

Transparent Food and Consumer Trust

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Abstract

Nowadays the food market is very complex and anonymous. Consequently, consumer trust in food has become a key issue for food choice. For example, the production process of food is not always transparent for consumers. To provide more transparency and to enhance consumer trust, different initiatives communicating traceability to the consumers exist. Visualised traceability systems such as the initiative 'Bio mit Gesicht' allow consumers to gather information about the farmer who has produced the food as well as information about his farm and family.

This study explores consumer trust in organic food, the impact of trust in the buying decision and the effectiveness of enhancing consumer trust by communication strategies on traceability. The research is grounded on the general finding that trust is one of the most crucial aspects when consumers decide whether or not to buy organic products. The study consists of two tasks, a quantitative and a qualitative survey. In this paper the focus is laid on the second task, a qualitative survey. The used method is the structure-formation-technique. The aim is to combine an interview with a visualising technique. With the help of this method the factors which influence the decision of consumers to buy or not to buy organic food should become clear. Furthermore, the role of trust in the buying decision will be explored. Moreover, an investigation should be made as to whether or not traceability systems influence consumer trust in organic food. This research is currently being conducted but preliminary results can already be presented.

The results of the study will help develop communication strategies for enhancing consumer trust in organic food.

Keywords: *consumer trust, organic food, traceability systems, structure-laying-technique*

1 Introduction

Generally most people say that they are benevolent for organic food, but they just buy them occasionally (Spiller and Engelken, 2003). There are different reasons why organic food is not always bought. Consumers explain that they do not believe in the advantages and the credibility of organic farming, and they doubt that a monitoring of organic food is reliable. These doubts are caused by insufficient communication and a lack of information on the part of the supplier of organic food (Stolz, 2005).

Halk (1993) examined mistrust of consumers in food. She found out that consumers do not trust or mistrust a piece of food itself, they trust or mistrust the actors who are responsible for the production, processing, marketing, and control of the food.

A number of previous studies on the consumption of organic food identified trust as one of the most crucial aspects when consumers decide whether or not to buy organic products (e.g. Zanolli, 2004).

Because of the fact that organic food is a consumer good with a high degree of 'credence' attributes a lot of consumer trust is needed (Darby and Karni, 1973). Credence attributes normally can not be proved. The consumer has to believe that these attributes exist (Bech-Larsen and Grunert, 2001). This is in contrast to 'search' attributes which can be judged by

consumers before buying and 'experience' attributes which can be verified after purchase (Nelson, 1970). Regarding organic food, an example of a search attribute is the appearance of a fresh fruit. The experience attribute can be the good taste of it. But the fact that the fruit is free of chemicals and pesticides is a credence attribute. The consumer has to believe that the farmer has not used pesticides and that the organic label is trustworthy.

Therefore communication strategies and the provision of information about organic food on the part of the producer and trader seem to be important for the development of consumer trust and for influencing the buying habits of the consumers.

2 Transparent food

Different possibilities for consumers to investigate the origin of their food have already been developed. Thereby consumer trust in food in general and especially in organic food should be enhanced. One example is the German homepage www.was-steht-auf-dem-ei.de. On this link consumers are able to receive some information about the special food "egg". They have the opportunity to gather information about the farm the eggs come from. To receive this information consumers have to enter a number which is stamped on the egg on the homepage (Verein für kontrollierte alternative Tierhaltung e.V., n.d.). Another institution which enables consumers to learn more about the origin of food is Nature & More. The concept is similar to the one described above – receiving information after entering the number standing on the product on the homepage www.natureandmore.com (Nature & More, n.d.). A third example, which should be added in this context, is the campaign 'Bio mit Gesicht'. In two food retailings in Germany consumers can buy different organic food which have a so called 'Bio-mit-Gesicht' -number. On the homepage www.bio-mit-gesicht.de they can enter this number and get information about the farmer who has produced the food (Bio mit Gesicht GmbH, 2005-2009). The aim of these initiatives is the creation of transparency for the consumers. More transparency might enhance consumer trust in food, especially organic products.

