Predicting Consumer Choices of Organic Food: Results from the CONDOR Project

John Thøgersen

Abstract - Based on a survey in eight European countries, a model of consumer decision making and behaviour with regard to organic food is presented as well as comparative results. It is found that the reasons given and the reasoning behind choosing organic products are quite similar across countries, but that whereas behavioural intentions are predictive of behaviour in the North, this is not the case in the South of Europe. A framework for understanding the difference between North and South is presented.¹

Introduction

The market for organically produced foods remains relatively small. If it is to increase then there needs to be a better understanding of the consumer decision-making processes involved in the choice between organic and non-organic foods.

The CONDOR project's conceptualization of consumer decision-making is based on Ajzen's (1991) theory of planned behaviour (TPB), which was modified slightly for our purpose. In the CONDOR project's eight country survey, we measured all the TPB constructs and some additional ones.

We expected that consumer decision making regarding organic food in different countries can be described by the same overall model, but that there are differences in the strength of various relationships in the model due different national conditions (constraints and facilitators).

In this paper, I summarize the main results from the CONDOR survey.

METHOD

Two questionnaires were used to collect survey data in each of eight countries: Denmark, Finland, Sweden, Germany, UK, Italy, Spain, and Greece. One questionnaire focused on the purchase of organic tomato sauce and the other one on fresh tomatoes. Besides this, the two questionnaires were identical. The questionnaires were developed in English and translated into the language of each country. In order to check the validity of the translations, questionnaires were back-translated into English.

In each of the eight countries, a representative sample of approximately 1000 respondents fulfilling certain criteria was interviewed by a market research company. Each country sample was randomly split into two sub-samples, each of about 500 people, who received one of the two questionnaires.

Printed questionnaires were delivered to each respondent either by mail with a prepaid return envelope or by hand, in which case it was collected when the respondent was done answering the questions. Respondents had to be at least 18 years old and in charge of or sharing the responsibility for the household's grocery shopping.

Structural equation modelling (SEM) with AMOS 5 (Arbuckle & Wothke, 1999) was used for the statistical analyses.

Before conducting the main analyses, we tested our measurement instruments for measurement invariance using a procedure proposed by Steenkamp & Baumgartner (1998). In the present case, it is necessary to assume configural and at least partial metric (or scale) invariance. A series of nested confirmatory factor analyses confirmed that all included constructs possess at least partial metric invariance.

RESULTS

Our analyses show that the same model can actually be applied to both sub-samples, irrespective of the specific product. Only with regard to the intentionbehaviour relationship does the specific product make a difference.

The attitude towards buying organic

A model including beliefs about consequences as well as basic values and past experience with buying organic food as independent variables produces a satisfactory fit to the data and also satisfactorily explains variations in consumer attitudes towards buying organic tomato products (the depending variable). Attitudes are primarily dependent on beliefs about consequences, whereas basic values and past experience give more marginal contributions. Fig. 1 shows unstandardized regression coefficients for beliefs about consequences for the eight countries. Where it was statistically defensible, regression coefficients were set equal across countries.

To the right is the list of included beliefs in their order of overall importance. Beliefs about health, taste and environmental consequences apparently have the strongest influence on the attitude towards buying organic whereas beliefs about costs have relatively little influence on the attitude.

Buying intention

Buying intention is modelled as a function of the attitude and three other variables (Fig. 2; only the structural part of the model).

John Thøgersen is with the Aarhus School of Business, the MAPP Centre, Haslegaardsvej 10, DK-8210 Aarhus V, Denmark (jbt@asb.dk).

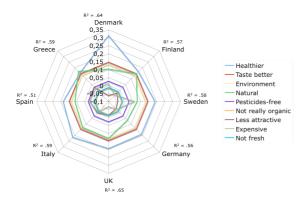


Figure 1. Belief Importance in eight countries. Unstandardized coefficients.

In this case, analyses show that it is admissible to assume identical regression coefficients across the eight countries. Again, the fit indices show a satisfactory fit to the data and the model explains a satisfactory part of the variation in intentions to buy organic.

The intention to buy organic depends on personal as well as external factors. There is a strong relationship between the attitude and buying intentions, but the social pressure from perceived norms play an even bigger role. If people feel uncertain about organic food or feel that organic food is difficult to get there is some likelihood that they will give up on organic, in spite of favourable attitudes and norms.

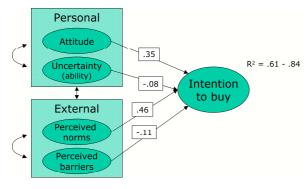


Figure 2. What influences the decision to buy organic? Eight EU countries 2005, N=8,113. Model fit: CFI = .93, RMSEA = .023

Buying behaviour

Buying behaviour is modelled as a function of the intention to buy organic and perceived constraints and barriers. It showed up that buying behaviour differs significantly between the two analyzed products in some countries. Hence, a dummy variable for product ("processing level") was included among the predictors. The model produces a satisfactory fit to the data and also satisfactorily explains variations in consumer purchase behaviour. However, regression coefficients differ significantly between countries (Fig. 3).

The most important finding is that there is a strong link between intentions and behaviour in the North of Europe, but weak links in the South. Only to some extend is this difference reflected in the

influence of uncertainty and perceived barriers and constraints, however. Hence, it appears that perceptions about barriers are a very imperfect reflection of the actual barriers and constraints on consumers wanting to buy organic food. The importance of the processing level of the tomato product also varies substantively across countries. This presumably reflects that the supply situation for organic tomato sauce is much worse than for organic fresh tomatoes in some, but not in other countries.

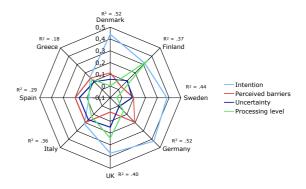


Figure 3. From intention to action in eight countries Unstandardised coefficients.

CONCLUSIONS

The most important conclusion from this study is that consumer choices of organic food seem to be based in similar reasoning and reasons in the eight analyzed countries. Individual attitudes towards buying organic food are primarily based on beliefs about benefits (healthy, taste better, environment-friendly) while beliefs about costs or risks are much less influential. However, decisions about buying organic food are not only based on individual attitudes. Social reasons seem to be more important than personal reasons. Uncertainty about what organic food is and perceived difficulties with getting organic food make some consumers give up on beforehand.

ACKNOWLEDGEMENT

The project Consumer Decision-Making with Regard to Organic Products, CONDOR, was supported financially by the European Commission through project no. QLK1-2002-02446. For more information about the project, see http://www.condor-organic.org/.

REFERENCES

Ajzen, I. (1991). Organizational Behavior and Decision Processes **50:**179-211.

Arbuckle, J. L., & Wothke, W. (1999). "Amos 4.0 users' guide." (Chicago, Ill.: Marketing Division SPSS Inc.: SmallWaters Corporation).

Steenkamp, J.-B. E. M., & Baumgartner, H. (1998). Journal of Consumer Research 25:78-90.