Chapter 14
Understanding E-Waste Disposal Behavior Across Diverse Groups:
A Social Cognitive Perspective

Varanasi Rahul
https://orcid.org/0000-0003-2407-7654
Jain University, India

N. Sathyanarayana
https://orcid.org/0000-0002-4185-7751
Jain University, India

Usha Prabhu
https://orcid.org/0000-0001-6219-5358
Jain University, India

Y. Fathima
https://orcid.org/0000-0002-0045-1421
Jain University, India

V. Lava Kumar
https://orcid.org/0000-0002-3539-9280
GITAM University, India

ABSTRACT

This chapter seeks to examine the factors and effects of e-waste disposal behaviour among various demographic groups. Social cognitive theory (SCT) is utilised to formulate and evaluate a conceptual model that examines the impact of psychological

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factors, observational learning, and self-regulation on individuals' e-waste disposal behaviour. This study employs a structured survey methodology via a questionnaire to investigate the e-waste disposal behaviours of various demographic groups across different regions of India. Multiple regression analysis is utilised as the statistical method for data examination. The results of the multiple regression analysis reveal that psychological factors, observational learning, and self-regulation are positively correlated with the e-waste disposal behaviours of various demographic groups. This study has constraints, including common method bias and social desirability bias, owing to its dependence on self-report measures.

INTRODUCTION

A growing quantity of WEEE is a direct result of the increased usage and modernisation of electronic devices and equipment brought about by economic development. Worldwide, e-waste production increased by 21% in only 5 years, reaching 53.6 million Mts in 2009, with recycling rates hovering around 17%. E-waste generally exerts more significant environmental repercussions than municipal garbage. Conversely, poisonous chemicals, along with substantial quantities of other heavy metals and chemical additives, constitute electronic waste. Severe environmental damage results from improperly disposed of electronic garbage, which leads to unintentional burying and burning. Arain et al. (2020) electronic trash is chemically different from regular household or municipal trash, and it contains several dangerous chemicals that, if not disposed of properly, can hurt people and the environment. These substances include lead, polybrominated biphenyls, and diphenyl. Reusing, reprocessing, recycling, and sometimes burning or putting it in a landfill are all ways that electrical waste is handled. Recycling is expected to be a primary method for reducing pollution, conserving natural resources, and improving energy efficiency. Awasthi et al. (2022) say that taking part in successful waste management, such as recycling, depends on more than just caring about the environment, supporting environmental goals, or being open to recycling technologies.

Formal treatment of e-waste is a key part of long-term solid waste control in developing nations for the very reason that it is directly linked to environmental issues due to the existence of informal sectors in large numbers (Bharali & Kumar 2018). The global challenges of sustainable development and the production of large amounts of waste started to raise calls for a circular economy. Policy and business experts have come up with a concept in which, through a sustainability development strategy (Islam et al. 2020), solutions to environmental degradation and resource scarcity issues are proposed. Borthakur & Govind (2016) the increased dependence of the masses on this device, which comes in all ranges and sizes and suits many