3 Aim of the study

While there is general agreement on the importance of trust in decisions on organic food, the investigation of trust in organic food is still at the beginning. In particular, there is little knowledge about the reasons why consumers trust or mistrust organic food, in what consumers put their trust in, how consumer trust in organic food can be gained and what the relations between consumer trust and buying behaviour are. It is also unclear which role emotions play in the process of trust-building, buying behaviour, and buying decision. Moreover, it is unknown, if more information about organic food and traceability systems may have an influence on the buying behaviour, buying decision, and growing of consumer trust. Furthermore, there are few attempts to conceptually grasp the construct of 'trust in organic food' by linking it to the broad literature on trust. Consequently, the aim of the project is therefore to fill this gap with an explorative study on consumer trust in organic food. The research is done regarding the concept 'Bio mit Gesicht' as one example for a German traceability system to make the origin, production and processing of organic food more transparent. The results of the study will help develop communication strategies for future marketing for enhancing consumer trust in organic food. Furthermore, whether or not the internet can be seen as an adequate medium for providing information about traceability to consumers will be explored.

4 Conceptualisation of trust in organic food

Trust is a vague expectation in considering uncertain events (Seifert, 2001). It is necessary in situations in which a person is dependent on another one (Coleman, 1995). Rotter (1967) defines interpersonal trust “as an expectancy held by an individual or group that the word, promise, verbal or written statement of another individual or group can be relied on.”

For trusting, three aspects are important: calculations, feelings, and habits (Seifert, 2001). **Calculations** are the cognitive dimension and they mean that a person calculates the risk taken when trusting another person or an institution. The person calculates the probability and extent of a possible benefit or damage. **Feelings**, such as sympathy or affection, are the affective dimension and can also influence the decision of a person to put trust in something or not. Feelings can be a reason for placing trust even if calculations speak against it (Seifert 2001). **Habits** are the conative dimension.

According to Friedrich (2004) trust is based on different factors. Three of these factors are cognitions, experience, and emotions. In psychology **cognition** mostly means comparatively simple phenomena, for example terms an individual acquires, concepts which are more or less abstract, but normally do not contain complex or complicated relations between the several parts (Groeben, 1988). Cognitions can be attitudes or appraisals, for example (Schmidt-Atzert, 1996).

The general disposition to trust someone or something is influenced by the **experiences** a person has had in the past. If a person has gained good experiences with a group of people a high disposition to trust this group will be developed. But if the trust is abused by another person this experience can cause general mistrust if it is generalised as “all others of the group are like the one person” (Seifert, 2001). If these consequences are transferred to the consumption of organic food, it follows that a person will continue to consume it as a result of good experiences. But if one bad experience with a specific organic food occurs, for example meat, fruits, or vegetables, it can result in a loss of trust in organic food in general. Consequently no more organic food will be consumed. This means that although the person has had a bad experience with just one product which did not fulfil the expectancy, the person transmits this to the total range of organic food and would not trust any organic product in the future.

An **emotion** is a subjective occasion, an interior agitation which is experienced more or less consciously as comfortable or awkward. It is connected with neurophysiological events and body language such as gesture, mimic, and non-verbal communication (Kroeber-Riel *et al.*, 2009).

It depends on the emotional situation as to whether a person puts trust in somebody or something or not (Schmidt-Atzert, 1996; Seifert, 2001). If someone is in a bad mood it is more likely that he would not trust a person than if he were in a good mood.

Trust is also based on other factors such as habits, information, culture, norms and values, and the existence of familiarity (Friedrich, 2004).

