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## GREEN INNOVATION AND SUSTAINABLE PRODUCTS IN SMALL AND MEDIUM-SIZED ENTERPRISES IN CHINA: THE MODERATING AND MEDIATING ROLES OF TECHNOLOGY AND WORK ENGAGEMENT

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### Abstract

This study explored how green innovation influences sustainable product development of small and medium-sized enterprises (SMEs) in China due to the growing trend of green innovation's contribution to creating sustainable products. The study focused on sustainable product development, a critical component of an ecologically accountable business plan. We based on the resource-based view and diffusion of innovation theory to analyse how green innovation influences sustainable product development. The study used 628 valid responses from 902 SMEs in the Jiangsu Province. Data was obtained from managers of the SMEs through a questionnaire. The study employed PLS-SEM for the data analysis using SMART-PLS 4. The results indicate that product innovation ( $\beta = 0.056$ ,  $p = 0.067$ ), organizational culture and leadership ( $\beta = 0.109$ ,  $p = 0.001$ ) influence sustainable product development. However, employee perception and engagement ( $\beta = -0.025$ ,  $p = 0.212$ ) and regulatory environment ( $\beta = 0.030$ ,  $p = 0.368$ ) had insignificant relationship with sustainable product development. We found that work engagement mediates green innovation and sustainable product development. Also, technological innovation moderate green innovation dimensions - sustainable product development nexus. The findings suggest that SMEs should adopt green innovation practices to manufacture sustainable products. Also, the government must support SMEs in the creation of sustainable products.

*Key words:* green innovation, small and medium-sized enterprises, sustainable products, technology, work engagement: China

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