

Personality meets product preference:

A new psychographic questionnaire for consumer research



Background & Objective

Consumer personality plays an important role in sensory and consumer research, influencing preferences, product perception and purchase decisions. While traits like openness, extraversion and neuroticism have shown links to product evaluations and decision making, existing psychometric questionnaires often lack relevance for product testing contexts. This study aimed to develop a concise questionnaire to better capture consumer personality, enabling more precise segmentation and deeper insights into how personality impacts product evaluation.

Authors

Pushan Tagore
Lise Dreyfuss
Kayla Terpstra
Zhiyu Wang
Ruth Greenaway
Jane Randall
Shaima Kerroum
Chlo   Nuvoli
Rebecca Woods

A 5-step approach

1

Literature review of existing personality and psychographic questionnaires to identify relevant personality traits and validated questions.

2

Selection of personality traits, and their associated questions, most pertinent to consumer product testing:

A. Perfectionistic, High-Quality Conscious Consumer

B. Confused by Overchoice Consumer

C. Emotion-based decision making

D. Variety-seeking

E. Foodie index

F. Curiosity

G. Big-Five Inventory

H. Cautiousness

I. Individual innovativeness

J. Involvement with Cooking

3

Online survey to identify the most relevant out of 86 initial questions related to 10 personality traits amongst 7,580 consumers across 7 countries.

4

Two distinct methods for data analysis –Item Analysis and Recursive Feature Elimination (RFE) with Adjusted Rand Index (ARI)– were combined to select, for each personality trait, the most relevant questions to create a more concise questionnaire.

Using Item Analysis and RFE successively produced an even more effective reduction of number of items

Trait	Before	After Item Analysis	After RFE
I. Perfectionistic, High-Quality Conscious Consumer	8	5	3
G. Confused by Overchoice Consumer	4	3	3
C. Emotion-based decision making	9	6	3
D. Variety-seeking	7	7	4
E. Foodie index	12	11	4
F. Curiosity	12	11	5
H. Big-Five Inventory	15	11	10
J. Cautiousness	6	6	3
I. Individual innovativeness	10	8	2
J. Involvement with cooking	3	3	3

5

The new personality questionnaire with just 40 questions, was trialled as part of a product testing project in a Central Location on 3 meat and cheese snacks (N=130, USA).

Linking consumer overall liking (OL) behaviour to personality traits

	Average Overall Liking		
	P148	P329	P650
Preference cluster 1	7.4	7.8	8.1
Preference cluster 2	7.5	5.2	8.0
Preference cluster 3	4.7	5.6	6.5
Total	6.6	5.5	7.6

Conclusion

This reduced psychographic questionnaire offers valuable insights into how personality traits influence product preferences across different consumer clusters.

By understanding these clusters, marketing teams can more effectively tailor their strategies—customising product features, adapting packaging designs, and refining messaging—to better align with the motivations and behaviours of specific target audiences.

This questionnaire can also be used upfront, at the recruitment stage, to allow a more targeted selection of consumers based on their personality traits and psychological tendencies.