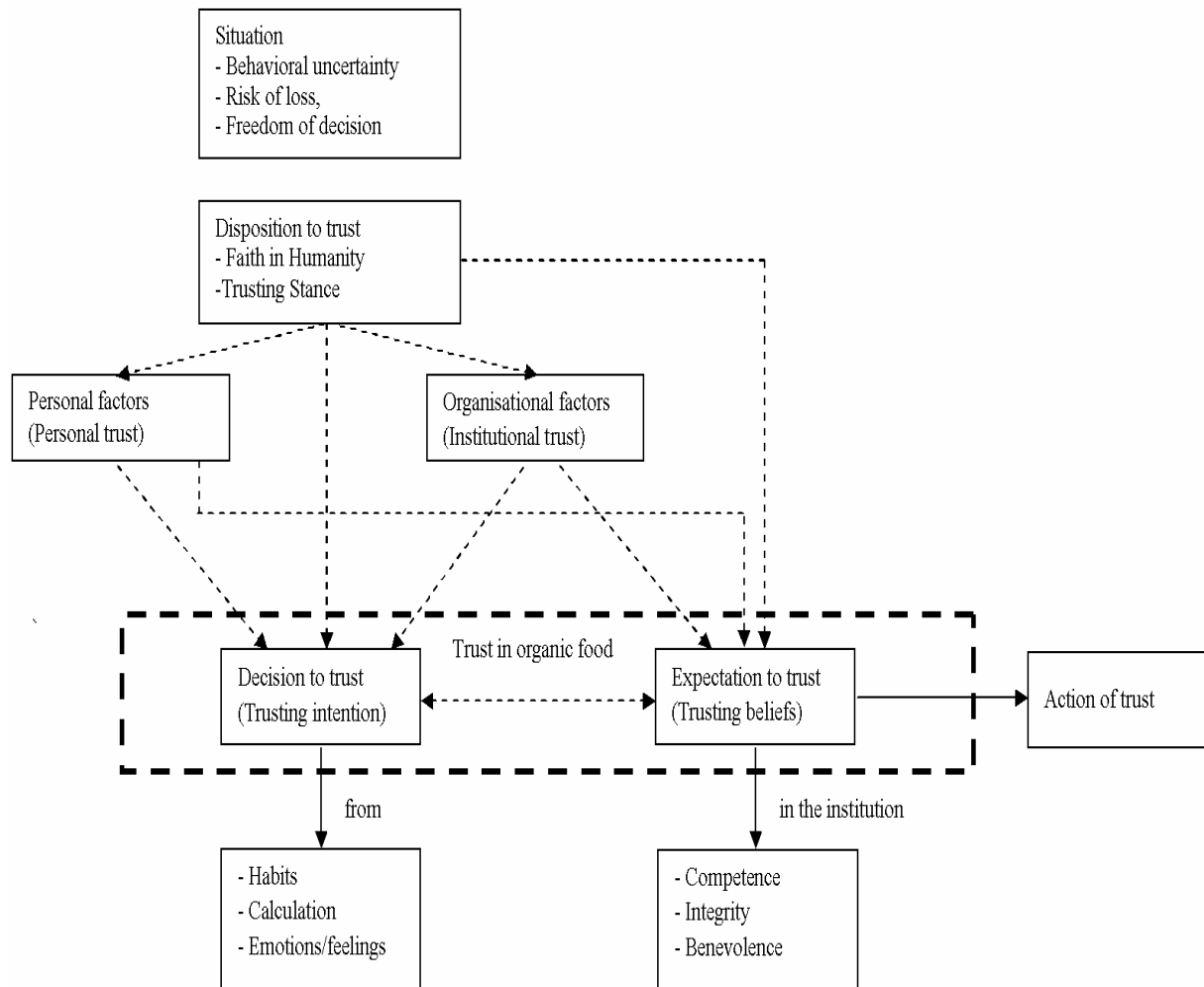


Figure 1. Model on trust (following McKnight and Chervany, 2001; Seifert, 2001)

