

INPLASY

Employee green behavior and food waste management in food services: a scoping review protocol

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ADMINISTRATIVE INFORMATION

Support - Not supported.

Review Stage at time of this submission - Data analysis.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 5 August 2026 and was last updated on 5 August 2026.

INTRODUCTION

Review question / Objective What is the relationship between employee green behaviors and food waste management practices in studies published over the last 10 years?

Objective:

To identify the relationship between the development of employee green behaviors and food waste management in the food service sector worldwide.

Background Employee Green Behaviors (EGB) are a relevant research area in work and organizational psychology, as they represent a concrete manifestation of workers' commitment to environmental sustainability practices. These seek to reduce any harm through the conforming implementation of pro-environmental behaviors, such as environmental activism (i.e., active participation in environmental care organizations), non-activist behaviors in the public sphere (i.e.,

donating to support environmental care organizations or complying with environmental regulations), private-sphere environmentalism (i.e., using personal products that reduce environmental harm), and other significant environmental behaviors (i.e., influencing the promotion of the environment in organizations). EGB also incorporates green behavioral dimensions, which aim to promote environmental sustainability through job performance, teamwork, and social support from leadership. Zacher et al. (2022) highlight six constructs related to the concept: a) Transforming: developing innovations or changes to maintain sustainable job performance on a daily basis; b) Conserving: preservation and waste avoidance behaviors; c) Avoiding Harm: behaviors that prevent negative impacts and/or mitigate their effects; d) Influencing Others: behaviors promoting environmental care among people; e) Taking Initiative: organizational voice behavior or organizational citizenship behavior; f) Counterproductive Behaviors toward Sustainability: risk-taking or harmful behaviors toward the environment.

Food waste represents a risk to achieving food sustainability. Consequently, the United Nations (UN) has declared ensuring sustainable food consumption and production a fundamental goal (SDG No. 12). Food loss avoidance thus becomes a strategic action. In this regard, green behaviors have been identified as central aspects in reducing food waste. Research on this topic has mainly focused on identifying the factors determining sustainable or food waste behaviors in consumers (Kumar et al. 2022). It has been identified that more food is lost in this segment of the production chain. On the other hand, research has also focused on identifying the determinants of food loss in households, as these are the primary places where people eat.

However, research on waste management in work environments is somewhat more limited. The systematic review by Cook et al. (2022) focuses on identifying monitoring mechanisms (auditing) for controlling food waste in hospitals, recommending mechanisms for quantifying and valuing food loss. The narrative review by Mia et al. (2025) focuses on identifying the sources of food waste and its valorization in products within the food industry. It observes that food is lost in agricultural production, processing, distribution and sale, food provision systems and hospitals, and household consumption. Hassoun (2025) identifies the contributions of Industry 4.0 in improving sustainability in food production, substantiating the need to enhance the digital competencies of workers contributing to environmental sustainability.

Rationale Research on this topic has mainly focused on identifying the factors determining sustainable or food waste behaviors in consumers (Kumar et al. 2022). It has been identified that more food is lost in this segment of the production chain. On the other hand, research has also focused on identifying the determinants of food loss in households, as these are the primary places where people eat.

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consumption. Hassoun (2025) identifies the contributions of Industry 4.0 in improving sustainability in food production, substantiating the need to enhance the digital competencies of workers contributing to environmental sustainability.

Regarding the state of the art on the research topic, it can be argued that there is scarce information on the relationship between the variables in the food service provision environment. The review by de Niz & Nájera (2023) alludes to the promotion of sustainability in restaurants. In the document, employee behaviors are highlighted as crucial. Aspects such as leadership, training, the link with customers/users, efficiency, etc., are determining factors. Furthermore, it is highlighted that all of these, along with feedback, favor three relevant dimensions of organizational behavior: a) favorable attitudes towards sustainability, b) sustainability awareness, and c) commitment and proposals for green practices. Despite what is highlighted, the need to further investigate the relationship between employee green behaviors and food waste management in food provision systems is clear.

