

The Eurasia Proceedings of Educational & Social Sciences (EPESS), 2023

Volume 31, Pages 160-164

ICRESS 2023: International Conference on Research in Education and Social Sciences

The Criteria for Reliability

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Abstract: We conducted a large sample representative survey to get a deeper understanding of the Hungarian population's opinion on what makes them think a product or service is trustworthy. The main objective of the research is to design the Reliable Product Rewards Programme around a set of research-acceptable metrics that are valid and acceptable to all in 2021 and beyond. The University of Óbuda will participate in the development of the Reliable Product reward scheme in the future. When assessing the reliability criteria, 6 out of 10 factors were included. Based on the results of the research, it is proposed that the following 6 factors should be included in the Reliable Product reward system: 1. product value for money 2. product quality 3. recommendation by others (acquaintances, friends, family) 4. satisfaction with the product, after previous tasting/use 5. trial, during previous tasting/use. In our further research, familiarity will be considered as a separate dimension 0 as a filtering criterion in the reward system.

Keywords: Reliable product, Value for money, Product quality, Satisfaction, Product sampling, Recommendation

Introduction

Inspira Research conducted research on behalf of Product of the Year Ltd. on a representative sample of products to assess the characteristics and values of trusted products for consumers. Previous research has shown that the Hungarian population over 18 years of age is more reassured when an award is based on a public market survey. From a research point of view, it was considered appropriate to base the award of the Reliable Product Award on a large sample survey. Since in the long term, the possession of a Reliable Product Award has a major influence on consumer decisions, it was considered important to develop a set of indicators that are based on practical grounds but also take scientific aspects into account.

There is a large body of literature on the concepts of reliability and satisfaction. In many cases, synonyms for these concepts, such as trust and loyalty, also appear in the research, which are also important for the treatment of the topic. Trust is nothing more than the belief of the trusting party in a relationship that the other party (the trusting party) will not exploit the vulnerability of the trusting party in a business exchange (Morgan & Hunt, 1994).

There are researchers who argue that trust means something else: a willingness to act, the willingness of the trust-giver to engage in risky behaviour with a given partner in their relationship, behaviour that increases their vulnerability, their exposure to opportunistic behaviour by the partner. Trustworthiness is therefore nothing more than the perception and expectation of the trust giver of trust in relation to the trust receiver (Barney & Hansen, 1994; Mayer et al., 1995). Trust itself, in the traditional understanding, is nothing more than the individual's belief that his partner will not abuse his vulnerability (Korczynski, 2000).

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⁻ Selection and peer-review under responsibility of the Organizing Committee of the Conference

The theoretical and empirical study of consumer loyalty has been popular in the international and domestic literature for more than two decades. For a long time, the debate has been about the importance of customer loyalty and there are countless scenarios on how to retain consumers and what positive effects it can have on the performance of organisations in B2C markets. Unfortunately, the same cannot be said for business-to-business (B2B) loyalty surveys. There is much less theoretical discussion and much less empirical research in this area (Hetesi, 2011).

Although loyal consumers are generally more satisfied, satisfaction does not automatically translate into loyalty. To unravel the satisfaction-loyalty puzzle, Oliver (1999) studies what aspects of consumer satisfaction affect loyalty, and what proportion of loyalty is attributable to satisfaction components? The conclusion of the analysis is that satisfaction is a necessary step in building loyalty, but many other processes are needed to acquire a loyal customer base. Although the majority of loyal consumers are satisfied, the data show that satisfaction is an unreliable predictor of loyalty. Nor is satisfaction-loyalty unambiguous according to relevant sources (Veres, 2008).

Hofmeister Tóth et al. draw attention to a more nuanced understanding of loyalty and customer retention: according to them, consumer loyalty and loyalty are static concepts, while customer retention is a dynamic concept, and the foundations of customer retention go back to transaction cost theory and social psychology (Hofmeister Tóth et al., 2003).

The role of qualitative research in scientific research has increased and changed, new methods are emerging and existing methods are being applied more intensively. This development has been prompted by the need to focus more on the why, the attitudes, the particular and the unique within the patterns of behaviour, which also means, especially in practical research, to gain as many characteristics and as complete a picture as possible of individual consumer behaviour and its driving forces. Academic research has also been influenced by this increased demand from practitioners, and by the fact that practical market research also conducts a lot of individual and group interviews, from which manufacturers and distributors are getting more and more information about the behaviour of even small groups of consumers and individuals (Simon, 2016).

Success indicators and research can play an important role in practical market research, instead of or in addition to measuring impact, i.e. not only measuring the effectiveness of measures (brand awareness, image, consumer satisfaction), but also the financial impact and success of the costs incurred, in particular the impact of marketing measures on ROI (Fischer et al., 2013).

Method

We conducted a large sample representative survey to get a deeper understanding of the Hungarian population's opinion on what makes them think a product or service is trustworthy. The research methodology was an online survey. The target group of the research was the Hungarian population aged 18 and over. The sample is representative of the population over 18 years of age, by gender, age, place of residence (region and type of municipality) and education level, so the conclusions drawn from the results can be generalised to the Hungarian population over 18 years of age. Data collection started at the end of September 2021 and ended at the beginning of October 2021. The sample size is n=600 individuals. The margin of error at the 95% probability level for a sample of 600 people. Multivariate statistical analyses were performed to assess the reliability criteria, of which the one with the strongest explanatory power was accepted. In factor analysis, we looked for groups of decision factors that were more closely correlated with each other, which variables could be considered to belong to a single factor.

