



## **An Empirical Study of why our Cognition Toward Environmental Sustainability is Inconsistent with our Behavior: Policy Implications**

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Raising public awareness of human environmental problems has been considered an effective way to promote public participation in environmental sustainability. From the perspective individual level, such participation mainly include the willingness of adopting less consumptive lifestyles and following the principles of reuse, reduce, and recycle. However, in reality, the development of environmental sustainability falls into the “Enlightenment Fallacy,” which asserts that enlightenment does not consequentially translate into meaningful reduction of pollution. We argue that environmental awareness is mainly at the level of cognition, which is built upon knowledge and facts; whereas the behaviors toward sustainability development are largely dominated by economic principles that focus on utility maximization. As such, the Enlightenment Fallacy can be explained by the “Tragedy of Commons” which occurs in the prevailing capitalism based economic system. This is due to the sad fact assumed in modern Economics that human beings are in general self-interested with unending desires but few moral concerns. Thus, economic individuals, who seek mainly their maximal utility or benefit, will not make significant sacrifices for improving environmental sustainability, which cannot be achieved by only a few individuals. From this perspective, we argue that only those individuals who are less self-interested and have more compassion toward mankind and earth will actively participate in environmental sustainability. In this study, we examine empirically the Enlightenment Fallacy phenomenon and develop an empirical model to test the following four hypotheses concerning the inconsistency between the environmental cognition and the actual behaviors. Policy implications for promoting public participation will be suggested based on our empirical results.

Hypothesis 1: Compassion (for mankind) has larger positive impacts than environmental cognition.

Hypothesis 2: Social punishment and encouragement has larger positive impacts than environmental cognition.

Hypothesis 3: The higher the individuals’ need/desire for resource preservation is, the less the individuals’ participation in environmental sustainability is.

Hypothesis 4: The higher the individuals’ compassion is, the less the impact of individuals’ need for resource preservation on environmental participation is.