

THE DRUVAN-PROJECT: PARTICIPATORY DEVELOPMENT OF WELLBEING, WORK AND PRODUCTIVITY BY USING THE METAL AGE METHOD IN A FINNISH MUNICIPALITY

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This paper presents the multidimensional Occupational Health Service Druvan project implemented in the small municipality of Dragsfjärd in Finland 2002-2005. Engagement and enthusiasm among the employees were created by new methods (Metal Age, Kiva-questionnaire), positive marketing and extensive internal and external participatory activities. The wellbeing and work ability developed positively and the economic analysis showed an annual 46% return on investment. The Druvan model is today normal procedure in the municipality.

Keywords: Druvan, Metal Age, Kiva-questionnaire, Wellbeing, Productivity

1 Introduction

Due to an increase in sick-leave and early retirements among the 190 employees, the council of the small Dragsfjärd municipality in Finland, decided unanimously on starting a 3-year DRUVAN-project 2002-2005. The annual investment in Occupational Health Service (OHS) increased from 20 to over 400 Euro/employee. The multidimensional OHS model was modified from the local steel industry.

2 Objectives

The objectives of the DRUVAN-project focused on a positive element, improved wellbeing among all employees. This objective was thought to be easily accepted by every individual employee and to even create enthusiasm. The improved wellbeing was expected to be followed by decreased absence due to illness and fewer early retirements. And the effect on absence and retirements was expected to increase the productivity and have a positive economic effect.

3 Methods

The multidimensional OHS Druvan model is a process, which continues throughout the whole working life from employment to retirement and consists of three types of activities: Activities based on age and years of service, Basic occupational health services and Expert advice for the management (Figure 1).

3.1 The Druvan model

The Druvan model includes health checkups, rehabilitation courses, medical treatment, ergonomics, work place analysis, physical activities and intoxicant programs. The expert advice given by the OHS personnel to the management is an important part of the Druvan project.

The development of the work content and work community is based on a systematic use of the Metal Age method (3.1) for participatory planning for increased well-being, work ability and total productivity (Näsman and Ilmarinen 1999).

The atmosphere was measured using the Kiva-questionnaire (3.2)

The continuous development of leadership was intensified mainly through 1-2 annual one-day seminars for the management (20 persons).

The Birthday discussions are mini-version development discussions.

