

REPORTS AND STUDIES IN
**HEALTH
SCIENCES**

TERHI SAARANEN ET AL.

*Occupational Well-being
of School Staff*

*Experiences and results from an action
research project realised in Finland and Estonia
in 2009–2014*

PUBLICATIONS OF THE UNIVERSITY OF EASTERN FINLAND
Reports and Studies in Health Sciences



UNIVERSITY OF
EASTERN FINLAND

SAARANEN TERHI, PERTEL TIIA, STREIMANN KARIN, LAINE SARI &
TOSSAVAINEN KERTTU

Occupational Well-being of School Staff
Experiences and results from an action research project
realised in Finland and Estonia in 2009–2014

Publications of the University of Eastern Finland
Reports and Studies in Health Sciences
Number 16

Department of Nursing Science
Faculty of Health Sciences
University of Eastern Finland
Kuopio
2015

Kopio Niini Oy
Kuopio, 2015

Series Editors:

Professor Veli-Matti Kosma, M.D., Ph.D.
Institute of Clinical Medicine, Pathology
Faculty of Health Sciences

Professor Hannele Turunen, Ph.D.
Department of Nursing Science
Faculty of Health Sciences

Professor Olli Gröhn, Ph.D.
A.I. Virtanen Institute for Molecular Sciences
Faculty of Health Sciences

Professor Kai Kaarniranta, M.D., Ph.D.
Institute of Clinical Medicine, Ophthalmology
Faculty of Health Sciences

Lecturer Veli-Pekka Ranta, Ph.D. (pharmacy)
School of Pharmacy
Faculty of Health Sciences

Distributor:

University of Eastern Finland
Kuopio Campus Library
P.O.Box 1627
FI-70211 Kuopio, Finland
<http://www.uef.fi/kirjasto>

ISBN (print): 978-952-61-1674-7

ISBN (pdf): 978-952-61-1675-4

ISSN (print): 1798-5722

ISSN (pdf): 1798-5730

ISSN-L: 1798-5722

III

Authors' addresses:

Terhi Saaranen
Department of Nursing Science
University of Eastern Finland
Kuopio, Finland

Tiia Pertel
Health Promotion Department
National Institute for Health Development
Tallinn, Estonia

Karin Streimann
Health Promotion Department
National Institute for Health Development
Tallinn, Estonia

Sari Laine
Department of Nursing Science
University of Eastern Finland
Kuopio, Finland

Kerttu Tossavainen
Department of Nursing Science
University of Eastern Finland
Kuopio, Finland

Saaranen Terhi, Pertel Tiia, Streimann Karin, Laine Sari & Tossavainen Kerttu
The Occupational Well-being of School Staff: Experiences and results from an action research project realised in Finland and Estonia in 2009–2014
University of Eastern Finland, Faculty of Health Sciences, Publications of the University of Eastern Finland. 16. 2015. 81 p.
ISBN (print): 978-952-61-1674-7
ISBN (pdf): 978-952-61-1675-4
ISSN (print): 1798-5722
ISSN (pdf): 1798-5730
ISSN-L: 1798-5722

ABSTRACT

This publication is based on the research and development project *Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009–2014*, whose purpose was to promote occupational well-being of primary and upper secondary school staff in Finland and Estonia between the years 2009 and 2014. The project was part of an international Schools for Health in Europe (SHE) study in the two countries. The project was carried out in collaboration with the staff of 21 Finnish and 39 Estonian schools and a Finnish-Estonian research group consisting of researchers and experts from the University of Eastern Finland, the Estonian National Institute for Health Development and the Foundation for School Health Care, Estonia. The Department of Nursing Science of the University of Eastern Finland was responsible for the study.

The aim of this publication is to describe and report on the occupational well-being of school staff in the two countries and to disseminate the results of the project at different project phases and the methods developed for the promotion of occupational well-being in the school communities. Moreover, the publication describes the development of a theory and a model for the promotion of occupational well-being of school staff members, which can be used to improve occupational well-being in school communities. Lastly, future challenges of promoting occupational well-being at schools will be discussed at the end of this publication.

Research data were collected in the project from the school staff members at the turn of the year 2009/2010 and 2012/2013 by using the quantitative Well-being at Your Work index questionnaire, which also included a small number of open questions. Furthermore, a qualitative mid-term review survey was carried out in the school communities of both countries at the turn of the year 2011/2012 by using an electronic questionnaire form. The data were analyzed by statistical methods and by inductive and inductive-deductive content analysis. The structural equation model will also be used to test the functionality and structure of the Content Model for the Promotion of Occupational Well-being of School Staff based on the data from the baseline and final survey data. The content model will be further developed based on the results.

Along with the tested and developed content model, the results and experiences from this action research project produce evidence-based information that school personnel and health promotion professionals can utilize in improving the occupational well-being at schools. Finally, the results and operation models of this study can be used more extensively in the promotion of occupational well-being by nursing and health care professionals, school employees and administration, and researchers, educators and experts in the field.

Keywords: Schools - manpower; Job Satisfaction; Occupational Health; Finland; Estonia

Foreword

There has been an increase in societal expectations and pressure from decision-makers directed at school staff and educational organizations in recent years in both Finland and Estonia. Schools, teaching and other support services are expected to be efficient and impactful. Occupational well-being of school staff is important not only for the maintenance of school employees' job welfare and their ability to continue working, but also for their pupils' well-being and learning. Thriving staff can provide support, guidance and teaching to their students as a part of their teaching and education work better than previously. Indeed, in today's competitive society, it is only possible to decrease isolation and inequality of pupils by taking their special needs into account quickly and thoroughly.

This study belongs to the publication series of the Faculty of Health Sciences at the University of Eastern Finland. The study is based on a research and development project, *Promoting the Occupational Well-being of School Staff – an action project in Finland and Estonia in 2009-2014*, whose purpose was to promote the occupational well-being of school staff in primary and upper secondary schools in the years from 2009 to 2014. In this project, the concept of occupational well-being was considered to cover the job welfare of all staff members in a school community. Occupational well-being was perceived to consist of four aspects: 1) worker and work, 2) working conditions, 3) occupational competence, and 4) work community. These aspects were seen as resource and stress factors in the context of occupational well-being. When resource and stress factors are balanced, it is possible for individual workers and staff in the whole school community to be empowered and achieve their optimal occupational well-being and health.

The theoretical discussion on occupational well-being of school staff of this publication introduces the concepts of empowerment and communality (the concept of social capital), which have been found to increase health and well-being among the population. When combined with the concept of communality, empowerment offers a premise for promoting occupational well-being in school communities and other work contexts, which supports positive outlooks on health.

I wish that this publication will increase discussion on the application of evidence-based knowledge and concrete measures and methods that have been found useful in the practical development of occupational well-being at schools. This publication is particularly aimed at school personnel, school nurses, occupational health nurses,

VIII

societal decision-makers and other experts dealing with questions regarding health and well-being at schools.

Finally, on behalf of the entire research group, I would like to thank everyone involved in this project; particularly the Finnish and Estonian school communities, the Estonian National Institute for Health Development and the Department of Nursing Science of the University of Eastern Finland and the Finnish Foundation of Nursing Education for grants that made it possible to realise this action research project. As the Estonian National Institute for Health Development and the Finnish Federation for Social Affairs and Health (SOSTE) are organizations supporting the Schools for Health in Europe (SHE) network in their countries, both organizations, alongside the Department of Nursing Science of the University of Eastern Finland, have had important roles in organizing the research and development project in the school communities and offering national training to school personnel on the topic. Lastly, I would especially like to show my gratitude to the Foundation for Municipal Development, whose grant allowed the realisation of this publication.

In Kuopio on 2 January 2015

On behalf of the research group of this project,

Terhi Saaranen

Docent, Senior Lecturer, PhD

Contents

1 INTRODUCTION	1
2 OCCUPATIONAL WELL-BEING OF SCHOOL STAFF, ITS RECOGNITION AND DEVELOPMENT.....	4
2.1 The concept of occupational well-being of school staff	4
2.2 Promotion of occupational well-being and communality at schools	6
2.3 Promoting occupational well-being of school staff as an action research.....	9
3 PROMOTING THE OCCUPATIONAL WELL-BEING OF SCHOOL STAFF – AN ACTION RESEARCH PROJECT IN FINLAND AND ESTONIA IN 2009–2014	12
3.1 The background of the action research project	12
3.2 The process of realising the action research project	13
3.3 Project findings based on the baseline, mid-term and final evaluations.....	15
3.4 Examples of developing occupational well-being of school staff in Finland and Estonia	29
4 DEVELOPING THE THEORY AND MODEL ON THE PROMOTION OF OCCUPATIONAL WELL-BEING OF SCHOOL STAFF	61
4.1 Developing a middle range health promotion theory and model – benefits to practical operations?	61
4.2 Promotion of the occupational well-being of school staff – phases, data sets and methods of developing the theory and the model	63
4.3 Summary on the development of the model and the theory	70
5 FUTURE CHALLENGES FOR PROMOTING OCCUPATIONAL WELL-BEING AT SCHOOLS AND CONCLUSION	72
REFERENCES	75
APPENDIXES	

Figures

Figure 1. Viewpoints of occupational well-being of school community staff and the levels of its promotion

Figure 2. The aspects of occupational well-being of school staff

Figure 3. Occupational well-being and health and the resource and stress factors used to depict it (Saaranen et al. 2006a)

Figure 4. Process chart on the project *Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009–2014*

Figure 5. Process chart of school number 1

Figure 6. Process chart of school number 2

Figure 7. Process chart of school number 3

Figure 8. Process chart of school number 4

Figure 9. Process chart of school number 5

Figure 10. Process chart of school number 6

Figure 11. Developing and testing the theory and content model on the promotion of school community staff's occupational well-being

Figure 12. The hypothetical model *Content model for the promotion of school community staff's occupational well-being*

Tables

Table 1. The number of Finnish and Estonian schools during different research project phases

Table 2. Background variables of school community staff in Finland (n= 486 and n= 545) and Estonia (n= 1330 and n= 974) at the turn of the year 2009/2010 and 2012/2013

Table 3. School community staff evaluations on occupational well-being and activities promoting it in Finland (n=468 and n=545) and Estonia (n= 1330 and n= 974) at the turn of the year 2009/2010 and 2012/2013

Table 4. Mean values (MV) and standard deviations (SD) of the sum variables of the aspects of working conditions and working community in Finland (n= 486 and n= 545) and Estonia (n= 1330 and n= 974) at the turn of the year 2009/2010 and 2012/2013

Table 5. Mean values (MV) and standard deviations (SD) on the sum variables of the aspects of worker and work and professional competence in Finland (n= 486 and n= 545) and Estonia (n = 1330 and n = 974) at the turn of the year 2009/2010 and 2012/2013

1 Introduction

The topic of well-being at schools can be investigated from a number of viewpoints, such as those of the *the pupil/student*, *health care services*, *cooperation between school and homes* and *the occupational well-being of school staff*. *The pupil* or *student* is generally perceived to be at the centre of well-being at school (Figure 1). Children and adolescents spend a large portion of their days at school, which makes school an important arena for health promotion. Health promotion occurring at schools consists of versatile and wide-ranging activities often guided by regional programmes and documents, such as curricula and child policy programmes, and different national (MSAH 2004, MSAH 2006, Child Welfare Act 2007, MINEDU 2010, Health Care Act 2010, MSAH 2012) and international recommendations (Odense Statement 2014) and strategies (MINEDU 2012).

Health care services also have an important role in the promotion of well-being at schools. For example, school health care is significant for the promotion of health of children and adolescents, while occupational health care bears an important role in the advancement of health and well-being of school staff. School health care services target primary school pupils and their families, are cost-free, legally protected and part of primary health care, and provide preventive care and monitoring related to the health and safety of the school environment and the well-being of school community members. Moreover, school health care follows individual pupils' growth, development and health, and promotes their well-being (MSAH 2013, Health Care Act 2010). A decline in offered school health care services has been found to correlate with a growing need for children and youths' nursing services. In her doctoral thesis, Paakkonen (2012) indicates that a service system supporting the mental health of children and adolescents is formed by several authorities and organizations. She particularly highlights the position of children and adolescents whose conditions are difficult to treat; after some Finnish municipalities eliminated a number of school health care services during the early 1990s recession in Finland, their need for specialized nursing services for children and youths increased in the 2000s. (Paakkonen 2012.)

Cooperation between homes and school can also be used to particularly affect the health promotion of children and adolescents and the well-being of pupils. Cooperation enables preventing problems with youths' overweight, risk behaviour and other health hazards threatening individuals' well-being, pupils' learning and concentration on school work in general. However, cooperation between homes and

school has often been found insufficient, and there may be many reasons preventing parents from actively participating in and planning of school work. For instant, parents might find the idea of discussing health-related topics with a teacher to be far-fetched, even though teachers would often have useful knowledge on children and youths' well-being and health hazards based on practical experience, and can provide practical solutions to challenging everyday situations. Both home and school bear a central importance on a child's health learning. From the school's point of view, it is important for the information connected to the study subject of health education to reach parents, as they are often uncertain about what kind of health-related topics are taught to their children at school. (Sormunen et al. 2013a.) In turn, homes are generally responsible for pupils' appropriate clothing, sufficient amount of sleep and rest, daily routines, washing and hygiene, and television watching. Teaching many topics of health learning (e.g., bullying, first aid and acting in emergencies) has been considered to be an equal responsibility of home and school. (Sormunen ym. 2013b.)

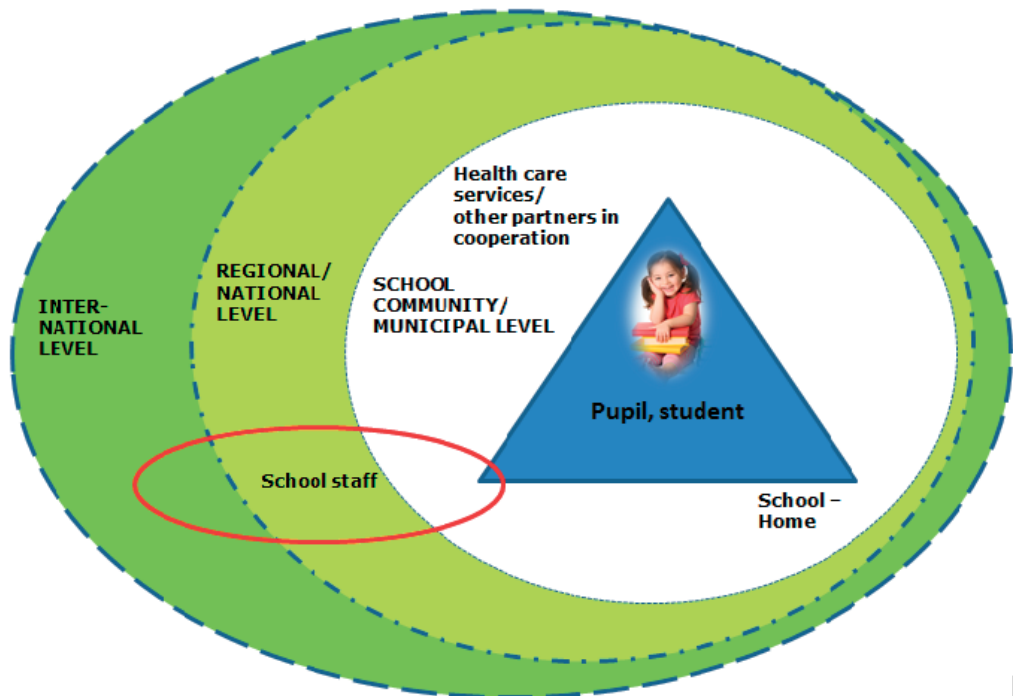


Figure 1. Viewpoints of occupational well-being of school community staff and the levels of its promotion

Occupational well-being of school staff is the third significant viewpoint of promoting well-being at school. Indeed, occupational well-being has been named as an important feature in the Europe 2010 strategy (EUROFOUND 2012). One of the

goals of the Finnish government programme for 2011-2014 (Finnish Government 2011) has been to develop occupational well-being and work ability in cooperation with management and employees of workplaces. A goal has been set in the Finnish social and health care policy for the workforce to continue in the working life on average for up to 2 to 3 years longer than currently. This requires constant improvement of working conditions and environments, and promotion of health, work ability and functional ability of working-aged population. Occupational health care must enhance health promotion at workplaces during the various situations at work of working communities and workers. (Occupational Health Care Act 2001.) When the well-being of school staff is in order, employees can offer high-quality teaching and take care of matters related to the well-being of children and adolescents (Saaranen et al. 2006a,b, 2007a,b,c, Jin et al. 2008, Spilt et al. 2011, Saaranen et al. 2012a,b).

In addition to the previously presented four viewpoints (*pupil/student, health care services, cooperation between school and homes, and school staff*), well-being at school can be investigated through *different levels*, i.e., *school level, regional level, national level and international level* (Figure 1). **This publication focuses particularly on studying the promotion of occupational health of school community staff in two countries based on the research and development project *Promoting the Occupational Well-being of School Staff – an action project in Finland and Estonia in 2009-2014*.** The project is part of the Schools for Health in Europe (SHE) network, whose members currently include approximately 40 countries. The network includes approximately 30 member schools in Finland and 262 kindergartens and schools in Estonia (Hansen et al. 2009).

The purpose of this project has been to promote occupational well-being of school staff in primary schools and upper secondary schools in Finland (21 participating schools) and Estonia (39 participating schools) in the years 2009-2014. As previously mentioned, occupational well-being of school staff is important not only for school employees' coping with work and maintenance of well-being, but also for pupils' welfare and learning. When there are no problems in the well-being of school staff, they are better equipped to support, guide and teach their students in their tasks as teachers and educators, e.g., as collaborators with parents and the health care system. Isolation and inequality of pupils and students must be decreased by taking their special needs into account quickly and thoroughly enough. This publication offers evidence-based information and concrete examples of good practices and operation models to school community staff, school nurses, occupational health care nurses, researchers in the field and educators, and also to other partners in cooperation involved in planning, implementing and assessing research and development projects on occupational well-being of school staff on municipal level.

2 Occupational Well-Being of School Staff, Its Recognition and Development

2.1 THE CONCEPT OF OCCUPATIONAL WELL-BEING OF SCHOOL STAFF

The promotion of occupational well-being of school staff is partially hindered by a lack of clarity of related concepts. Occupational well-being can be defined as the physical and mental state of a worker based on the sum of work, working environment and free time (Vocabulary of Safety and Health at Work 2006). According to the definition of the Finnish Ministry of Social and Health Care (MSAH 2014), occupational well-being encompasses the safety, healthiness and reasonableness of work (see also FIOH 2014). Occupational well-being is enforced by a satisfactory atmosphere in the working community, workers' proficiency, and good and motivational leadership. According to Juniper (2011), occupational well-being is a subjective and multidimensional concept. She indicates that occupational well-being programmes often fail due to a lack of consensus and agreement on the contents of the notion of occupational well-being. Indeed, the concepts of *well-being* and *occupational well-being* are used to signify different conceptions based on the aims, contexts and scientific field of research and the different areas of focus of research orientations.

Therefore, the multitude of occupational well-being research and concepts related to it is a challenge requiring researchers to be specific in defining and limiting their research concept (Ilmarinen et al. 2008). Therefore, special attention must be paid to workers' own perceptions of their well-being. This is to make sure that the methods used for planning and realising occupational well-being development activities are suitable for employees and profitable for employers. Both employees and their employers are responsible for developing occupational well-being, which occurs at work places in cooperation with management and staff. (MSAH 2014, FIOH 2014.) Scientific research generally supports the idea that the more healthy and happy people are, the more likely they are also to be profitable employees at their work places (Juniper 2011).