Results and Discussion

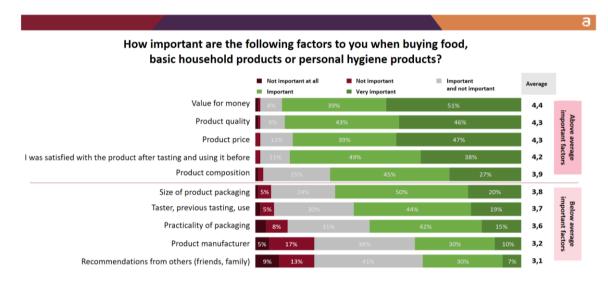
When examining the criteria of reliability, 10 factors were included in the research, which, based on previous experience, are usually important factors when shopping. The decision factors included in the research were the following:

- 2. Product price/value ratio
- 3. Product quality
- 4. Product packaging

^{1.} Product price

- 5. Product packaging size6. Recommendations from others (friends, family, acquaintances)7. Satisfaction with the product after previous tasting/use
- 8. Trial, during previous tasting/use
- 9. Product composition
- 10. Product manufacturer

The average importance of the factors included in the survey ranges between 4.4 and 3.1, indicating that the factors measured are of at least medium importance to the Hungarian population when purchasing food, basic household products and personal hygiene products. In the order of importance of the aspects influencing the purchase, value for money (or price), quality, satisfaction and product composition are above average. Recommendation came last, but is still a moderately important factor (Figure 1).



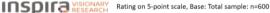
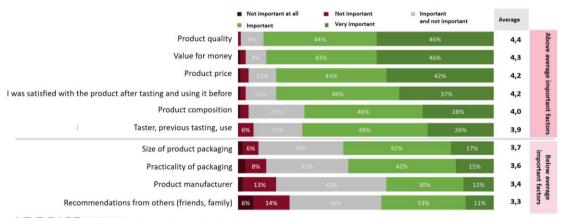


Figure 1. How important are the following factors to you when buying food? Basic household products or personal hygiene products?

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What do you mean by "trustworthy" when you recommend a product you consider "trustworthy" to your friends and acquaintances? Which of the following decision criteria are important to you?



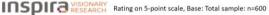


Figure 2. What do you mean by "trustworthy" when you recommend a product you consider "trustworthy" to your friends and acquaintances? Which of the following decision criteria are important to you?

The Hungarian population over 18 years of age perceives the quality, value for money (or price), satisfaction with the products, the composition of the products and the prior familiarity with the products as the key factors

for a reliable product. These are the factors that are of above-average importance to the Hungarian population and explain the existence of reliable products. The importance of recommendation is also ranked last, but here too it is of medium importance (Figure 2). When testing the reliability criteria, we performed multivariate statistical analyses, accepting the one with the strongest explanatory power.

In factor analysis, we searched for groups of decision factors that were more closely correlated with each other, which variables could be considered to belong to a factor. The essence of factor analysis is to generate a small number of new variables from several variables by exploring the relationships and latent structure between the original variables. The factors under study are grouped into 6 separate factors. The weight of each factor is determined by the percentage of the total variance explained by that factor. The results show that the factors of practicality of packaging and size of product presentation, and the factors of product manufacturer and composition of the product are grouped into a single factor, and thus these factors are highly correlated (Figure 3).

	Factors					Factor weights (factor explains % of total variance)	
	1	2	3	4	5	6	(lactor explains % or total variance)
Product value for money	0,813	0,233	0,03	0,19	0,183	-0,005	15,4
Product price	0,664	0,157	0,191	0,16	-0,053	0,082	13,4
Trial, previous tasting/use	0,186	0,789	0,161	0,106	0,115	0,085	12,4
Satisfied with the product, after previous trial / use	0,278	0,582	0,119	0,304	0,114	0,105	12,7
Practicality of packaging	0,103	0,168	0,82	0,071	0,241	0,149	11,1
Size of product packaging	0,422	0,152	0,488	0,054	0,247	0,117	11,1
Product quality	0,327	0,29	0,079	0,881	0,157	-0,018	10,1
Product manufacturer	0,014	0,059	0,185	0,038	0,578	0,264	
Product composition	0,17	0,214	0,242	0,236	0,46	0,102	8,3 5 factors explain 64% of the total variance
Recommendations from others (friends, family)	0,071	0,126	0,16	-0,003	0,288	0,777	7,5
KMO criterion value: 0.82 (very good) - variables are suitable for with each other based on Bartlett's test was met. The 5 factors o minimum of 60%.							

Figure 3. Result of factor analysis

Conclusion

Based on the results of the research, we propose that the following 6 factors should be included in the Reliable Product Award:

- 1. Product value for money
- 2. Product quality
- 3. Recommendation by others (friends, family, friends of friends)
- 4. Satisfaction with the product after previous tasting/use
- 5. Trial, during previous tasting/use

Based on our research experience, we suggest that in addition to the 5 dimensions defined above, awareness should be included as a separate "zero" (type of input) dimension as a filtering criterion in the reward system. Future research will examine the wording that is most clear to consumers. Together with this, we propose to remove from future studies the following items: 'practicality of packaging' and 'size of product', and the product's manufacturer and composition'

Scientific Ethics Declaration

The authors declare that the scientific ethical and legal responsibility of this article published in EPESS journal belongs to the authors.

Acknowledgements or Notes

* This article was presented as an poster presentation at the International Conference on Research in Education and Social Sciences (<u>www.icress.net</u>) held in Budapest/Hungary on July 06-09, 2023

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To cite this article:

Dornyei, O. & Tégla, Z. (2023). The criteria for reliability. *The Eurasia Proceedings of Educational & Social Sciences (EPESS), 31,* 160-164.