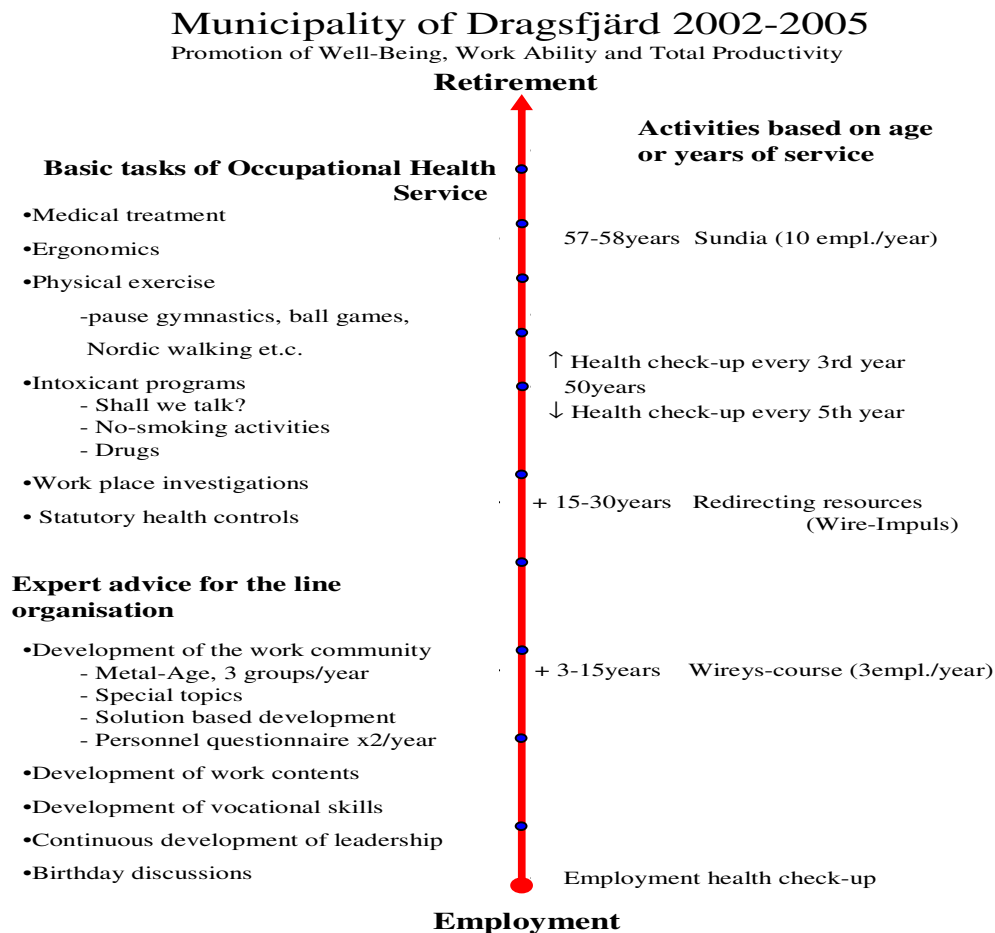


Figure 1. The Druvan Program

In addition to the extensive participatory activities among the personnel inside the organization (municipality) there was collaboration with the Finnish Institute of Occupational Health, the Ministry of Health and Social Affairs, the Centre for Occupational Safety, The Finnish Work Environment Fund, The Swedish School of Economics (Hanken), The Social Insurance Institution of Finland and The Association of Finnish Local and Regional Authorities which were all represented on the project group.

3.2 *Metal Age*

The *Metal Age* (MA) method for participatory workplace health promotion was developed by Näsman and Ilmarinen (1999). The model is designed to identify problems and opportunities at work and generate positive manageable solutions to them. In the MA process the personnel of the company or organization is divided into groups of 5-20 people, often by departments or people normally working together. Each group has development sessions that take 8-10 hours, followed by a shorter follow-up session usually 3-6 months later.

The MA process consists of the following phases:

- Orientation
- Identification of development (problem) areas
- Prioritizing
- Consensus decision-making about concrete actions
- Follow-up
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In the orientation phase the workplace is seen as a matrix of opportunities, solutions and results on an individual, enterprise and society level.

In the identification of development areas the session participants are encouraged to list all relevant development areas they can think of in order to increase their well-being at work.

The prioritizing of initiatives is made by using a priority matrix. All participants are asked to rate the importance, prevalence and possibility to influence on a scale between 1 and 10. A total score is achieved by multiplying the ratings. The development area with the highest score is then taken for a more detailed analysis in order to agree on concrete actions, person in charge of them, and dead lines for their completion.

During the first follow-up session the achievements concerning the concrete actions of the first development area are discussed one by one. Thereafter the session participants continue by planning concrete actions for the second development area.

The Central administration Metal Age planning group ranked highest the Development area "Work community, being together". The concrete actions are presented in Figure 2.

Concrete actions	Responsible person	Time schedule
Tell other people positive things about your job and fellow-workers. Negative aspects only directly to the person involved. Call attention to this during discussions.	Everybody	Now
Internal ICT-education, short occasions, learning from each other.	Klas	Starting March 2003
Outdoor-day twice a year	Tage	Starting May 2003
Study tours to other municipalities/companies.	Tomy+Klas	Starting fall 2003
Making a system for introducing new fellow-workers	Working party: Anitra (calls tog.) Sonja Christina Ernst	Finished by end of 2003

Figure 2. Metal Age, Concrete actions for the Central administration. Development area “Work community, being together”.

3.3 Kiva-questionnaire

The Kiva-questionnaire (Kiva is a Finnish word meaning fun, nice) is a short, user-friendly questionnaire with 7 standard questions, Figure 3.

The working climate was measured twice a year using the standard formula during the Druvan project..

The VOOP program enables an interactive presentation of the Kiva-questionnaire results.

1. **Have you enjoyed coming to work in the last weeks?**
 1 2 3 4 5 6 7 8 9 10
 Not at all Yes, very much
2. **I regard my job as**
 1 2 3 4 5 6 7 8 9 10
 Not meaningful at all Very meaningful
3. **I feel in control of my work**
 1 2 3 4 5 6 7 8 9 10
 Not at all Very much so
4. **I get on with my fellow-workers**
 1 2 3 4 5 6 7 8 9 10
 Not at all Very well
5. **My immediate superior performs as superior**
 1 2 3 4 5 6 7 8 9 10
 Very poorly Very well
6. **How certain are you that you will keep your job with this employer?**
 1 2 3 4 5 6 7 8 9 10
 Not certain at all Very certain
7. **How much can you influence factors concerning your job?**
 1 2 3 4 5 6 7 8 9 10
 Not at all Very much

Figure 3. The Kiva-questionnaire

4 Results

All measured indicators showed favorable figures and the general opinion among the employees in the municipality was that the Druvan project was a big success.