Members of several different professional groups work at schools, including classroom teachers, subject teachers, teaching assistants, cleaners, kitchen staff, office workers, principals, and others. This makes it more challenging to understand the concept of occupational well-being and develop it in this context due to the different

contents and requirements of work of different professional groups. In 2011, there were a total of 179,000 employees in the education sector, which covers 7% of the entire workforce of Finland. In 2009, 142,300 persons worked in educational institutions, including 85,600 teachers and 56,700 other staff members. There were 46,300 teachers working in primary schools; 7,700 in upper secondary schools; 16,300 in vocational institutes; 7,300 in universities of applied sciences; and 8,000 in universities (Statistics Finland 2012).

The topic of occupational well-being at schools and its development has been further complicated by fairly extensive changes in the contents of teaching work (e.g., Ballet & Kelchtermans 2009). This has been apparent in, e.g., redevelopment of curricula, implementation of new teaching and learning methods, and increased administrative tasks.

In this publication, occupational well-being at schools is considered to cover the occupational well-being of the entire school community staff consisting of four aspects: 1) worker and work, 2) working conditions, 3) professional competence and 4) working community (Figure 2). The aspect of *worker and work* encompasses health, mental and physical workload, personal resources and related factors. The aspect of *working conditions* includes the physical operational environment (physical, chemical and biological factors) and occupational safety. *Professional competence* covers occupational proficiency and opportunities for further education and training. The aspect of *working community* is considered to comprise, e.g., management, work organisation, leadership, social support and communication at work. (Saaranen et al. 2007a,b,c, 2012a,b, 2013.)

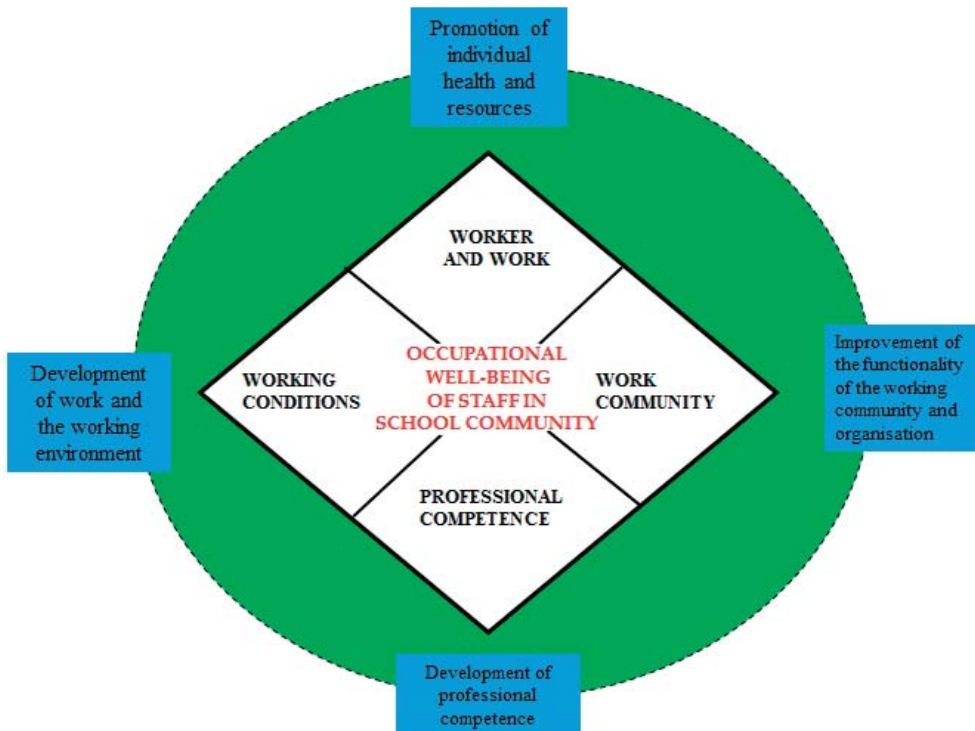


Figure 2. The aspects of occupational well-being of school staff

Recognizing these areas is important for the health promotion and development of occupational well-being of working communities. The needs of different schools may vary significantly. Needs related to professional competence may be a point of focus in one school, while working community related needs may be emphasised in another. It is also noteworthy that it is impossible to develop all aspects at once. Instead, it is recommendable to first focus on the issues considered most important.

2.2 PROMOTION OF OCCUPATIONAL WELL-BEING AND COMMUNALITY AT SCHOOLS

Similarly as occupational well-being, the concept of communality has been defined in various ways. Its basic characteristics can be considered to include membership, general set of symbols, shared values and norms, and a sense of belonging. In addition, communality involves influence between individual persons, shared needs and joint commitment to meet them. A community has been considered to be formed by a social network, which may be tightly or loosely bound. (Hyypä 2010.) In projects

related to occupational well-being of school community staff, school staff members have often been asked to define the worker groups they consider to belong to their communities. Based on the answers, it can be said that school staff members define their working community in a heterogeneous way. In some schools, certain worker groups, e.g., cleaning and cooking staff, have been outsourced, and thus other staff members and pupils may seldom encounter them in the everyday school life. In such cases, it is possible that these worker groups are not perceived as members of the working community. On the other hand, in smaller schools, teaching assistants and other support staff may be actively involved in visible roles as part of the everyday school life, and they might thus be viewed as members of school community staff participating in education work.

There have been attempts to define and study communality through the concept of social capital, but several approaches have been presented also in the context of this notion. Among other issues, researchers have focused on whether social capital is a singular or collective characteristic (Hyypä 2010). The concept itself is rooted in the history of social sciences and economics, and its themes have been dealt with since the 19th century. Systematic discussion on the concept of social capital and its terminology came fully into focus in the 1980s and 1990s, when three most often quoted theoreticians emerged: James Coleman (1988,) Pierre Bourdieu (1986) and Robert Putnam (1994). Coleman and Putnam were Americans and Bourdieu was French. Among other features, the tightness of social networks and the exclusivity of social structures (Coleman 1988) and the importance of the similarity of group members or the networks between individuals or organizations that value one another (Bourdieu 1986) have been highlighted as central characteristics of social capital (Rouvinen-Wilenius 2008, see also Ruuskanen 2002). In 1993, a notable breakthrough in defining social capital was achieved by Putnam, who considers social capital particularly as a characteristic of a community. Putnam's research team studied how well democracy, government and economic growth were realised in different regions of Italy, and found out social capital to be a defining factor in this context. (Putnam 1994.) In Finland, there has been an increase in the discussion about social capital since the mid-1990s. Markku Hyypä and his research team have particularly studied the health impacts of communality among Swedish-speaking population in Finland (Hyypä 2010).

According to Hyypä (2010), communality and social capital can be observed as fairly parallel constructions. The power of communality emerges from mutual trust, open communication, interaction, participation and learning among community members. As a general principle, we may think that social capital can stem from

networks within a workplace, but as such networking does not guarantee an increase in social capital. Instead, social capital is founded on a community spirit which emerges from networks of interaction between people under certain circumstances. To simplify, this means that only the sort of workplace activities that are founded on a mutual trust, open communication, participation and learning among workers can construct social capital and promote health. (Saaranen & Tossavainen 2009, Hyyppä 2010.)

Based on previous research findings and results from research projects (Saaranen et al. 2006a,b), particularly communality as a resource factor at schools has been found to affect the occupational health and well-being of school staff. Based on research findings, this process is illustrated in the figure and text below (Figure 3).



Figure 3. Occupational well-being and health and the resource and stress factors used to depict it (Saaranen et al. 2006a)

In order to secure and promote occupational health and well-being of school community staff, the aim must be to maintain a balance between resource and stress factors of both individual workers and the working community. Work must not be too easy, as this leaves resources unused and creates dissatisfaction with work that is not challenging enough considering the worker's competencies. On the other hand, overtly stressful and straining work depletes resources. When there is a balance of resources and stress factors, it is possible for individual workers and the entire staff of a working community to become empowered and reach their optimal occupational health and well-being. Communality has also been found to be a pivotal factor in

increasing workplace resources. According to an interview study aimed at school staff and school nurses (Saaranen et al. 2004, 2006a), school resource factors were perceived to be formed most centrally by the operational culture within a community.

The interviewees described the communal operational culture in multiple ways. They considered it to mean having a workplace where it was nice to go, where they had friendly co-workers, a good atmosphere and collaboration that was functional. The culture was also considered to include well-functioning meetings and conversations and a possibility to receive work guidance if needed. Additionally, it was considered important to have a functioning feedback system where comments could be received from management and co-workers, and also pupils or students and their parents. Lastly, humour was perceived as an important factor for the communal operational culture and occupational well-being in the work community. (Saaranen et al. 2004, 2006a.)

In addition to communality-related factors, hobbies and taking care of one's personal health, private life and relationships, motivational work and professional competence were considered meaningful (Saaranen et al. 2006a).

2.3 PROMOTING OCCUPATIONAL WELL-BEING OF SCHOOL STAFF AS AN ACTION RESEARCH

Action research and the idea of a learning organization have been fairly seldom applied in the context of developing occupational well-being of school staff (e.g., Saaranen et al. 2007a, 2013). Instead, the action research method has been utilized more in other contexts, such as promoting the health of children in school communities (e.g., Khunti et al. 2008, Gullan et al. 2009, Ozer et al. 2010), developing nursing education or professional competence (Coetzee et al. 2005, Casey 2007, Casey 2011), and promoting nursing practices (Mitchell et al. 2005, Glasson et al. 2008, Moore et al. 2012).

The progression of action research has been depicted as a cyclical process slightly varying according to the research context and sources (e.g., Casey 2007, Glasson et al. 2008, Gallagher et al. 2009, Moore et al. 2012). However, the basic idea contains the cyclical nature of the process, which is formed by the stages of reflecting, planning, carrying out actions, observing outcomes, going through feedback and reflection, and replanning (e.g., Glasson et al. 2008). When realizing an action research project, it is important to recognize that the study must be flexible when needed and respond to the requirements of its context and participants. As research proceeds cyclically, actions can be further developed during new cycles of the process.

There was a particular desire to develop the occupational well-being of entire school community staff in this action research, *Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009–2014*. Factors related to occupational well-being in a school community and promoting it can be described by using four content areas: 1) worker and work, 2) working conditions, 3) professional competence, and 4) working community. The aspect of worker and work consist of health, mental and physical workload, personal resources and factors that impact them. Working conditions include the physical work environment (physical, chemical and biological factors) and occupational safety. Professional competence contains occupational proficiency and possibilities for further training or education. The aspect of working community is considered to cover, e.g., management and work organisation, leadership, social support, and information and guidance. (Saaranen et al. 2012a, 2013.)

In addition to individual-oriented activities for promoting health and well-being carried out at schools, community-oriented development activities should also be made an integral part of everyday school life, in which integrating stability and development actions into work community are essential goals. A central principle of community-oriented health promotion is the engagement of entire staff in organised activities. School managers play an important role in activating school employees. The actions do not necessarily require for a school principal to be in charge of the action project, but instead a school well-being group can be set up and made responsible for practical matters related to occupational well-being development activities and their implementation. The establishment of such a group enables delegating tasks and guarantees that furthering the activities will not be left as the responsibility of a single person. A suitable group size has been generally considered to include 3 to 5 persons. An occupational well-being group should be formed out of members of school staff, including representatives of different professional groups. In some cases, it has been found beneficial to have a school health care nurse participate in the development activities, e.g., when improving work spaces. Moreover, even though each school bears the main responsibility for developing their operations, a work group can profit from utilising the competence and participation of different school workers, such a school health care nurse.

Occupational health care services also offer valuable expertise to development activities related to occupational well-being. They can offer help and information that can be used in activating and following the development of organised functions and activities at schools. Occupational health care nurses and physicians meet school workers at appointments and visits to schools, and are thus competent in assessing

how much stress and burden is caused by work from the viewpoint of occupational well-being. However, research findings indicate that members of school staff are often not aware of the role of occupational health care at their workplace, and thus collaboration with occupational health care professionals often remains insufficient. In some municipalities, an overburden of occupational health care services (due to, e.g., lack of resources) has affected their availability, which in turn has resulted in little attention being paid to the occupational well-being of school communities in the area. In such cases, an idea has emerged from the viewpoint of occupational health care personnel or school staff of school as an expert organization which can manage without outside support. However, this should not be presumed, as schools should be entitled to the same occupational health care services as other working communities. Schools can help solve this issue by maintaining more active communication with occupational health care providers and by asking a representative from occupational health care, such as a nurse, to come to their staff meetings to introduce all available occupational health care services. This also allows for school staff to present their own wishes for collaboration between school and occupational health care services.

3 Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009–2014

3.1 THE BACKGROUND OF THE ACTION RESEARCH PROJECT

The research and development project *Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009–2014* was carried out in cooperation with the staff in Finnish and Estonian schools (21 Finnish and 40 Estonian schools at the baseline survey phase, one of which withdrew from the study at the beginning of the project), members of a Finnish and an Estonian research group, and the Finnish and Estonian coordinators of the School for Health in Europe (SHE) programme. The members of the research group came from the University of Eastern Finland (UEF), and the National Institute for Health Development (NIHD) and the Foundation for School Health Care (FSHC) in Estonia. The Finnish Federation for Social and Health (SOSTE; until 2011 Finnish Centre for Health Promotion) is the leading and supporting organization of the SHE network in Finland, while NIHD has the equivalent position in Estonia. Both organizations have been significant partners in collaboration with the research group when organizing the action research project in the school communities. The research was conducted at the Department of Nursing Science of the UEF (<http://www.uef.fi/hoitot>), which provided a high-quality research environment. In Estonia, the NIHD offered an important research environment to the Estonian researchers and experts participating in this project.

Research data were gathered from the school community staff at the turn of the year 2009/2010 and 2012/2013 by using a quantitative, online-based *Well-being at Your Work Index Questionnaire*, which also included a small number of open questions. A qualitative mid-term evaluation was realised using an electronic questionnaire form in the school communities in both countries at the turn of the year 2011/2012. Interventions developed and implemented as a part of the project (procedures and methods) produced positive results to the development of occupational well-being of school staff. The realisation of the project is presented in further detail in chapter 3.2 and the findings from the project divided into the baseline and final survey phases and the mid-term evaluation and process evaluation phases are described in chapter 3.3. Furthermore, the *Content Model for the Promotion of School Community Staff's Occupational Well-being*, tested and developed in this project, and the middle-range

theory (see chapter 4) produced in it provide evidence-based knowledge on the promotion of school community staff's well-being among teachers, school health care nurses, occupational health nurses and other partners in cooperation, such as researchers when planning, carrying out and assessing development projects. Results from this research have been appraised, and will be further assessed and distributed, in international conferences and scientific publications.

3.2 THE PROCESS OF REALISING THE ACTION RESEARCH PROJECT

At the **baseline survey phase**, information on occupational well-being was collected in the schools. The purpose of this information was to function as the basis for development activities. The staff of 21 schools in Finland and 40 schools in Estonia participated in the baseline survey. The baseline survey was conducted between the autumn of 2009 and winter of 2010 by using the electronic *Well-being at Your Work Index Questionnaire*, which was constructed based on the model of four aspects of occupational well-being (working conditions, worker and work, working community and professional competence). 10 questions on background variables were posed at the beginning of the questionnaire, and they were succeeded by four questions on the respondent's experiences of their personal and their working community's well-being and on available actions promoting occupational well-being. After these sections, the form included a set of questions on the four aspects of occupational well-being according to the *Content Model for the Promotion of School Community Staff's Occupational Well-being*: 1) *worker and work* (12 questions, e.g., on mental workload and voluntary actions to take care of oneself and looking after personal health), 2) *working conditions* (12 questions, e.g., on the aural environment, ergonomics and ventilation at work), 3) *professional competence* (7 questions, e.g., on occupational substance knowledge and the sufficiency of training related to coping with work) and 4) *working community* (20 questions, e.g., on an atmosphere of fairness and trust). Likert scale variables (1-5) were used to ask respondents about the aspects. After each section, respondents were given the opportunity to answer two questions which allowed them to provide further information on the preceding statements or to name other factors influencing occupational well-being.

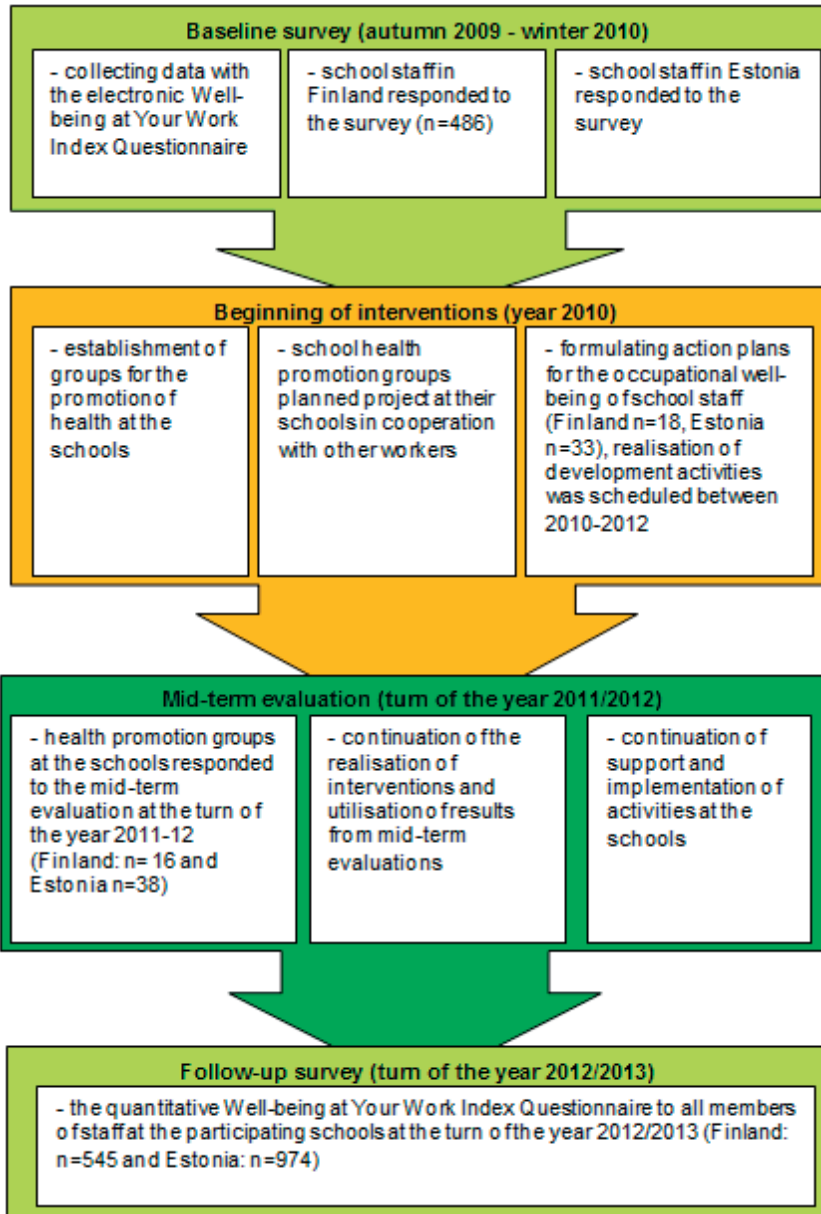


Figure 4. Process chart of the project *Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009–2014*

The researchers at the Department of Nursing Science at the UEF, which carried out the action research, sent each Finnish school their school-specific results of the baseline survey in the spring of 2010. They also sent the overall findings and the school-specific results from the Estonian schools to the National Institute for Health Development

(NIHD) in Estonia, which was responsible for conducting a further analysis of the school-based data and forwarding the information to each participant school in Estonia.

