

Assessing the role of trust and food-related attitudes and consumer traits on risk perception towards sustainable innovative food processing technologies

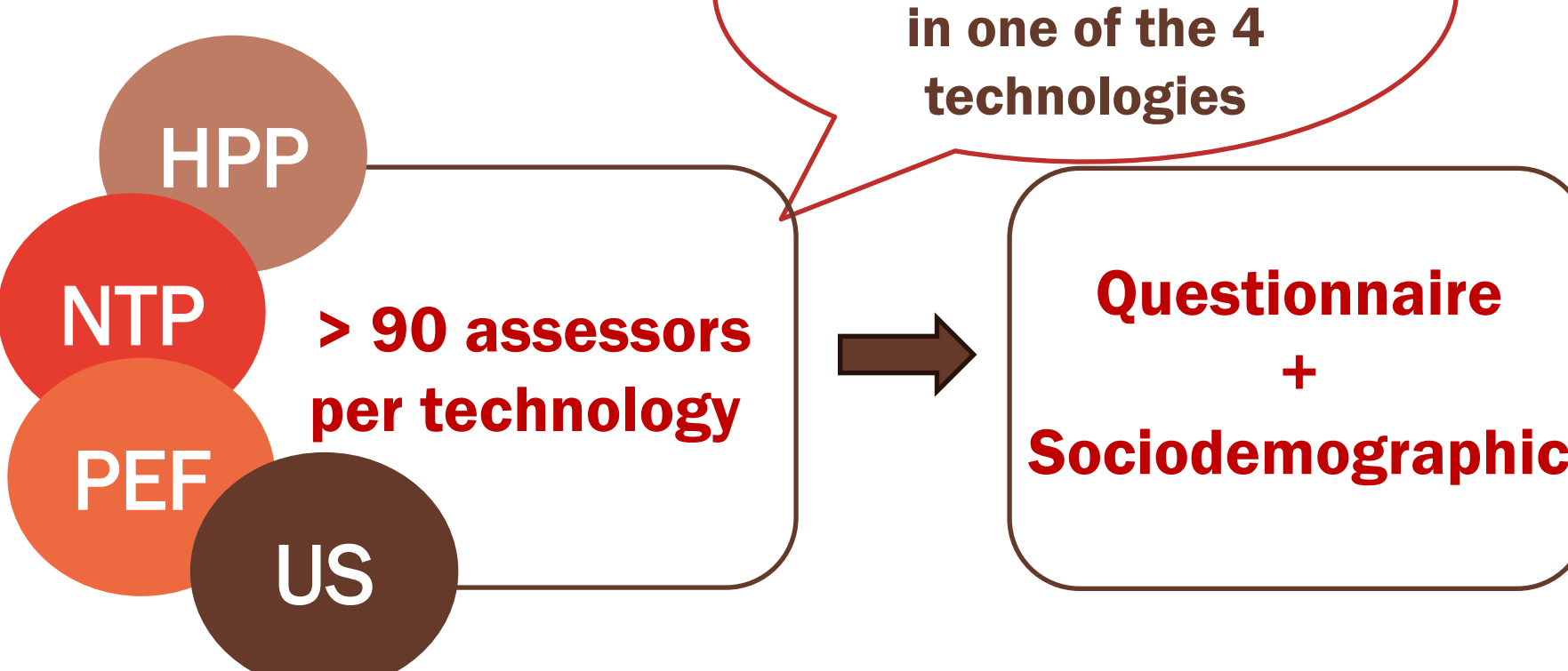
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Background

Over the past decades, considerable efforts have been made to develop innovative food technologies that provide safe, nutritious food with high organoleptic qualities that meet consumer demands¹. However, the introduction of new technologies for food processing may generate concern among consumers, leading to low acceptance. Therefore, it is important to consider the consumers' point of view from the early stages of innovation. This study aims to evaluate consumers' acceptance and risk perception towards sustainable innovative food processing technologies such as high hydrostatic pressure (HPP), ultrasound (US), non-thermal plasma (NTP) and pulsed electric field (PEF) in Portugal, Germany and United Kingdom.