Trust in organic food can be conceptualised as a multidimensional concept embracing the consumers' willingness to rely on other actors such as farmers, retailers, certification bodies, or labels (**'trusting intention'**), on the one hand, and consumer beliefs in the trustworthiness of these actors (**'trusting beliefs'**) on the other hand. Figure 1 shows this concept in detail. The trusting intention is seen as the cognitive, emotional or habitual willingness of the truster to rely on somebody else in a risky situation. The trusting belief is the associated belief that the object of trust is trustworthy. It is the truster's perception that the trustee possesses characteristics which would benefit the truster (McKnight *et al.*, 2002). Consumer trusting intentions and beliefs toward organic food are seen as a result of their general **disposition to trust** with "the Faith in Humanity and Trusting Stance" (McKnight and Chervany, 2001), **personal trust** in specific actors of the organic movement, and **institutional trust** in the effectiveness and justification of the organic rules and the associated feeling of being connected to the actors of the organic movement. These different forms of trust are not regarded as independent from each other, but present an interplay between them. Institutional trust is formed in personal encounters with salient representatives, but the existence of institutional trust may also strongly influence the attitude of whether to put trust in a person or not (cf. McKnight and Chervany, 2001; McKnight *et al.*, 2002; Seifert, 2001). At the top of all these factors, the **situation** influences trust, as shown in Figure 1. It contains an uncertainty, a risk of loss, and the freedom of decision (Seifert, 2001). This means that the

person who has to decide whether to trust or not is unsure how to behave and always has the risk of loss. If the person puts trust in something or somebody, it is possible that the trust will be abused. If the person does not place trust, the risk of loss also exists. The person loses the opportunity of an advantage which could be possible with the placed trust. The opportunity to decide between different alternatives is important for placing trust.

This study deals with the identification of reasons for the behaviour of consumers regarding organic food and the role of trust in it. It is not the aim to give a forecast for the behaviour. Therefore the Model of trust (Fig.1) is used in this context and not the Theory of planned behaviour developed by Ajzen (1991) that deals with the prediction of behaviour (Ajzen, 1991).

The importance of personal trust in organic food is reported by several research projects. For example, consumers currently state that they have more confidence in small shops where they experience the competence, integrity, and benevolence of the sales staff. In addition, consumers prefer to buy organic products directly from the farmer in order to be sure that they really buy organic food (Zanoli, 2004).

Furthermore, trust in organic food has similarities to what Lahno (2001) describes as trust in an 'organisation' or 'institution'. According to Lahno, institutional trust is predominantly directed to the efficacy of the rules and principles guiding the behaviour of people. In this regard, consumers trust the actors of the organic supply chain not only for their personal trustworthy characteristics but also for the existence of efficient guidance and control systems.

5 Research questions

As described above, the investigation of trust in organic food is still at the beginning. It is known that trust influences the decision of consumers in their buying behaviour towards organic food, but it is unclear what the influencing factors of trust are. Therefore more research is necessary, and the following research questions should be answered:

1. What are the reasons for the decision of consumers whether to buy organic food or not?
2. What are the subjective influencing factors of consumer trust in organic food?
3. Is there a positive effect of traceability systems on consumer trust in organic food?

Another point can be to differentiate between male and female consumers. Friedrich (2004) came to the result that women have a lower disposition to trust than men and that they are more critical towards people they have a transaction with. Other authors also came to the conclusion that women in general have less confidence in someone and something than men (Chaudhuri and Gangadharan, 2003 quoted by Friedrich, 2004; Eckel and Wilson, 2000). In this connection it could be of interest to analyse the fourth research question:

4. Is there a difference between women and men according to their trust in organic food?

6 Research design

The research design consists of two tasks: a quantitative inquiry and qualitative interviews. At this point the focus is laid on the qualitative interviews.

The basis of these interviews is the quantitative inquiry. In 2009 the first task of a quantitative survey was completed. Nearly 900 consumers in Germany were asked about their trust in

different actors involved in the supply chain of organic food and in distinct attributed qualities such as benefit for health, ecology, and animal welfare as well as the customers' criteria for assessing trustworthiness of the organic products. Regarding the model on trust (Fig. 1) with this inquiry the trusting beliefs are examined. Furthermore, the consumers are classified according to their extent of buying organic food into four groups: buying organic food never, occasionally, often and almost always. In the second task, the qualitative research, a deeper analysis of these groups, is conducted to get more information about the reasons for buying or not buying organic food and to analyse the role of trust in the process of buying decision. Referring to the model of trust, the aim of the second task is to investigate the trusting intention. The qualitative research is currently being conducted. Figure 2 shows the course of the study.