Zacher, H., Rudolph, C., Katz, I. 2023. Employee Green Behavior as the Core of Environmentally Sustainable Organizations. *Annual Review of Organizational Psychology and Organizational Behavior*. 10, 465-494

Kumar et al. (2022) Food Waste Consumer Behaviour: A Bibliometric Review. *International Journal of Early Childhood Special Education*, 14(3), 4006-40019.

Cook et al. (2022) A systematic review of food waste audit methods in hospital foodservices: development of a consensus pathway food waste audit tool.

Mia, S., Ahmed, M., Zzaman, W. (2025) Valorization of food waste into functional ingredients supports a sustainable strategy for the food industry. *Discover food*, 5, 275.

Hassoun, A. (2025) Food sustainability 4.0: harnessing fourth industrial revolution technologies for sustainable food systems. *Discover Food*, 5, 171

de Niz Sedano, Ángel Gabriel, & Nájera González, Areli. (2023). La sustentabilidad en la industria de restaurantes: prácticas, desafíos y oportunidades. *Suma de Negocios*, 14(31), 164-173.

METHODS

Strategy of data synthesis The databases WOS, SCOPUS, PubMed, and Scielo will be reviewed.

The keywords to be used will be:
English:

EMPLOYEE GREEN BEHAVIOR, GREEN BEHAVIOR, GREEN PRACTICES, GREEN AWARENESS, GREEN ATTITUDES, GREEN SKILLS, GREEN LEADERSHIP

FOOD, FOOD WASTE, FOOD LOSS.

RESTAURANT, CAFE, CATERING, SCHOOL CANTEENS, FOOD SERVICE.

Participants or population

We have considered the following characteristics of the population:

Gender: All

Age: +18 years old.

Job: Any food services workers.

Country: Across the world.

Contract: Temporary and permanent contracts (subcontractor or contractor)

Exposure: Involved in any empirical qualitative, quantitative, or mixed research.

The studies to be included are:

Empirical qualitative design (interviews, ethnography with interviews, case reports, brief reports, interventions).

Quantitative design (cross-sectional, longitudinal, quasi-experimental, or experimental).

Eligibility criteria SPIDER Inclusion criteria

Sample: Workers (+18) employed in different companies or businesses in the food provision sector (food services). This includes school canteens, restaurants, cafes, food trucks, etc. Language of studies: Spanish, Portuguese, and English.

Phenomenon of Interest: The relationship between employee green behaviors and waste management practices, highlighting the discretionary role of workers in this. Relevant aspects include: a) What workers do; b) What they must do (prescriptions) and their results.

Design: Interviews, case reports, brief reports of experiences, experience of interventions, participant ethnography. All quantitative and mixed-method studies. Not Systematic review.

Evaluation: Articles must refer to the phenomenon of interest. Those not focused on the food provision sector will be excluded.

Research type: Empirical research with diverse design methods (qualitative, quantitative, or mixed).

SPIDER Exclusion criteria

Sample: Does not specify that the participants are food provision or preparation workers.

Article for which the full text cannot be retrieved.

Article for which the abstract cannot be retrieved.

Article written in languages other than those included.

Article that obtains an "exclude" overall appraisal from the Critical Appraisal tools for use in JBI Systematic Reviews.

Phenomenon of Interest:

Design: secondary database analysis, narrative reviews, meta-analyses.

Evaluation: The relationship established between variables is vague.

Research type: Empirical quantitative research, documentary research, historical research, systematic review, bibliometric review.

Source of evidence screening and selection

The sources of evidence will be: WOS, SCOPUS, SCIELO, and PubMed. We will use Rayyan.ai software to process all documents and information extracted from the databases. At least two reviewers will independently screen the abstracts and vote for the inclusion or exclusion of each article. Subsequently, the other reviewers will conduct a full-text reading of the selected documents. The disagreement between reviewers will be resolved by a third member of the research team.

Data management Data management will be handled by the principal investigator using Rayyan AI software.

Language restriction Languages other than English, Spanish, and Portuguese.

Country(ies) involved Chile.

Keywords Employee green behavior; Food waste management; Sustainability; workplace environment.

Contributions of each author

Author 1 - Jose Matamala Pizarro - Drafted the manuscript.

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Author 2 - Nicole Lasserre Laso - Specialist in human nutrition; adviser in the drafted manuscript.

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