

# SUSTAINABLE LEADERSHIP AND INNOVATIVE LEARNING ENVIRONMENTS

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## Abstract

After the pandemic, work environments and social cultures have changed, requiring new insights into leadership. Sustainable leadership competencies, in particular self-leadership and resilience have also been highlighted. Leadership development initiatives are widely researched however evidence of their effectiveness is lacking. The sustainable leadership competencies of the leaders can be improved using innovative learning environments. In this study, innovative environments include nature, equine-assisted environments, collegueship networks, and technology. The present study aimed to develop and pilot sustainable leadership training for leaders to develop their self-leadership and resilience competencies. Two training pilots were carried out between Feb23-Jun23 and 10 participants in leader positions from diverse fields were selected for each pilot. The training pilots made use of innovative learning environments, such as the nature environment and horses (also in virtual settings), which are known to provide a trustful environment for the training of self-leadership, interaction, and practicing emotional intelligence. The leaders also worked in multidisciplinary small groups applying collegueship practices. To answer the research question, how different learning environments are perceived in the context of training pilots, the effectiveness of the training and innovative learning environments on participants' self-leadership and resilience competencies were measured twice through questionnaires including both Likert scale statements and open-ended questions. The participants (N=19) were asked to respond using their diary reflections and smart ring data (a device that measures electrical conductivity and reflects emotional states and stress levels). Also, a qualitative co-creation workshop provided data for this study. The results showed that all participants highlighted working with horses as a great experience during the training. Working with horses was inspiring and left a strong emotional impression. Being in nature was natural and pleasant, the environment made the participants relax. The training discussions were seen as good and in-depth. Collegueship was perceived as important. The support of networking with people in the same position and life situation was very useful and it was felt that hearing and understanding different perspectives and opinions contributed to a deeper identification of one's own role and support for different leadership situations in everyday life. The smart ring divided opinions. Some participants found the smart ring clumsy and cumbersome and its functionality lacking, although at the same time, it helped them to understand their strengths.

**Keywords:** *Self-leadership, resilience, sustainable leadership, training, innovative learning environments.*

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## 1. Introduction

Returning to workplaces or moving to hybrid work after pandemic requires new insights into leadership. Sustainable leadership practices, and in particular, self-leadership and individual resilience have emerged as important competencies to enhance the creation new working methods aiming to foster innovation and sustainability (Djourova, Rodríguez, Tordera, & Abate, 2020).

Self-leadership can be explained as a self-influencing process wherein individuals attain the self-direction and self-motivation essential for effective performance (Neck, Manz, & Houghton, 2019). Self-reflection, self-awareness, and self-regulation are also drivers of the self-development process (Nesbit, 2007). Self-leadership is the key to building resilience. According to Poijula (2003, p. 48), resilience refers to a person's ability to withstand and adapt to uncomfortable, unexpected events and changes. Resilience is expressed as the ability to recover from adversity, problems, and shortcomings, either on one's own or with the support of others. Like self-leadership, resilience can also be learned and developed (Poijula, 2018, p. 17). Changes in the operating environment predispose to learning (Valli, 2020).

However, the focus of the previous research has been strongly on the competencies of the leaders, not on the leadership development initiatives and their effectiveness (Krampitz, Seubert, Furtner, & Glaser, 2021). Furthermore, there is a necessity to explore innovative and unconventional learning environments for leadership development (e.g., Rauén, 2017). For example, engaging with horses, which can serve as a valuable means of acquiring leadership competencies. Horses possess a remarkable ability to discern a person's emotional state, intentions, and needs by interpreting their body language and the feelings they attempt to conceal. Also, nature could be better utilized as a learning environment, as nature environments reduce stress and increase positive emotions, improve people's attention and concentration in general, induce better self-regulation, and make learners more interested and involved (e.g. Kuo, Barnes, & Jordan, 2019). Moreover, technology enables people to develop their competencies and monitor their impact on well-being, particularly stress related to resilience. Technological devices can also motivate and support learning (Lyll & Robards, 2018). Collegueship refers to the peer experience of being on a common cause across organizational boundaries (Laiho, Ryömä, & Teerikangas, 2019). This kind of peer-to-peer interaction can be very useful for leadership development (Goldman, Wesner, & Karnchanomai, 2013).

