

**Driving demand:  
Attitude, subjective norms and their impact on local food purchasing**

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From supermarket shelves to farmers' market booths and road side stands the demand for locally-produced foods has increased significantly over the last decade (Adams & Salois, 2010). Attributed to larger social concerns over food security and safety, diminishing small and medium size farm production, bioregionalism, and corporate activism local foods have become a popular staple among a growing segment of today's consumers who seek improved quality, healthiness, and variety in their food purchases (Verbeke, 2005; Guptill & Wilkins, 2002). What began as an alternative to "big agriculture" and conventional food supply chains has escalated into a local foods movement of mounting proportion.

Despite the increasing popularity of local foods, little theoretical research exists. Of the existing studies most are qualitative, descriptive in nature, or lacking in their ability to test simultaneous relationships (Campbell, 2011). This study seeks to fill these gaps in the literature and broaden the current research base by utilizing the theory of planned behavior to ascertain the influence of *attitude*, *subjective norms*, and *perceived consumer effectiveness* on intention to purchase local foods.

Specifically, this study seeks to answer the following questions:

1. For Tennessee consumers<sup>†</sup>, what are the drivers of local food demand?
2. What roles do attitudes, subjective norms, and perceived consumer effectiveness play in influencing intention to purchase locally produced foods?

This paper begins with a review of the related literature including a conceptualization of the term local. Following this review, the theoretical framework is introduced and the research model proposed and tested. The paper concludes with a discussion of research results as well as recommendations for future research and practice.

## **Review of Literature**

### **Defining Local**

Defining local is not an easy task. According to the US Congress, in order for an agricultural product to be considered local, the total distance the product travels from origin to market must be less than 400 miles or within the state of production (HR 2419, 2008). However, unlike other food labels (e.g. - organic - standardized under the Organic Food Production Act of 1990) a universally enforced rubric designating a product as local does not exist. This lack of rubric has left the definition of local open to vary amongst regions, companies, and even consumers. According to Darby, Batte, Ernst, and Roe (2008), understanding how consumers define local is critical for companies who wish to utilize locally-grown as a marketing strategy. Additionally, this lack of a clear conceptualization presents a stumbling block in the

<sup>†</sup>Due to funding guidelines, the sample for this study was limited to Tennessee consumers.

analysis of local foods demand (Zepeda & Li, 2006), leading to diverse operationalizations of the term local within the research literature.

### **Theoretical Background**

From adolescent food choices (Denninson & Shepherd, 2008) to beliefs regarding organic products (Sparks & Shepherd, 1992), dairy consumption by older adults (Kim, Reicks, Sjoberg, 2003), and local foods purchasing (Campbell, 2011), theory of planned behavior (Ajzen, 1985) has been utilized in a number of studies. Indeed, a central strength of the theory of planned behavior lies in its ability to explain a wide cross-section of behavioral intentions. Given its documented effectiveness in explaining behavioral intentions especially in the context of sustainable/ local foods, theory of planned behavior was deemed by the authors to be the most appropriate theoretical lens for the present study.

Developed from Fishbein and Ajzen's (1975) theory of reasoned action, the theory of planned behavior holds that three key factors - attitude, subjective norms, and perceived behavioral control work together to influence and determine an individual's behavior (Ajzen, 1985). It is the final factor, that of perceived behavioral control, which serves to distinguish theory of planned behavior from the theory of reasoned action. Generally speaking behavioral intention is positively related to each of the three factors such that favorable attitudes combined with favorable subjective norms and increased perceived behavioral control results in increased behavioral intention. Behavioral intention according to Bagozzi, Baumgartner, and Yi (1989) is seen as an immediate antecedent to performing a behavior.

### **Hypotheses:**

Based on the extant literature, the following hypotheses are proposed:

H1: Consumer's attitude toward local foods positively predicts intention to purchase local foods.

H2: Consumers' subjective norms regarding local foods positively predicts intention to purchase local foods.

H3: Consumers' perceived consumer effectiveness regarding local foods positively predicts intention to purchase local foods.

### **Methods**

#### **Sample**

A panel of respondents (n= 514) was solicited from C and T Marketing, an on-line market research company. A purposive sample consisting of consumers 18 years and older residing in Tennessee was utilized for this study. A question asking state of residence screened the sample.

#### **Measures and Instrument**

Existing measures of attitude, subjective norms, perceived consumer effectiveness, and purchase intention were used. Similar measures have been utilized by previous researchers in the examination of local foods consumption. (See Campbell, 2011).

