of Australian consumers, PIRSA (2010) revealed that whilst some consumers had a preference for locally sourced food, environmental impact was not the primary driver.

Ethical self-identity refers to the extent to which a consumer is driven by ethical motives when making consumption choices (Shaw et al., 2000; Shaw and Shiu, 2002). Ethical consumption is defined as “people purchasing and using products and resources according
not only to the personal pleasures and values they provide but also to ideas of what is right and good, versus wrong and bad, in a moral sense” (Starr, 2009, p. 916). Ethical consumption involves making “conscious and deliberate” consumption decisions based on personal beliefs and morals (Megicks et al., 2008, p. 639). Motives underlying ethical consumption choices include concern for animal and human welfare, fair prices, etc. (Wheale and Hinton, 2007; Michaelidou and Hassan, 2008). In particular, ethical values have been found to be associated with the consumption of local food (McEachern et al., 2010) and organic foods (Honkanen et al., 2006).

3. Hypotheses

Based on the review of the extant literature and knowledge of the wide range of potential drivers of local food purchasing, this paper specifically focuses on the role of egoistic motivations associated with health consciousness and food safety, and altruistic motivations linked to ethical self-identity and environmental consciousness. In order to see the impact of these motivations, they are studied in line with beliefs and past purchase frequency, 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 i.e. if concerned about local food they will purchase that type of product more often.

Furthermore, in line with the Theory of Reasoned Action (TRA), it is proposed that attitudes toward the act of purchasing local food predict behaviour rather than attitudes toward the product itself (Ajzen and Fishbein, 1980; Tarkiainen and Sundqvist, 2009). Indeed, measuring purchase frequency based on ‘recalled’ behaviour may provide insights, but a person’s attitude toward the favourability of buying a particular product and their propensity to buy a particular product may prove most insightful. Moreover, with respect to
local food, interest in provenance and traceability, or knowing how food had been grown and produced, have been found to influence purchase of local food.

Therefore the hypotheses postulated for this study are:

**H1**: Favourable beliefs toward purchasing local food are positively associated with:

- **a.** egoistic motivations (health consciousness; food safety)
- **b.** altruistic motivations (ethical self-identity; environmental consciousness).

**H2**: Interest in traceability of food is positively associated with:

- **a.** egoistic motivations (health consciousness; food safety)
- **b.** altruistic motivations (ethical self-identity; environmental consciousness).

**H3**: Propensity to buy local food is positively associated with:

- **a.** egoistic motivations (health consciousness; food safety)
- **b.** altruistic motivations (ethical self-identity; environmental consciousness).

**H4**: Increased purchase frequency of local food is positively associated with:

- **a.** egoistic motivations (health consciousness; food safety)
- **b.** altruistic motivations (ethical self-identity; environmental consciousness)

**H5**: Increased purchase frequency of local food is positively associated with:

- **a.** favourable beliefs about local food
- **b.** propensity to buy local food
- **c.** interest in traceability.

4. **Research methodology**

4.1 **Participants and Procedures**

A quantitative online survey was administered to 677 Australian grocery shoppers in South East Queensland. Respondents were screened to ensure they were over 18 years of age and the main/joint decision maker in grocery shopping decisions for the household.
4.2 Measures

To measure respondents' health consciousness, concerns about food safety, environmental consciousness and ethical identity, scales were utilised from past research. All scales were chosen based on their suitability and validity.

Health consciousness reflecting health involvement (Gould, 1988) and concerns for food safety were each measured on 3 items borrowed from a UK study of local food research (Megicks et al., 2012). Six items from the New Ecological Paradigm scale (Dunlap et al., 2000) were used to measure environmental consciousness. Ethical identity was measured on three items taken from Megicks et al. (2012). Each of these measures utilised a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree.