Right now, it is important to focus on developing leaders' self-leadership and resilience competencies, which will reduce stress and help them cope with the daily workload. Innovative learning environments and technology can support competencies development (Maijala, 2023). All this has a major impact on the well-being of the whole work community and organizational learning. Research shows that sustainable leadership leads to more sustainable development and resilience in the long term (Avery & Bergsteiner, 2011).

## 2. Context of the study

The context for this study consists of two Hohtaminen® Towards Sustainable Leadership training pilots (5ects), which took place between 2023 February and 2023 June. For each pilot, 10 leaders or entrepreneurs from different sectors were selected.

The theoretical framework for Hohtaminen® is Avery and Bergsteiner's pyramid of sustainable leadership (2011) and so-called higher-level practices: internal motivation, self-direction, teamwork, trust, organizational culture, and knowledge sharing. In developing leadership competencies, these practices improve not only the resilience of the leaders but of the whole work community, and its individuals. Sustainable leadership can create long-term well-being and long-lasting value for all stakeholders in the organization.

The aim of the training is that the participants:

- can reflect on their competencies and set new development goals,
- can regulate their own behavior in a leadership role (resilience),
- know how to apply innovative learning environments to enhance development of competencies.

The training will experiment with innovative and creative learning environments. Participants' self-leadership competencies are the starting point for all development and creating a trusting learning environment is the key to these rapid experiments. This project will work in natural and equine-assisted environments, traditionally used in occupational therapy and social pedagogy, for example. In leadership training, this is a rarely used learning environment. The project also uses technology as a tool for self-leadership, i.e., participants wear a smart ring during the training. The ring allows them to monitor their own stress levels (Varhelahti, Laiho, Orava, & Syrjänen, 2023). The training is multifaceted, i.e., part of the training is carried out virtually.

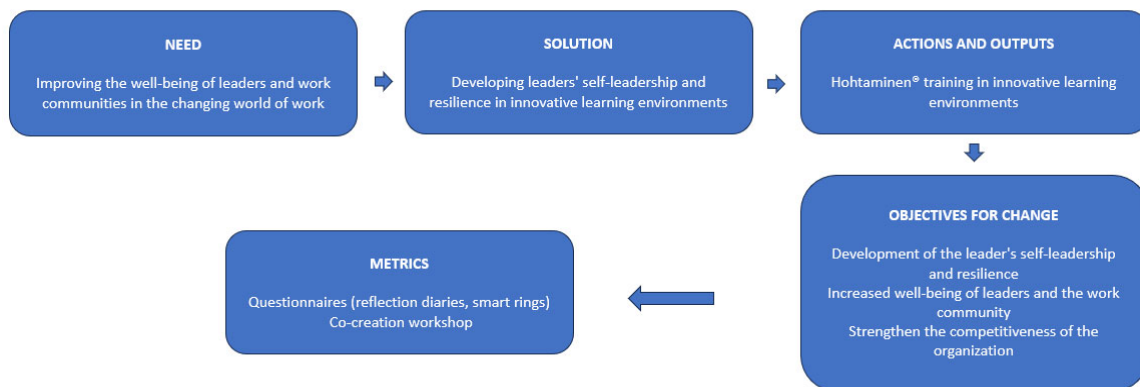
The training was created at Turku University of Applied Sciences in 2023 as part of the *Hohtaminen* project. The project was funded as part of the European Union's response to the covid 19 pandemic. The training responds to the key objectives of the Finnish Structural Funds program REACT-EU ESF (Priority 9), focusing on the specific objective 12.4 "Promoting the rapid change capacity of enterprises and entrepreneurs".

## 3. Objectives

The study aims to provide information for the implementation of effective sustainable leadership training. It focuses primarily on the effectiveness of leadership training at the individual level. Measuring the effectiveness of competence development initiatives is important, as effectiveness describes the ability of the measures to achieve the objectives set and produce the desired effects (see (Krampitz & al., 2021). The training aims to achieve effect, which is reflected in the development of competencies. This in turn is expected to be reflected in increased efficiency, improved quality, and ultimately improved conditions for organizational success and profitability. The study will also analyze the factors that have contributed to,

hindered, or possibly prevented effects from being achieved. Figure 1 illustrates the effectiveness chain of Hohtaminen® leadership training.

