

Understanding Household Food Waste: An Application of the Theory of Planned Behaviour

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Abstract

Food waste is a major sustainability challenge with significant environmental, economic, and social consequences. Households contribute a substantial share of total food waste, making consumer behaviour a critical area for intervention. Understanding the behavioural and psychological determinants underlying household food waste is therefore essential for the development of effective policies and strategies aimed at reducing waste and promoting sustainable consumption. This study investigates consumers' intentions and behaviours related to household food waste through the application of the Theory of Planned Behaviour (TPB). Alongside the model's core constructs (attitudes, subjective norms, and perceived behavioural control) this research examines nostalgia as an additional emotional factor potentially influencing food waste reduction. Data were collected using an online questionnaire administered to 124 Portuguese consumers between November and December 2025. The survey gathered information on food waste practices, prevention strategies, and psychosocial factors associated with waste-related behaviour. The results demonstrate that attitudes towards food waste and perceived behavioural control significantly influence consumers' intentions to reduce food waste, with perceived behavioural control emerging as the strongest predictor. Furthermore, perceived behavioural control also has a direct and positive effect on actual food waste reduction behaviours, indicating that consumers' perceived ability, knowledge, and access to resources are crucial for translating intentions into concrete actions. In contrast, subjective norms do not exert a significant influence on intention, suggesting that household food waste behaviour is not primarily driven by social pressure within this sample. Similarly, nostalgia does not show a statistically significant effect on either intention or behaviour, although it contributes to distinguishing different consumer profiles. Overall, the findings confirm the relevance of the TPB in explaining household food waste behaviour while highlighting the predominance of cognitive and control-related factors over emotional and normative influences. This study contributes to the literature by emphasising the importance of behavioural empowerment and practical competencies in reducing food waste at the household level. The results suggest that interventions and public policies should prioritise consumer education, meal planning, food storage practices, and the enhancement of perceived behavioural control, rather than relying exclusively on social norms or emotion-based approaches.

Keywords

Food waste, Behaviour, Theory of planned behaviour, Sustainability.