The four dependent variables were also borrowed from previous research (Megicks et al., 2012). Past purchasing frequency was measured on a six-point scale (1 = never to 6 = more than once a week). Five statements measured beliefs about the purchasing of local food. These were averaged prior to analysis, and the internal consistency of the scales confirmed by overall as well individual Cronbach’s alphas being greater than 0.7 (Nunnally, 1978). Attitudes toward local food and beverage were measured on two additional statements designed to measure ‘propensity to buy’ local food and ‘interest in traceability’. These were all measured on 7-point Likert scales (1= strongly disagree to 7 = strongly agree).

5. Results

5.1 Respondent Characteristics

The key characteristics of respondents in the sample are outlined in Table 1. In addition to this, 18.2% of respondents came from single person households, 36.6% from households with 2 people and 45.2% with 3 or more people. 31.0% of respondents had at least one dependent child at home, and 8.4% at least one adult child at home. With regard to education, 43% of
respondents had completed Tertiary education/university, 29.5% technical training, with the remainder (27.5%) having a highest education level of secondary school or below.

Table 1
Respondent Characteristics of Survey Sample

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Category</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>392</td>
<td>57.9</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>285</td>
<td>42.1</td>
</tr>
<tr>
<td>Age</td>
<td>18-24 years</td>
<td>32</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td>25-34 years</td>
<td>82</td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td>35-44 years</td>
<td>155</td>
<td>22.9</td>
</tr>
<tr>
<td></td>
<td>45-54 years</td>
<td>160</td>
<td>23.6</td>
</tr>
<tr>
<td></td>
<td>55 years +</td>
<td>248</td>
<td>36.6</td>
</tr>
<tr>
<td>Location</td>
<td>Queensland</td>
<td>397</td>
<td>58.6</td>
</tr>
<tr>
<td></td>
<td>Interstate other than Queensland</td>
<td>280</td>
<td>41.4</td>
</tr>
<tr>
<td>Income*</td>
<td>Less than AU$20,000</td>
<td>29</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>AU$20,000 - AU$39,999</td>
<td>100</td>
<td>14.8</td>
</tr>
<tr>
<td></td>
<td>AU$40,000 - AU$59,999</td>
<td>111</td>
<td>16.4</td>
</tr>
<tr>
<td></td>
<td>AU$60,000 - AU$79,999</td>
<td>95</td>
<td>14.0</td>
</tr>
<tr>
<td></td>
<td>AU$80,000 - AU$99,999</td>
<td>67</td>
<td>9.9</td>
</tr>
<tr>
<td></td>
<td>AU$100,000 - AU$119,999</td>
<td>50</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>AU$120,000 - AU$139,999</td>
<td>24</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>AU$140,000 - AU$159,999</td>
<td>26</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>AU$160,000 +</td>
<td>52</td>
<td>7.7</td>
</tr>
</tbody>
</table>

*18.2% declined to answer/did not know

5.2 Identifying egoistic and altruistic factors influencing the purchasing of local food

5.2.1 Scale Item Validation

Each item used to measure egoistic and altruistic motivations was tested for the basic assumptions of multivariate analysis (Schumacker and Lomax, 2004). Following this the
sample was split into two halves; one to be utilised for an Exploratory Factor Analysis \((n = 339)\) and the other as a holdout sample for the ensuing Confirmatory Factor Analysis \((n = 338)\).

The four constructs representing egoistic (health consciousness; food safety) and altruistic (environmental consciousness; ethical identity) motivations were subjected to an Exploratory Factor Analysis using the Maximum Likelihood technique with Promax Rotation. After an iterative procedure three unsatisfactory items were considered for deletion. Two items measuring environmental consciousness (*The balance of nature is very delicate and easily upset* and *Despite our special abilities, humans are still subject to the laws of nature*) were removed due to low communalities; <.3 (Hair et al., 2010), and one item measuring environmental consciousness (*Humans are severely abusing the environment*) was removed due to low factor loadings; <.4 (Hair et al., 2010).

