

Sustainable (green) Food and Purchase Intention – An Analysis of Influence Factors

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Abstract— According to the basic needs of eating and drinking, new demands develop steadily for the assortment, the food production and trade. Beside the current trends in the food sector like "convenience", "health, fitness & wellness", "premium & pleasure", the subjects „sustainability/ecological/green“ gain in importance for the consumer. To counteract the narrow view on single sustainable (green) food product attributes and their influence on consumer behaviour, the following paper aims to provide an approach that includes several variables that have been considered to be of importance after reviewing existing literature to better understand the consumer and key drivers for their purchase intention towards green food products.

Keywords— Sustainability, food, Green products, consumer purchase intention, influence factors

I. INTRODUCTION

Less waste, a sustainable option, 100 percent renewable energy or zero deforestation are sustainable promises that are increasingly found on products (e.g. food) today. Consumers consider these products more frequently in their daily lives, since environmental and green issues such as climate change, water and air pollution and over-consumption are more present in consumers' minds today. Manufacturers respond to the increasing consumer awareness of sustainable (green) products and emphasize their own environmental commitment to target new customers. However, the focus on corporate environmental commitment and advertisement with green claims has to fit to the provided product and corporation; otherwise corporations are quickly accused of greenwashing [4], [6]. This development is not limited to manufacturers and consumers. Retailers, which provide green products, are aware of the great importance of environmental commitment and have started to transform their conventional retailing by moving towards "greentailing" to differentiate themselves and remain competitive [7].

During the course of this development, literature about green products or green consumerism has immensely increased. Research findings show that consumers value environmentally friendly products including ecological labelling, donations for an environmental cause or recyclable packaging positively [2], [3]. However, researchers claim that these considerations cannot be reflected onto the daily

buying behaviour of consumers, since their attitude differs from their behavioural intention and behaviour towards green products [5]. Previous research has usually focused on the analysis of one or very few variables that influence consumer's purchase intention regarding sustainable food products. Many researchers focused on the influence of ecological labels, price, green advertisement or behavioural factors on the purchase intention of consumers. Within that research, findings were never consistent and even similar research approaches led to widely divergent results [2], [3]. In comparison, less research has been conducted with regard to the attitude towards corporate environmental commitment and the impact of green packaging on consumers purchase intention.

To counteract the narrow view on single sustainable (green) food product attributes and their influence on consumer behaviour, the following paper aims to provide an approach that includes several variables that have been considered to be of importance after reviewing existing literature to better understand the consumer and key drivers for their purchase intention towards green products. In this regard this paper attempts to answer the following research question: Which factors, next to attitude, influence the purchase intention of green food products? For both, science and managerial practice, it is crucial to understand how corporate-, product- and behavioural-related factors jointly influence the purchase intention of green products.

II. EMPIRICAL ANALYSIS AND FINDINGS (EXTRACT)

After a detailed explanation of literature the methodology of the empirical analysis is conducted in this paper. Firstly, the through the online questionnaire collected data are presented and further insights about the demographics are explained. In addition, a description of the sample according to the consideration of green food products is provided. Subsequently, a factor analysis is used to reduce the items in the questionnaire and merge factors to conduct a regression analysis. The regression analysis tests the stated hypotheses and affirms or rejects each hypothesis. Thereafter, the results are discussed and the initial research question is answered.

The following paper demonstrates a cross-sectional research design, which can be described as an empirical analysis of data that previously has been collected at one specific point in time in Germany. The questioning is conducted by a standardized online questionnaire with eight sets of questions.

During the questioning period 427 respondents answered the questionnaire, whereby not all respondents fully completed the questionnaire. To generate a uniform analysis all incomplete questionnaires are eliminated (Backhaus et al. 2006, p. 151). In total the sample size amounts for 370 complete questionnaires.

One question regards the environmental focus of food groups (“In case of which food product groups do you particularly consider environmental friendliness?”). The most considered food product groups include fruits and vegetables (85.2%), meat and sausages (72.2%), dairy products (69.2%) and fish (51.9%). Here it can be seen that especially quickly perishable and animal foods are of great importance for the consumers. The second group encompasses frozen foods, delicacies, remaining dry foods (e.g. Rice, cereals etc.) and beverages (alcoholic and non-alcoholic). Only 12.6% until 19.8% of the respondents pay attention to the greenness of these foods. The last group comprises non-durable foods such as canned food and sweets as well as perishable foods such as convenience foods and baked goods. In this regard only 6.8% until 8.4% of the respondents consider environmental friendliness. 5.7% of the respondents name other grocery products such as eggs, coffee and tea. It can be seen that consumers consider environmental friendliness only for selected product groups. Figure 1 demonstrates the findings:

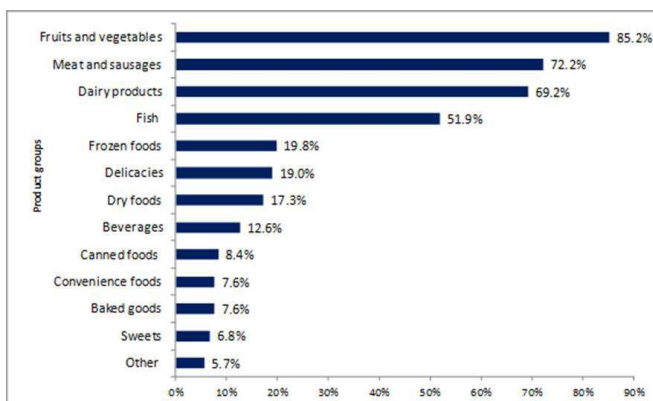


Fig.1 Frequency of Considered Product Groups (in %)

The following findings represent just a short extract of the general findings. Figure 2 shows the influence factors on purchase intention with their corresponding beta values. The variable attitude towards corporate environmental commitment is not shown, because the hypothesis was rejected.

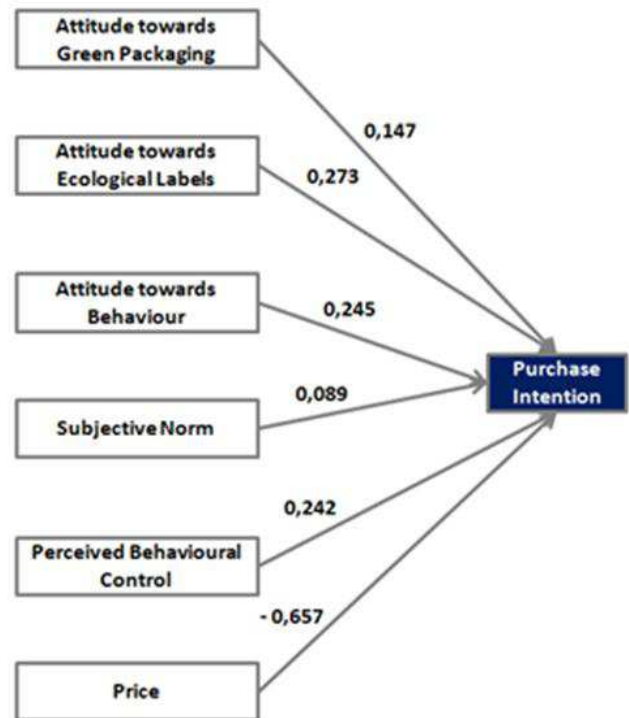


Fig. 1 Presentation of the Findings

The current study was conducted to gain a better understanding of the influences of consumers’ attitude of green product attributes and behavioural indicators on green purchase intention. In the course of the present analysis several factors were identified that influence the purchase intention. All relevant questionnaire items were included in a factor analysis that could prove the relationship of certain items and grouped seven factors that influence the purchase intention. Afterwards, a regression analysis was used to measure the influence of each factor on the purchase intention.

The present research focused initially on six variables, namely: green packaging, ecological labelling, corporate environmental commitment, attitude towards behaviour, subjective norm and perceived behavioural control, whereas the first three variables origin from recent research and the remaining variables from the TPB (Theory of Planned Behaviour; 1985) from Ajzen and Fishbein. After a conducted pre-test the variable “price” was added to the model, since participants expressed the importance of the price in case of purchasing green products. It has been proven to be vital to include the price to increase the explanation power of the model. Present findings have shown that an increasing price leads to a decrease in the purchase intention. Previous research has mostly confirmed that price plays a superior role in the purchase of green products. However, as stated before some researchers have

evidence that consumers are willing to pay higher price premiums for green products.

The behavioural components, which are essential for the present work, had a positive influence on the purchase intention as anticipated. Nevertheless, the influence has been lower as in previous studies that used the TPB. The added variables to the TPB demonstrate a significant role in the explanation of intention to purchase green products and therefore enhanced the explanatory power by almost 30 percent. Next to the price, ecological labelling and green packaging demonstrated a positive influence on the purchase intention. The positive influence of ecological labels has been proven in previous studies, findings about the effect of green packaging has been contradictory, whereas the present study could only unveil a low positive influence on the purchase intention. The only added variable that could not contribute to the explanatory power of the derived model was the attitude towards corporate environmental commitment. Findings showed that the variable has no significant influence on the purchase intention. Since studies in this field are rather rare, future studies have to investigate a possible relationship. Nevertheless, it is important to state that although the developed model has an increased explanatory ability, 30% percent remain unexplained through the model. Hence, further research is essential to achieve an improvement in the explanatory power of the model. This could be done for instance by including further variables, such as product involvement, credibility of brand or green advertisement.

III. CONCLUSIONS

The current study was conducted to gain a better understanding of the influences of consumers' attitude of green product attributes and behavioural indicators on green purchase intention. In the course of the present analysis several factors were identified that influence the purchase intention. All relevant questionnaire items were included in a factor analysis that could prove the relationship of certain items and grouped seven factors that influence the purchase intention. Afterwards, a regression analysis was used to measure the influence of each factor on the purchase intention.

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