It was made not possible to single out individual respondents based on the findings from Finland and Estonia. After receiving their results, each school participating in the project in the two countries established a group for promoting occupational well-being, and drew up school-based *action plans for promoting the occupational well-being of school staff* based on the baseline survey and planned development interventions on areas considered important at the schools. The research group at the University of Eastern Finland sent each school an *action plan questionnaire for the promotion of occupational well-being of school community staff* to be filled out by the schools' occupational well-being groups (see Appendix 1). After formulating the action plans, the realization of the measures required to improve occupational well-being of personnel was started at the schools.

The realization of the activities at the schools was assessed with **mid-term evaluations** at the turn of the year 2011/2012. Their purpose was to find out whether certain actions should be changed or enhanced based on the plans and, if needed, to add new support actions to reach improved occupational well-being. The mid-term evaluation was realized as an online questionnaire in both Finland and Estonia. The members of the occupational well-being groups at the schools responded to the mid-term evaluation questionnaires so that one filled-out form was returned to the researchers from each school. One year later, at the turn of the year 2012/2013, a **final survey** was realised at the schools using the same Well-being at Your Work Index Questionnaire form as at the baseline survey phase. The purpose now was to find out whether the development activities had resulted in changes on the aspects of working conditions, work, working community or professional competence as experienced by members of school community staff. The school-based results and the overall findings from each country were also sent to the schools in Finland and Estonia so they could be utilised at the schools when planning future activities.

3.3 PROJECT FINDINGS BASED ON THE BASELINE, MID-TERM AND FINAL EVALUATIONS

Data collection

The *baseline survey* (turn of the year 2009/2010) was responded by the staff of 21 primary schools and upper secondary schools (principals, teachers, school nurses, occupational health care nurses and other staff groups, such as cleaning and cooking

personnel) in Finland (N=879) and the staff of 40 primary schools and upper secondary schools in Estonia (N=1978). The survey was conducted using the *Well-being at Your Work Index Questionnaire* in Finnish and Estonian and was responded by 486 persons in Finland and 1330 persons in Estonia. This made the response rate 58% in Finland and 67% in Estonia. The research findings of the baseline survey have been reported in more detail in scientific articles (Saaranen et al. 2012a, b).

The final survey (turn of the year 2012/2013) was conducted using the same *Well-being at Your Work Index Questionnaire* as the baseline survey and its target group was formed by the staff of 21 primary schools and upper secondary schools in Finland (N=961) and 38 primary schools and upper secondary schools in Estonia (N=1871). Three Finnish schools that had responded to the baseline survey withdrew from the final survey, and three schools that did not participate in the baseline survey responded to the final one. The last-mentioned three schools joined the action project slightly later than the others, and were therefore not included in the baseline survey data. However, occupational well-being was developed in the three schools according to the action research project. Therefore, the total of 545 persons in Finland and 974 in Estonia responded to the final survey, which made the response rates 58% in Finland and 52% in Estonia. (Table 1.)

Table 1. The number of Finnish and Estonian schools during different research project phases

Timetable	Project phase	Finland	Estonia
Turn of the year 2009/2010	Schools participating in the project's baseline survey	21 schools n=486	40 schools, one school opted out at the very beginning n=1330
Autumn 2010	Schools that submitted their action plans	18 schools	33 schools
Turn of the year 2011/2012	Schools participating in the mid-term evaluation	16 schools	38 schools
Turn of the year 2012/2013	Schools participating in the final survey	21 schools n=545	38 schools n=974

The *mid-term evaluation* (process evaluation) was realised as an *online questionnaire* available in Finnish and Estonian. The questionnaire was aimed at the occupational well-being groups that had been established in the schools participating in the project. In total, 16 Finnish and 38 Estonian schools submitted their responses to the mid-term evaluation to the research group (Table 1). The online questionnaire included classified and open questions regarding, e.g., evaluation of school-based aims and

their realisation during the action research project and the usefulness of the action plan.

Analysis

At the baseline and final survey phases, the background variables of school staff in Finland and Estonia and the school staff's evaluations of occupational well-being and activities promoting it were analysed using descriptive variables, such as frequencies, percentages and standard deviation (Table 2 and 3). The Mann-Whitney U test was also used to find out changes between school staff's evaluations on occupational well-being and activities maintaining it in the baseline and final survey data from Finland and Estonia (Table 3). Sum variables based on previous factoring were formed of the school staff members' responses to single variables (Saaranen et al. 2006). Factor analysis was used to condense data in order to make it easier to handle a large number of variables (Polit & Beck 2011). Sum variables were described using means and standard deviation. Moreover, the sum variables from the baseline and final surveys in Finland and Estonia were tested with one-way analysis of variance, which indicated whether there had been statistically significant changes between the initial and final project phases (observing country-specific changes). Two-way analysis of variance was also used to test statistical changes between the initial and final survey results in the two countries, investigating similarities or disparities in the changes. If the p-value of the two-way analysis of variance was not statistically significant, the changes were considered similar. Correspondingly, if the p-value was statistically significant, changes had been different. The value of $p < 0.05$ was considered the limit for statistical significance in all of the tests. (Table 4 and 5)

The qualitative data of the mid-term evaluation (from the open questions) was analysed with the method of content analysis. Responses by the Estonian participants were first translated into Finnish. Subsequently, the two initial questions of the evaluation (aims and how they had been reached) were analysed with the method of inductive-deductive content analysis. Data from Finland and Estonia were analysed separately and these results were compared to see differences between countries. Responses to the question "How did the action plans support reaching the goals?" were analysed inductively, i.e., based on the material, using the method of content analysis. In the following section on the results, the outlines of the findings from the mid-term evaluation are presented by using direct quotations. The results from the mid-term evaluation will be reported in more detail in an international scientific article.

Results

Inspection of the background variables of the school staff who participated in the baseline and final survey revealed that the majority of the respondents to the *Well-being at Your Work Index Questionnaire* were female. Most of the respondents were aged between 36 and 50 in both Finland and Estonia (Table 2). The majority of respondents (66-81%) worked as teachers (subject, special education or classroom teachers) during both time periods. 4-8% of respondents were school managers. Moreover, 8-11% of respondents were members of support staff groups at the schools (e.g., psychologists, social workers, school assistants) and 6-7% represented other professional groups (cooking and cleaning workers etc.).

Table 2. Background variables of school community staff in Finland (n= 486 and n= 545) and Estonia (n= 1330 and n= 974) at the turn of the year 2009/2010 and 2012/2013

Background variables	FINLAND		ESTONIA		FINLAND		ESTONIA	
	2009/2010		2009/2010		2012/2013		2012/2013	
	n	%	n	%	n	%	n	%
Age								
-35	110	23	289	22	110	20	176	18
36-50	227	48	541	42	257	48	400	41
51-	139	29	458	36	173	32	391	41
Total	476	100	1288	100	540	100	967	100
Gender								
Male	114	24	164	13	140	26	116	12
Female	363	76	1135	87	402	74	852	88
Total	477	100	1299	100	542	100	968	100
Marital status								
Married	321	67	674	52	360	67	503	52
Common-law marriage	65	14	245	19	86	16	184	19
Divorced	44	9	239	18	47	8	101	10
Single/widowed/other	46	10	144	11	47	9	179	19
Total	476	100	1302	100	540	100	967	100
Profession								
Subject/special education teacher	299	63	572	44	316	59	493	52
Classroom teacher	87	18	282	22	101	19	202	21
Principal/school manager	17	4	92	7	23	4	72	8
School nurse	3	1	8	1	8	1	2	0
Other support staff	37	8	116	9	60	11	65	7
Other professional group	30	6	217	17	30	6	119	12
Total	473	100	1287	100	538	100	953	100
Work contract								
Permanent	361	76	1155	90	437	82	855	89
Temporary	113	24	113	10	98	18	105	11
Total	474	100	1268	100	535	100	960	100
Number of staff								
- 20	42	9	72	5	66	12	88	9
21 - 40	202	42	332	26	180	34	314	33
41 -	231	49	886	69	289	54	554	58
Total	475	100	1290	100	535	100	956	100
Total number of years in the profession								
- 2	39	8	108	8	40	8	88	9
3 - 10	142	30	436	34	136	26	269	28
11 - 20	140	30	302	23	187	35	259	27
21 -	149	32	446	35	165	31	338	36
Total	470	100	1292	100	528	100	954	100

During the action research project, the permanency rate of the staff's work contracts was increased in Finland (76% of staff at the turn of the year 2009/2010 and 82 % at the turn of the year 2012/2013). In Estonia, the rate was nearly unchanged between the baseline and final survey phase, i.e., approximately 90% of staff held permanent work positions. There was variance in school sizes based on number of staff, but during both evaluation rounds, schools whose number of personnel surpassed 41 persons outnumbered other school sizes in both Finland and Estonia. The total number of work years was divided fairly evenly among staff in both Estonian and Finnish schools. However, the smallest number of respondents had been in the profession for the total number of years of 2 years or less. (Table 2.)

The school staff's full assessment of occupational well-being and activities promoting it in Finland and Estonia

During both survey periods (turn of the year 2009/2010 and 2012/2013), mean values indicated that school community staff in both Finland and Estonia were fairly satisfied with occupational well-being and activities promoting it (Table 3).

Table 3. School community staff evaluations on occupational well-being and activities promoting it in Finland (n=468 and n=545) and Estonia (n= 1330 and n= 974) at the turn of the year 2009/2010 and 2012/2013

Variables	Finland 2009/2010		Finland 2012/2013		p- value	Estonia 2009/2010		Estonia 2012/2013		p- value
	MV	SD	MV	SD		MV	SD	MV	SD	
My personal occupational well-being compared to the best in profession	3.81	0.77	3.82	0.84	0.566	3.71	0.71	3.68	0.71	0.331
The general occupational well-being of my working community on the whole as I see it	3.42	0.77	3.44	0.85	0.339	3.61	0.63	3.58	0.62	0.297
My satisfaction with activities promoting personal occupational well-being	2.93	0.98	3.17	0.91	0.000	3.62	0.77	3.40	0.80	0.000
My satisfaction with activities promoting occupational well-being in my working community	3.08	0.98	3.26	0.95	0.002	3.65	0.75	3.57	0.73	0.005

MV = Mean value (scale: 1=very poor...5=very good)

SD = Standard deviation

p-value =Mann-Whitney U test

During the course of the development activities, satisfaction with activities promoting personal occupational well-being was statistically significantly ($p < 0.000$) improved in the Finnish schools, whereas it declined in the Estonian schools ($p < 0.000$). The same phenomenon was also apparent in satisfaction with activities promoting the occupational well-being of the working community in that there was a statistically significant increase in satisfaction in Finland ($p < 0.002$), while a slight decrease was detected in Estonia (Table 3).

Occupational well-being of school staff in Finland and Estonia according to the four aspects

In Finland, there was positive development in school community staff's satisfaction with the aspect of *working conditions* during the development period. Favourable changes were found in particular in the sum variables of *workspaces, work positions and equipment* and *physical factors* ($p < 0.000$) (Table 4). In the Estonian schools, there was an apparent decline in satisfaction with these sum variables ($p < 0.000$).

There was also improvement in the sum variables of the aspect of *working community* (*work atmosphere and appreciating others' work, co-operation and communication* and *management of work tasks and time management*) in the Finnish schools during the development period (Table 4). Correspondingly, the mean values of these sum variables had remained nearly as before or declined in the Estonian schools. The Finnish staff particularly perceived improvement in the areas of management of work tasks and time management ($p = 0.001$), while in Estonia, the staff appeared to have experienced a contrary change ($p = 0.034$).

Table 4. Mean values (MV) and standard deviations (SD) of the sum variables of the aspects of *working conditions* and *working community* in Finland (n= 486 and n= 545) and Estonia (n= 1330 and n= 974) at the turn of the year 2009/2010 and 2012/2013

Mean values and standard deviations of the sum variables of the aspects of working conditions and working community	Finland 2009/2010		Finland 2012/2013		p-value*	Estonia 2009/2010		Estonia 2012/2013		p-value*	p-value**
	MV	SD	MV	SD		MV	SD	MV	SD		
Working conditions											
Work spaces, working positions and equipment	2.91	0.97	3.23	0.86	0.000	3.62	0.75	3.44	0.76	0.000	0.000
Physical factors (e.g., noise level, temperature, lightning)	2.88	0.86	3.10	0.85	0.000	3.71	0.77	3.51	0.78	0.000	0.000
No chemical or biological factors	3.62	1.18	3.70	1.17	0.331	4.18	1.06	4.15	0.99	0.429	0.193
I have a set workstation (e.g., teacher or cleaner does not need to move between different schools during the work day)	3.79	1.55	3.94	1.41	0.097	4.24	1.17	4.13	1.26	0.037	0.007
Working community											
Work atmosphere and appreciation of others' work	3.76	0.71	3.87	0.77	0.022	3.97	0.62	3.94	0.59	0.226	0.005
Co-operation and communication	3.55	0.74	3.64	0.74	0.056	3.85	0.65	3.81	0.65	0.126	0.011
Management of work tasks and time management	3.29	0.77	3.46	0.76	0.001	3.93	0.71	3.87	0.68	0.034	0.000

NB!

p-value * = one-way analysis of variance used to test whether there were statistically significant changes in the country-specific data (= between sum variables of baseline and final survey from Finland and/or of baseline and final survey from Estonia)

(scale: $p \leq 0.05$ statistically nearly significant; $p \leq 0.01$ statistically significant; $p \leq 0.001$ statistically very significant)

p-value **= two-way analysis of variance used to test similarities/differences between changes in data from Finland and Estonia (between countries). A not statistically significant p-value indicates a similarity of changes. A statistically significant p-value indicates a difference of changes.

(scale: $p \leq 0.05$ statistically nearly significant; $p \leq 0.01$ statistically significant; $p \leq 0.001$ statistically very significant)

In the Finnish schools, there was also positive development in the staff's satisfaction with the aspect of worker and work based on the sum variables (*workload, activities supporting personal resources at work, occupational well-being service operations, hurry and work pace*) (Table 5). Again, decline could be seen in the sum variables in Estonia. For instance, the Finnish staff found that their workload had slightly decreased, while the results from the Estonian schools indicated that it had increased statistically significantly ($p=0.002$). The findings on the sum variable of hurry and work pace were also similar, i.e., positive development could be detected to have occurred in Finland, while the Estonian staff considered the situation to have become worse ($p=0.001$).

Table 5. Mean values (MV) and standard deviations (SD) on the sum variables of the aspects of *worker and work* and *professional competence* in Finland (n= 486 and n= 545) and Estonia (n = 1330 and n = 974) at the turn of the year 2009/2010 and 2012/2013

Mean values and standard deviations on the sum variables of the aspects of worker and work and professional competence	Finland 2009/2010		Finland 2012/2013		p-value*	Estonia 2009/2010		Estonia 2012/2013		p-value*	p-value**	
	MV	SD	MV	SD		MV	SD	MV	SD			
Worker and work												
Workload	3.30	0.81	3.37	0.77	0.170	3.75	0.76	3.65	0.83	0.002	0.004	
Activities supporting personal resources at work (e.g., activities related to stress management, gym/swimming bath tickets, professional guidance to individuals and groups)	2.73	0.93	2.85	0.96	0.044	3.16	0.92	2.78	0.98	0.000	0.000	
Occupational well-being service operations	2.89	0.94	3.07	0.90	0.002	3.07	0.95	2.94	0.92	0.001	0.000	
Hurry and work pace	2.62	1.00	2.73	1.12	0.120	3.16	1.18	3.00	1.14	0.001	0.001	
Professional competence												
Substance know-how and interaction in order	3.76	0.65	3.83	0.65	0.121	3.90	0.54	3.85	0.56	0.044	0.012	
Sufficiency of education	2.86	0.97	2.98	0.98	0.056	3.54	0.93	3.50	0.84	0.292	0.024	
Satisfaction with IT skills	3.26	1.21	3.29	1.15	0.700	3.16	1.16	3.19	1.12	0.470	0.935	

NB!

p-value * = one-way analysis of variance used to test whether there were statistically significant changes in the country-specific data (= between sum variables of baseline and final survey from Finland and/or of baseline and final survey from Estonia)

(scale: $p \leq 0.05$ statistically nearly significant; $p \leq 0.01$ statistically significant; $p \leq 0.001$ statistically very significant)

p-value ** = two-way analysis of variance used to test similarities/differences between changes in data from Finland and Estonia (between countries). A not statistically significant p-value indicates a similarity of changes. A statistically significant p-value indicates a difference of changes.

(scale: $p \leq 0.05$ statistically nearly significant; $p \leq 0.01$ statistically significant; $p \leq 0.001$ statistically very significant)

The disparity between the two countries was again detected in the aspect of *professional competence*, where the Finnish staff members' satisfaction with professional competence increased based on the sum variables of *substance know-how and interaction in order*, *sufficiency of education*, and *satisfaction with IT skills* during the

project (Table 5). However, changes in the mean values of the sum variables of the aspect of *professional competence* were not statistically significant. Nevertheless, it is noteworthy that there was an increase in the Estonian school staff members' satisfaction with their IT skills during the development period (Table 5). Moreover, the results indicate that, in general, the mean values of the sum variables of the aspects of occupational well-being (working conditions, working community, worker and work and professional competence) were higher than in the Finnish school communities, even though the Finnish participants were able to make this gap smaller during the action research project based on their responses (Table 4 and 5).

The results from the mid-term evaluation supported realising interventions at the schools

The mid-term evaluation (process evaluation) of the project *Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009-2014* was conducted one year after the beginning of the realisation of interventions at the schools, at the turn of the year 2011/2012. The purpose of the mid-term evaluation was to find out how the goals set in the *action plan for the promotion of occupational well-being of school community staff* had been reached in Finland and Estonia (Appendix 1). A further aim was to describe the significance of the action plans for supporting the occupational well-being of school staff. Furthermore, there was a desire to produce information on the meaning of goal-oriented and systematic actions and to find out what requirements there were for further development of the promotion of occupational well-being during this action research project.

Based on the mid-term evaluation, versatile goals had been set to promote occupational well-being at schools by school staff members. The aims for the promotion of occupational well-being were primarily similar in the schools in Finland and Estonia. Aims had been named from all of the aspects of occupational well-being (working conditions, working community, worker and work, and professional competence). These will be reported on in more detail in an international publication.

Nevertheless, based on the results of the mid-term evaluation, it can be summarized that the number of realised actions exceeded that of the set aims in the schools in both countries. This indicated that formulating the goal-oriented *action plan for the promotion of occupational well-being of school community staff* also activated the schools to develop occupational well-being more comprehensively than what they had originally set out to do. Goals that had not been reached by the mid-term evaluation were mostly connected to the physical work environment, such as the school building. Based on the results, some of the realised activities had also been

innovative. For instance, comfort at the school as a working environment had been increased by purchasing board games and crossword puzzles, and work motivation had been promoted by awarding staff with "good co-worker" titles. Especially in the Estonian schools, motivation had been improved by introducing different kinds of rewarding systems. In both countries, there had been efforts to increase professional competence through fairly traditional methods, such as organising training on different topics.

As a method, the mid-term evaluation made it possible to detect faults and mistakes in activities and therefore enabled altering development activities to be better in line with the aims of this project if necessary. The mid-term evaluation of this project supported the idea that the interventions realised at the school had so far been successful. The majority of school staff also felt that the *action plan for the promotion of occupational well-being of school community staff* (Appendix 1) had been a useful tool for promoting occupational well-being:

“ The aims of the plan have been proposed based on the well-being survey conducted at the school, so they are concrete. Having these goals also ‘forces’ us to think about them more profoundly.”