Figure 1. Measuring the effectiveness of the training.



The effectiveness will be examined from the perspective of innovative learning environments and sustainable leadership competencies, particularly self-leadership and resilience. The study seeks answers to the following questions:

- How do the participants perceive their self-leadership and resilience to be developed during and after the training?
- How do different learning environments support the development of participants' competencies?

Effective training ensures that leaders can lead and feel well. At the same time, it supports a change in the leadership culture of the workplace. This ensures learning and readiness for change throughout the work community and the organization.

#### 4. Methods

The study mainly uses qualitative methods. The data were collected as follows:

- “Training of dreams” - co-creation workshop at the end of the training (N=19)
- Effect questionnaire 1 at the end of the training (N=10)
- Effect questionnaire 2, 6 months after the end of the training (N=3)

At all stages of data collection, the participants were asked to utilize the data they had reflected in individual diaries and stress level data they had measured with the smart ring during the training. Research practices consider ethical conduct and privacy. The reflection diary and smart ring data were only accessible to the participants themselves. They reported the information they received to the extent that they wanted to in the training co-creation workshop and the effect questionnaires.

Mainly qualitative open-ended questions were used in the questionnaires, but some quantitative items were included. Content analysis was used for the analysis. There were two pilot trainings: training pilot 1 took place 16 Feb- 25 April 2023 and training pilot 2 took place 2 May – 6 June 2023. Altogether, 19 people completed the training and 16 of them were female. Of them 13 stated that they worked as entrepreneurs and 6 were in leading positions.

#### 5. Results

The study investigated the effectiveness of Hohtaminen® leadership training and aimed to identify how leadership training using innovative learning environments supported the participants' sustainable leadership competencies more specifically self-leadership and resilience. In addition, it examined how the participants perceived the use of innovative learning environments. The study was based on the results of virtual “Training of dreams” co-creation workshops conducted in connection with the training pilots in the spring of 2023 and surveys conducted twice after the training pilots.

The results of the study show that the training was beneficial, as most of the participants felt that the training had strengthened their ability to cope with working life. Participants reported that their self-leadership competencies and resilience improved. The development of self-leadership competencies was reflected in improved self-reflection and self-awareness. The training increased understanding of personal limits and coping. Many of the participants already had strong resilience, but the training strengthened their resilience and helped them to identify their habits and adapt better.

The results also indicate that the innovative learning environments used in the training (nature, horses, the smart ring, and the colleagueship network) were perceived positively. Nature supported the creation of a trustful environment for discussion between the participants. Being in nature was natural and pleasant, the environment made the participants relax. Training discussions were seen as good and in-depth. The results highlighted working with horses as a great experience in training. Working with horses was inspiring and left a strong emotional impression. The presence of horses brought empathy and calmed the participants. The concrete visual data of the smart ring made people think about their work and its impact on their emotions. On the other hand, the smart ring divided opinions. Some participants found the smart ring clumsy and cumbersome and its functionality lacking, although, at the same time, it helped them to understand their strengths. Colleagueship was perceived as important. The support of networking with people in the same position and life situation was very useful and it was felt that hearing and understanding different perspectives and opinions contributed to a deeper identification of one's own role and support for different leadership situations in everyday life. Nature and colleagueship were learning environments that the participants intended to use even after the training.

In addition, the greatest improvement in the participants' competencies was in their ability to use different learning environments (nature, technology, animal-assisted learning) in leadership not only in self-leadership and -development. The results suggest that the participants have applied or are aiming to apply new competencies and knowledge in their work community. The participants emphasized that such training could also support the culture of the work community.

## 6. Conclusions

This study examined the effectiveness of Hohtaminen® training. The training can be considered effective because the learning objectives set have been achieved. Furthermore, there is evidence that what has been learned will be or has already been put into practice in work communities.

Leaders' sustainable leadership competencies, including self-leadership and resilience, can be enhanced through competence development interventions. In addition, innovative training solutions are now expected, and different learning environments are part of this. A greater focus on such learning environments can also create a safe and confidential learning environment for leadership training, where everyone is encouraged to share their knowledge and reflect on their learning.

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