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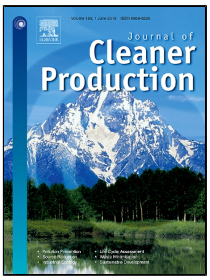

Impact of Environmental Regulations on Green Technological Innovative Behavior: an Empirical Study in China

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Impact of Environmental Regulations on Green Technological Innovative Behavior: an Empirical Study in China

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Abstract: Green technological innovative behavior has attracted a great deal of attention due to the growing concern about the degradation of natural resources and environmental pollution in China. Drawing on the theory of planned behavior, this study investigates the impact of environmental regulations on green technological innovative behavior via the mediation of green technological innovative intention. Environmental regulations are divided into command-and-control environmental regulation and market-based incentive environmental regulation, and green technological innovative behavior is classified into end-of-pipe technological innovative behavior, cleaner process innovative behavior and green product innovative behavior. Data were gathered from 298 high-end manufacturing firms in China, and analyzed using hierarchical regression analysis. The empirical results reveal that command-and-control environmental regulation and market-based incentive environmental regulation can promote green technological innovative intention and enhance green technological innovative behavior. Both command-and-control environmental regulation and market-based incentive environmental regulation have positive impact on green technological innovative intention, and have different positive effects on end-of-pipe technological innovative behavior, cleaner process innovative behavior and green product innovative behavior, too. Green technological innovative intention positively affects end-of-pipe technological innovative behavior, cleaner process innovative behavior and green product innovative behavior. Besides, green technological innovative intention plays different mediation roles in the relationship between environmental regulations and green technological innovative behavior. It does not mediate the relationship between command-and-control environmental regulation and end-of-pipe technological innovative behavior. However, it plays a full mediation role in the relationship between command-and-control environmental regulation and the other two types of green technological innovative behavior. Moreover, it partially mediates the link between market-based incentive environmental regulation and each type of green technological innovative behavior. This study not only promotes the integration of the theory of planned behavior with

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