“The action plan has been drawn up to be staff-oriented and this has helped becoming committed to planned actions. Writing down plans ensures that the actions will really be carried out.”

On the whole, the mid-term evaluation offered valuable information on the progress of the action research project and provided evidence that it had been realised according to plan. The evaluation helped to gain knowledge and confidence on the fact that the project had processed according to set aims and was appropriate and acceptable to the primary stakeholders (see South et al. 2010). Moreover, it enabled gaining a deeper understanding on the process of the action research project and on the effects its contents had had on different contributors during its course (see also Potter et al. 2011).

Summary and discussion on the findings

Based on the baseline and final surveys, the interventions for promoting occupational well-being of school staff had produced slightly more positive results in Finland than in Estonia. At the Finnish schools, there was all-around improvement in the results of the Well-being at Your Work Index Questionnaire from the turn of the year 2009/2010 to 2012/2013. In Estonia, satisfaction with occupational well-being remained as before

or slightly decreased during the observation period. Therefore, the development of occupational well-being was not univocal or parallel at the Finnish and Estonian schools, regardless of the fact that the mid-term evaluation indicated similar realisation of set goals and interventions in the two countries.

The results of the baseline and final surveys might have been influenced by the fact that not a lot of attention had been paid to the occupational well-being of school community staff at the Estonian schools before the beginning of this project. The project and related training helped to increase knowledge on occupational well-being at the Estonian schools, which made it likely for the respondents' views to turn more critical by the final survey. Nevertheless, the results from the turn of the year 2012/2013 indicate that occupational well-being at the Estonian schools was still on a better level in case of all of the aspects of occupational well-being (*working conditions, working community, worker and work* and *professional competence*) compared to the Finnish schools. However, the experiences recounted by school staff members indicated that the mean values on satisfaction with occupational well-being from Finland and Estonia came closer during the development process (Tables 3, 4 and 5).

Based on the results, workload (total amount of work) decreased at the Finnish schools during the implementation of development actions. Time management was also improved, which resulted in less hurry at work and a drop in work pace. At the Estonian schools, staff perceived their workload to have increased. This could be explained by changes that occurred since the beginning of this project in the school life in Estonia. For example, the curriculum of Estonian schools underwent a reform in 2010, and its implementation has been problematic. Moreover, there have been revisions to the Estonian school system and some schools have even been closed down. This may have resulted in an increase in a general sense of uncertainty among school employees. The escalation of workload and insecurity may have negatively impacted on the experiences of occupational well-being and it is worth considering whether there would have been an even more significant change in the declining values of occupational well-being in Estonia had there not been any interventions realised during this challenging period.

It is also worth considering whether the increase in workload caused a decay in working community atmospheres. However, based on the results, the increase in workload (amount of work, hurry and work pace) does not appear to have affected the sum variables of *work atmosphere and appreciation of others' work* and *co-operation and communication* of the aspect of working community in the case of the Estonian respondents (Table 4). It is possible that the development work has alleviated the effects of workload by making management of work tasks and time management

more efficient and having the investments made to improve the working community compensate the negative changes brought on by excessive workload. This view is supported by the findings of the process evaluation, which indicate that many interventions promoting occupational well-being were indeed developed to target areas related to the aspect of working community, such as time management and communication. It is also likely that the working community was often the focus of interventions because the school employees had the best possibilities to affect this area through their own actions as opposed to, e.g., issues related to working conditions, such as the maintenance of school premises.

Working conditions, such as physical factors, were improved particularly at the Finnish schools. This is partially explained by the fact that there were significant dampness and indoor air problems in many of the Finnish school buildings, and some of the schools participating in this project underwent extensive renovations during the observation period, with some of them being even entirely rebuilt. These significant changes are apparent in the positive final survey results of the Well-being at Your Work Index Questionnaire.

Based on the mid-term evaluation, the aspect of professional competence was addressed through, e.g., improving workers' IT skills and acquiring new equipment and systems in both countries. The results from the baseline and final surveys indicate a slight improvement in workers' IT skills in both countries, but this was not statistically significant. It is possible that the process of learning to use technological equipment is not yet complete and employees are required to have increasingly comprehensive IT competences, which in turn might partially explain the fact that there have not been significant changes in staff opinions in this area.

Based on the study results, it can be noted that school communities are recommended to develop interventions promoting occupational well-being based on their own particular needs, as there is a lot of variation in schools' requirements and resources that can be used to implement activities (e.g., money and human resources). In the future, more and more internal resources should be recognized and enforced within working communities, such as schools, used as the foundation for development work. This would make development processes at working communities not only communal but also unique and tailored to each workplace (see chapter 3.4).

3.4 EXAMPLES OF DEVELOPING OCCUPATIONAL WELL-BEING OF SCHOOL STAFF IN FINLAND AND ESTONIA

In this section, three case examples are presented from each country to demonstrate how the school communities participating in the occupational well-being intervention drew up their school-specific *action plans for promoting the occupational well-being of school staff* (hereby referred to as *action plan*) in practice, how they carried out the planned development activities, and how the plans promoted the development of occupational well-being at the schools. The names of the schools have been replaced by numbering in this publication (Finnish schools have been marked with running numbers 1-3 and Estonian schools with 4-6). Persons from each school's work groups that had been responsible for formulating the action plans were interviewed for the case examples by members of the research group at the University of Eastern Finland: school principals were interviewed at Finnish schools 1 and 3, while the contact person of the Schools for Health in Europe (SHE) network was interviewed in school 2. The examples from the Estonian schools (number 4, 5 and 6) rely on written summaries by regional SHE coordinators in Estonia based on respondents' interviews, experiences and observations in the selected school communities.

Example from school number 1 (Finland)

The work group formulated the action plan based on the Well-being at Your Work Index Questionnaire

The staff of school number 1 responded to the Well-Being at Your Work Index Questionnaire, aimed at the entire school community staff, in the autumn of 2009. The results of the baseline survey were presented by the school's SHE contact person at a teachers' conference and were openly discussed. After discussing the results, a work group of three persons lead by the school principal was established according to instructions from the research group at the University of Eastern Finland. The established group had the task of developing occupational well-being and formulating an action plan for promoting occupational well-being of the school community staff (Appendix 1). In addition to the school principal, the group included a health education teacher who also functioned as the SHE contact person and a secretary for the group, and the school's special education teacher. The group arranged meetings to draw up the action plan and, subsequently, met occasionally

during the intervention, e.g., to formulate a mid-term evaluation. The SHE contact person took the main responsibility for promoting the intervention (Figure 5).

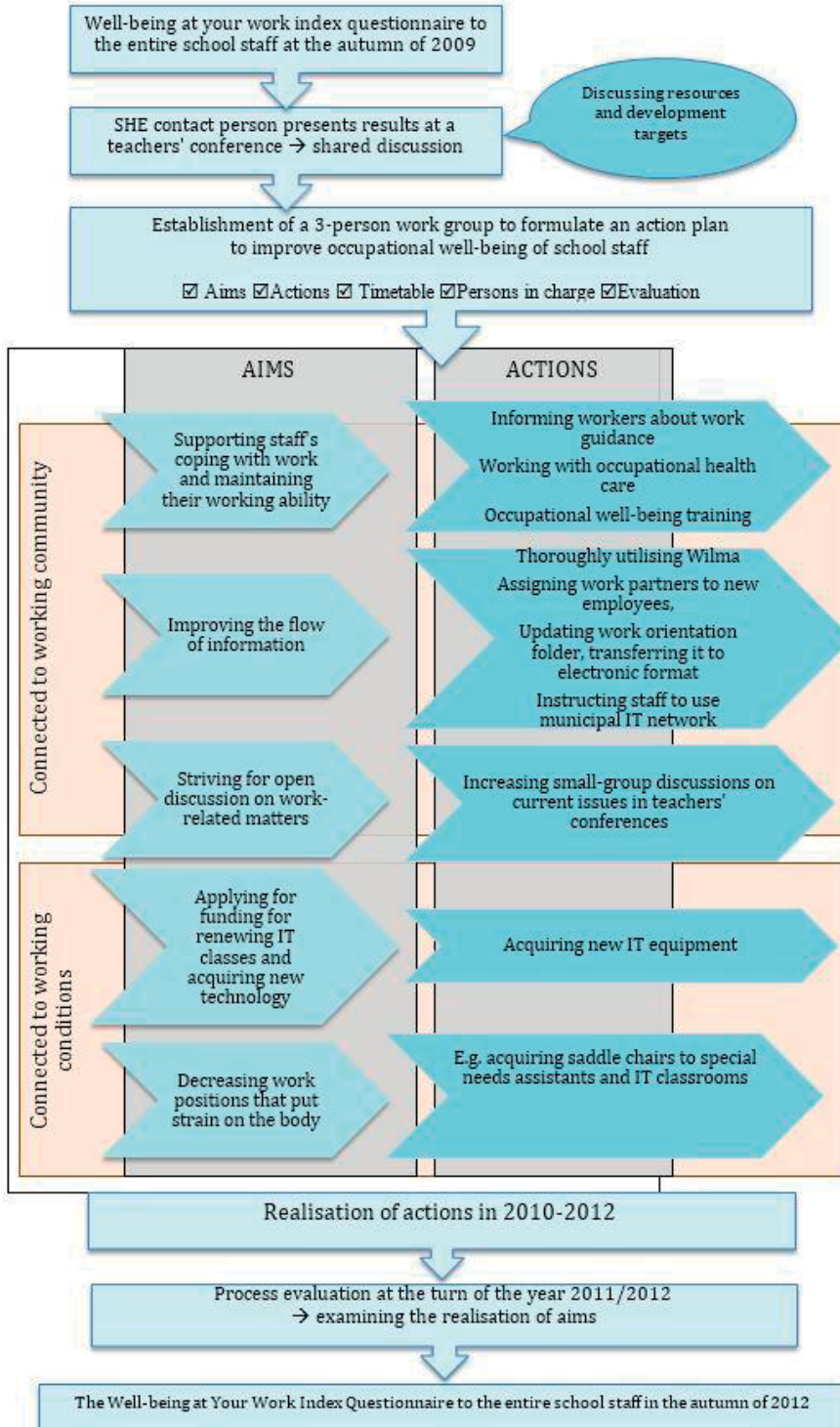


Figure 5. Process chart of school number 1

The work group that had been established at the school to promote occupational well-being named seven items based on the instructions provided by the research group at the University of Eastern Finland: 1) resources of personnel, 2) problems threatening occupational well-being and development targets, 3) aims in terms of problem solving, 4) planned activities and costs caused by them, 5) timing, 6) responsible persons and 7) assessment of the realisation of activities (see Appendix 1).

The resources and problem areas presented by staff at the baseline survey were widely included in the action plan. According to the baseline survey aimed at staff members, staff's resources were considered to include teachers' good readiness to act as group leaders and partake in interactive situations and their possibilities to effectively utilise their competences at work. The physical strain of work was considered appropriate and it had been possible to take part in rehabilitation available through an examination by occupational health care services. School employees were considered to be motivated and professional and value their own work. Teachers' sense of responsibility was a resource for co-workers helping and supporting each other. The school was perceived to develop along with the society and, all in all, development activities had been dynamic. Pupils had also actively participated in multiple well-being activities. Moreover, having been able to repair ventilation at the school and make work spaces appropriately lit and heated was considered a further resource.

According to staff at school 1, problem areas at the school included the mental workload of the job, accumulation of work and mandatory evening and weekend work. Teachers felt they had no time to have breaks and moments of rest during workdays, and activities supporting coping with work and mental resources were found insufficient. Moreover, readiness to deal with problematic persons was considered lacking, and larger-than-average class and group sizes were found to add to the teachers' burden. According to the staff, there were also no regular health check-ups or professional guidance offered to them. The topic of voluntarily taking care of oneself and one's health had also emerged from the baseline survey. There was considered to not be enough activities encouraging the maintenance of personal well-being or training offered to support one's personal development. Lack of IT skills was also perceived as a problem area for occupational well-being. School employees had desired more open discussions and more efficient communication related to work-related issues. Resources had been taxed by moderately unfit work spaces and observed shortcomings in the tools and equipment necessary for work. It was also seen as an issue that there had been no reviews on problematic work positions at the school, and computer workstation ergonomics were not considered to be in order.

Many problems named by the staff, such as working during evenings and weekends, were perceived by the interviewed principal to be typical for everyone working in teaching positions. It was decided that all factors considered to threaten occupational well-being, even if it was only by one worker, were to be noted in the action plan, and even those problem areas to which the school management already saw solutions were not to be ignored.

Clearly naming and writing down resources and problem areas helped to formulate and set aims in the action plan. Based on the development needs that emerged in the baseline survey, the work group at school 1 summarised and set five aims connected to the aspects of working community and working conditions in their action plan:

- 1) To support staff's coping with work and maintain their working ability (connected to working community)
- 2) Improve the flow of information (connected to working community)
- 3) Strive for open discussion on work-related matters (connected to working community)
- 4) Get funding for renewing IT classrooms and acquiring computers, video projectors and document cameras (connected to working conditions)
- 5) Decreasing working positions that put strain on the body (connected to working conditions)

Actions were planned according to the aims:

- In order to support staff members' coping with work and maintain their working ability, there was a plan to find out every staff member's needs for training to develop their professional competence and gain awareness of their true needs for professional guidance. It was established that training was already available, and school workers were encouraged to actively participate in it. Education on stress management to the entire school staff was planned (aim 1).
- In order to improve the flow of information, it was planned that communication would be enhanced and staff would receive more guidance in using an online network for municipality employees. There was a plan for further development and enhancement of the use of the educational institution's administrative programme, Wilma. Moreover, there was a plan to familiarise new workers with their tasks by assigning them and teachers' substitutes with work partners and by updating information in a work orientation folder (aim 2).
- In order to encourage open discussion, career development discussions between manager and employees were organized and teachers' conferences

were developed. In order to better accommodate dealing with current topics, small group activities were planned as part of the teachers' conferences (aim 3).

- Factors related to the school premises and computers were taken into account when organising school timetables and when acquiring computers and other technical equipment. Information on equipment to be ordered was recorded in the plan (aim 4).
- In order to decrease the use of working positions that put strain on the body, a survey was planned, costs were calculated and budgetary estimates were formulated so to accommodate necessary corrective steps (aim 5).

The costs of all of the measures were taken into account at the planning stage. There was a budget for the acquisition of IT equipment and ergonomic corrections, while investments related to education and training had always been made. The municipality already offered incentives and opportunities to participate in personal recreation activities. However, it was considered a challenge to formulate a timetable for the planned actions. The issues considered most important and urgent were prioritised, and all of the measures were planned to be realised at the latest within a couple of years. Setting concrete timetables functioned as a promise to answer to the staff's wishes and made sure that the occupational well-being intervention and the related surveys were goal-oriented. The school principal was named as the person in charge of the intervention and, particularly, the career development discussions. It was also entered into the plan that every member of the working community was personally responsible for the occupational well-being within it, and workers were reminded of this task at shared meetings. Moreover, a long term primary trustee of the school was by default independently involved in the realisation of the actions without a separate mention of their role in the action plan. The trustee provided the work group with information connected to occupational well-being.

The work group also formulated a plan for the evaluation of the realisation of issues presented in the action plan. The evaluation was intended to be realised by a separate planning group that had been previously established to develop issues connected to a reformation of the comprehensive school system. Indeed, the occupational well-being interventions were all in all mostly connected to the comprehensive school reform anticipated to occur in the near future. This was apparent in the evaluation, e.g., in that the results from the occupational well-being interventions and answering to the demands of the comprehensive school were assessed parallel to one another.

Using systematic planning and concrete aims to reach mutual aims

The realisation of the actions occurred in school 1 between the years 2010 and 2012. At the turn of the year 2011/2012, the school's work group responded to the process evaluation questionnaire (=mid-term evaluation) realised by the research group at the University of Eastern Finland to find out how the school had succeeded in carrying out their action plan and the project in general. The work group wrote down separately how each goal had been reached. According to the principal in charge of the intervention, the realisation of the actions had been generally successful and goals had been reached *"well enough to afford the grade 9 (out of 10)"*. The action plan had been considered to aid the promotion of occupational well-being of school community staff. The principal felt that formulating the action plan had given a structure to the actions by making the process clearer and more goal-oriented. Writing down the issues and thinking about them together had helped *"steer things to the right direction"* in a planned and systematic way. Even though the project had been generally considered to use a lot of resources, the principal found that the benefits outweighed the disadvantages.

When it came to writing down issues to the action plan, the principal considered that actions were promoted by having schedules as punctual as possible and systematically evaluating the realised procedures. It was considered favourable to inform the staff involved in the intervention on the timetables and on how the plan and its actions were to be implemented. The principal considered this method to promote trust and motivation, as the clear timetable enabled everyone involved to follow the different stages of the project as they happened. After the implementation of the intervention, the principal reflected that conscious evaluation is often overlooked at the planning phase and in practice. In order to construct a plan that is as clear and functional as possible, it is recommended to proceed from as concrete goals as possible via clear procedures and scheduling to evaluation determined based on the goals. For instance, the detected problem of teachers being too busy to take sufficient breaks during the workday can be solved by setting a concrete goal of enabling taking breaks by introducing a rotation system, pauses from teaching during workdays etc. Timeframe for introducing a change can be, e.g., the following semester, and evaluation can be set to a certain point in time where the realisation of the plan is examined by asking teachers whether the goal has been reached. According to the principal, the formulation of the action plan would have been accelerated and made easier by having even clearer instructions on its structure. This would also have helped formulating the plan systematically and aided working on goal-oriented topics.

Example from school number 2 (Finland)

Generating ideas in small groups and setting clear aims to solve shared problem areas

The Well-Being at Your Work Index Questionnaire was filled out at school 2 in the early spring of 2010. After receiving the school-specific results, the school's SHE contact person picked out 14 most central statements threatening occupational well-being and presented them to the teachers of the school in connection of an education event in January 2011. Subsequently, teachers were divided into small groups to work on possible solutions to solve the issues for approximately an hour. A work group of four members of school faculty was established to combine the output of the small groups and to formulate an action plan for the occupational well-being intervention at the school. Participation in the group was voluntary. Two mathematics teachers (one of whom was also the SHE contact person at the school), a special education teacher and a student counsellor signed up for the group. They first assembled a few times to formulate the action plan and, subsequently, the SHE contact person took a fairly independent role in taking care of the progress of the actions. No further teamwork in the group was deemed necessary. The SHE contact person presented the action plan at a teachers' conference, after which it was approved (Figure 6).

The work group named seven items from resources to evaluation in their action plan. At school 2, good atmosphere among working community, openness, tolerance and collegial support were perceived as resources. Problems at the school included increased sick days caused by indoor air factors and having teachers be segregated in two different staff rooms, as the teachers with indoor air problem related symptoms had been forced to use a separate barrack-like building as their temporary work space for over three years. This had decreased communality and collegial support at work, and many teachers missed having shared activities and social interactions. Therefore, teachers were widely motivated to partake in the occupational well-being intervention and optimistic about its possibilities to promote communality at work.

