

Can a Market based generative Learning Management style explain the conditions or characteristics that make an organization more likely to commit to, and perform on, environmental issues?

Peter Österberg and Daniel Berlin

Swedish University of Agricultural Sciences

Department of Economics

PO Box 7013

750 07 Uppsala

Sweden

## Abstract

The purpose of this study was to test the hypothesis that the interaction between a managers Ability on Goal Setting on Environmental Issues (GSEI) and his/hers ability on creating a climate for Parallel Knowledge Distribution within the organization (PKD), also called 'Market based generative Learning Management style', can predict organizational Performance on Environmental Issues (PEI), mediated by employees Decision Commitment on Environmental Issues (DCEI) and Symbolic Convergence (SC). The preliminary result of the study is two folded. First, no effect was found for communication (PKD), Symbolic Convergence (SC), or participation in the decision making process (DCEI). Second, even if the path analysis showed strong significance between the four variables in the study, the mediating variables together with LCT could not out rule the single effect of LCT.

**Key words:** Life Cycle Thinking, Goal Setting on Environmental Issues, Commitment on Environmental Issues, and Organizational Performance on Environmental Issues.

**Bibliographic notes:** Peter Österberg is a PhD-student at the Department of economics at the Swedish University of Agricultural Sciences. His research focus is on the impact of management style on learning- and work performance in organizations.

Daniel Berlin holds an MSc degree in Business Management, with a specialization in Environmental Management, from the University of Gävle. He is currently a PhD student at the Department of Economics, Swedish University of Agricultural Sciences. His research interest lies within the field of environmental management especially on the development, use and application of information-gathering and analytical tools, e.g. LCA, as an aid for environmental decision-making.

## Introduction

For business firms, as well as for society as a whole, the last decades have involved a row of changes: globalization, increased competition, and a rapid growth in new technologies are few examples that have challenged business firms around the world. During the last decades we have also come to witness the consequences of over hundred years of industrial development: global warming, air and water pollution, acidification, eutrophication, soil erosions and ozone depletion are some of the environmental problems that have emerged. The result, a steadily increasing environmental awareness and a will to take environmental responsibility, has introduced a new business climate manifested in the concept of sustainable development. In this new business milieu pressure to improve the environmental performance steams from a wide range of stakeholders, including governments, policy makers, advocacy groups, business firms and the public all over the world (Fischer & Scot, 1993). Business managers are confronted with new and different kind of questions, such as: how is value generated, i.e. in what ways and by what means are products and services produced, what responsibility is taken to environmental issues and resource use, and how does your company participate in the creation of sustainable development? In face of such trends business managers are faced with the challenges of natural environmental constraints and thus needs to focus on reducing waste and emissions, conserving energy and other natural resources, and reducing business impact on ecosystems as well as the challenges of developing skills and capabilities internally in order to remain competitive (Menguc and Ozanne, 2003).

It is argued by a range of scholars (e.g. Linnanen, et al, 1996; Welford, 1998; Berry and Rondinelli, 1998; Sinding, 2000) that an answer to these challenges lies within the transformation from a traditional reactive legislative driven management approach to environmental issues to a visionary, anticipatory and market driven attitude that takes on a more holistic, inter-organizational, view on environmental problems. Employing such an approach can provide benefits through for example better reputation, lower cost or green product differentiation. Furthermore the ability to successfully integrating environmental issues into every day business practice can become a strategic capability that in it self can constitute a competitive advantage (Judge and Douglas, 1998)

However, there are several barriers and challenges that need to be overcome for a more proactive environmental approach to be successful (Post and Altman, 1994; Sharfman, et al., 1998; Sinding, 2000). These barriers affect an organization's capacity to deal with and perform on environmental issues and involve inertial forces that impose constraints upon change in organizations. The list of forces includes such internal limitations as the organization's ability in processing of information and the quality of communication, and the conservative forces of history and tradition for example in the structure of authority and in business policies and goals.

A recent concept that correspond to a more proactive approach is Market-Based Generative Learning Management (Österberg, 2004). The concept consists of the interaction of managers' ability on super-ordinate goal setting and his/hers ability to create a climate for Parallel Knowledge Distribution within the organization. This management style makes organizational creativity, new ways of learning and problem solving within the organization, possible. Focusing on the managerial and organizational challenges for a more proactive approach to environmental issues a question emerges: Can a Market based generative Learning Management style explain the conditions that make an organization more likely to commit to, and perform on, environmental issues?

