

Communicating Nuclear Energy in Southeast Asia: A Cross-Country Comparison of Communication Channels and Source Credibility

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Abstract : Nuclear energy is a contentious technology that has attracted much public debate over the years. The prominence of nuclear energy in Southeast Asia (SEA) has burgeoned due to the surge of interest and plans for nuclear development in the region. Understanding public perceptions of nuclear energy in SEA is pertinent given the limited number of studies conducted. In particular, five SEA nations – Singapore, Malaysia, Indonesia, Thailand, and Vietnam are of immediate interest as that they are amongst the most economically developed or developing nations in the SEA region. High energy demands from economic development in these nations have led to considerations of adopting nuclear energy as an alternative source of energy. This study aims to explore whether differences in the nuclear developmental stage in each country affects public perceptions of nuclear energy. In addition, this study seeks to find out about the type and importance of communication credibility as a judgement heuristic in facilitating message acceptance across these five countries. Credibility of a communication channel is a crucial component influencing public perception, acceptance, and attitudes towards nuclear energy. Aside from simply identifying the frequently used communication channels, it is of greater significance to understand public perception of source and media credibility. Given the lack of studies conducted in SEA, this exploratory study adopts a qualitative approach to elicit a spectrum of opinions and insights regarding the key communication aspects influencing public perceptions of nuclear energy. Specifically, the capitals of each of the abovementioned countries - Kuala Lumpur, Bangkok, and Hanoi - were selected, with the exception of Singapore, an island city-state, and Yogyakarta, the most populous island of Indonesia to better understand public perception towards nuclear energy. Focus group discussions were utilized as the mode of data collection to elicit a wide variety of viewpoints held by the participants, which is well-suited for exploratory research. In total, 156 participants took part in the 13 focus group discussions. The participants were either local citizens or permanent residents aged between 18 and 69 years old. Each of the focus groups consists of 8-10 participants, including both male and female participants. The transcripts from each focus group were analysed using NVivo 10, and the text was organised according to the emerging themes or categories. The general public in all the countries was familiar but had no in-depth knowledge with nuclear energy. Four dimensions of nuclear energy communication were identified based on the focus group discussions: communication channels, perceived credibility of sources, circumstances for discussion, and discussion style. The first dimension, communication channels refers to the medium through which participants receive information about nuclear energy. Four types of media emerged from the discussions. They included online and social media, broadcast media, print media, and word-of-mouth (WOM). Collectively, across all five countries, participants were found to engage in different types of knowledge acquisition and information seeking behavior depending on the communication channels used.

Keywords : nuclear energy, public perception, communication, Southeast Asia, source credibility

Conference Title : ICNESE 2017 : International Conference on Nuclear Energy Systems Engineering

Conference Location : Paris, France

Conference Dates : September 21-22, 2017