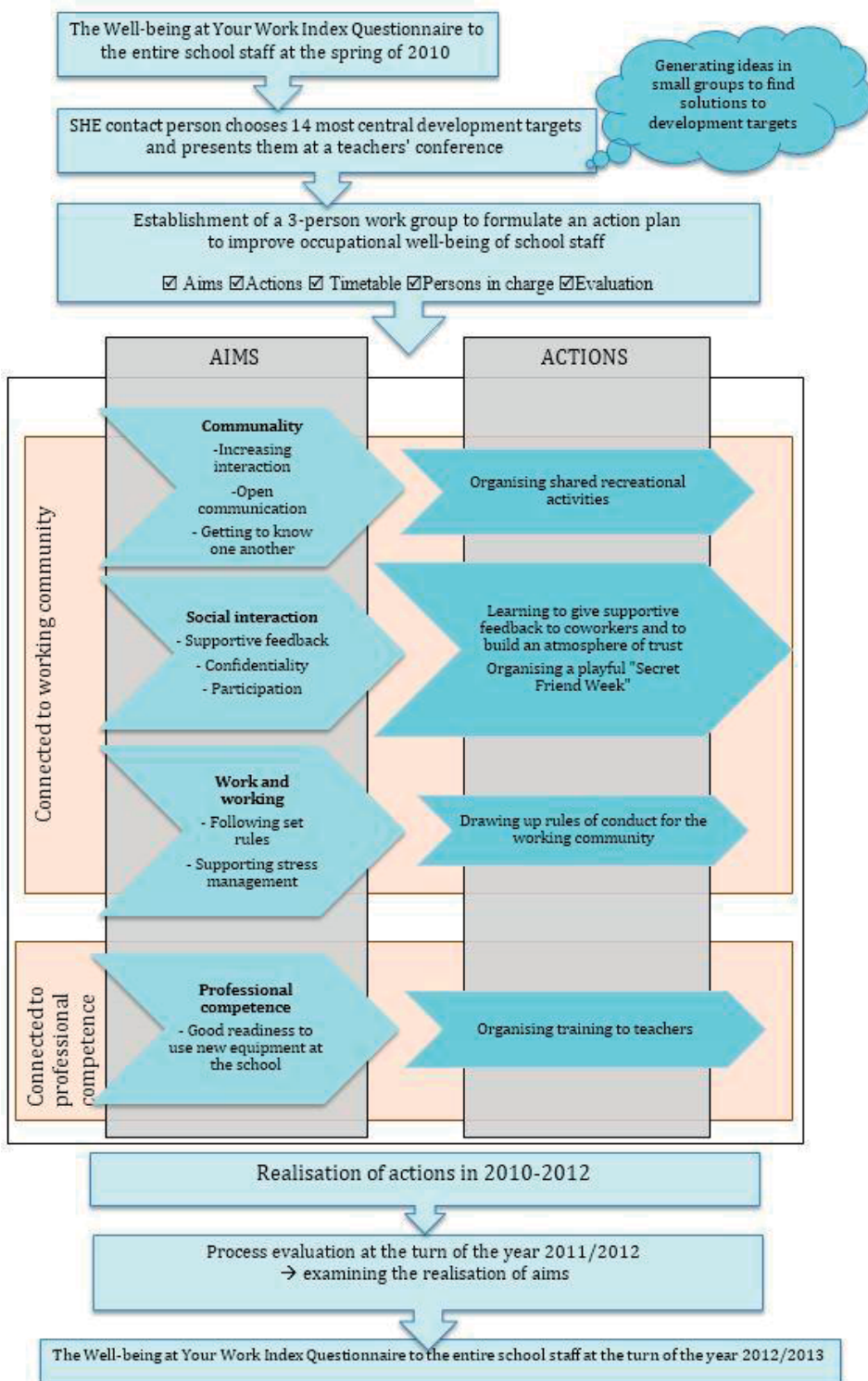


Figure 6. Process chart of school number 2

The work group set four clear aims connected to the aspects of working community and professional competence and their adjustments to support occupational well-being at the school:

- 1) Communality: increasing interactions, communicating openly, supporting each other (connected to working community)
- 2) Social interactions: supportive feedback, confidentiality, participation (connected to working community)
- 3) Working: following set rules, supporting stress management (connected to working community)
- 4) Professional competence: good readiness to implement new equipment and devices at the school (connected to professional competence)

In order to reach the goals, the work group planned activities to realise each aim while taking costs into account:

- In order to promote communality, shared voluntary and personally paid for recreational activities outside working hours were planned, e.g., trips to theatre shows and participation in sport events.
- In order to promote social interaction within the working community, an idea emerged in the work group of a "Secret Friend Week" where each member of personnel were to be assigned a secret friend who they would regard with acts of kindness for a one-week period. The reveal of the secret friend was planned to occur on Valentine's Day ("Friend's Day" in Finland). In addition, a feedback board was set up so that workers could leave messages of encouragement to each other (goal 2).
- In order to promote work and working, the work group formulated a plan to update rules of conduct at the school and to discuss them at classroom teachers' lessons. An opportunity to receive professional guidance was also included in the plans (goal 3).
- In order to promote professional competence, offering training on different topics was planned and possible costs were to be compensated from the school budget (goal 4).

Cost-related factors limited planning the actions. As there was no special budget allocated to this intervention, set goals and procedures had to be such that they would cost practically nothing. Therefore, it was not necessary to mention costs separately in the action plan. When the action plan was formulated, there was a small amount of money allocated to the promotion of occupational well-being available and it was included in the plan. The timetable for the action plan was primarily drawn up on a

semester and monthly base. The responsibilities for the set goals were divided and delegated to different persons. The evaluation of each goal was designed and assigned to each responsible person, and it was planned to be conducted primarily based on verbal or written feedback. In practice, evaluation occurred in teachers' conferences through joint discussions on the success of the actions and this was considered a good and sufficient form of assessment.

Clearly defining goals, delegating responsibilities and receiving support from the school principal as the foundation for a successful intervention

The planned actions were realised at the school between the spring and autumn of 2011. The SHE contact person at the school felt that the actions carried out at the school had been generally very successful and staff had been satisfied with their accomplishments. According to the contact person, the school had been able to stick to the action plan well and the intervention was thought to not have been overtly demanding. The procedures had been carried out alongside other work tasks. The timetable formulated in the action plan was successful and the actions were realised within the previously determined timeframes. The accomplishment of some of the goals was slightly incomplete, but there were plans to continue working on them in the following years, always within the possibilities of the situation. This was also the reason why there was no major pressure to complete all goals in their entirety in the first place. The interviewee considered it a significant accomplishment that the plan had been realised regardless of other major challenges faced by the teachers. Indeed, the majority of resources was spent on constructing a new school building and planning relocating to it during the intervention.

According to the SHE contact person, setting the goals on a suitable level and having a sufficiently small number of aims had promoted the success of the intervention. It was considered important to have goals that were as specific and realistic as possible in order to reach them. Clearly defining timetables and actions was deemed central to reaching goals. It was also considered beneficial to have a plan that proceeded logically and systematically from resources to evaluation. In addition to the success of the plan, the commitment of workers to the responsibilities named to them was considered a further important asset. Morale was good among teaching staff from the beginning of the intervention, and it was easy to find teachers to function voluntarily and naturally in the tasks, as these persons had often already been previously involved in similar roles of responsibility. In fact, the clear plan and division of roles had been so well-functioning that no more meetings of the work group were considered necessary after the initial planning stage. The SHE contact

person also highlighted the support of the school principal as an absolute requirement for the success of the intervention. Without the principal's motivation and certain authority, it would have been difficult to promote this project involving all of the school staff. All in all, the SHE contact person felt that the more motivated the persons involved, the more likely and easier was the projects' success and realisation.

The SHE contact person assessed that having thought out the plan and agreeing on issues together gave a concrete form to a desire to cooperate for the sake of occupational well-being. When the contact person was later considering the topic, they presented that if the project group had included more employees, there might have been more awareness of and familiarity with the project at the school community. It would be recommended to also share work and responsibilities when formulating an action plan in order to incorporate different viewpoints and operation models in the process. It would also be good to get the involvement of those representing other staff groups at the school, even though it could be challenging for cleaning and cooking staff to participate in meetings during school days. Indeed, a school nurse had been involved in other occupational well-being related projects organised at the school in previous years, and she had been considered a good cooperation partner.

Example from school number 3 (Finland)

Clear and systematic but flexible action plan as a solution to central problems

The Well-Being at Your Work Index Questionnaire was filled out at school 3 in the autumn of 2009. The results from the survey were initially discussed at meetings between the school principal and vice principal. The occupational well-being project was a natural continuation of an interaction development project realised at the school during the previous two years. The baseline survey provided information on how the interaction skills of staff had evolved and which areas should be developed at this point in time. Central issues were raised from the results on the grounds that they were perceived such that they could be influenced. They were presented to the teaching staff at a shared meeting, represented as percentages using a pie chart and a PowerPoint presentation. The resources of staff were also brought up at the meeting, and there was lively conversation on the topic. Subsequently, a work group of four persons was formed at the school to take care of formulating an occupational well-being plan and realising the project. The group consisted of the school principal, the vice principal and two teachers (one from each school location). During the project,

the work group assembled biweekly, approximately 1.5 hours at a time. They agreed on the division of responsibilities within the group (Figure 7).

The members of the work group formulated the action plan together and named seven items from resources to evaluation. Based on the baseline survey, the proficient, competent, motivated and caring staff was a resource at the school community. Occupational well-being was perceived to be hindered by constant hurry and insufficiently bringing up issues. Moreover, there was considered to be inadequate familiarisation of new workers to their tasks and the work place, and inadequate informing of staff of changes at the school. Limiting work tasks and saying no to offered responsibilities was considered difficult. A *problems/development targets* section of the action plan also included the opportunities that the work group considered to provide possible solutions to the aforementioned problems. It was thought possible to intervene with the issues by being honest about difficult topics and discussing them openly. Appointing persons responsible for offering work orientation to new employees was considered a solution to the problem with the familiarisation. Furthermore, the work group highlighted the benefits of organising meetings and unofficial events for the entire school community staff.

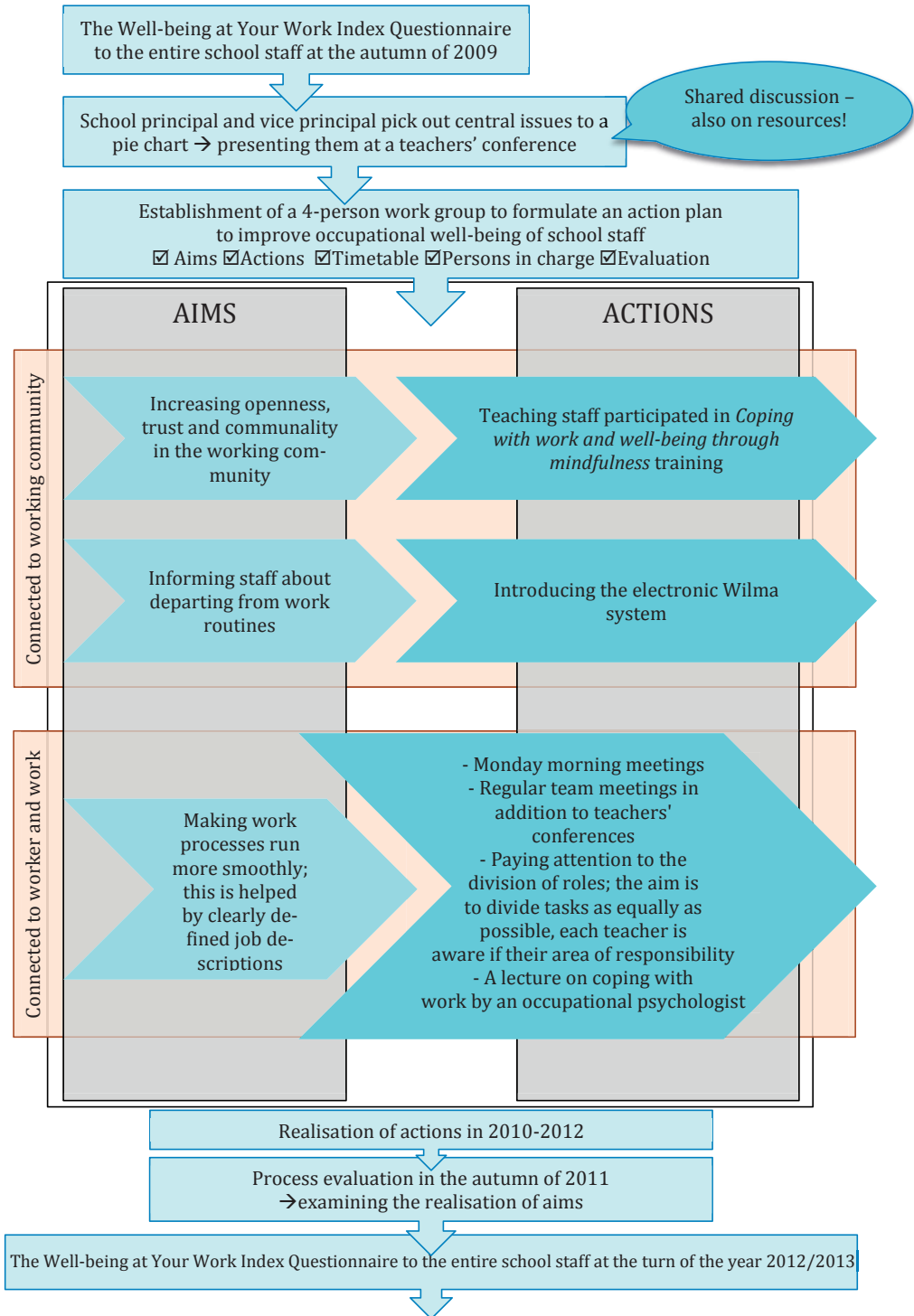


Figure 7. Process chart of school number 3

In their occupational well-being plan, the work group singled out three goals connected to the aspects of working community and worker and work:

- 1) Increasing openness, trust and communality in the working community (connected to working community)
- 2) Informing staff about issues departing from work routines (connected to working community)
- 3) Making work processes run more smoothly: work is accommodated by having clearly defined roles for all employees (connected to worker/work)

Items from goals to evaluation were systematically documented in the action plan according to numbering given to the aims. In order to reach set goals, the work group set the following tasks:

- Participating in training on occupational well-being and coping with work to increase occupational well-being and communality (goal 1)
- Agreeing on a person in charge of informing other staff of decisions at the end of each meeting (goal 2)
- Agreeing on responsible persons and carefully considering extra work and projects (goal 3)

The timetable documented in the action plan regarding participation in training covered time between the spring and autumn of 2011. Selecting the person in charge of informing other staff about decisions was scheduled to take place as soon as the action plan had been formulated. Familiarisation of new workers with their tasks and working environment was decided to take place whenever a new employee started working at the school. The entire school community was named in charge of training. The person writing the memo and acting as the secretary at meetings was assigned to inform all staff of decisions made in the meetings. The school's special needs assistants usually took turns in the task. School principal/vice principal, teacher peers, kitchen manager and cleaning staff manager were respectively named in charge of the orientation of new employees. The assessment of the realisation of the plans was intended to take place in performance appraisal discussions occurring before a spring leave and in meetings throughout the school year: in weekly meetings on Monday mornings, biweekly group meetings and biweekly teachers' conferences. Teachers' yearly official additional training days, whose purpose was to plan teaching for the following school year, were also considered a good occasion for discussing evaluation-related matters. The completed action plan was presented to teaching staff at a meeting.

A culture of open discussion to promote occupational well-being and communality

The success of the planned actions was appraised with a process evaluation questionnaire survey realised by the research group at the University of Eastern Finland in the autumn of 2011. The set measures were perceived to have been realised successfully and the respondents were satisfied with the previously formulated action plan. The goal of increasing openness, trust and communality in the working community had been reached well.

As planned, the entire teaching staff participated in training that had been set as an aim in the spring of 2011. The *Coping with Work and Well-being through Mindfulness* training included a lot of open discussion and exercises enforcing communality, and had been considered good for improving morale at school. The goal of making work processes go more smoothly had been reached excellently.

The Monday morning meetings had been established as a weekly routine at the school, where any special events and deviations from routines of the incoming week were discussed, thus making sure that all staff members were aware of them. In order to make these meetings stress-free, it was decided that teaching would commence at 9 AM on Mondays after each meeting. Person assigned to the task of acting as a secretary documented decisions made in the meetings and the information was also saved to an electronic calendar used by the school staff members. Organizing team meetings and teachers' conferences had also become a regular practice.

The electronic Wilma system had also been utilised in informing the working community about deviations from everyday work practices. Work was also made to run more smoothly by paying more attention to the division of work tasks. The aim was to divide tasks as evenly and fairly as possible, and each teacher was made aware of their personal areas of responsibility. This had been promoted by clearly defining job descriptions and discussing them in groups. The clarified job descriptions enabled all members of staff to know what was expected of them. If needed, these definitions will be updated in the future. A further lecture by an occupational psychologist on coping with work was arranged to take place later, in the spring of 2012.

The school principal and special education teacher had arranged a possibility for teachers to fill out the occupational well-being questionnaires during lessons, which played a part in increasing the response rate. The principal also perceived that teachers' participation in the development work group augmented their commitment to the project. This was promoted by, e.g., having a teacher member of the work group instead of the principal to inform teaching staff about decisions, thus making it appear less as *"things being dictated from above"* and preventing the goals from remaining a concern of the managerial level only. In the occupational well-being project, similarly

as in many other endeavours connected to creating a change, participants were contrived to proceed through trial and error. When developing new features, the functionality of the structure of the intervention and general opposition to changes can pose challenges. The principal considered that it was possible to influence this by cherishing shared and stress-free discussions. If any experiment was found redundant, it was possible to discuss together about what other solutions could be there to replace it. After the intervention, the principal considered whether it would have been useful to have set even more detailed goals. However, this does not mean that the plan would have to be rigid and unquestioning. Instead, it is important to have a plan that allows some alterations to accommodate potential new needs and related changes throughout the school year and during the course of the project.

The interviewed principal found promotion of occupational well-being to be a topic of utmost importance in the school community. Maintaining shared and active discussions on occupational well-being is advisable, as it is a topic that might easily be overtaken by routine work responsibilities at school. Regular and frequent conversations also help new or returning members of the working community to grasp necessary information and know what decisions have been made. The principal considered the structured and goal-oriented action plan to function as a good tool for evaluating one's own actions, determining what was already successful and deciding what practical measures should be taken at each particular time. Having the timetable written down helped sticking to the plan: "*When you reserve the time, you'll have it*". The principal also found that projects promoting occupational well-being increased communality and openness towards related issues. According to the principal, it is advisable to maintain discussions on the action plan throughout the school year, as everyday experience has indicated that if people are not reminded of these issues, they tend to slip back to old behavioural patterns. Conducting a general survey on opinions and the current situation helps getting an objective idea of the state of affairs, as there can be faulty conceptions regarding it. The principal also expressed the idea of repeating the baseline survey of the project every now and then as a good method for picking up currently important development issues.

One challenge related to the occupational well-being survey had emerged at the school due to the fact that not all members of school staff work under the same manager. As management activities significantly impact occupational well-being, the interviewed principal wondered whether it would have been better to organise separate surveys to those with different managers. This could have increased the extent of the goals of the action plan related to the problem areas revealed by the survey.

Example from school number 4 (Estonia)

The occupational well-being development group chooses to focus on the most critical problem at the school

In Estonia, the staff of school 4 completed the electronic occupational well-being survey in the year 2010. In the same year, a work group established at the school began formulating an action plan to promote general occupational well-being at the school based on school-specific results. The group included a school nurse, teachers, a personnel expert and a substitute for the school's director of finance. In Estonia, a regional coordinator for health promotion provided the school's occupational well-being promotion group feedback and recommendations to aid constructing the action plan.

In relation to the aspect of working conditions, the work group assessed high levels of noise at the school premises and problems it caused to staff and students to be one of the most critical well-being issues at the school (58% of staff considered the noise level too high at the baseline survey phase). Lowering the noise level at the school by the January of 2012 so that the minimum of 70% of staff would find the noise level tolerable was set as an aim in the development plan (Figure 8).