The purpose of this paper is (1) to test if the interaction between a managers Ability on Goal Setting on Environmental Issues (GSEI) and his/hers ability on creating a climate for Parallel Knowledge Distribution within the organization (PKD), also called 'Market based generative Learning

Management style', can mediate the relation between Life Cycle Thinking (LCT) and organizational Performance on Environmental Issues (PEI). (2) To test if the relation (1) is strengthened by using Decision Commitment on Environmental Issues (DCEI) and Symbolic Convergence (SC) as mediators between 'Market based generative Learning Management style' and organizational Performance on Environmental Issues.

## Method

### *Participants*

Staff from three different hotels responded on our questionnaire. The hotels all belong to the same chain. The respondents were all workers, with various education and position.

### *Procedure*

We contacted a managing director of one of the hotels, who in turn asked colleagues at other hotels to take part in survey. Two other directors responded positively. We sent 50 questionnaires to each hotel. To date we have received 22 answers on which we based our preliminary pilot study.

### *Measures*

The questionnaire contained questions about gender, sex and education, and questions about attitudes among members of the organization towards management qualities. The first group of questions will not be used in this study. The second group of questions were answered on a 7 graded likert scale: 1 (I fully agree) – 7 (I totally disagree), and besides those four mentioned below, questions were asked about "Communication within the Organization" and "Participation in the Decision Making Process". As these measures did not indicate any significant effect on the Organizations Performance on EI, they will not be used in the analysis.

#### Life cycle thinking (LCT)

1. It is natural for me to have sustainable development in mind regardless of the kind of work I am involved in. 2. In my daily work: It is important for me to consider consequences of sustainable development. 3. Thoughts about sustainable development is established at my work. 4. In my daily work: the management group expect that I take sustainable development into account. 5. Employees are educated about environmental issues in order to minimize the environmental impact of the service that company provide. 6. Customers are informed about environmental issues in order to minimize the environmental impact of the service that company provide. 7. The company co-operates with suppliers in order to minimize environmental impact of the services the company provides. 8. The company is open-minded about the market demand for sustainable development. 9. The company co-operates with other organizations in order to minimize the environmental impact of the services that the company provides. 10. The company follows current laws and environmental rules and policies. 11 The company is committed to sustainable improvement regarding the environmental impact of their services. 12. The company makes effort to minimize the environmental impact from disposal of the services they provide. 13. The company makes efforts to minimize the use of resources for the services they provide. 14. The company prioritizes re-use over re-cycling. 15. The company prioritizes re-cycling over disposal.

Cronbach alfa: .93

#### Goal setting on Environmental Issues

1. Do you consider the company's goal on sustainability to be measurable in time, that is, you are sure about when the achievement should be fulfilled. 2. Do you consider the company's goals about

sustainability to be concrete, that is, you feel certain about what the management group wants to achieve. 3. Do you consider the company's goals on sustainability to be challenging.

Cronbach alfa: .87

#### Commitment to Goals on EI

1. I have accepted the goal on sustainability that management has communicated to the organization. 2. I have committed myself to work against the goal on sustainability that management has communicated to the organization. 3. It has been easy to commit to the goal on sustainability that management has communicated to the organization. 4. I will work hard to make the organization achieve the goal on sustainability. 5. It is most likely that I will do my best to make the organization reach its goal on sustainability.

Cronbach alfa: .93

#### The Organizations Performance on EI

1. I do contribute to a great extent for the achievement to reach the company's goal on sustainability. 2. My work contribution is efficient. 3. I easily adapt to changes regarding the company's goal setting on sustainability. 4. I easily detect possibilities that contribute to the fulfillment of the company's goal on sustainability. 7. I work efficiently to reach the goal on sustainability stated by management. 8. I contribute efficiently to provide customers and co-workers with proper information about the company's perspective about sustainable development. 9. I feel comfortable at work. 10. At work, I do my very best. 11. I am satisfied with my work contribution. 12. I believe my work contribution to be of importance for the company's over all result.

Cronbach alfa: .82

### *Design*

We conducted a cronbach alfa for all four latent variables in the analysis: "Life Cycle Thinking" (LCT), "Goal Setting on Environmental Issues", "Commitment to Goals on EI", and "Organization's Performance on EI". The result from the Cronbach alfa test showed that predictors, questions, used in the questionnaire could be used to build the four latent variables. Then we apply linear regression to conduct a path analysis in order to reveal if the mediating variables, "Goal Setting on Environmental Issues" and "Commitment to Goal Setting on EI", to a better extent could explain the organizations performance on environmental issues than LCT it self.