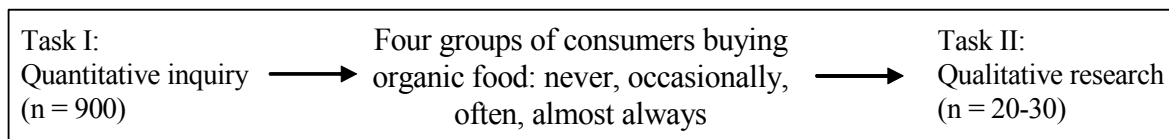


Figure 2. Course of the study

The applied method in Task II is the structure-formation-technique. It is a qualitative research method containing the investigation into the knowledge of the interviewee about a special theme and a structure-laying-process (Groeben and Scheele, 2000). With the structure-formation-technique the subjective concepts of the consumer's decision making can be comprehend in a dialogue-hermeneutic approach. The procedure of this method is as follows:

1. Interview: The interview starts with the question: *What criteria are you using when you select your food?* This question functions as a starting question to motivate the consumer to think about the factors which are important for him when he buys food.

After answering the first question the interview is directed to the last purchase of food with the question: *Remember your last purchase of food. Have you bought organic food?* The interviewee is asked about the points which led him to buy or not to buy organic food. Furthermore, he is asked about his attitudes toward organic food and the feelings, motivations, etc. evoked by them. In addition, he should comment on his trust in the different actors involved in the organic supply chain and systems of traceability.

The answers of the questions are written down on cards. Simultaneously there is a dialogue between the interviewer and the interviewee in which the interviewer can check if he has understood everything correctly.

The aim of the interview is to analyse the factors influencing the decision for or against organic food. Furthermore, the impact of traceability systems is considered. In addition, the role of trust is explored. Cognitions, emotions, and attitudes with a negative assessment are taken and analysed together with the interviewee to get information as to what can be done in his opinion to change them to positive.

2. Structure-formation-process: Following the interview the concepts are linked with formal relations. These relations can be very important (short arrows in Fig. 3) or less important (long arrows in Fig. 3) and positive (+) or negative (-). Equals signs can be used to present that two points are synonymous. As a result diagrams are put up which show the contents of the concepts of the person questioned and the formal relations between them (Dann, 1992). Figure 3 shows a part of a diagram.

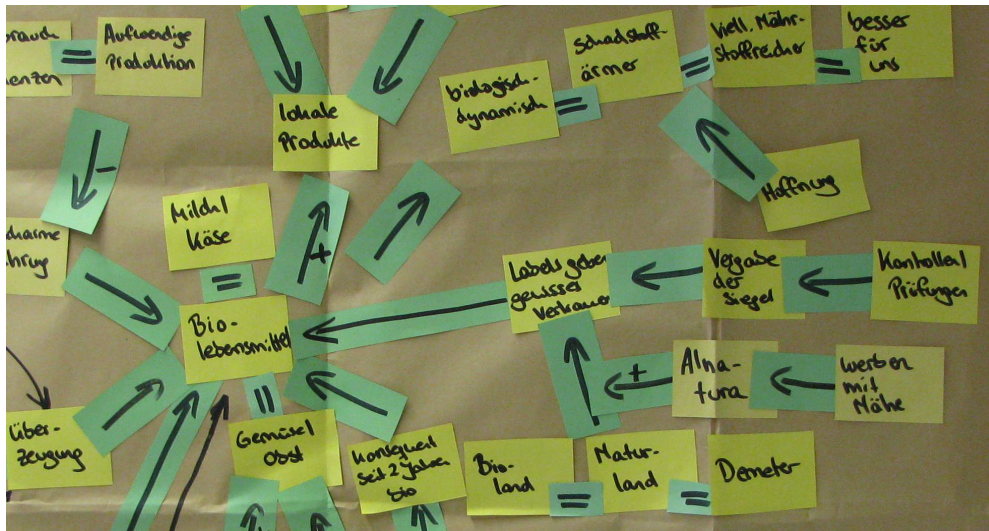


Figure 3. Example diagram

The whole process of the structure-formation-technique is audibly recorded.

3. Data analysis: The analysis is conducted according to the hermeneutic circle. First a quantitative analysis of the interviews is done followed by an intensive qualitative analysis and hypotheses. The software program MAXqda will support the analysis.

