

# E-Waste Disposal Behavior: A Mediator for Sustainable Consumption

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## ABSTRACT

This review focuses on sustainable consumption behaviors which play a crucial role in reducing electronic waste. E-waste has become a global environmental concern due to the massive generation of discarded electronic products, with improper disposal contributing to pollution, health risks, and resource depletion. Through a systematic analysis of secondary data, this review identifies key factors that can inform strategies for improving e-waste management. The collective findings demonstrate that factors such as attitude towards a safe environment, eco-literacy, subjective norms, perceived behavioral control, volume accumulation, monetary return expectation, and others; play a crucial role in influencing the behavior of urban consumers towards e-waste disposal behavior and sustainable consumption. By reviewing the existing research, this review highlights the need for targeted interventions to promote responsible e-waste disposal, contributing to broader efforts toward a circular economy and sustainable urban living.

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## 1. Introduction and Objectives

Sustainable consumption and e-waste disposal management are the need of the hour. According to Bagwan (2) in the past few decades, there has been a consistent rise in the generation of electronic waste due to numerous factors such as high consumption rate, frequent upgradation of technology, high purchasing power, and deteriorating quality of electronic products. E-waste disposal management is more crucial for urban consumers because when it comes to the generation of e-waste, urban areas have surpassed rural areas. Urban areas are those areas in which the population density is high along with the high consumption rate. These urban consumers generate large amounts of electronic waste, which in turn poses a serious threat to both human lives and the environment. Thus, it is important to guide the behavior of urban consumers towards effective e-waste management to preserve the environment and human well-being. Several studies (9, 10) described that the behavior is majorly dependent on factors such as awareness, education, motivation, and environmental concern.

Objectives of the study:

1. To identify the factors influencing urban consumers toward sustainable consumption.
2. To examine the role of e-waste disposal behavior as a mediator for achieving sustainable consumption.
3. To determine whether urban consumers are aware of the concept of sustainability and e-waste disposal behavior.

Hypothesis:

H1: Numerous factors influence urban consumers' behavior towards sustainable consumption.

H2: E-waste disposal behavior acts as a significant mediator towards achieving sustainable consumption.

H3: Urban consumers are aware of the concept of sustainability and e-waste disposal behavior

There is a huge gap in the existing field of research. At present studies have been done on e-waste disposal behavior and sustainable consumption but none have considered e-waste disposal behavior as a mediator towards achieving sustainable consumption to the best of the researcher's knowledge.

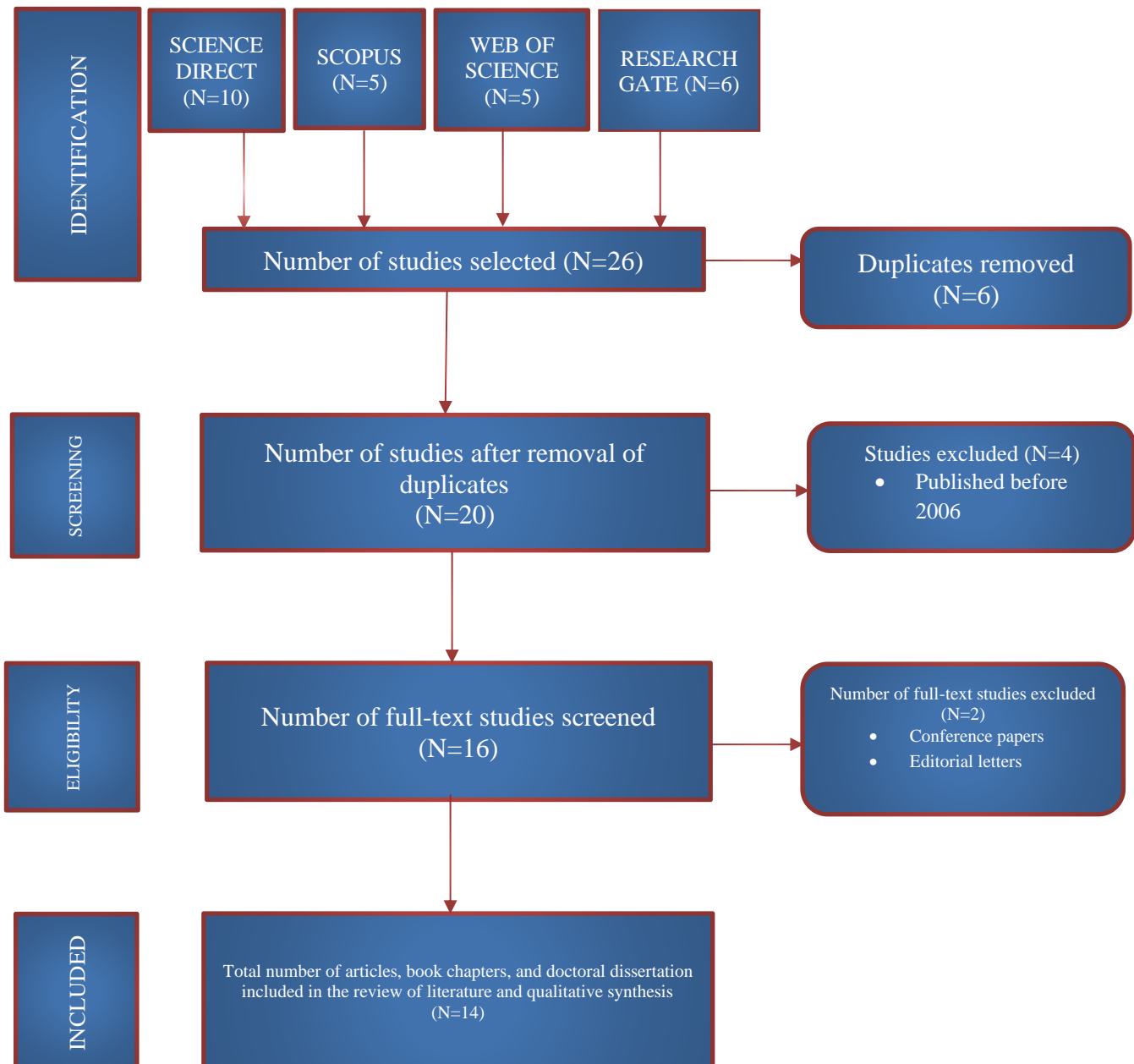
## Nomenclature

**E-waste:** Electronic - waste

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## 2. Methodology

The present study employs a methodical literature review technique. Research papers published in 2024 were identified through comprehensive searches of leading academic databases, including Scopus, Research Gate, Science Direct, and Web of Science. The two key phrases that were utilized were "e-waste disposal behavior", and "sustainable consumption." Albhirat et al. (1) highlighted the importance of the PRISMA framework to ensure the systematic review of the literature. There are four stages in the systematic literature review and they are depicted in Figure 1 below:



**Figure 1:** PRISMA framework, outlining the systematic review process for this study. It illustrates each step, from the initial identification of research articles across multiple databases to the final selection of studies included in the analysis.

The study considered only those papers that focused on the disposal of e-waste in connection to sustainable consumption. Qualitative analysis was done to identify the recurrent themes and mediating effects using NVivo software. In the present study, quantitative tools and techniques were not used for analysis.

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## 3. Results

Through an extensive review of literature such as Islam (7), it is found that urban consumers are generally aware of the concept of sustainability and e-waste disposal behavior but surprisingly, although consumers are highly aware, their behaviors often do not align with environmentally friendly practices. The



still the goal hasn't been and the main reason behind this is the high price of environment-friendly products. In the future researchers could consider making a quantitative paper, considering e-waste disposal behavior as the mediator.

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