Purchasing behaviour and motives of consumers of zero-waste shops in Vienna by means-end-chain analysis

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***Abstract* - Consumers are becoming increasingly aware of the negative consequences of consumption. The aim of this paper is to analyse consumers through Means-End-Chain-Analysis to find the underlying values and purchase motives when shopping in zero-waste shops compared to conventional supermarkets. The results of this study show significant differences as well as similarities (ecological sustainability, time for family/oneself) in the values of consumers. In addition, there are insights for the implementation of zero-waste concepts, whereby, from the consumer's point of view, attention must be paid to hygiene, cleaning, and process flow.**

Introduction and Problem

For decades, plastic was considered a cheap, lightweight, and durable option for packaging and transporting food. As a result of the development towards a throw-away society, packaging and plastic bags for food are being released into the environment, which, in turn, requires several hundred years for the degradation of many of these substances (Su et al., 2021).

In 2015, a total of 4.16 million tonnes of municipal waste was generated in Austria, i.e. 482 kg per capita (Federal Ministry for Sustainability and Tourism, 2017). Through various governmental and non-governmental measures, the impact of plastic on the environment is supposed to be reduced (Nielsen et al., 2019). At the same time, however, there is also a growing environmental awareness among broad sections of the population. Awareness is reflected, among other things, in consumer behaviour and manifests itself both in the choice of food and its packaging (Lindh et al., 2016). As a result of this change in behaviour, there is a trend in consumption that shows an increased willingness to pay for ecologically, sustainably produced products or products that are not or at least less harmful to the environment (Lindh et al., 2016; Su et al., 2021).

Consequently, as interest in sustainable lifestyles has grown, so has the sustainable business sector. Due to the increased demand for packaging-free food in recent years, the concept of zero-waste shops has become established in the market. Consumers buy or bring their own packaging such as jars or cans and fill them with food directly in the store (van Herpen et al., 2016). Meanwhile, large supermarket chains have also become aware of this trend and are in the process of integrating similar systems into their stores.

In order to analyse the future development of this economic sector, attitudes towards ecological sustainability as well as the consumption behaviour and motives of consumers of zero-waste stores and consumers of conventional supermarkets will be investigated and compared. Due to the research gap regarding consumer behaviour in zero-waste shops in Austria, Vienna was used as a case study in order to generate in-depth insights by means of qualitative research.

Method and Approach

The understanding of sustainable consumption patterns and the reasons for or against sustainable consumption serve as foundation to be able to derive the consumption behaviour of consumers of zero-waste shops as well as conventional supermarkets. A suitable model for this is the Means-End-Chain model (MEC) in combination with the (soft) laddering approach. The MEC serves to explain cognitive structures in hierarchically arranged levels of abstracting (attributes → consequences → values) (Grunert & Grunert, 1995). Laddering involves semi-structured in-depth interviews that allow for a natural flow of speech (Reynolds & Olson, 2001).

After the interviews, they are coded and an implication matrix is created using these codes. Based on the implication matrix, a Hierarchical Value Map (HMV) is generated (Reynolds & Olson, 2001). Furthermore, the most significant relationships between the elements can be represented in the HMV. For this work, a total of 20 people were interviewed, ten per group. In the course of the interviews, attention was paid to theoretical saturation. This was noticeable at interview number eight in each group. Subsequently, two more interviews were conducted per group in order to determine the theoretical saturation with certainty.

Results

From the results of the qualitative interviews, the HVM shows that there are similarities, but also fundamental differences in the values of consumers of these two types of shopping. In conventional markets, ecological sustainability (14 mentionings) dominated at the deepest level of abstraction (values), followed by health (7) and time for family/oneself (4). For consumers of zero-waste shops (see Figure 1), ecological sustainability (11), social sustainability (9), belonging/connectivity (7), and time for family/oneself (3) dominated the consumption motives.

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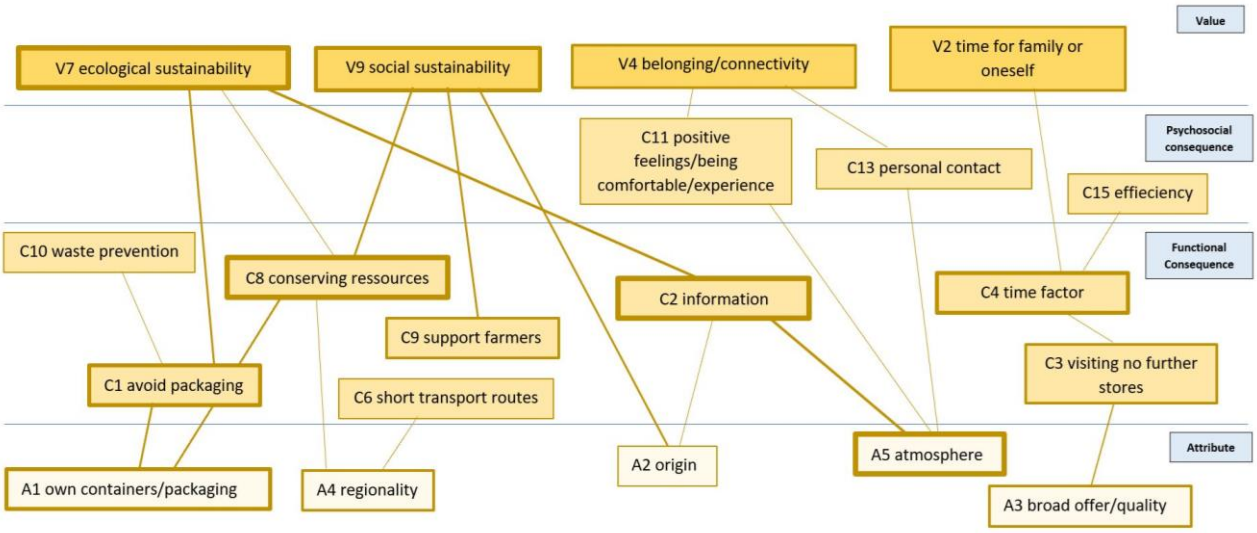

Figure 1: Hierarchical Value Map for consumers of zero-waste shops

Even though the shopping behaviour of the two groups is different in terms of duration, planning, and frequency, common values such as ecological sustainability and time for family/oneself could be identified. However, the two groups differ in other values, whereby the value structure of the consumers of zero-waste shops appears more differentiated and intrinsically values social factors more strongly.
Both groups are positive about the implementation of the concept of zero-waste shops in general. However, there are concerns about hygiene and a possible increase in the number of containers consumed and thus an increase in the consumption of resources by inexperienced consumers.

Discussion and Conclusion

Ecological sustainability means acting in a way that preserves the essential characteristics of the environment so that future generations can find them in comparable condition (Pufé 2012). As can be seen in both groups of consumers (zero-waste vs. conventional stores), ecological sustainability is the strongest value in both HVM, with resource conservation and waste avoidance being important to either group in terms of their individual consumption patterns. Consumers of zero-waste shops differentiate the concept of sustainability more strongly and also consider the dimension of social sustainability to be crucial. The fact that consumers of zero-waste shops take on the extra effort is due, among other things, to their greater involvement in these issues and their more intensive engagement with environmental problems, which requires a greater depth of cognitive processing for this group (Kroeber-Riel & Gröppel, 2019).
In the practical implementation of the concept, particular attention should be paid to hygiene standards, regular cleaning, and regulated procedures for filling the collection containers, as well as to monitoring and optimising the collection procedure. The results can be used to further develop products or services from a consumer perspective and to derive further communication and advertising strategies.

Literature

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