The resulting pattern matrix yielded a three factor solution (Table 2). The first factor can be interpreted as ‘egoistic motivations’ and relates to the well-being of both the individual and those close to them (health consciousness) and the safety of the food they consume (food safety). The second component comprises items relating to ‘ethical self-identity’ (altruistic motivation). The final component ‘environmental consciousness’ is concerned with the wider environment and its capacity to cope with the demands upon it (altruistic motivation). Whilst a four factor solution was preferred to mirror the hypothesised relationships, a forced four factor solution highlighted divergent validity issues; inter-factor correlation between health consciousness and food safety concerns being greater than 0.7 (Hair et al., 2010). Further, the fourth factor had an Eigenvalue less than 1, thus failing to meet Kaiser’s criterion (Pallant, 2010; Field, 2013). Therefore, the analysis proceeded with a three factor solution with acceptable sample adequacy \((KMO = .86; \text{df} = 66; p = .000)\), which accounted for 76% of the total variance. Cronbach’s coefficient alphas evidence the internal reliability of the multi-
item scales and a high level of consistency, being in excess of the generally agreed on lower limit of 0.70 (Nunnally, 1978). Convergent validity of the factors was confirmed by high overall factor loadings, >.7 in the pattern matrix; divergent validity by the absence of cross-loadings and correlations in the factor correlation matrix being less than 0.7 (Hair et al., 2010).

5.2.2 Measurement Model Assessment

Next Confirmatory Factor Analysis (CFA) was conducted to ascertain the robustness of the three factors representing egoistic and altruistic motivations using SPSS AMOS version 24. Table 2 displays the individual factor loadings of the constructs as well as confirmation of acceptable internal consistency (Composite Reliability > 0.6) and convergent validity (AVE > 0.5) measures (Bagozzi and Yi, 1988).
### Table 2
Confirmatory Factor Analysis for Factors Influencing Local Food Purchases

<table>
<thead>
<tr>
<th>Construct</th>
<th>Factor Loading</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Egoistic Motivations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m very conscious about my health and the health of others for whom I shop in the household</td>
<td>.89</td>
<td>.907</td>
<td>.628</td>
</tr>
<tr>
<td>I take responsibility for the state of my health and the health of others for whom I shop in the household</td>
<td>.93</td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td>I’m very involved with my health and the health of others for whom I shop in the household</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m very concerned about the amount of artificial additives and preservatives in food</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The safety of food nowadays concerns me</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nowadays most foods contain residues from chemical sprays and fertilizers</td>
<td>.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ethical Identity</strong></td>
<td></td>
<td>.916</td>
<td>.784</td>
</tr>
<tr>
<td>Ethics are important to me when making buying decisions</td>
<td>.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think of myself as someone who is concerned about ethical issues</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think of myself as an ethical consumer</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Consciousness</strong></td>
<td></td>
<td>.784</td>
<td>.550</td>
</tr>
<tr>
<td>The balance of nature is strong enough to cope with the impacts of modern industrial nations</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The so-called ecological crisis facing human kind has been greatly exaggerated</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humans have the right to modify the natural environment to suit their needs</td>
<td>.63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discriminant validity of the constructs (Table 3) is confirmed by the square root of the AVE being greater than the inter-construct correlations (Anderson and Gerbing, 1988; Fornell and Larcker, 1981). Therefore the fit indices of the confirmatory factor analysis confirm acceptable data fit.

**Table 3**

Correlation Matrix of all Variables

<table>
<thead>
<tr>
<th></th>
<th>Ethical Identity</th>
<th>Egoistic Motivations</th>
<th>Environmental Consciousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical Identity</td>
<td>.885&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egoistic Motivations</td>
<td>.608</td>
<td>.792&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Environmental Consciousness</td>
<td>.142</td>
<td>.151</td>
<td>.742&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

