

# FALSE BELIEFS OR FALSE POSITIVES? INFLUENCE OF GREEN INNOVATION ON ORGANIZATIONAL PERFORMANCE IN PAKISTAN

Ahmed Muneeb Mehta, University of the Punjab  
Maham Tariq, University of the Punjab

## ABSTRACT

### **Background:**

*The study describe that the green innovation incorporates green product and procedure sub-measurements. Particularly, green procedure development clarifies changes in organizational performance and competitive advantage. The green difference in organization's fundamental procedures decreases the organization's environmental impacts as well as it provides the organization successful position in the market as compared to its rivals.*

### **Purpose:**

*The purpose of this research is to identify the impact of a green environment on environmentally delicate organizational performance in Pakistan.*

### **Design/Methodology/and Approach:**

*The questionnaire survey method was used to examine the hypotheses model of this research. The data collected from 162 organizations and examine these results on SPSS. The Pearson correlation analysis was performed in order to demonstrate the relationship among factors and regression analysis was used to determine the impact of green environment on organization performance in Pakistan.*

### **Findings/Result:**

*The result of statistical analysis confirms the significant and positive relationship between green innovation and environmental organization performance and the competitive advantage.*

### **Research Implications:**

*Further explanation and practical implication are discussed throughout the research. The result of this study explain that green advancement exercises significantly affect an organization's performance and competitive advantage.*

### **Originality/Value:**

*The study is a rare empirical study that identify the impact of a green environment on environmentally delicate organizational performance in Pakistan.*

**Keywords:** Human Resource Development, Employee Performance, Individual Absorptive Capacity.

## INTRODUCTION

Today's in the modern competitive environment, the organizations aim to increase the profitability and fulfil the needs of their targeted buyers. Particularly, fabricating organizations target to introduce new innovative items which empower less vitality utilization at the time of using items by the buyer, this model present the propensity of organizations with respect to natural consideration and insurance (Gluch et al., 2009). Organizations likewise focus on their procedures as far as natural regard. It also found different methods to reduce their expenses

and vitality utilization at the time of creation stage and try to solve environmental issues (Song & Yu, 2017). Organizations perceived the significance of environmental protection and few benefits for organizations in the market (Wong, 2012). By using different ways of green innovation organizations gain cost advantages or increase buyer's consideration. From an alternate perspective, it creates the organization execution as well as its gives competitive advantage (Ho et al., 2009).

In the subsequent sections first, we explain the introduction of the study, second, the review of literature, third, research model of the study. Fourth, conclusion and directions for future research.

## **LITERATURE REVIEW**

### **Green Innovation**

In 1939, Schumpeter present the meaning and definition of innovation. It defines that innovation is not a creation or improvement, it is the utilization of specialized or authoritative oddity (Larsen, 2005). And it is characterized the acknowledgment of new innovated products or procedures on authoritative applications, another promoting strategy or hierarchical technique in the Oslo Manual distributed by (OECD, 2005). According to Larsen 2005, the industries focus toward improvement, and adjustment of different thought or conduct for an organization (Damanpour, 1996), it is the fruitful utilization of product or procedure just because (Cumming, 1998) are defined innovation. In order to describe innovation, OECD divided innovation into 4 components. These are delegated innovation in product, procedure, authoritative and marketing innovation (OECD, 2005).

Green innovation is characterized as the improvement of product quality or provide techniques for ideal utilization of organization resources (Rave et al., 2011). Green product innovation is a complicated process in which 3 main types of environmental target products, energy, and pollution are include and are based on different segments of the impact of environment like manufacturing process, utilization of product and recycling disposed product ideas are the most important part to utilized in literature (Schiederig et al., 2011). It is also depending on the type of applied innovation, green innovation occurred when environmental pressure exists (Huber, 2008). The purpose of green innovation to decline the contamination, vitality efficiency, reduction of waste, the substitution of constrained assets with manageable assets and reusing (Kemp & Arundel, 1998).

