

Green Manufacturing Practices among Manufacturers in Malaysia: Servant Leadership as a Mediator

Nur Kamarul Hafiz Jamil
Zuraini Alias
Mokana Muthukumarasamy
University of Selangor, Malaysia

Green manufacturing practices (GMP) are eco-friendly practices that reduce environmental problems through production activities from the manufacturing sector. The United Nations has introduced sustainable development goals (SDGs) to promote green manufacturing practices as a way of minimizing environmental problems. Not only that, it helps countries to improve living standards, create eco-friendly occupation, and increase global competitiveness. Malaysia has started adopting green practices in improving the development of manufacturing sector as this sector contributes to both economy growth and environmental problems. Although this is in line with Malaysia's national policy to enhance the manufacturing sectors' development by 54% in 2025, Malaysia's performance in green practices are less encouraging. According to international reports such as The Green Future Index 2021, Malaysia's performance in green practice is still modest. Local studies also reported similar results, indicating that most manufacturers in Malaysia are still struggling with the implementation of green manufacturing practices as a result of ineffective leadership styles. Hence, to enhance the implementation of GMP among Malaysian manufacturers, this paper proposes servant leadership as a mediator. Servant leadership prioritizes the followers' interests rather than leaders' own interest in implementing a new change, enabling the change as beneficial for both employees and the company. Therefore, this study intends to investigate whether servant leadership mediates the relationships among influential factors, namely business environment, organizational, and individual in the implementation of green manufacturing practices, a less highlighted area in the context of Malaysian green practices. In the pilot study, 30 respondents from five manufacturing sectors, namely Food & Beverages, Fabricated Metal, Chemical / Petroleum, Electrical & Electronics, and Plastics / Papers responded to the questionnaire of the study. The results show that all the research variables are reliable based on Cronbach's Alpha exceeding .70. Two major factors are identified as influencing manufacturing companies implementing GMP namely business environment factors (i.e. law enforcement and technological advancement) and organizational factors (i.e. proactive communications). The factory managers assumed that the environmental law is an obligation to comply with in preventing their company from being fined by the court and advanced technologies help them to reduce manufacturing costs. Subsequently, new visions on green practices are communicated face-to-face with employees to enhance their understanding and commitment to new changes. Meanwhile, servant leadership mediated the relationship between individual factors and green manufacturing practices, by empowering employees to exhibit environmental behaviors to make a huge impact on

protecting the environment. An example from the survey results indicated that allowing employees to use recycled materials such as papers to minimize excessive wastes empower employees to be more environmentally aware. In addition, employees are also empowered through autonomous decision making and task completions. Practically, the initial results obtained from the study could provide new insights to industrial and academic practitioners about the concept of servant leadership in prioritizing employees' capabilities to enhance and maintain the company's performance for longer period especially in the implementation of effective green manufacturing practices.

Keywords: *Business Environment, Green Manufacturing Practices, Individual, Organizational, Servant Leadership*