*Note:* *Diagonal elements are squared AVE

5.2.3 Causal Model Assessment

Prior to assessing the causal model, Common Method Bias (CMB) was investigated (Podsakoff et al., 2003). Upon comparing the unconstrained CMB model with a fully (zero) constrained CMB model, the presence of common method bias was established as the Chi-square test was significant (Williams and McGonagle, 2016). Different rating scales were used to measure the independent variables to reduce the likelihood of common method bias (Podsakoff et al., 2003). However, the likelihood of such bias is apparent as the combined factor representing egoistic motivations accounted for more than 40% of the variance (Harman’s Single-Factor Test; Chang et al., 2010). Therefore, factor scores were imputed whilst retaining the Common Latent Factor in the measurement model to correct for Common Method Bias.
To rule out multicollinearity between the independent variables, the VIF and tolerance values were calculated by conducting multiple regressions for each of the dependant variables using the three factor scores as inputs. Results indicate this is not present as the VIF values were below 5 and tolerance values greater than 0.2 (Grewal et al., 2004). Therefore the overall fit of the structural model is considered satisfactory (CMIN/DF= 1.452; CFI= .997; NFI/RFI/IFI/TLI > .95; RMSEA=.037; PCLOSE=.672); meeting the recommended thresholds (Byrne, 2010; Schumacker and Lomax, 2004).

5.2.4 Path Coefficients

Demographic variables (age, gender, location) were controlled for prior to running the analysis. The path coefficients and p-values are presented in Table 4 along with a summary of the outcomes from the tested hypotheses concerning associations between (a) egoistic motivations and (b) altruistic motivations and favourable beliefs about local food (H1), interest in traceability (H2), propensity to by local food (H3), and purchase frequency (H4), as well as, relationships between purchase frequency and the independent variables (H5).
<table>
<thead>
<tr>
<th>Path</th>
<th>Description</th>
<th>Coefficient</th>
<th>p-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>Egoistic Motivations &gt; Favourable Beliefs</td>
<td>.276</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b</td>
<td>Ethical Identity &gt; Favourable Beliefs</td>
<td>.244</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>Environmental Consciousness &gt; Favourable Beliefs</td>
<td>-.036</td>
<td>.488</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H2a</td>
<td>Egoistic Motivations &gt; Interest in Traceability</td>
<td>.436</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H2b</td>
<td>Ethical Identity &gt; Interest in Traceability</td>
<td>.358</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>Environmental Consciousness &gt; Interest in Traceability</td>
<td>-.065</td>
<td>.245</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H3a</td>
<td>Egoistic Motivations &gt; Propensity to Buy</td>
<td>.200</td>
<td>.050</td>
<td>Supported</td>
</tr>
<tr>
<td>H3b</td>
<td>Ethical Identity &gt; Propensity to Buy</td>
<td>.368</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>Environmental Consciousness &gt; Propensity to Buy</td>
<td>-.132</td>
<td>.060</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H4a</td>
<td>Egoistic Motivations &gt; Increased Purchase Frequency</td>
<td>-.028</td>
<td>.609</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H4b</td>
<td>Ethical Identity &gt; Increased Purchase Frequency</td>
<td>-.010</td>
<td>.847</td>
<td>Not Supported</td>
</tr>
<tr>
<td></td>
<td>Environmental Consciousness &gt; Increased Purchase Frequency</td>
<td>-.059</td>
<td>.103</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H5a</td>
<td>Favourable Beliefs &gt; Increased Purchase Frequency</td>
<td>.101</td>
<td>.020</td>
<td>Supported</td>
</tr>
<tr>
<td>H5b</td>
<td>Propensity to Buy &gt; Increased Purchase Frequency</td>
<td>.144</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H5c</td>
<td>Interest in Traceability &gt; Increased Purchase Frequency</td>
<td>.052</td>
<td>.174</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>
5.2.4.1 The relationships between egoistic and altruistic motivations and beliefs/attitudes

First, the relationships between egoistic and altruistic motivations and beliefs/attitudes about local food were investigated. Results indicate egoistic motivations have a positive effect on favourable beliefs toward purchasing local food ($\beta = .276; p = .000$), interest in traceability ($\beta = .436; p = .000$) and propensity to buy local food ($\beta = .200; p = .050$). Thus, H1a, H2a and H3a are accepted. Similarly, ethical identity has a positive effect on favourable beliefs toward purchasing local food ($\beta = .244; p = .000$), interest in traceability ($\beta = .358; p = .000$) and propensity to buy local food ($\beta = .367; p = .050$). However, environmental consciousness is not associated with favourable beliefs toward purchasing local food ($\beta = -.036; p = .488$), interest in traceability ($\beta = -.065; p = .245$) or propensity to buy local food ($\beta = -.132; p = .060$). Consequently, H1b, H2b and H3b are only partially accepted.

