# Assessment of Factors Determining Consumer Satisfaction with Crop Insurance Services

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## Introduction

In today's world, insurance plays an important role in risk management, both in everyday life and in business, contributing to the vitality of the economy. The behavior of companies that provide insurance services is therefore very sensitive, as it is directly linked to the relationship with the consumers of these services. According to Zwier (2021), Gąsiorkiewicz and Kruk (2019) also Batool and Sahi (2019) company's willingness to learn about and meet the needs of its customers determines the acquisition of new customers, customer satisfaction, the maintenance of long-term relationships and the company's performance with these customers. Also, Pachura and Smolarek (2018) with Biener et. al. (2016) agree that an organisation's willingness to learn about and meet the needs of its customers determines the attraction of new customers, customer satisfaction, the maintenance of long-term relationships, and the performance of the organisation about it. Therefore, the determination of consumer satisfaction factors becomes important and necessary for the development of the insurance system. Other authors (Issalillah and Khayru 2022, Cappiello 2020, Moehring, et al. 2020) agree with this position and claim that surveys on consumer satisfaction with crop insurance would complement the concept of a crop insurance scheme and such information on consumer satisfaction would provide a roadmap for the development of the crop insurance system in general. Every insurance company strives to meet the needs of both existing and potential customers in order to grow. The determinants of user satisfaction of crop insurance services have not yet been studied, and this proves the importance of this research.

***The purpose is to identify the factors that determine consumer satisfaction with crop insurance and to assess their impact.***

## Methodology

Based on a set of scientifically based hypothetical factors, aims to determine the influence of factors on consumer satisfaction with the insurance service. The study follows a model based on an analysis of the scientific literature. The study was conducted using a questionnaire survey. The questionnaire was created based on a rationale for the potential influence of individual factors, with new items added to reflect the current reality of crop insurance. The reliability of the questionnaire survey was calculated. Consumers were asked to answer questions about their attitude towards the service: how consumers perceive the value of the service, the technical and functional quality of the service and the image of the service. They were asked to provide information about themselves (place of residence, age, agricultural experience, insurance experience, field of activity, size of business). This questionnaire for the farmers we have created by taking into consideration the specific situation of agriculture in Lithuania.

The statistical analysis of the data was performed with SPSS and the graphical analysis with MS Excel. Appropriate statistical methods were used depending on the type of variable: factor analysis and regression analysis.

## Results

The model (fig 1) represents the factors that, according to Issalillah, & Khayru (2022), Bisikwa (2021), Cappiello, (2020), Yazdanpanah, et al (2020), Schofield, et al. (2020), Shirsath, et. al. (2019), Kumar, and Gupta (2019), Mare et al. (2019), Ghazanfar et al. (2015), lead to consumer satisfaction with crop insurance and also inform positive or negative consumer satisfaction. If one of the factors is perceived positively by the consumer, it can be assumed that the consumer is inclined to use crop insurance and has a positive attitude toward it. The empirical study aims to uncover the relationship between the above factors, consumer socio-demographic characteristics, and consumer satisfaction.
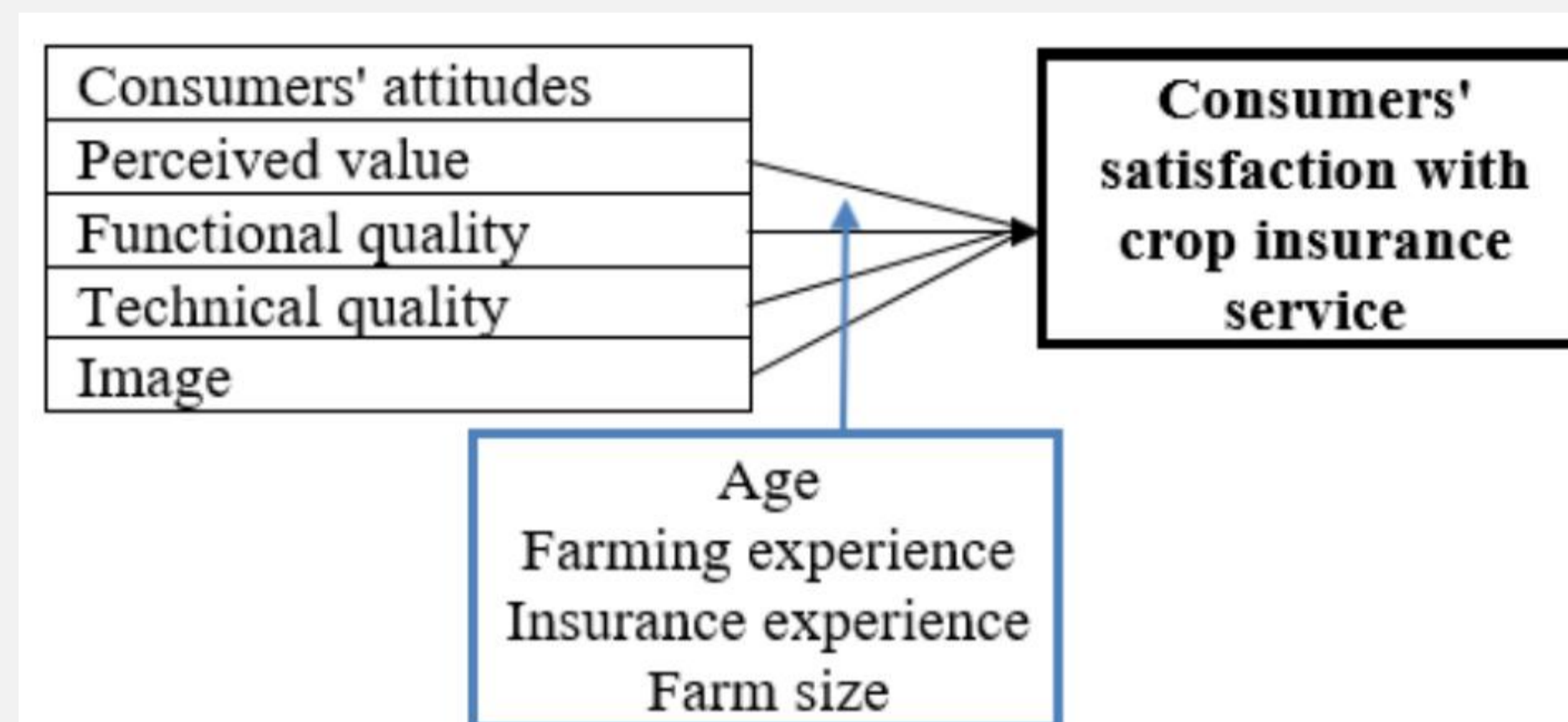