4. Based on the hypotheses, **recommendations** for the development of communication strategies to enhance consumer trust in organic food will be given.

In addition, trust in general is measured. For this the *Interpersonal Trust Scale* from Rotter (1967) is used. This is a scale in the Likert-format which contains 25 items according to trust and 15 filler items. The items included in the scale deal with the variable of interpersonal trust and a diversity of situations. In the different situations a number of different social agents, such as parents, sales personnel, judiciary, people in general, politicians, and news media are considered. The content of most items is the credibility of social agents, but some also measure the general optimism about the future of society. The points reached can vary between 25 (less trust) and 125 (high trust) with a mid-point at 75 (Robinson, 1991).

There is the assumption that those people who, in general, place high trust in something or somebody also place more trust in organic food. Those people who do not have confidence and who say they can not trust anybody place less trust in organic food. This assumption will be checked.

7 Preliminary results

As already mentioned, the qualitative research is still in progress. So far final results are not yet available. Nevertheless preliminary results can be presented at this point.

Figure 1 shows the model of trust. As noted above, the aim of Task II of this study is the investigation of the trusting intention, which is a part of this model. The trusting intention contains the three items habits, calculations, and emotions/feelings. A first quantitative analysis of the interviews shows different answers which can be assigned to these three items. Table 1 demonstrates some results.

Table 1. Trusting intention: habits, calculations, and emotions

Habits	<ul style="list-style-type: none"> · Socialisation, parents · Grocery store · Religion · Healthy nutrition as a philosophy of life
Calculations	<ul style="list-style-type: none"> · Price; Price-performance ratio · More expensive but fair prices for the farmers · (not) Knowing the producer/farmer · Regional and/or organic
Emotions/ feelings	<ul style="list-style-type: none"> · Hope · Scepticism · Certainty/feeling of safety · Sympathy

Regarding **habits** socialisation plays an important role in the trusting intention. Furthermore, consumers try to buy their food in their habitual grocery store which is considered as trustworthy. They try not to change between different grocery stores. In addition, religion is of great importance. One consumer mentioned that her religion has got her to live healthy. Thus a healthy diet with organic food has become her philosophy of life.

With reference to **calculations** consumer consider the price, especially the price-performance ratio. It is a well-known fact that organic food is more expensive than conventional one. Consumers accept this difference but if there is a wide difference between the prices some consumers rather choose the conventional one or they do not buy this product at all. On the other hand consumers are willing to pay more for organic food when they know that the farmers get fair prices for their products. Knowing or not knowing the farmer or producer can lead to the purchase of organic or conventional food. For example, if a farmer is well known with the customers the food does not have to be organic because consumers trust the farmer that it is of a good quality. In addition, consumers prefer to buy regional food and in this case it does not matter if the food is organic or not.

Emotions play an important role in the trusting intention, whereby the emotions mentioned by the consumers are different ones. On the one hand, consumers hope that organic food is truly organic. Furthermore, they hope that the farmers get fair prices like it can be read on the labels of some products. On the other hand some of the consumers are sceptical whether organic food is truly organic and if farmers get fair prices. In addition, buying organic food evokes a feeling of safety because organic products contain fewer pesticides. Besides, consumers also buy organic food because the person producing or selling it is pleasant.

For answering the first research question, *What are the reasons for the decision of consumers to buy organic food or not?*, different aspects are mentioned by the interviewees. These reasons are presented in Table 2. Some of these points match with answers regarding the trusting intention in Table 1.

Table 2. Reasons for (not) buying organic food

Reasons for buying organic food	<ul style="list-style-type: none"> · Socialisation, parents · Health · Positive impact on environment and animal welfare · Personal experiences and knowledge · (not) Knowing the producer
Reasons for not buying organic food	<ul style="list-style-type: none"> · Price · Limited offer · Origin of food: regional and/or organic · Knowing a conventional producer · Taste

Referring to the second research question, *What are the subjective influencing factors of consumer trust in organic food?*, different answers can be mentioned. **Organic labels** can have a positive influence on consumer trust. Furthermore, **personal experiences** in the field of organic farming and knowledge about organic food enhance consumer trust in organic food. Other influencing factors are the **monitoring** of organic food and test results. **Knowing the producer** can also enhance consumer trust.