5.2.4.2 The role of egoistic and altruistic motivations in influencing purchase frequency of local food

To aid analysis, respondents were grouped into three categories based on their purchase frequency of local food. Those who reported ‘rarely’ purchasing local food accounted for just over one-quarter (25.7%) of respondents, those who reported they ‘sometimes’ purchase local food accounted for 36.8 percent, while those who reported purchasing local food ‘often’ accounted for just over one-third (37.5%) of respondents.

Results indicate that none of the three factors have an influence on increased purchase frequency of local food: egoistic motivations ($\beta = -.028; p = .609$), ethical identity ($\beta = -.010; p = .847$), environmental consciousness ($\beta = -.059; p = .103$). Hence H4a and H4b are not accepted. This insignificant relationship may be explained in part by the multiplicity of drivers and barriers influencing local food purchasing, as well as overall very low levels of purchase by respondents in this study (Birch, 2012; Knight, 2013).
Furthermore, in terms of the three factors explored in this paper, holding more favourable beliefs toward purchasing local food was found to have a positive relationship with increased regularity of local food purchasing ($\beta = .101; p = .020$), as does propensity to buy ($\beta = .144; p = .000$), however interest in traceability ($\beta = .052; p = .174$) does not. Hence, H5a and H5b are supported, whilst H5c is not supported. Figure 1 illustrates the structural model.

**Figure 1**

The Structural Model

![The Structural Model Diagram](image)

*Note: * denotes statistically significant path coefficients

**6. Discussion and implications**

The aim of this research was to deepen our understanding of the types of motivations behind local food purchasing behaviour, and in particular 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 egoism or self-interest (‘what is good for me’) and altruism or concern for the wider community (‘what is good for we’). It
extends the literature further by establishing that not all motivations are equally important with egoistic motivations being a stronger indicator of local food purchase than altruistic motivations, although the altruistic motivation of ethical identity does play an important role.

6.1 Theoretical implications

In line with previous studies of local food consumption, the findings of this study reveal that Australian consumers are concerned with egoistic motivations related to their health and personal well-being (Byker et al., 2010; Weatherell et al., 2003) as well as issues of food safety (Peters et al., 2008). Egoistic motivations were found to be positively associated with favourable beliefs toward purchasing local foods, interest in traceability of food, and with propensity to buy local food. Local producers are therefore advised to emphasise the healthy and safe aspects of local food in order to positively influence both beliefs/attitudes toward local food and purchase frequency.

The extant literature reveals that altruistic motivations including ethical self-identity and environmental concerns are associated with increased purchasing of local food (Bean and Sharp, 2011; Johnston et al., 2011; MacMillan Uribe, et al., 2012; Onozaka and McFadden, 2011). However the results of this study only add partial support to this, finding the role of ethical self-identity as an influence on favourable beliefs towards purchasing local food, interest in traceability and propensity to buy local foods. However in contrast to much past research (e.g. COI/FSA, 2007), the altruistic motivation of environmental consciousness did not show a positive relationship with any of the beliefs/attitudes in this study, but in doing so substantiates the work of, for example, Kemp et al. (2010). This outcome may be due in part to some querying the positive environmental impacts often associated with local food production and distribution (e.g. Coley et al., 2009; Edwards-Jones et al., 2008; Mundler and Rumpus, 2012). Hence, focusing on the ethical aspects of local food (e.g., concern for animal
welfare, supporting local farmers) will lead to more favourable beliefs/attitudes as well as heightened purchase intention.