4.1 Work Ability Index (WAI)

The WAI (Ilmarinen et al 1997, Ilmarinen and Tuomi 2004) was completed by 67 persons before (2001) and after (2005) the Druvan project. The expected decline in WAI during four years among municipality workers with mean age over 40 years is 2,4. The decline during the Druvan project was only 0,13 in the above cohort.

4.2 Kiva-questionnaire

The work climate was initially at a good level and increased only moderately.

4.3 Sick-leaves

There was a dramatic decrease in absence due to illness.

Dragsfjärd had before the Druvan project much higher sick-leave figures than the average Finnish municipality. After the project the situation was the opposite. Figure 4.

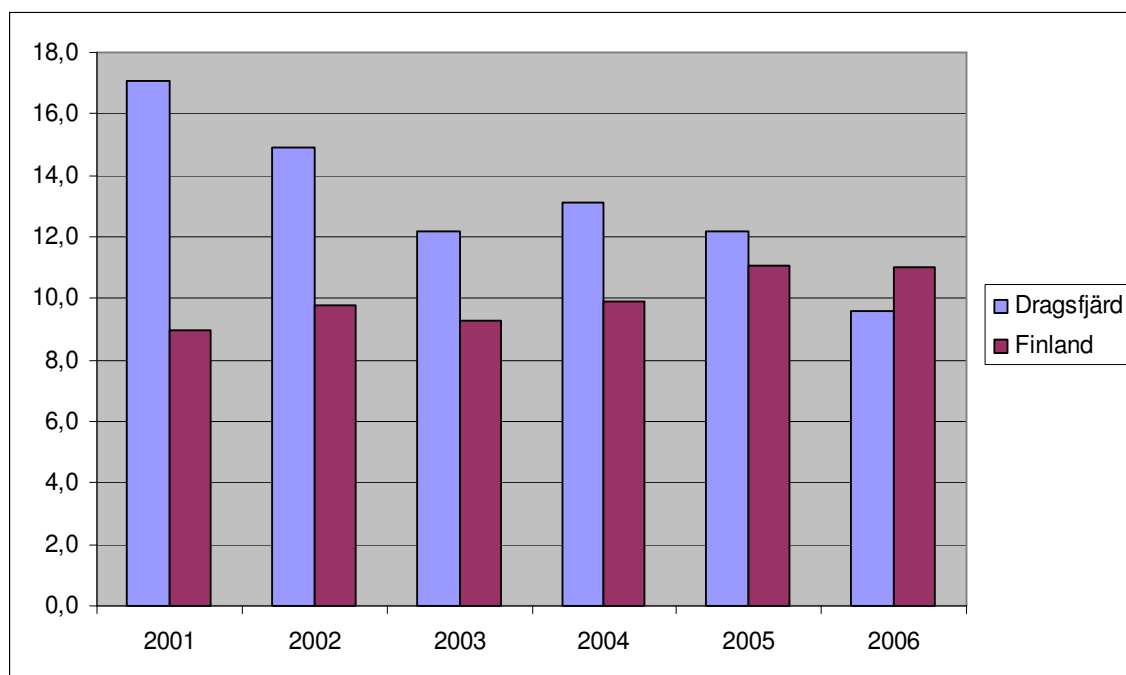


Figure 4. Sick leave days/employee in Dragsfjärd and in all Finnish municipalities.

4.4 Retirements

The retirements are few because of only 190 employees. Although the trend since the start of the Druvan project has been from disability pensions to old age pensions.

4.5 *Economic analysis*

A Cost-Benefit Analysis (Ahonen et al 2002) was made by using the Potential Model (Miljodata 2002). The analysis shows that there was a 46 % annual return on investment (ROI) as a result of the project.

5 Discussion

The results are very encouraging. The multidimensional Druvan model made it possible for almost every employee to participate in something he or she benefited from personally which is crucial for creating engagement. This was the main reason for Druvan becoming "Our Project" among the municipality workers. The participatory approach using the Metal Age method was also very important in this aspect.

The positive marketing of the project as a project for wellbeing also helped to engage the employees in a much better way than trying to engage people in a project focusing on decreased sick leave and longer working life. And the results are the same.

The collaboration with and participating by many external experts in different fields gave important advice to the local actors and authority to the project. The economic analysis could not have been made without external expertise.

The Druvan project ended in 2005 but the municipality has due to the good results decided to continue with multidimensional OHS in the same manner as during the Druvan project. The project activities have become normal procedure.

The results indicate that a work place health promotion program based on participation and collaboration can be very successful measured with wellbeing, work ability and monetary units and lead to a new, lasting way of maintaining and developing the wellbeing of the employees and the whole organization.

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