Green innovation is divided into three parts according to the applied method and potential effects (Ramus, 2002):

1. Green innovation includes assembling procedure which help to decrease the removal of uncertain material
2. It provides solutions to solve environmental issues of the organization
3. It also helps in the process of developing effective products by using of less resources and energy.

### **Green Product Innovation**

Nowadays, strategic preference developed the business cycle of the green product innovation and its analysis shows the relationship among sustainability and development (Dangelico & Pujari, 2010). It helps to increase the profitability of business, through enhancements of existing products or adopt new strategies, and different attributes and help to improve its appearance. Some example for the benefits of green innovation such as, it help the

organizations to reuse or decomposed waste products easily, and decrease the use of harmful products and help to capture a successful position in the market by using different techniques (Rave et al., 2011). It additionally implies at the time of creating product that effectively more positive impacts on nature at the time of manufacturing (Durif et al., 2010).

### **Green Innovation Procedure**

The procedure of green innovation has direct relationship with the organization's inward profitability. With the green product innovation activities, organizations intend to decrease environmental impacts with improvement in existing product and including new procedures (Cheng et al., 2014). This procedure includes the utilization of various types of advancements, organizations focused their aims with respect to contamination decline, or creation proficiency (Shrivastava, 1995). Thus, it also encouraged for vitality saving or risky materials avoidance (Chen et al., 2006).

Mostly, organizations techniques for environment management are classified into two parts; regulating and avoidance (Fernandez et al., 2003; Azzone & Noci, 1998). The regulating technique is characterized by taking out population aspects subsequently improving the occurrence through different advancements. There are additionally provide few systems with respect to environmental activities. Successful organizations consider environmental protection is a fruitful resource to solve the issues and settled it with the least expense. In literature various classifications of organizations are described with respect to the level of social duties and environmental cognizance, for example, responsive, compelling, pioneer organizations or evangelist, proactive, predictable, receptive and latent organizations (Azzone & Noci, 1998).

### **Environmental Organization Performance**

Organization performance influenced some elements, and it is estimated with various business yields on different studies. These yields can be either economical outcome, for example, overall revenue increase the income of organization, and provide various types of qualities which can't be exactly estimated. For assessing organization performance two measurements are given, an environmental execution, and competitive advantage. In previous studies, also explain the association among green product innovation and its procedure and they positively affected competitive edge of the organizations (Conding & Habidin, 2012). Therefore, green innovation effect environmental performance of organization emphatically (Cheng et al., 2014; Lin et al., 2013).

### **Research Hypotheses**

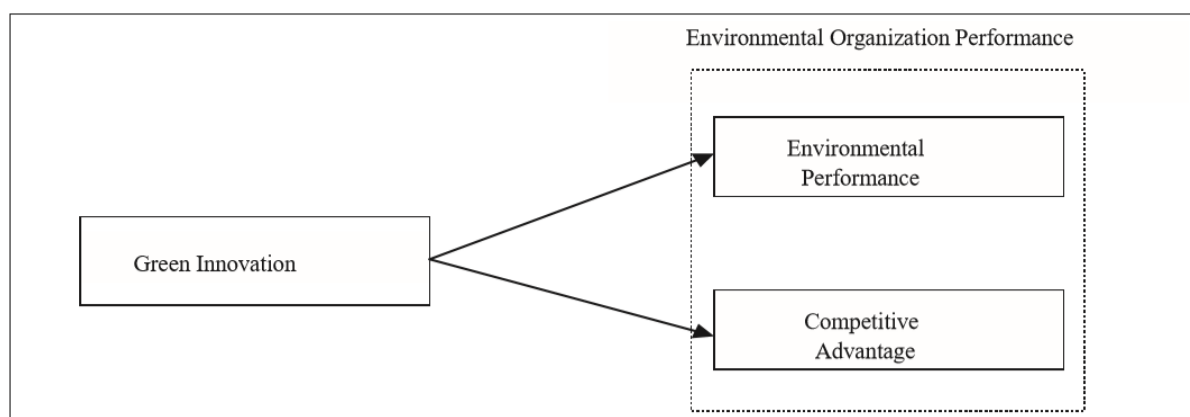
This research is depending on two hypotheses:

1. *H1: Green innovation has significant effect on environmental performance of organization*
2. *H2: Green innovation has a positive effect on competitive advantage of organization In order to examine the presented hypotheses, below research model are shown:*

## MATERIALS AND METHODS

### Research Design

The research aims to examine the influence of green innovation on environmental organization performance in addition environmental performance and competitive benefit for organizations. For this purpose, focused on review researches regulated in Pakistani companies. The research model presented in Figure 1.