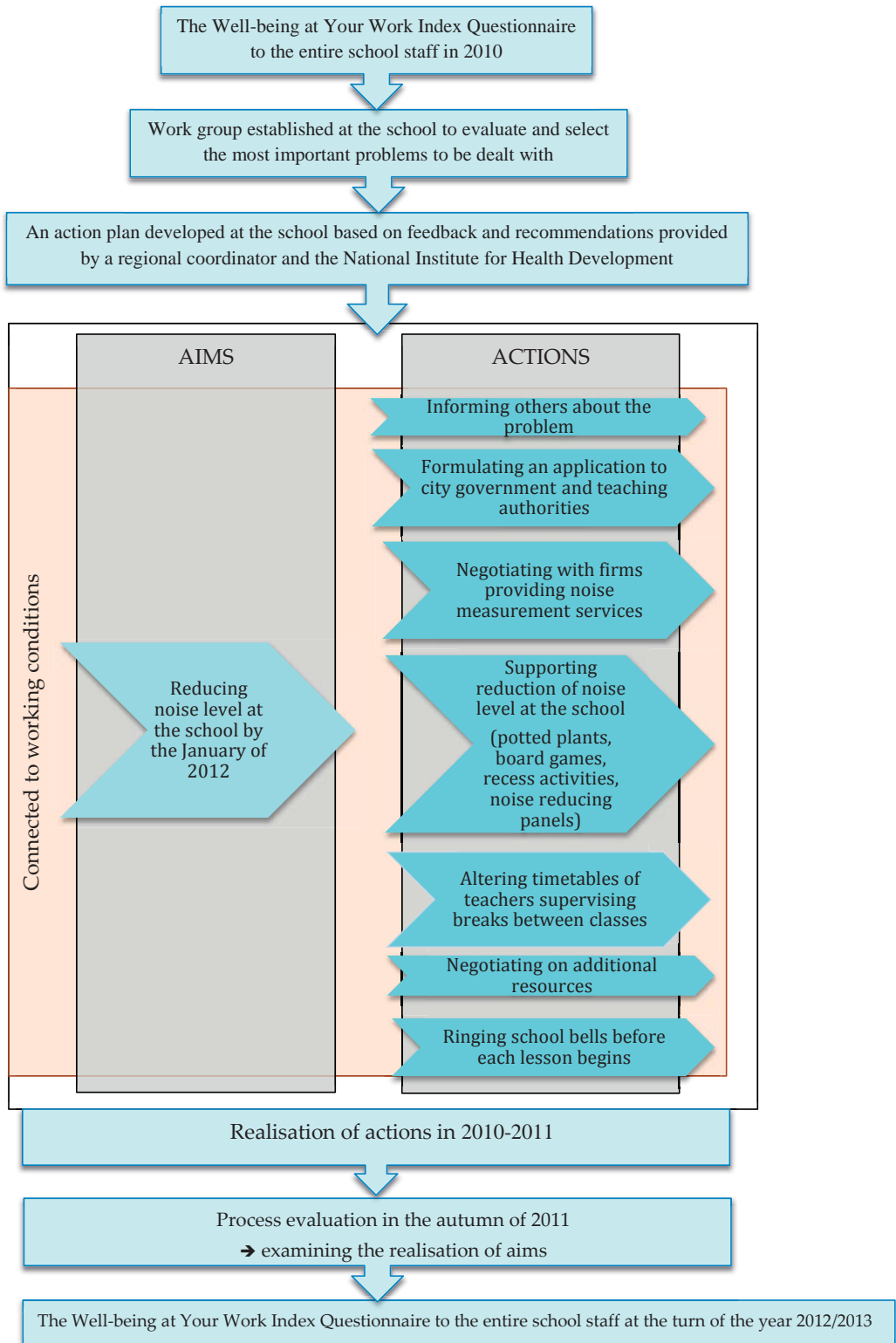


Figure 8. Process chart of school number 4

In order to tackle the noise issue, the following procedures were planned:

- Solutions were related to school premises and breaks between lessons supporting the reduction of noise:
 - Placing potted plants on windowsills in school hallways, hanging students' art on the walls
 - Acquiring board games, books and crossword puzzles in classrooms in order to reduce the number of students loitering in the hallways during breaks
 - Offering recess activities to students: purchasing outdoor game and sport equipment (balls, skipping ropes, Frisbees), offering the minimum of one outdoor break per day to primary school pupils during winter, offering the possibility to spend each break outdoors during spring and autumn and breaks with sport activities in the school gymnasium, giving a possibility to play table tennis, arranging a "quiet room" where students may, e.g., read or do crafts in silence, organising a dance session in the school assembly hall once per week, acquiring foosball and corona tables
 - Installing noise reducing panels on hallway ceilings
- Informing school manager and pupils' parents about the problem at an administration meeting
- Formulating an application to the city government and teaching officials to gain their support
- Negotiating with companies providing noise measurement services, calls for offers
- Amending timetables of teachers functioning in positions requiring a lot of watching over pupils so that they would not have to spend entire schooldays in areas with high levels of noise
- Maintaining negotiations with school officials regarding the acquisition of additional resources in order to install noise-reducing panels on school ceilings
- Ringing school bells before each lesson (prepares pupils to forthcoming classes and helps them to calm down)

The realised practices were financially supported the teaching administration (the installation of noise-reducing panels onto ceilings), project funding (purchasing the corona and foosball tables) and funds from the school budget (establishing

playground areas). Additionally, the school was donated crossword puzzles, books and potted plants. The realisation of the action plan was commenced with the support and advice of the regional coordinator.

Inspiring results achieved through development activities also in other areas of occupational well-being

The realisation of the actions was evaluated with the process evaluation questionnaire survey carried out by the research group at the University of Eastern Finland in the autumn of 2011. Its purpose was to assess how the action plan had supported achieving set goals, what results had been gained thus far, and how collaboration to promote the issue had succeeded. The process evaluation indicated that the action plan constructed at the school had supported involving school staff in the project. It was also apparent that the introduced methods had resulted in more calmness among pupils during lessons and recess, as they now had more opportunities to exercise during breaks and could also spend time in silence.

In addition to the activities cutting down noise, other changes were realised to support the occupational well-being of school staff during the project. The staff room had been divided into working and resting zones, a dishwasher was installed in the kitchen area, and school hallways and staff room were embellished with seasonal decorations during celebrations in order to raise spirit among workers. A new tradition of organising shared learning trips for staff (including courses and workshops) to interesting Estonian destinations three times a year was established at the school. There were plans to cut back on the number of teachers watching over school breaks, but this will only be possible once all employees feel equally responsible to intervene with disturbing behaviour (it has been decided that this topic will be studied more and additional training on it will be offered). It was also considered important to further develop cooperation and understanding on the fact that everyone at school can play a part in improving their personal well-being and share the same goal. Therefore, one more general cooperation development seminar was planned to take place at the beginning of 2012.

The success of the project was finally evaluated with the electronic final survey aimed at school community staff realised by the research group at the University of Eastern Finland at the turn of the year 2012/2013. The results from this survey were compared with the baseline survey that had been carried out two years earlier. The comparison was used to find out about further occupational well-being development needs. The final survey indicated that the noise level at the school had decreased significantly: in 2010, 58% of respondents had found the noise level to be excessive,

while at the turn of the year 2012/2013 only 29% felt this way. There had been constant efforts at the school to offer pleasant recess activities to pupils in the future and thus guarantee that pupils remain more restful during lessons. There had particularly been a lot of participation in the sport activities. Some had worried that employees would not get excited about offering one another positive feedback. Words of gratitude were more likely to be expected to come from school management than from one's peers. Nevertheless, more opportunities to recognise and reward co-workers who had done well were available at the beginning of the year 2013, as different titles and awards were introduced at the school (Teacher of the Year, Young Teacher of the Year, Best Subject Teacher, Fairest Teacher, Best Classroom Teacher and Friendliest Teacher). In the autumn of 2013, a notice board for presenting the acknowledgements awarded to teachers was also placed in a school hallway. All in all, the school staff evaluated that the aims of the development plan had been successfully reached in the intervention.

Example from school number 5 (Estonia)

The work group selects the most urgent problem area and sets sub-aims to solve it

Staff of school 5 also responded to the electronic Well-being at Your Work Index Questionnaire in the autumn of 2010 and began developing occupational well-being in the school community based on their survey results in the same year (Figure 9).

Based on the baseline survey, there were several strengths apparent at the school. General well-being was evaluated as good, personnel were satisfied with operations organised to support professional well-being, there was a positive atmosphere in the school, and employees were offered a lot of possibilities, e.g., to get further training and develop one's competences. However, certain problem areas could be detected in the results. There was a need for renovating the school building, lighting at the school was sub-par and caused noise that disturbed concentration on work, ventilation was insufficient in certain areas, soundproofing was non-existent in certain classrooms, teachers' IT skills were unsatisfactory, and collaboration between members of the organisation was lacking.

Out of the named issues, the significance of cooperation emerged as the most urgent matter, and improving it was decided as the central aim at the beginning of 2011. The idea of improving cooperation stemmed from a wish to enhance the organisation of work tasks, information on changes in the working environment, familiarisation of new workers to their tasks, and communication between co-workers. The topic was discussed among those involved in school health care and at the meeting of the school's board of directors. Three sub-aims were set to achieve the goal:

- 1) Establishing a health promoting and encouraging school environment, promoting the health and well-being of teachers
- 2) Enhancing teachers' spirits and confidence through self-development and acquisition of new skills
- 3) Creating possibilities for teachers to communicate and collaborate and guaranteeing teachers' willingness to cooperate and valuing collaboration between school management and workers

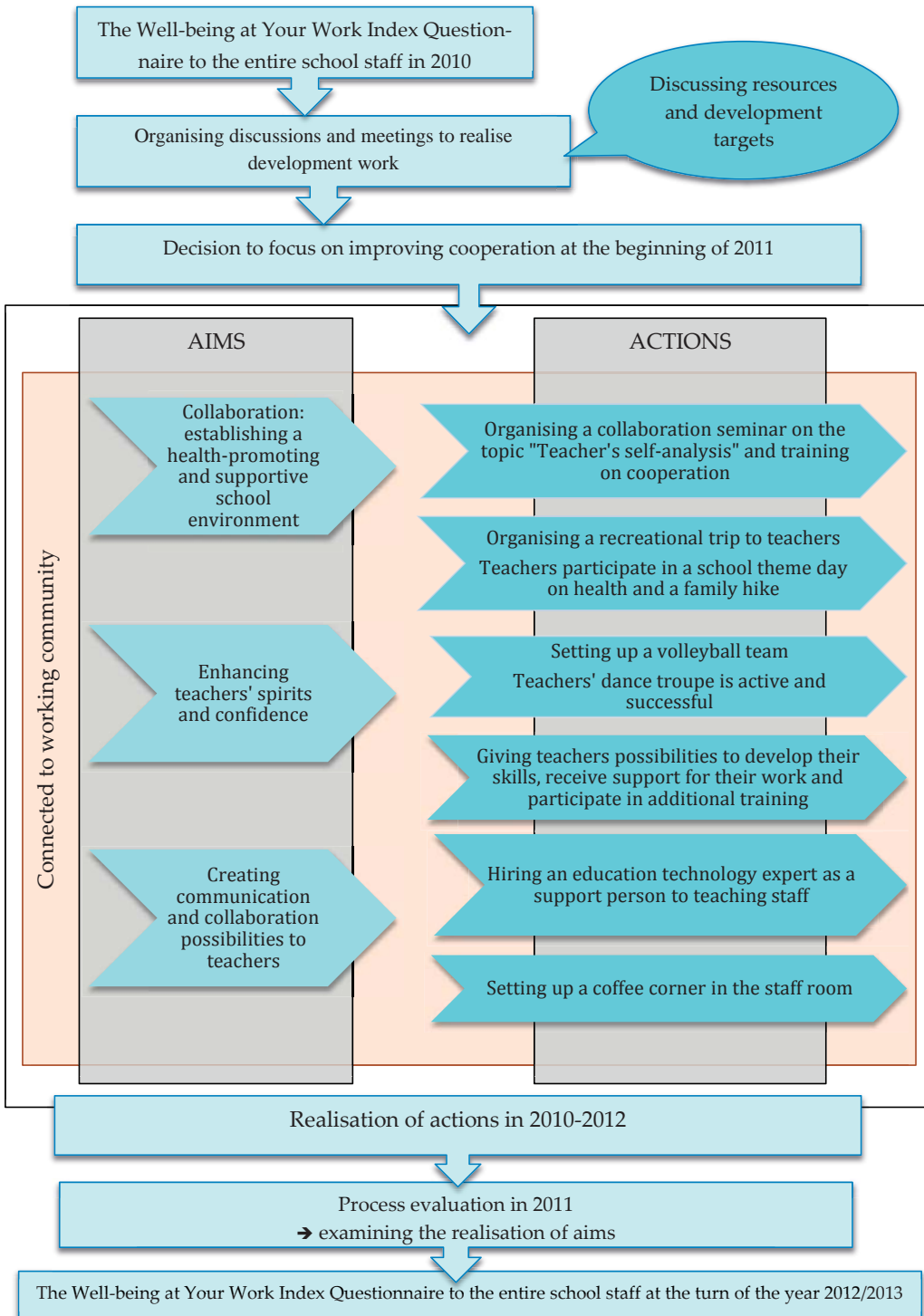


Figure 9. Process chart of school number 5

In order to realise activities, joint discussion events and meetings were organised. Interventions were planned by determining their beginning dates, durations, resources and responsible persons. Actions were funded from the school budget. The school leader, representatives of school health administration and members of the school staff's occupational well-being group were named in charge of the project. The following actions were realised to reach the aims:

- A collaboration seminar on teacher's self-analysis and collaboration training were organised. Both the seminar and the training included a recreational trip and a possibility to participate in activities maintaining health.
- A recreational trip was organised for teachers to the Estonian Drama Theatre in Tallinn. Teachers also participated in a health theme day at the school and a family hike, and five teachers also entered into a running competition between two towns.
- School employees set up a volleyball team and held a tournament against pupils. Team members still attend volleyball practice once a week. A dance troupe established by teachers is active and has been successful. The troupe has participated in national and regional dance celebrations.
- Teachers were offered possibilities to develop themselves, receive support for their work and participate in additional education:
 - In-house training events were offered and all teachers were given the possibility to participate in at least one training session
 - Eight teacher took a 160-hour course on formative assessment
 - Training on outdoors learning was organised at the school
 - Training on collaboration was organised at the school
 - Parents and teachers were offered a lecture on computer addiction
 - A first-aid course was organised
 - 40 hours of "*Digitiger*" ('digi tiger') IT training was offered to classroom teachers
 - The information manager of the school held an in-house training on the use of Microsoft Excel and Power Point programmes
 - 13 teachers took part in a Moodle learning platform training
 - Round table discussions were organised and these were used to share information and different skills between co-workers (during school breaks)
- An education technology expert was hired to function as a teachers' IT support person
- A coffee corner was set up in the staff room

Development activities cannot simultaneously respond to all of the questions on occupational well-being

The occupational well-being development actions were realised between 2010 and 2013. In 2011, the research group from the University of Eastern Finland realised the process evaluation survey at the school. The results indicated that most of the planned procedures had been realised and that formulating the action plan had supported reaching the goals set in the project. In June 2011, a questionnaire survey mainly concerning team work was conducted among teachers at the school. According to the results, 96% of the respondents completely or nearly agreed with the statement "Through their actions, school management can support collaboration between school staff and teachers", 84% with the statement "The school's goals and missions are planned in collaboration", and 92% with the statement "Collaboration between classroom teachers and subject teachers is efficient". In connection with the questionnaire, teachers also expressed an interest in developing further measures for maintaining employees' health. At the final phase of the project, all of the tasks named in the action plan had been realised. A final evaluation survey was conducted among school community staff at the end of 2012. A comparison of the baseline and final survey results reveals that there has been improvement in certain areas, while others have stayed unaltered and some have even gotten worse. Possible reasons for the disparities were thought to include the fact that the school environment is constantly changing, which makes it harder to continuously get positive results.

Those interviewed for the case example emphasised that the well-being of employees was the most pivotal theme of the project and attention was paid to the topic systematically. As there were constant discussions on the well-being of workers and the topic was frequently thought about, many school employees began independently taking notice of their own well-being (and also that of their colleagues) instead of merely waiting for the school management to initiate dealing with the issue. The project had resulted in, e.g., the establishment of a working environment committee at the school. Subject committees had also increased their activity and organised events on different themes for other employees instead of expecting these to be administered from a higher level in the organisation. Teachers had also become more likely to take initiative in including other workers in activities.

Investing in collaboration was considered important also after the development intervention in the large school community. Maintaining workers' mental well-being and positive spirits was considered a further area to which more attention should be paid. At the time of the interviews, the school was going through several extensive changes in connection with an education reform (including changes and revisions to

the educational system), which resulted in worry and uncertainty among teaching staff. It was therefore essential to make sure that the teachers understood what was going to happen due to the changes and what kinds of impacts would the reform have on their work.

Offering physical activities to school employees was also considered an important development target. There was a lot of pride among school staff on the activities of the dance troupe, but new ways to activate staff were also sought. Factors related to the physical school environment, such as renovation of school building, acquiring new windows etc., were also considered important, even though school staff and the occupational well-being group could do little to directly influence them.

The work group found that all of the actions planned throughout the project could be realised, as they had been designed to be fairly moderate. The group members were satisfied with having participated in the project, as it helped introducing the important topic of occupational well-being to be a part of discussions held at school.

Example from school number 6 (Estonia)

Occupational well-being development activities also benefiting pupils

The occupational well-being intervention was started in school 6 in 2010 by responding to the baseline survey. In order to draw up an action plan at the school, a work group was established to promote the occupational well-being of school staff. The group included the chairman of the school's health administration, the school's social pedagogue, a trade union representative, a manager of curriculum development, a subject teacher, the school headmaster and a youth worker. In order to develop the action plan, the school also received support from a regional health promotion coordinator and from experts of the National Institute for Health Development (NIHD) in Estonia (Figure 10).

Based on the baseline survey, the work group considered teachers' stress and emotional strain as the most critical problems at the school. The issues affected the entire school life by causing disagreements, impacting relationships between persons, and reflecting on children's' academic success and enthusiasm at school. Therefore, teachers' malaise put strain not only on themselves but also on their pupils. Based on these views, the main goal of the occupational well-being project was determined as the alleviation of stress in teachers, and accomplishing through it a more positive learning environment, better relationships between teachers and pupils, and improved job satisfaction among teachers. Development work was led by school health care providers in collaboration with the trade union for education staff and

local authorities. Activities were funded by school and union assets, local government, and the European Social Fund, established in 2011.