Approach

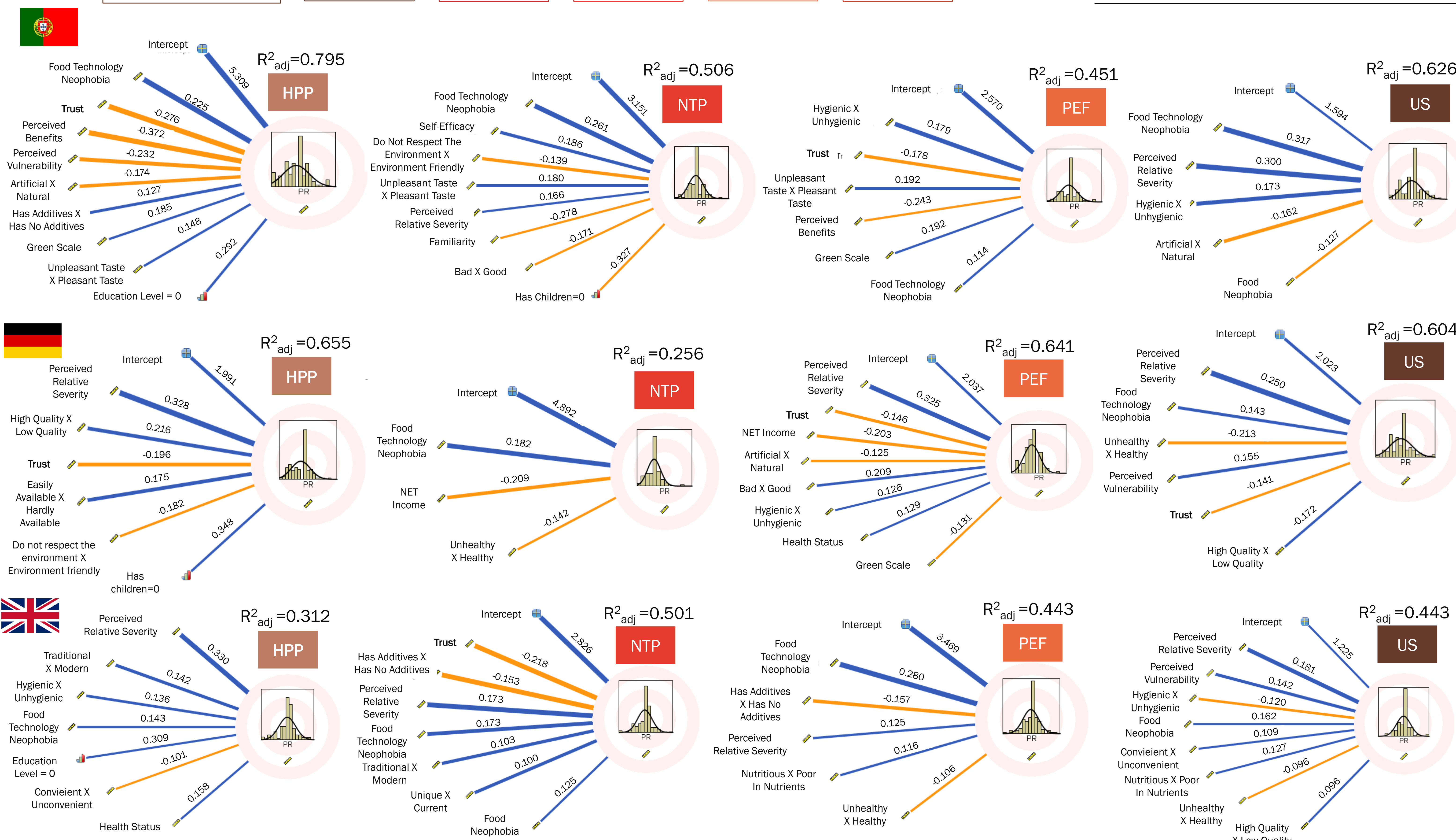


Results

	HPP/NTP/PEF/US		18-34 years old	35-50 years old	>50 years old	
PT (n=423)	114/ 97 / 103 / 109	53%♀/ 47% ♂	33%	31%	36%	37%
DE (n=409)	97/ 100 / 101 / 111	49%♀/ 51% ♂	33%	32%	35%	46%
UK (n= 574)	150/ 149 / 136 / 139	42%♀/ 58% ♂	50%	26%	24%	47%

Table 1. Mean and standard deviation for Perceived risk

	HPP	NTP	PEF	US	p-value
PT	3.7 ± 1.4	3.7 ± 1.0	3.8 ± 1.1	3.7 ± 1.2	0.966
DE	3.9 ± 1.0	3.9 ± 0.8	3.9 ± 0.8	4.0 ± 0.8	0.625
UK	3.6 ± 1.2	3.8 ± 0.7	3.6 ± 1.0	3.5 ± 1.1	0.138



CONCLUSIONS

The results of this research show that the development and production of new products with novel technologies should take in account the consumers perception in each country that they are going to launch it. No significant differences were found between technologies within each country however it can be seen that the factor affecting the perception of risk varies markedly between technologies within each country.



REFERENCES

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ACKNOWLEDGEMENTS

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 955431 (Transit). Authors Silva, Rocha and Cunha acknowledge support from *Fundação para a Ciência e a Tecnologia* (FCT), through the Strategic Projects UIDB/05748/2020 and UIDP/05748/2020 (GreenUPorto).

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