**Figure 1.** Model for assessing consumers' satisfaction with the Crop Insurance Service

Regression analysis helps to determine how the mean values of the dependent variables will change depending on the values of the independent (in this case, causal) variables. The results of a regression analysis are significant if the p-value is less than 0.05, which proves that the influence of the independent variable on the dependent variable is statistically significant.

The Beta (ß) value indicates the strength of the correlation, so the higher the Beta (ß) value, the stronger the factors (consumer attitude, technical quality, functional quality, image, perceived quality) extracted from the literature analysis are in determining consumer satisfaction with the crop insurance service (dependent variable). The expression of the Beta (ß) value is shown in Table 1.

**Table 1.** *Regression analysis of factors influencing consumer satisfaction with crop insurance*

| Independent variables | Non-standard ratios | | Standardized ratios | T | p-value |
|---|---|---|---|---|---|
| | B | Standard deviation | BETA ( ) | | |
| Consumers' attitude | 0,196 | 0,055 | 0,188 | 3,565 | 0,000 |
| Technical quality | 0,220 | 0,075 | 0,177 | 2,929 | 0,004 |
| Functional quality | 0,221 | 0,069 | 0,167 | 3,221 | 0,001 |
| Image | 0,155 | 0,050 | 0,143 | 3,090 | 0,002 |
| Perceived value | 0,360 | 0,51 | 0,413 | 7,019 | 0,000 |

## Results

The correlation analysis revealed that the socio-demographic characteristics of consumers have a statistically significant correlation with the determinants of consumer satisfaction (Table 2).

**Table 2.** *Correlation between consumer satisfaction factors outcomes and socio-demographic consumer characteristics*

| Satisfaction factors | Correlation results | Age | Duration of farming | Farm size | Duration of insurance |
|---|---|---|---|---|---|
| Consumer attitudes | Correlation ratio | 0,136* | 0,123* | 0,030 | -0,156** |
| | p- value | 0,020 | 0,032 | 0,324 | 0,009 |
| Technical quality | Correlation ratio | ,221** | 0,184** | -0,057 | -0,256** |
| | p- value | 0,000 | 0,003 | 0,195 | 0,000 |
| Functional quality | Correlation ratio | 0,055 | -0,025 | -0,063 | -0,217** |
| | p- value | 0,203 | 0,355 | 0,170 | 0,000 |
| Perceived value | Correlation ratio | 0,214** | 0,307** | 0,118* | -0,162** |
| | p- value | 0,001 | 0,000 | 0,038 | 0,007 |
| Image | Correlation ratio | -0,013 | 0,058 | 0,101 | -0,307** |
| | p- value | 0,420 | 0,190 | 0,065 | 0,000 |

The findings of the study suggest that more attention should be paid in the future to the influence of socio-demographic characteristics of consumers on the identification of new crop insurance schemes. It is necessary to assess these factors more frequently, as they are constantly changing, which would provide more detailed data and help insurance companies to provide better quality insurance services.

## Main conclusions

Crop insurance is a process involving two stakeholder groups, service providers and consumers. Crop insurance is a form of risk management used to protect against crop losses caused by relative weather events. It is a special and specific type of insurance, requiring specific knowledge and skills to provide services.

As a result of the analysis of the scientific literature, a model of the determinants of consumer satisfaction with the crop insurance service was developed.

The empirical study tests the validity of the theoretical model developed. It reveals that consumer satisfaction is determined by perceived value, consumer attitude, technical quality, functional quality and image. Perceived value was found to be the most important factor, with image being the least important. The socio-demographic characteristics of consumers determine the value of crop insurance services.

The findings of the study suggest that more attention should be paid in the future to the influence of socio-demographic characteristics of consumers on the identification of new crop insurance schemes.

The results of the research on user satisfaction with crop insurance services will undoubtedly influence the modeling of other elements of the system development, and the modeling of other elements of the system is also the direction of our further research.

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