

Understanding the Drivers of Food Waste in University Dining Facilities: A Systematic Literature Review

Widiantika Wenny
Master of Management – Strategy and Innovation Management
Supervisor: Prof. dr. Stephan BRUNS



Background

- Food waste: urgent global concern
- Catering industry in China wastes 17-18 million tons of food/ year, USD 4 billion/ year in the UAE, 12 kg of food waste per person in Europe. 783 million people in the world suffering from hunger.
- Literatures suggested: do more study of food waste, particularly in university dining facilities. Some limitations include: (1) lack research identifying areas for improvement in universities. (2) lack in the data (interviewees, universities sample & participants). (3) Inadequate attention to the ethical implications of food waste and its effects on environmental sustainability and social equity.

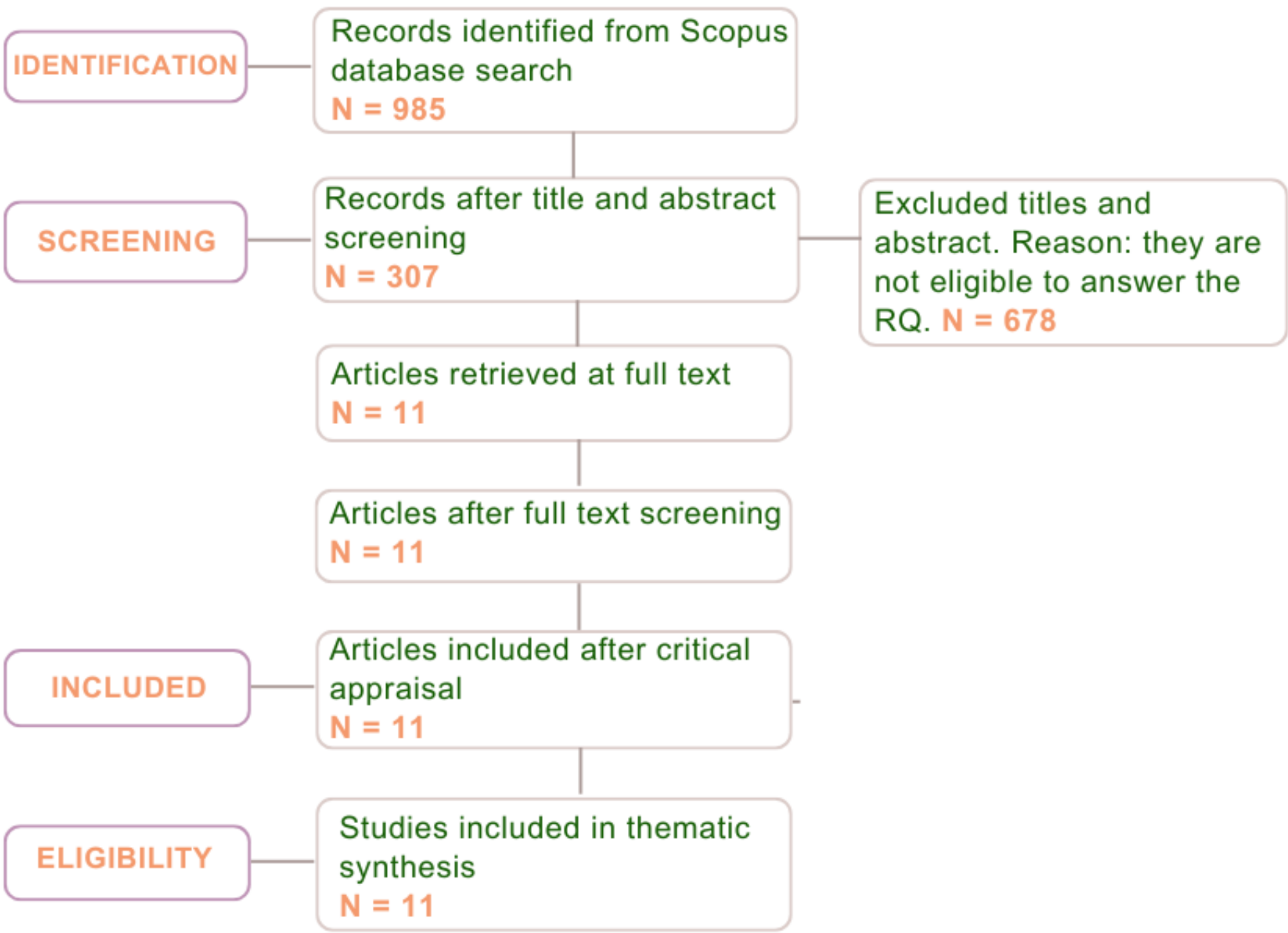
Research Objective

Aims to systematically review & synthesize existing studies to identify the drivers of food waste in university dining facilities.