In addition, consumers mentioned that they put their trust in the different **actors** involved in the organic supply chain, such as farmers or retailers. Furthermore, they put their trust in the monitoring of organic food and organic labels. In addition, they put their trust in journals, like Ökotest or Warentest, in brands, and in the grocery store.

With respect to the third research question, *Is there a positive effect of traceability systems on consumer trust in organic food?*, a definitive conclusion is currently not possible. Some consumers say that traceability systems may have an influence on their trust in organic food. Other consumers mentioned that such systems do not have a positive influence on their trust. They are not sure if the information on the homepages is trustworthy.

The results show that some answers of consumers regarding the trusting intention correspond to the idea of 'Bio mit Gesicht' to make organic food more transparent in order to enhance consumer trust. In this context, two points should be considered as examples. One point is knowing the producer. 'Bio mit Gesicht' provides information about the farmer as well as his family and farm in order to establish a personal reference toward him. Knowing the farmer or producer is mentioned by the interviewees as one factor influencing their trust in organic food. Knowing can cause sympathy which is connected with the trusting intention. The problem in this context is consumer doubt about the trustworthiness of the information about the farmer on the Internet. To solve this problem it is possible to organise a visit to organic farms to make the information on the Internet transparent. Such personal contact between consumer and farmer can enhance consumer trust in a specific farm as well as in traceability systems. This point is connected to the fact that personal knowledge and experiences are mentioned as one reason for buying organic food. By visiting an organic farm, consumers can gain experience in the field of organic farming. This experience can have a positive impact on trust.

The second point which should be mentioned in this context is the price. Some consumers noted that they are sceptical as to whether higher prices of organic food are justified. Regarding this point more transparency about the reasons for higher prices may help to lower this scepticism. Consumers need clear information about the factors influencing the price formation of organic food. If this information is given consumers do not have to be sceptical about the prices anymore. This can lead to an increase of consumer trust.

8 Conclusion

The preliminary results show that different factors influence the trusting intention of consumers. Habits, calculations, and emotions play a role in this process. These are starting points for recommendations for traceability systems such as 'Bio mit Gesicht' for creating more consumer trust by transparency. Two calculations mentioned by consumers, the price and knowing the producer can be picked up to create more transparency and enhance consumer trust. Related to knowing the producer it may be insufficient to provide information only over the Internet. A personal contact between consumer and producer can cause emotions such as sympathy and could have an influence on trust building. Regarding the price, the emotion scepticism plays a role. Through more transparency about the price formation this scepticism can be lowered and the trusting intention can be influenced in a positive way.

The research project will provide deeper insights into the complex construct of trust in organic food. Synthesising the results of the two streams of inquiry will support the development and improvement of communication strategies for enhancing consumer trust in organic food.

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9 References

- Ajzen, I. (1991): The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes* (50): 179-211.
- Bech-Larsen, T.; Grunert, K. G. (2001): Konsumentenentscheidungen bei Vertrauenseigenschaften: Eine Untersuchung am Beispiel des Kaufes von ökologischen Lebensmitteln in Deutschland und Dänemark. In: *Marketing - Zeitschrift für Forschung und Praxis* (3): 188–197.
- Bio mit Gesicht GmbH (2005-2009): Frankfurt. www.bio-mit-gesicht.de (21.07.2009).
- Coleman, J. S. (1995): *Grundlagen der Sozialtheorie. Band 1: Handlungen und Handlungssysteme.* München: Oldenbourg Verlag GmbH.
- Dann, H. -D (1992): Variation von Lege-Strukturen zur Wissensrepräsentation. In: Scheele, B. (Ed.): *Struktur-Lege-Verfahren als Dialog-Konsens-Methodik. Ein Zwischenfazit zur Forschungsentwicklung bei der rekonstruktiven Erhebung Subjektiver Theorien.* Aschendorffsche Verlagsbuchhandlung GmbH & Co., Münster: 2–41.
- Darby, M.R.; Karni, E. (1973): Free Competition and the Optimal Amount of Fraud. In: *Journal of Law and Economics* (16): 67–88.
- Eckel, C. C.; Wilson, R. K. (2000): Whom to trust? Choice of partner in a trust game. http://www.ruf.rice.edu/~rkw/RKW_FOLDER/EckelWilsonWhomToTrust.pdf (17.06.2009).
- Friedrich, C. (2004): *Determinanten der Einschätzung vertrauenswürdigen Verhaltens von Transaktionspartnern – ein anwendungsorientierter Erklärungsbeitrag zur Bildung subjektiver Wahrscheinlichkeiten.* Dissertation. Jena.
- Groebe, N. (1988): Explikation des Konstrukts 'Subjektive Theorie'. In: Groebe, N.; Wahl, D.; Schlee, J.; Scheele, B. (Eds.): *Forschungsprogramm Subjektive Theorien. Eine Einführung in die Psychologie des reflexiven Subjekts.* A. Francke Verlag GmbH, Tübingen: 17–24.