A web-based, self-administered survey was developed by the researchers. Layout of the survey followed recommendations for survey research as outlined by Churchill and Iacobucci

(2002). Survey included measures assessing consumers' attitude toward purchasing local foods, consumers' perceptions of the social norms influencing their local foods consumption, consumers' perceived effectiveness as it relates to local foods consumption, and consumers' intention to purchase local foods. Respondents were instructed to indicate their level of agreement with each statement using a 5 point Likert scale where 1 = strongly disagree and 5 = strongly agree. In addition to these measures, demographic variables necessary to characterize the sample were also collected.

## **Results**

### **Modeling the Data**

A Confirmatory Factor Analysis (CFA) was conducted for each of the latent constructs. After conducting the CFA's, Anderson & Gerbing's (1982) two-step process for SEM analysis was utilized. A measurement model including the constructs of attitude, subjective norms, and perceived consumer effectiveness was fit. The overall fit of the measurement model was unsatisfactory. Numerous attempts to fit the model were unsuccessful. As a final option, the latent construct of perceived consumer effectiveness was dropped from the model. A new measurement model containing only the latent constructs of attitude and subjective norm was run. This measurement model, as specified, fit the data well ( $\chi^2=28.92$ ,  $df=8$ ,  $p\text{-value}=0.00033$ ,  $RMSEA=0.071$ ,  $CFI = .99$ ,  $RFI = .97$ ). With the measurement model exhibiting acceptable fit, the full structural model was run. The model fit the data well ( $\chi^2=78.48$ ,  $df=32$ ,  $P\text{-value}=0.00001$ ,  $RMSEA=0.053$ ,  $CFI = .99$ ,  $RFI = .97$ ).

For H1, consumers' attitude toward local foods was found to have a significant, positive effect on intention to purchase local foods with a beta (path estimate) of .96. For H2 consumers' subjective norms toward local foods was found to have a significant, *negative* effect with a moderate effect size of -.34.

### **Discussion**

Hypothesis 1 was supported demonstrating that consumers' attitude toward local foods has a positive effect on local foods purchasing. This finding echoes the findings of previous works which have demonstrated attitude to be highly predictive of local foods purchasing (Campbell, 2011; Vermeir and Verbeke, 2007; Zepeda and Li, 2006).

Interestingly, hypothesis 2 was not supported. Though a significant relationship was found between subjective norms and intention to purchase local foods, the influence of the relationship was negative, not positive as specified in the hypothesis. This significant, negative effect mirrors the findings of Campbell (2011).

While the researchers initially sought to utilize the theory of planned behavior as the theoretical lens for this study, the construct of perceived consumer effectiveness proved problematic. The problematic nature of perceived consumer effectiveness is not isolated to this study. Other studies including Campbell (2011) have found issues in utilizing the construct. Part of the problem with the construct could be attributed to the measures for perceived consumer effectiveness which were originally developed and demonstrated valid in a different country (Belgium) and thus different cultural context. (See Vermeir & Verbeke, 2007.)

### **Limitations**

As with all research, the present study is not without limitations. First, the average variance extracted for the construct of attitude was low indicating that this construct is not doing a very good job of discriminating against the other construct of social norms. Additionally,

while the authors sought to utilize theory of planned behavior, problems with cross-loadings for the factor of perceived consumer effectiveness prevented its inclusion in the final analysis. Thus, a key component of theory of planned behavior had to be excluded from the final model. Finally, the sample was limited to Tennessee residents. The extent to which generalizations can be made to residents of other states must be considered.

## **Implications**

### **Research**

This study provides at least three implications for future research. First, the low variance extracted for the construct of attitude calls for the development of a new attitudinal measure which can be utilized in the context of local foods consumption. Additionally, the role of subjective norms in sustainable food purchasing versus local food purchasing should be explored. Finally additional research concerning the construct of perceived consumer effectiveness is critical.

### **Practice**

The important role attitudes play in driving local foods purchasing cannot be ignored. Agricultural producers and retail outlets selling local foods should target messages to consumers that seek to engender and capitalize upon consumers' favorable attitude toward local foods consumption

### **Conclusion**

The popularity of local foods has grown substantially in the last decade; unfortunately, research in this area has been slow to follow. This study seeks to strengthen the body of knowledge surrounding local foods through the application of theory and empirical inquiry. Utilizing the theory of planned behavior, this study was able to highlight the important role of attitudes in influencing intention to purchase local foods. Additionally, this study was able to call attention to avenues for future research including the need for additional inquiry concerning the construct of perceived consumer effectiveness in the local foods setting. It is the authors' hope that through additional research, informed practice, and a better understanding of the drivers of local food demand, the momentum of the local foods movement can continue to escalate providing our food supply with a much needed face.

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