**FIGURE 1**  
**RESEARCH MODEL**

### Data Collection Technique

According to the research conducted in organizations the analysis shows the data 500 organizations of Pakistan and its some attributes. For example, organization provide productive facilities e.g. salaries to their employees etc. must having ISO 14001 environmental management framework certificate. And in order to obtain the data collection from all organizations, a survey was sent via mail. The questionnaires were filled by the managers of operation, production, and R&D quality department of the organizations. The data collected from 162 organizations and examine these results on SPSS. The correlation and regression analysis are used to examine the presented theories in the study.

### Analyses and Results

The questionnaire is divided into three sections. The initial segment incorporates descriptive data, for example, gender, respondents, and number of participated organizations that indicated by the number of workers, and different parts of the organization. The second and third segments related to green innovation and environmental organization performance. The 13 item-scale are used to quantify the green innovation presented by (Chen et al., 2006; Chiou et al., 2011). And 15 item scale are utilized to examine the organization performance (Condong & Habidin, 2012). By and large, the survey has 28 things altogether, and 5 item-Likert scale are used to determine both variables factors.

To identify the impact of both variables correlation and regression analysis were conducted. The Pearson correlation analysis was performed in order to demonstrate the relationship among factors. The results of analysis are shown in Table 1.

## RESULTS AND DISCUSSION

Results from correlation and regression analysis shows the significant and positive relationship between green innovation and environmental organization performance and the competitive advantage Table 1.

<b>TABLE 1 CORRELATION COEFFICIENT MATRIX</b>		
	<b>Environmental performance</b>	<b>Competitive advantage</b>
Pearson Correlation Analysis Results		
Green innovation	0.759*	0.562*
Green product innovation	0.589*	0.424*
Green innovation procedure	0.733*	0.553*

\*Correlation coefficient is significant at the 0.01 level

The results of the regression analysis show the positive influence of green innovation on environmental organization performance. Table 2 shows the result of regression analysis.

<b>TABLE 2 REGRESSION ANALYSIS RESULTS</b>		
<b>Dependent variables</b>	<b>Environmental performance</b>	<b>Competitive advantage</b>
<b>Independent variable: Green innovation</b>		
R <sup>2</sup>	0.575	0.316
Adjusted R <sup>2</sup>	0.573	0.311
F	216,789	73,780
Sig.	0.000	0.000

In order to determine any distinction on factors as indicated by; environmental reward ownership of the organization, respondents' area of expertise inside the organization, organization's industry, and length of ISO 14001 authentication of organization t-test and ANOVA analysis was conducted. For environmental possession circumstances, there is no distinction between green development or environmental performance; yet the organizations reward' higher the competitive advantage average of the organizations. For respondents' area of expertise is not a noteworthy distinction on any factors. The certification of ISO 14001 duration shows the significant distinction for the green development variable. Organizations that have an ISO 14001 certificate over 10 years are highly profited organizations as compare to other organizations.

## CONCLUSION

This research aims to determine the impact of green innovation on environmental organization performance. The data collected through questionnaires, which was send to 224 organizations and these are recorded in ISO 500 during the most recent 5 years and ISO 14001 Environmental Management System certificated. Utilizing 162 organization data altogether, some analyses were led to testing the research hypothesis. Before hypothesis testing, reliability and validity analysis results shows significant relationship between green innovation and

environmental organization performance. The study also found the impact of green innovation on environmental performance higher than the competitive advantage. Additionally, green innovation activities are most probable in ISO 14001 certified organizations and help the organizations to improve organization performance and gain competitive advantage.

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