Main RQ: *What are the drivers of food waste among students in university dining facilities?*

Methodology

- Systematic Literature Review (SLR)
- ROSES protocol
- Thematic analysis



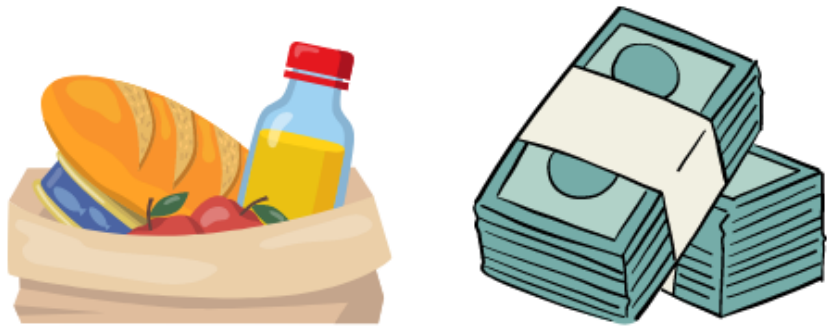
Limitations & Future Recommendations

Limitation in: database search (Scopus), English articles only, the sample location: China, Poland, Italy, UAE, Portugal, Spain, & the USA. Future research need to investigate the issue of food waste in universities within developed & developing economies.

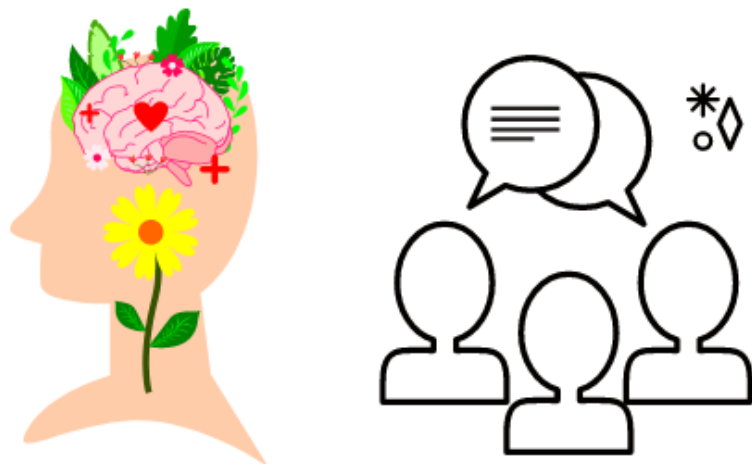
Results

Drivers of food waste in university

Material factors: foreign objects in food, unappealing/ undercooked meals, inadequate food presentation, excessive portions, and improper date labeling.



Economic factors: lower perceived value of cheaper foods.



Psychological factors: avoid certain foods they find unpalatable & lack of frugality, may not fully appreciate the value of minimizing waste.

Social factors: mealtime competition, gender impressions, the influence of dining companions.



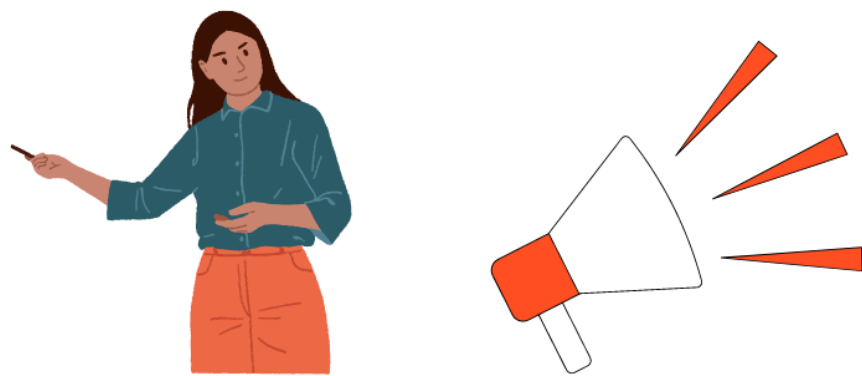
Cultural factors: non-local students struggle with unfamiliar local cuisines

Health factors: balancing diet/ avoiding overeating.

Intervention to stimulate behavioral change to mitigate food waste

Food waste course: enhance students' understanding of food waste.

Campaigns: raise awareness and encourage active participation in waste reduction.



Strategies for university stakeholders to mitigate food waste

Food diversion: redirected to food banks, composted, industrial purposes, or repurposed as animal feed.

Improvement in material factors: high hygiene standards, serving visually appealing & appetizing food, enhancing the flavor & quality of meals, providing detailed labels for each dish, offering variable portion sizes, considering change the shape & size of plates.