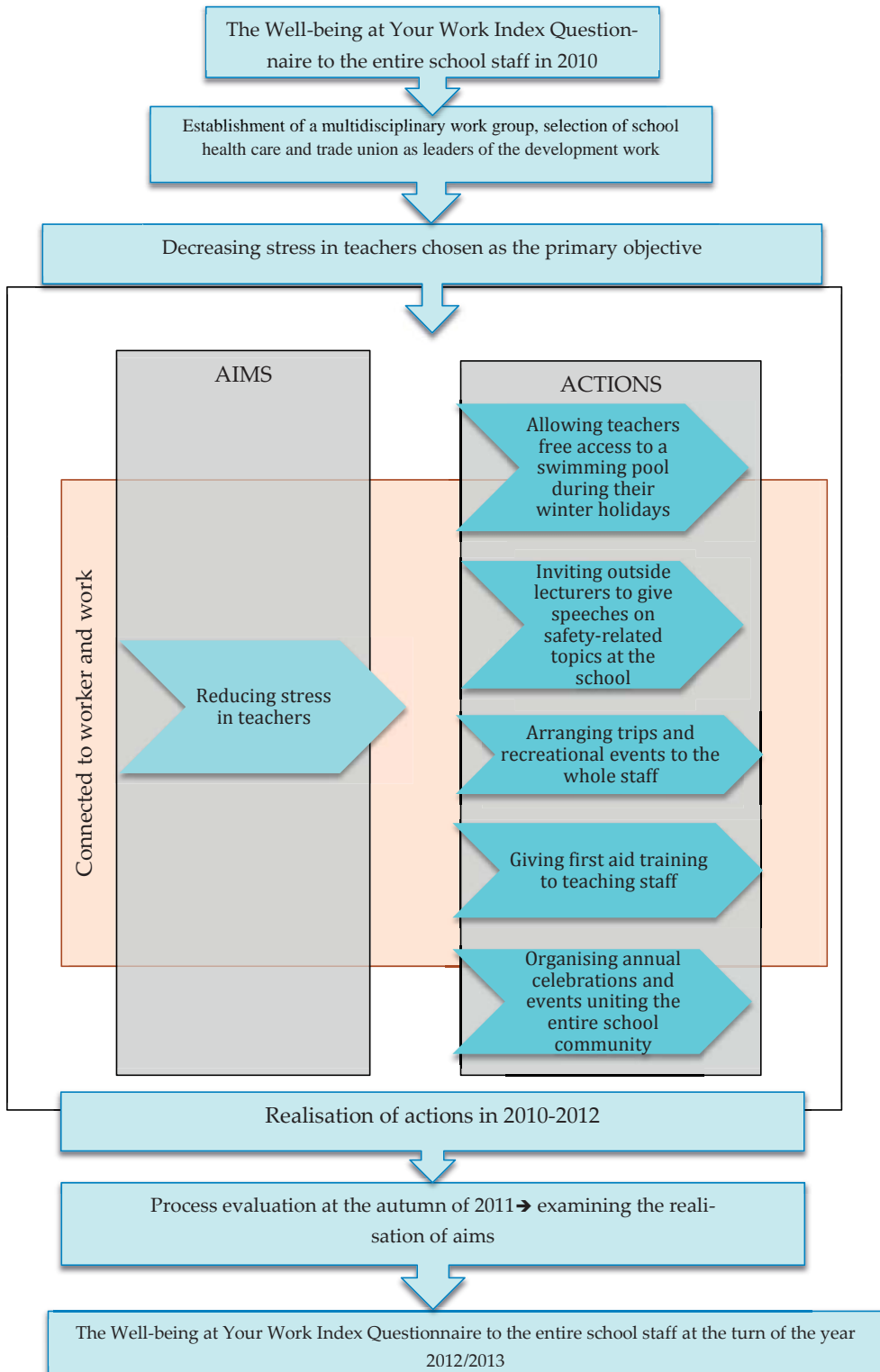


Figure 10. Process chart of school number 6

In order to reach the aim, the following alternatives were considered to improve the situation:

- 1) Offering teachers different alternatives for guidance
- 2) Organising training on stress management and self-confidence improvement
- 3) Administering creative therapy
- 4) Alleviating emotional stress through physical activities

It was decided that the following actions were to be realised to treat and prevent stress in teachers:

- Teachers got a permission to use a swimming pool free of charge during their winter holidays
- Lectures by an outside expert were given on the topics "*Väärtustest lihtsalt ja selgelt. Turvalisus*" ('On values, simply and clearly. Safety'), "*Piirkonna riskid, kriisijuhtimine, toimetulek*" ('Risks in the area, crisis management, survival') and "*Ma tulen toime*" ('I get by')
- The working community arranged an end of the school year trip to the Setomaa region of Estonia and a paddling and sauna trip
- The teaching community were given eight hours of first-aid training
- A school anniversary was prepared to unify the entire school community

Moreover, different celebrations in connection with important and topical themes were organised throughout the school year (September 1st, Teachers' Day, Christmas, End of School Year) and annual events were established to bring teachers and pupils closer, such as a teachers' theme day (held annually, teachers wore theme costumes, organised performances etc.) and a drama day (plays were staged by teachers and pupils) (Appendix 2. Photographs of interventions realised at the school). The aim of the events was to overcome mental borders between different members of the school community in a positive way and to create a sense of everyone working for the same cause.

Promising results and plans for the future

At the end of 2011, the University of Eastern Finland realised the process evaluation questionnaire survey at the school. The survey helped to observe what had been accomplished so far and to make amendments in the development activities if necessary. The mid-term evaluation revealed that the organised activities had yielded excellent results, as the responses to the questionnaire proved to be highly positive. Goal-oriented work and having a clear vision were perceived as the reasons for the favourable results. There was a desire in the working community to continue with and

enhance the started activities, which included active joint events, new traditions, participation, offering training to maintain and improve teachers' self-confidence, developing employees' personal competences and paying attention to each worker. There was also an interest in increasing everyday physical activity of staff and team work was considered an equally significant area for development.

As the final evaluation of the project, the research group at the University of Eastern Finland carried out the occupational well-being survey among school staff at the end of 2012. A comparison of the responses of the baseline survey of 2010 and the final survey of 2012 indicates that the development of occupational well-being at the school had been positive. This was the case in nearly all of the aspects, although some issues remained challenging. The respondents felt they did not have enough possibilities for physical activities and recovery. On the other hand, there were opportunities to use the school gymnasium and health club for exercising and a high-quality sauna for recuperation. Indeed, according to the work group at the school, development is highly dependent on people's personal attitudes, values and participation activity. It was also pointed out that the trade union for education staff offered free vouchers to a swimming centre during winter breaks, but unfortunately not all employees had seized this opportunity.

A clear annual growth in the number of participants in shared events and activities was considered one of the positive results of this project. It was also emphasised that teachers' work had become safer, more interesting, and more versatile as the school had been continuously improving its material and technical resources. Class rooms had been decorated with new furniture with a lighter palette to create a brighter and more joyful atmosphere, and projectors and projector canvases were added to each classroom. All necessary technical equipment was also acquired to the school's multimedia room and assembly hall, and computers were purchased to all teachers at the school. IT training had been offered to all those interested. A ceramics oven had also been acquired to the school with funding from the steering programme and is used to teach crafts to adults within the frameworks of lifelong learning. Teachers found it handy that they could participate in workshops according to their own interests, and they have in fact been enthusiastic to take part in them.

In summary, it can be noted that the school staff were pleased with the success of the project. The aim of the project period was to decrease teachers' mental strain and stress, and the observations made from the school life and the results of the surveys both indicate that this goal has been reached. Moreover, the project allowed utilising a good measurement tool at the school (the Well-Being at Your Work Index Questionnaire), helped setting clearer aims than previously, and played a part in

discovering resources within school and its employees. The general atmosphere of the school has become more peaceful and positive as a result of this project. There have been plans to keep organising sporting and recreational events and training days, which have become a new tradition at the school, and events involving both teacher and student participation will continue to be very important in the future. For instance, a Frisbee golf and sauna event for all staff and a Teachers' Theme Day (this time with the theme of *"Teenage Teachers"*) were organised during the school year of 2013.

The school's new traditions were continued in the years 2012-2013:

- Community development days which included creative training in the form of a soapstone workshop and a lecture by David Vsevioiv *"Ajalugu ja emotsioonid"* ('History and emotions')
- A two-day learning trip of the school community to Kihnu Island
- A trip to Tallinn, including a dinner at the *Admiral* steam boat and a *"Jõulukellad"* ('Jingle Bells') concert at the St. Nicholas' Church
- A learning and training day on the topic of teachers' new wage system, governmental funding and teachers' job descriptions
- A learning trip for the members of the work community to Eastern Virumaa
- Participation in the *Night Run Estonia* running event in the city of Rakvere

In the final survey of 2012, occupational well-being and rehabilitation connected to the former had emerged as challenges. At the time of the interviews, there was no more funding left for further processing of the issue, but the aim is to find positive solutions for it in the future. According to the work group, one of the most urgent problems that needs to be solved in the near future is the high level of noise at the school, which was mentioned in the responses during both rounds of interviews. Decreasing the noise level would be an important step towards better mental and general well-being of both children and school staff. The following goals have been set to improve the occupational well-being of school staff: 1) maintaining the achieved level of mental well-being and developing the area further, increasing physical activity among staff and 2) lowering the noise level at the school.

4 Developing the theory and model on the promotion of occupational well-being of school staff

4.1 DEVELOPING A MIDDLE RANGE HEALTH PROMOTION THEORY AND MODEL – BENEFITS TO PRACTICAL OPERATIONS?

In the context of health promotion, the purpose of middle-range theories is to create and develop everyday practices, such as the occupational well-being of school staff, based on research findings (Smith 2008). A middle-range theory describes, explains and predicts, e.g., a clearly defined health promotion phenomenon (Polit & Beck 2011). The purpose of the theory is also to be concrete enough to be utilised in practical settings (Whitehead 2010). According to Crosby and Noar (2010), the development of the health promotion theory has not progressed in the right proportion with health promotion practices. Indeed, Crosby and Noar (2010) argue that when developing a theory, more attention should be paid to, e.g., reasoning the development in practical settings and implementing the theory in collaboration with practical workers. In order to improve occupational well-being in school communities, there is a need for developing a theory producing models for those employed in the school community context and for others involved in the promotion of occupational well-being at schools. The resulting model must be sufficiently generalizable in other situations and contexts, without neglecting the special needs and starting points of employees and the workplace in question.

Developing a theory can be inductive, deductive or inductive-deductive. The inductive development of a theory is founded on concrete, empirically based sets of data connected to the phenomenon in question, which means that the research methods are qualitative (e.g., ethnography, phenomenology and grounded theory) (Polit & Beck 2011). The deductive development of a theory usually utilises quantitative research methods. In this case, theory development starts off with statements which are tested in several carefully defined situations. The inductive-deductive development of a theory combines the aforementioned research methods. This is a typical choice, e.g., for intervention studies in the field of health sciences, where mixed methods research has become commonplace. (Polit & Beck 2011, Sormunen et al. 2013c.)

Theory development results in *models* which function as theoretical frameworks for, e.g., health promotion and evaluation of its operations in different contexts. A theoretical model must be adequately described and suit its purpose (May et al. 2007). In an action research, the model serves as a theoretical framework for understanding complicated interventions. The model makes functions more transparent and offers explanations to phenomena and their development, which the empirical action research reveals through its different methods.

This chapter deals with the example of developing and modelling a theory on the promotion of occupational well-being of school staff based on a number of action research projects. The development work was started in a participatory action research, *Promotion of school community staff's occupational well-being in co-operation with occupational health nurses – participatory action research in Eastern Finland in 2001–2004*, realised at the University of Eastern Finland from 2001 to 2004. The development of the theory has ever since been continued in international projects; first in the *Occupational Well-being of Teachers* project in 2004-2006, carried out as a collaboration project between Finnish, Irish, German and Italian schools (see Saaranen et al. 2013) and later continued in this Finnish-Estonian joint venture, *Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009–2014*.

Health promotion and taking practical reality into account according to the theory development of the inductive-deductive theory was the starting point for the developed *theory on the promotion of the occupational well-being of school staff*. The action research as a method using methodology and data triangulation has enabled not only developing practices but also testing and developing a theory. A descriptive, explanatory and predictive middle-range theory to promote the occupational well-being of school staff has been developed in this process. In this context, school staff refers to all professional groups working in the school community, such as teachers, principals/school managers, special needs assistants and cleaning staff. The theory has been developed in collaboration with practical workers (school staff and occupational health care nurses) and researchers.

In this context, modelling refers to producing a content model for the development of occupational well-being of school community staff. The purpose of the model is to describe and explain occupational well-being of school community staff and to function as a tool for assessing it. The end results is a context-based middle range theory and the *Content model for the promotion of school community staff's occupational well-being*, which can be used to describe, explain, evaluate and also guide practice.

4.2 PROMOTION OF THE OCCUPATIONAL WELL-BEING OF SCHOOL STAFF – PHASES, DATA SETS AND METHODS OF DEVELOPING THE THEORY AND THE MODEL

The development of the theory and the related content model on the occupational well-being of school staff has been a long-term and multifaceted process. As a starting point, there was a need for developing such a theory that produced models for those employed in the school community context and for others involved in the promotion of their occupational well-being at schools. Moreover, the resulting model had to be sufficiently generalizable to other school contexts, without neglecting the special needs and starting points of individual employees and workplaces. Developing the theory and the used research data and methods are presented below in *five phases* (Figure 11).

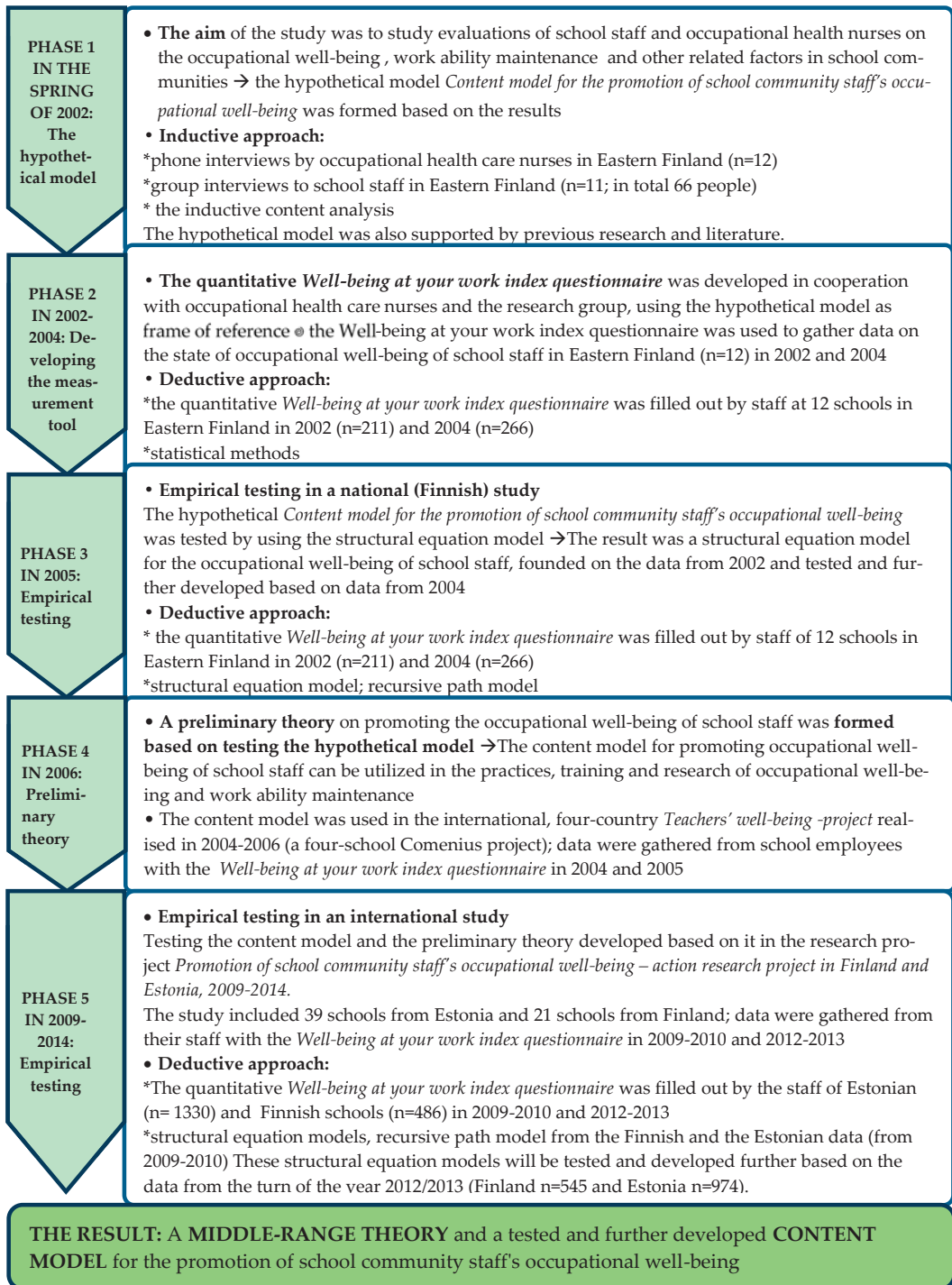


Figure 11. Developing and testing the theory and content model on the promotion of school community staff's occupational well-being

During the first phase in the spring of 2002, the goal was to inspect the views of school community staff members and occupational health care nurses on occupational well-being and activities at the workplace for promoting it and related factors in the school community (Saaranen et al. 2005, 2006a). The data were collected with themed telephone interviews of occupational health care nurses (n=12) and group interviews of school staff members (n=11; in total 66 persons) and analysed using inductive content analysis. Using the inductive approach and the qualitative research method at the initial phase of the occupational well-being study was supported by the view that there was little information on the topic, and previous knowledge on it was fairly scattered. As argued by Juniper (2011), promoting occupational well-being is hindered by the plural nature of the concept of occupational well-being due to its subjectivity and multiple dimensions. A school is a community for working and learning that includes several different professional groups (e.g., teaching, cleaning, cooking and property maintenance staff) and pupils, and which should support the health and functionality of all those involved in the school community (Bonell et al. 2011).

As a result of the telephone interviews of the occupational health care nurses and the group interviews of the school staff members, the contents of the concept of occupational well-being was considered to be formed of the following four upper categories: the working community's positive atmosphere, motivation for work and the quality of working conditions, professional abilities and adequate education, and workers' private life conditions (Saaranen et al. 2006a.) Similarly, based on the results, participants described four aspects of activities supporting the occupational well-being of school community as work ability maintenance targeting employees, school community, school work and working conditions and professional competence (Saaranen et al. 2005). The aspects of actions maintaining work ability of school community were very similar as the four upper categories of the concept of occupational well-being.

Therefore, the gained results supported the Finnish view on work ability maintenance, in which work ability maintenance is described as being formed of the aspects of worker, working community, professional competence, and work and working conditions. (Ilmarinen et al. 2008). The results also enforce the idea that it is possible to comprehensively develop the occupational well-being of school community staff through work ability maintenance (see the four upper categories of the concept of occupational well-being; Saaranen et al. 2005). This idea is also supported by previous research and literature on the different aspects. However, there was little previous research knowledge on developing occupational well-being comprehensively through work ability maintenance activities by paying attention to

all of its aspects (worker, working community, professional competence, and work and working conditions). Previously presented models on occupational well-being or work ability maintenance also did not include depicting connections between the influence of different aspects or factors, which resulted in leaving the connections of these aspects to occupational well-being and to each other unclear.

By utilising the results of the telephone interviews of the nurses and the group interviews of the school staff members, previous research information and literature, a hypothetical model, *Content model for the promotion of school community staff's occupational well-being*, was formed at the first phase of the theory development (Figure 12). The aim of the hypothetical model was to comprehensively present the factors influencing the formation of occupational well-being of school staff and the issues which should be a focus when promoting their occupational well-being.