## Results

The results from the first analysis reveal that there is an association between Life Cycle Thinking (LCT) and Performance on Environmental Issues (PEI). The same holds for all relations between the four variables (Se Figure 1 in appendix).

The association between LCT and PEI, which was indicated by the correlation in figure 1, implicates that a manager who are skilled in communicating propositions based on life cycle thinking are more likely to lead organizations that have the attitude that they perform well on matters that are related to environmental issues.

But, in our hypothesis we suggest three variables to work as mediators between LCT and PEI, that is, if applied properly there is a probability that they will strengthen the effect LCT has on organizational performance. Therefore we applied multiple linear regression to see if the partial correlation together would outrule the direct effect of Life Cycle Thinking (See Figure 2 in

appendix). We then calculated the total effect of the path analysis, and compared it with the direct effect.

The direct effect between LCT and PEI: .685\*\* (see figure 1).

The indirect effect (see figure 2):

1. LCT – GS EI – Performance EI:  $.696 * .571 = .40$   
+
  2. LCT – GS EI – Commitment EI – Performance EI =  $.696 * .443 * .465 = .14$   
+
  3. LCT – Commitment EI Performance =  $.491 * .465 = .23$ .
- =.6801

The result from the study indicate no difference between the LCT – PEI and LCT – PEI with the mediating variables – Goal Setting on EI and Commitment on EI. Even so, our initial hypothesis claimed communication to be of importance for PEI, but our model couldn't confirm that.

As our sample did not fill the scientific demands for proper statistical modeling, we cannot conclude on results from the analysis.

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## Appendix

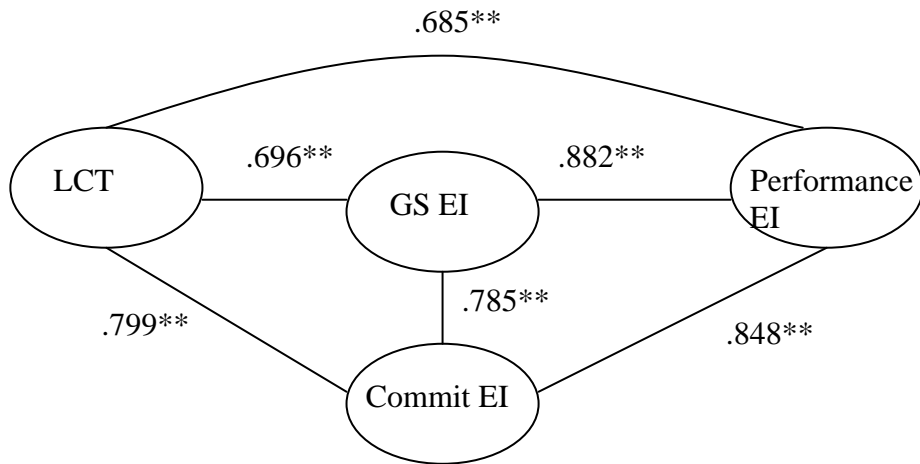


Figure 1. Correlations. \*\* significant at the .001 level.

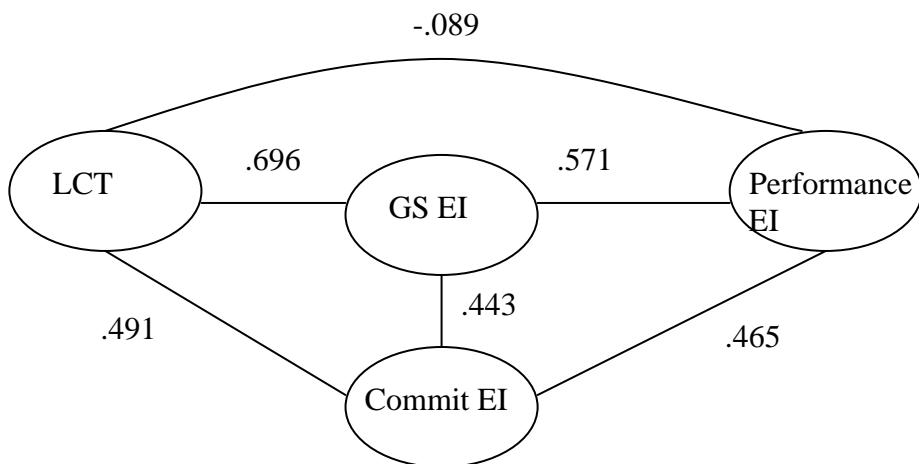


Figure 2. partial correlations.