Interestingly, the relationship between increased purchase frequency of local food and all of the three motivational factors were found to be non-significant. However, findings do indicate that holding favourable beliefs and reporting propensity to buy local food leads to increased purchase frequency. Therefore, whilst not directly influencing purchase frequency, egoistic motivations and ethical identity may indirectly lead to just such an outcome. As such, stimulating purchase of local food relies upon fostering favourable beliefs/attitudes by focusing on egoistic and social benefits of local food consumption.

6.2 Managerial implications

The outcomes of this research have several implications for producers and retailers of local food, particularly in relation to their marketing and communication strategies. Reflecting global trends of increasing interest in provenance and traceability of food, this study reveals that many Australian consumers are interested in where and how the food they eat is grown and/or produced. This presents an opportunity for local growers and producers to leverage such interest through the provision of provenance stories and information of production methods. Linking local food production with kinder and gentler practices in terms of ethical consumption will build interest in local food.

The branding and labelling of produce needs to reflect the intrinsic qualities that consumers are seeking e.g., that it is free from chemicals, preservatives, etc. so that they can make informed choices. Consumers are sceptical of green-washing, so producers also need to ensure that products making these claims do actually meet them. Furthermore, these strategies need to be backed up by retailers who should offer adequate training/information to their service staff within retail outlets to enable them to have the knowledge of where the
local products stocked come from and how they are produced, so they may inform consumers and become ambassadors for local food.

7. Limitations and future research

The research presented here is based on a moderate-sized sample of local food shoppers in Queensland, Australia (n = 677). Therefore, findings may not be generalizable to a wider context to Australia as a whole, or in a global setting, so should be treated with caution. However, this limitation provides an opportunity for further research by replicating the study in other settings e.g., other Australian regions; different countries, to ascertain whether consumers exhibit similar egoistic and altruistic motivations towards local food purchasing. Whilst the data used is recent, it is cross-sectional in nature. Further use of longitudinal data would allow for more robust findings, and help track changes in purchase behaviour and influence over time, in particular as the marketing and distribution of local food is becoming more sophisticated. The study is limited in scope as it only investigates the key drivers of local food consumption, and does not explore the effect of any barriers (e.g. limited distribution and inadequate marketing/branding). Given barriers are present, and it is possible ‘trade-offs’ occur between barriers and drivers when making purchase decisions, integrating barriers into future research would potentially provide greater insight of local food buying motivations.

The inclusion of other psychological characteristics may be beneficial to help further explain motivations and attitudes towards local food e.g., local identity. Finally, this research focuses on local food as a ‘homogenous’ product and hence there is potential to investigate egoistic and altruistic motivations in different product categories, which may help focus marketing and retailing strategies more appropriately at individual category levels.
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REFERENCES


Author Biographies:

Dr Dawn Birch is a Senior Lecturer in Marketing at Bournemouth University. She researches and publishes in the areas of consumer behaviour related to food with a special interest in local and sustainable food and seafood. Dr Birch has undertaken seafood related research consultancies for the Australian Queensland government, the Australian Seafood Cooperative Research Centre, and the Crown Estate, UK. Dr Birch has also researched in the areas of bartering and shopping centre entertainment. Dr Birch’s work has been published in journals such as Journal of Consumer Marketing, Journal of Consumer Behaviour, and Journal of Food Products Marketing.

Juliet Memery is Professor in Marketing at Bournemouth University. Her research interests are around consumer behaviour and decision-making in relation to consumer choice, focusing in particular on food shopping behaviour with regard to ethical considerations. Themes from this research include exploration of local and regional food, and seasonal food, with current work looking at food security, sustainable fish, food waste and consumer decision-making models. Prior to academia she worked in design for companies based in both Europe and Africa, and has continued to keep close links with industry through consultancy, research collaboration, and knowledge transfer partnerships.

Maheshan De Silva Kanakaratne is a Lecturer in Marketing at the Faculty of Management, Bournemouth University. Maheshan’s main research interest is in the area of grocery retail consumer loyalty. His PhD research focuses on the impact of national culture and industry structure on consumer loyalty in the context of grocery retailing.