- Groeben, N.; Scheele, B. (2000): Dialogue-Hermeneutic Method and the "Research Program Subjective Theories" [9 paragraphs]. In: Forum: Qualitative Social Research, 2 (1), Art. 10, <http://nbn-resolving.de/urn:nbn:de:0114-fqs0002105> (20.03.2009).
- Halk, K. (1993): Bestimmungsgründe des Konsumentenmißtrauens gegenüber Lebensmitteln. Ergebnisse von empirischen Untersuchungen an ausgewählten Verbrauchergruppen. Studien zur Agrarwirtschaft (30), Ifo-Inst. für Wirtschaftsforschung: München.
- Kroeber-Riel, W.; Weinberg, P.; Gröppel-Klein, A. (2009): Konsumentenverhalten. Vahlen: München.
- Lahno, B. (2001): Institutional Trust: A Less Demanding Form of Trust? In: Revista Latinoamericana de Estudios Avanzados (15): 19-58
- McKnight, D. H.; Chervany, N. L. (2001): Conceptualizing Trust: A Typology and E-Commerce Customer Relationships Model. In: Proceedings of the 34th Hawaii International Conference on System Sciences.
- McKnight, D. H.; Choudhury, V.; Kacmar, C. (2002): The impact of initial consumer trust on intentions to transact with a web site: a trust building model. In: Journal of Strategic Information Systems 11: 297–323.
- Nature & More (n.d.): www.natureandmore.com (21.07.2009).
- Nelson, P. (1970): Information and Consumer Behavior. In: Journal of Political Economy, 78 (2): 311–329.
- Robinson, J. P. (1991): Measures of personality and social psychological attitudes. Academic Pr.: San Diego.
- Rotter, J. B. (1967): A new scale for the measurement of interpersonal trust. In: Journal of Personality 35: 651–665.
- Schmidt-Atzert, L. (1996): Lehrbuch der Emotionspsychologie. Kohlhammer: Stuttgart.
- Seifert, M. (2001): Vertrauensmanagement in Unternehmen. Rainer Hampp Verlag: München.
- Spiller, A.; Engelken, J. (2003): Positionierung virtueller Communities für Biolebensmittel. Göttingen. In: VEcoCom Diskussionspapier Nr.5.
http://www.uni-oldenburg.de/produktion/download/Diskussionspapier_Nr_5.pdf (20.03.2009).
- Stolz, H. (2005): Warum deutsche Verbraucher Einzelmerkmale des Öko-Landbaus stärker bevorzugen als das Gesamtsystem Öko-Landbau. In: Hess, J.; Rahmann, G. (Ed.): Ende der Nische. Beiträge zur 8. Wissenschaftstagung Ökologischer Landbau. Kassel, 1.-4. März 2005: 487–490.
- Verein für kontrollierte alternative Tierhaltung e.V. (n.d.). www.was-steht-auf-dem-ei.de (21.07.2009).
- Zanoli, R. (2004): The European consumer and organic food. School of Management and Business: Wales.