

TOWARDS SUSTAINABLE ELECTRICITY IN BAHRAIN: EXPLORING FACTORS DETERMINING THE CONSUMERS' ELECTRICITY CONSERVATION BEHAVIOR IN THE RESIDENTIAL SECTOR

OVERVIEW

The main objective of this research is to explore the factors that determine the electricity conservation behavior of consumers in the residential sector in Bahrain and to properly utilize Social Marketing in changing this behavior. The research empirically tests international theories that defines the relationships between influential factors impacting electricity conservation of households.

PROBLEM

There is an evidence that Bahrain is having a high per-capita electricity consumption compared to other countries, and that is causing various negative consequences for the kingdom, such as the high cost of excessive electricity generation, transmission and distribution, in addition to the associated negative impact on the environment and meeting the related sustainable development goals (SDGs). In spite of the efforts taken by the concerned authorities over years, it is not easy to make the consumers, particularly in the residential sector, to actually contribute and take action in conserving electricity. Hence, there is a need to explore the causes and factors that lead to electricity conservation among Bahrain residential sector consumers.

METHODOLOGY

A quantitative research method is followed in this study. The study is classified as an analytical and descriptive study with a deductive logic. According to outcome, it is classified as an applied research, where the outcomes can be used in real-life scenarios. This study uses the probability sampling technique and the targeted population was the customers in the residential sector. Regarding the data analysis, two approaches were used; Descriptive Analysis and Inferential Analysis approaches. This study uses the cluster sampling method under probability sampling techniques.

FINDINGS

The main findings of the research are summarized below:

- Perceived behavior control is the main and significant factor that influences the behavior intention.
- Subjective (social) norms, personal norms, and the perceived behavior control cause a higher intention.
- Intention has a big influence on actual behavior.
- Relationship between the behavioral intention and the electricity conservation behavior was unaffected by the respondents' economical nor sociodemographic characteristics.

RECOMMENDATIONS

The main recommendations of the study are summarized below:

- Make certain that both kinds of benefits (individualistic + altruistic) are considered in campaigns, and concentrate on means that change undesirable attitudes into desirable ones
- Enhance the perceived behaviour control associated with carrying out electricity-saving measures.
- The subjective (social) norms is very useful in offering solid motivational bases.
- Utilize smart meters (customized messages could be sent to customers /a mobile app that shows all required information to customer and directs him to take necessary action).