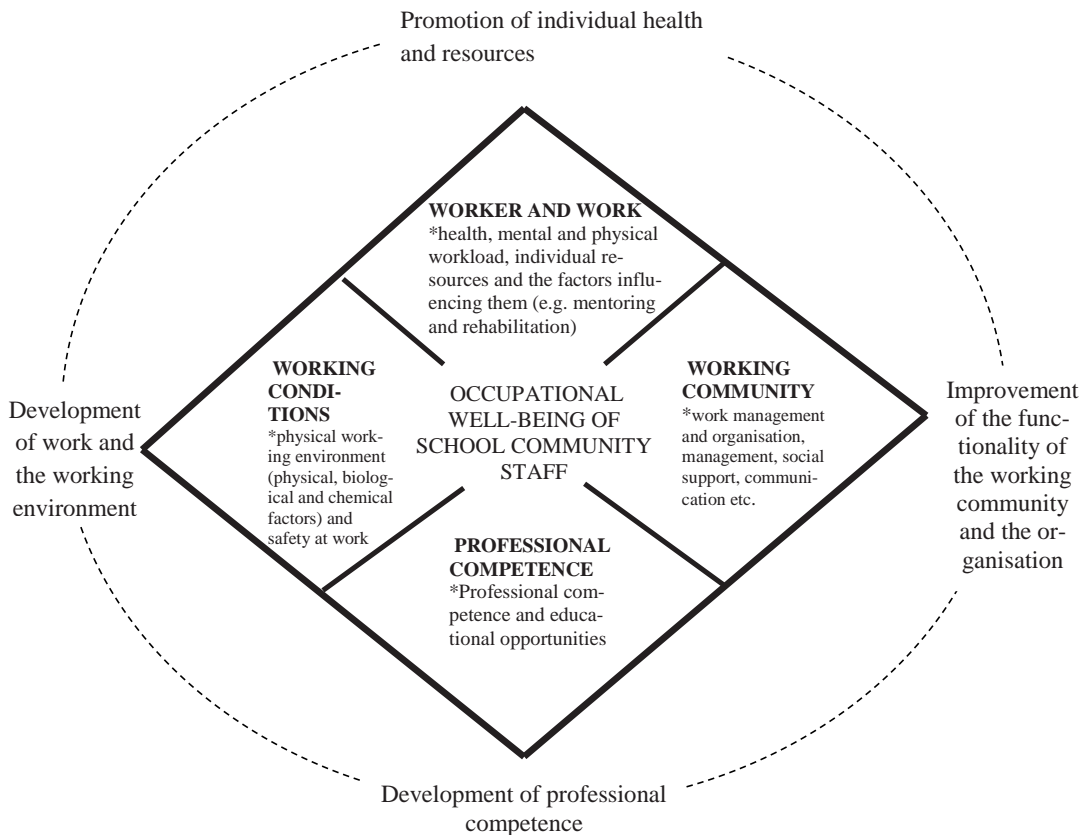


Figure 12. The hypothetical model *Content model for the promotion of school community staff's occupational well-being*

During the second phase, the hypothetical model developed at the previous stage was used as the starting point. The aim was to determine statements and operationalise concepts in a model using the deductive approach. At this point, the quantitative *Well-being at Your Work Index Questionnaire* measurement tool was developed in collaboration with occupational health care nurses and the research group. The research group of this project and the participating occupational health care nurses assessed the *Well-being at Your Work Index Questionnaire* tool several times during its development (e.g., by written feedback on the contents of the questionnaire form as an e-mail survey from the nurses to a researcher). The index questionnaire was pre-tested by the staff of one middle school that did not otherwise participate in this study (n=14). The questionnaire included finding out respondents' background information (10 questions) and satisfaction with their occupational well-being and the available actions for occupational well-being by using four Likert scale variables (1-5; 1 = very poor... 5 = very good). It was also possible to provide further information in the context of the questions on one's satisfaction on the available actions for occupational well-being by filling out a section titled "additional information on the statements". This information was utilised in planning local and school-specific development projects. The form also included questions on the different aspects of occupational well-being regarding working conditions (12 questions), worker and work (12 questions), working community (20 questions) and professional competence (7 questions). The questions were on a Likert scale (1-5), and after each section, there were two open questions which allowed respondents to provide further details in connection to the previous statements or name other factors influencing occupational well-being. In certain school communities, the answers to the open questions offered further information that could be utilised in planning local, school-specific development targets.

At both measurement dates (in 2002 and 2004), encoded questionnaire forms were personally delivered to occupational health care nurses at the schools, who provided the questionnaires to staff at their schools. The nurses also collected the filled out questionnaire forms in return envelopes and submitted them to the researcher. The *Well-being at Your Work Index Questionnaire* was used to find out about the state of occupational well-being of the staff of 12 schools. A follow-up survey was conducted in the same schools in 2004.

Quantitative data collected through the measurement tool enabled the use of statistical methods in researching factors from different aspects influencing occupational well-being. The use of statistical methods not only made it possible to utilise work-community-based findings into practice but also to systematically inspect

concepts and factors between different aspects. After the completion of this study, the developed *Well-being at Your Work Index Questionnaire* has been fully or partially utilised in other national (e.g., Laine et al. 2014) and international projects (e.g. Woynarowska-Soldan & Weziak-Bialowolska 2012) and it has been found a useful tool for developing practical activities.

During the third phase, the hypothetical model was tested with a structural equation model, which is typically used to test theories and models. (Polit & Beck 2011). A path model (Kline 2005) was used as a structural equation model to test the functionality and structure of the *Content model for the promotion of school community staff's occupational well-being* based on the data from 2002 (n=211; response rate of 78%) and 2004 (n=266; response rate of 83%). This data was same as at the second phase of theory development, i.e., the material collected from school staff members with the Well-being at Your Work Index Questionnaire. In practice, testing occurred so that a structural equation model was formed based on the data from 2002, which was tested and further developed with the data from 2004.

An examination of the structural equation models (the model from 2002 and the tested/developed model from 2004; see Saaranen et al. 2007b) indicates that the explanatory factors are the same and there have only been minor alterations in the relationships of influence between factors. The factors explaining occupational well-being are from the different aspects of occupational well-being (working community, working conditions, professional competence, worker and work), which describes the comprehensiveness of the topic of occupational well-being of school staff. Therefore, the structural equation modelling of the occupational well-being of school staff strengthened the view that the hypothetic *Content model for the promotion of school community staff's occupational well-being* (see Saaranen et al. 2006b) is sufficiently comprehensive (including all of the four aspects) to be utilised in planning, realising and evaluating the occupational well-being of school staff.

The findings of the structural equations model confirmed the hypothesis that the four aspects of occupational well-being, working conditions, worker and work, working community and professional competence, must be taken into account in the promotion of the occupational well-being of school community staff. Different phases of theory development indicated that the aspects of the content model did not conflict with one another, had explanatory effects, and the hypothetical content model was proven to be sufficiently strong to withstand formal testing (May et al. 2009). The content model was demonstrated to be theoretically clear, strong yet flexible, and a functional model for the realisation and assessment of occupational well-being.

During the fourth phase, a preliminary theory on promoting the occupational well-being of school staff was formed based on testing the model. Based on the results, the *Content model for the promotion of school community staff's occupational well-being* was supplemented with connections depicting the influence between the different aspects (working conditions, worker and work, working community and professional competence) or factors (Saaranen et al. 2007b; Figure 1 in the article). The content model was then utilised in the four-nation Teachers' Well-being project in 2004-2006. The Teachers' Well-being project was a Comenius endeavour participated by four school communities (school communities from Finland, Ireland, Italy and Germany) and had the main purpose of developing occupational well-being in the school communities. The Well-being at Your Work Index Questionnaire was used to map the occupational well-being of school community staff in 2004. The project for developing the occupational well-being of school staff in the school communities was based on the results of the questionnaire. A follow-up study was conducted in 2005 in the same school communities using the same measurement tool. The results of the follow-up regarding the occupational well-being of staff and developing it were positive. However, it was also noted at this point that the content model needed to be further tested and possibly developed more extensively in other school communities.

During the fifth phase, the development of the middle-range theory and testing the model have been continued in the *Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009–2014* project. The purpose of the project was, and still is, to further develop occupational well-being of school staff through comprehensive activities maintaining and promoting occupational well-being in Finnish and Estonian primary schools and to test and further improve the functionality and structure of the *Content model for the promotion of school community staff's occupational well-being* in explaining occupational well-being of school staff. Structural equation models have also been constructed based on the data from the earlier phases of this project (turn of the year 2009/2010), which will be further tested with the data from the final phase of this project (turn of the year 2012/2013). The development of the models during the fifth phase will be realised similarly as in the empirical testing phase 3.

Preliminary results by the structural equation models support previous ideas on the formation of the content model for the occupational well-being of the four aspects. Both Finnish and Estonian data indicate explanatory factors from the different factors of occupational well-being (working community, working conditions, professional competence, worker and work). A separate, more detailed scientific publication will be written on the structural equation models.

4.3 SUMMARY ON THE DEVELOPMENT OF THE MODEL AND THE THEORY

The theory has been developed and modelled in accordance with good scientific practice (TENK 2012). Research permits were acquired according to ethical guidelines from all of the organisations and individual respondents involved in this project. The research projects have been founded on voluntariness and participants have been able to discontinue their participation in the projects at any point of their realisation. However, school staff participation rates have been excellent in the projects, and this is a further indicator of the need for the development of occupational well-being of school staff and of an interest in the topic.

The reliability of the development of the theory and the content model is increased by the long-term development work (2001–2014). Development has occurred in national and international action research projects, which has enabled naturally combining and improving the theory and practice. However, employees experience occupational well-being uniquely and dependant on contexts (Juniper 2011), which makes it challenging to form a straightforward theory and content model for the occupational well-being of school community staff that is applicable to the constantly changing work and school life. Nevertheless, the aim has been to create a middle-range theory and a content model to serve the needs of entire school staff as successfully and comprehensively as possible, without neglecting, e.g., school-specific special requirements. Indeed, the experiences and gained research findings have been positive, but further testing and developing of the theory and the model in different school contexts is still needed.

Testing and reporting on the theory and content model will be continued until the end of the year 2014 in the project Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009–2014. This will result in a tested middle-range *Theory for the Promotion of School Community Staff's Occupational Well-being* and a further improved *Content model for the promotion of school community staff's occupational well-being*. However, it can already be noted that the produced middle-range theory and content model have aided promoting health and occupational well-being of school community staff members in the intervention studies in several ways. First, the developed content model has allowed recognising or depicting factors that have been indicated to be significant in the promotion or prevention of versatile interventions in school communities. Second, the model has offered an unambiguous starting point for the assessment of interventions carried out in different projects. This has promoted the distribution of good practices and their

adoption as everyday practices in the school communities (May et al. 2007). In the future, the theory, model and the Well-being at Your Work Index Questionnaire must also be tested and developed in the promotion of occupational well-being in other work communities.

5 Future challenges for promoting occupational well-being at schools and conclusion

Schools face several expectations and pressures, which are often directed at school staff members. For example, teachers have reported changes in the contents of teaching work, which have manifested in the development of curricula, implementation of new teaching and learning methods, and increased administrative duties. Moreover, school workers often consider problems and disturbances caused by students as demanding and find that collaboration with pupils' parents has become more challenging than previously. (E.g., Ballett & Kelchtermans 2009, Jokinen et al. 2013) At the same time, schools and teaching, and also support services, are expected to be efficient and impactful without an increase in their resources due to, among other issues, the weakened economic situation of the society, which has been apparent in both Finland and Estonia.

In addition to work-related strain and its management and professional competence, development needs have also been detected in the working conditions and communities of Finnish and Estonian schools. For instance, experts have assessed that there are indoor air problems in clearly over one half of Finnish schools and day care centres (The Audit Committee of the Parliament of Finland 2013), which was also evident in the schools participating in this study. The Estonian school community staff members named development needs in this project as, e.g., the aural school environment, with which 40% of the respondents of the baseline survey were unsatisfied (Saaranen 2012b). Developing working conditions from different viewpoints must be taken seriously, as poor working conditions have been found to correlate not only with impacts diminishing physical health (e.g., musculoskeletal problems and respiratory illnesses) but also to impact, e.g., psychosocial stress (Fernandes & Rocha 2009), work motivation, pupils' learning (Bascia & Rottman 2011) and even teachers' changing careers (Cha & Cohen-Vogel 2011). According to Jokinen et al. (2013), approximately 20% of general education teachers had seriously considered changing their profession. Teachers felt that their remaining in the work position was most strongly influenced by good atmosphere and personal relationships in the working community (Jokinen et al. 2013).

A school community is a workplace for several different professional groups (e.g., teachers, special needs assistants, office workers, cooking and cleaning staff and other support services) and must support the health and well-being of all of its members.

However, different school staff members can perceive occupational well-being in considerably different, subjective and multidimensional ways from their own, unique standpoints (Juniper 2011). In international research, the term *job satisfaction* is often applied in this context instead of *well-being*, which may result in misunderstandings and even fragmentation of development work in the area. Therefore, it is important to define the meaning of the concept of occupational well-being in each school community at the beginning of development work (Juniper 2011).

In this research and development project, occupational well-being at schools was considered to be formed of four aspects: 1) worker and work, 2) working conditions, 3) professional competence, and 4) working community. These aspects can function as resource factors or straining factors for the accomplishment of occupational well-being (Saaranen et al. 2012a, b). Resources help to decrease work demands as experienced by employees, promote achieving work goals and further personal growth, learning and developing at work. Work resources can also produce work engagement (Hakanen et al. 2006). Similarly, excessive work demands and insufficient resources can decrease occupational well-being. In addition to the aforementioned aspects, occupational well-being is also impacted by conditions at home and the society, but this study focused particularly on the aspects which could be influenced at school communities.

The results of this action research project indicated that there can be a lot of variety in school-based development needs and challenges for promoting occupational well-being, and actions might target the areas of worker and work, development of school community functions, professional competence or working conditions. It is not feasible to simultaneously develop all aspects of occupational well-being, but it is important to prioritise and schedule planned activities. Based on the gained results and experiences, an occupational well-being study must also cater to the geographically-specific needs of school community employees while taking their resources (e.g., monetary and staff resources) into account. In this action research project, *the action plan for the promotion of occupational well-being of school community staff* was used to aid the realisation of school-specific aims and functions. The mid-term evaluation was closely connected to this, and helped gain positive results from the school communities during the course of the project. A mid-term evaluation also makes it possible to rearrange or redirect aims and procedures if necessary.

The results and experiences from this project also strengthened the view that there is a need for intervention studies that produce extensive and multidisciplinary approaches for the development of occupational well-being. In this project that was realised simultaneously in two countries, there were development operations that

functioned well across cultural borders. This enabled sharing good practices. On the other hand, differences in school life due to cultural reasons or history regarding, e.g., working conditions, may cause divergences in staff opinion measurements (e.g., on experiences of working conditions) and the gained research data cannot thus be compared between different countries. The project also enforced the view that there is a need for models and theories on the occupational well-being of school staff in order to make development activities more systematic and evidence-based in the future both nationally and internationally.

Conclusions on the development of occupational well-being of school staff:

- School communities are multidisciplinary and the entire community must be taken into account when developing its occupational well-being. Participatory methods and support from management aid development activities.
- At the beginning of occupational well-being development work, it is important to define the concept of occupational well-being in each specific school community in order to determine shared goals for the activities.
- It is not feasible to develop all aspects of occupational well-being at the same time; development needs and challenges must be prioritised and put in an order of importance.
- Activities for developing occupational well-being of school staff are promoted by the implementation of a methodological approach and the use of evaluation data throughout the different phases of the process.
- Occupational well-being research and development work must cater to geographically-specific needs of school community employees. The method of action research offers a suitable means for this.
- Models and theories on the promotion of occupational well-being of school staff are needed in order to make development activities more systematic and evidence-based in the future.

References

- The Audit Committee of the Parliament of Finland. 2013. Report of the Audit Committee 1/2013 (TrVM 1/2013 vp — M 5/2013 vp). Rakennusten kosteus- ja homeongelmat [Dampness and mould issues in buildings]. Retrieved on 26 June 2014 at: http://web.eduskunta.fi/dman/Document.phx/~public/Katsaukset/Tarkastusvaliokunta_mietinto?folderId=%7Epublic%2FKatsaukset&cmd=download
- Ballet K & Kelchtermans G. 2009. Struggling with workload: Primary teachers' experiences of intensification. *Teaching and Teacher Education*, 25(8), 1150-1157.
- Bascia N & Rottmann C. 2011. What's so important about teachers' working conditions? The fatal flaw in North American educational reform. *Journal of Educational Policy* 26(6), 788-802.
- Bonell C, Harden A, Wells H, ym. 2011. Protocol for a systematic review of the effects of school and school-environment interventions on health: Evidence mapping and syntheses. *BMC Public Health*, 11, 453.
- Bourdieu P. 1986. The forms of capital. In: J Richardson (ed.) *Handbook of theory and research for the sociology of education*. Greenwood Press, Westport, 241-258.
- Casey D. 2007. Using action research to change health-promoting practice. *Nursing and Health Sciences*, 9(1), 5-13.
- Casey M. 2011. Interorganisational partnership arrangements: A new model for nursing and midwifery education. *Nurse Education Today*, 31(3), 304-308.
- Cha S-H & Cohen-Vogel L. 2011. Why they quit: A focused look at teachers who leave for other occupations. *School Effectiveness and School Improvement* 22(4), 371-392.
- Child Welfare Act 13 Apr 2007/417. Retrieved on 26 June 2014 at: <http://www.finlex.fi/fi/laki/ajantasa/2007/20070417>
- Coleman JS. 1988. Social capital in the creation of human capital. *The American Journal of Sociology* 94, Supplement: Organizations and institutions: sociological and economic approaches to the analysis of social structure, S95-S120.

- Coetzee M, Britton M & Clow SE. 2005. Finding the voice of clinical experience: Participatory action research with registered nurses in developing a child critical care nursing curriculum. *Intensive and Critical Care Nursing*, 21(2), 110-118.
- Crosby R & Noar SM. 2010. Theory development in health promotion: Are we there yet? *Journal of Behavioral Medicine*, 33(4), 259–263.
- EUROFOUND (The European Foundation for the Improvement of Living and Working Conditions). 2012. Health and well-being at work: A report based on the fifth European Working Conditions Survey, Dublin. Retrieved on 26 June 2014 at: <http://www.eurofound.europa.eu/pubdocs/2013/02/en/1/EF1302EN.pdf>
- Fernandes MH & Rocha VM. 2009. Impact of the psychosocial aspects of work on the quality of life of teachers. *Revista Brasileira de Psiquiatria*, 31(1), 15-20.
- Finnish Government. 2011. Programme of Prime Minister Katainen's Government. Retrieved on 26 June 2014 at: <http://valtioneuvosto.fi/tietoarkisto/aiemmat-hallitukset/katainen/hallitusohjelma/pdf/fi.pdf>
- FIOH (Finnish Institute of Occupational Health). 2014. Työhyvinvointi. Retrieved on 26 Jun 2014 at <http://www.ttl.fi/fi/tyohyvinvointi/Sivut/default.aspx>
- Gallagher LP, Truglio-Londrigan M & Levin R. 2009. Partnership for healthy living: An action research project. *Nurse Researcher*, 16(2), 7-27.
- Glasson JB, Chang EML & Bidewell JW. 2008. The value of participatory action research in clinical nursing practice. *International Journal of Nursing Practice*, 14(1), 34-39.
- Gullan RL, Feinberg BE, Freedman MA, Jawad A & Leff SS. 2009. Using participatory action research to design an intervention integrity system in the urban schools. *School Mental Health*, 1(3), 118-130.
- Hakanen J, Bakker AB & Schaufeli WB. 2006. Burnout and work engagement among teacher. *Journal of School Psychology*, 43(6), 495-513.
- Hansen S, Varava L and Streimann K. 2009. Establishing the network of health promoting kindergartens and schools in Estonia in 2005-2009. *Better Schools through Health: The Third European Conference on Health Promoting Schools*, Vilnius, Lithuania, 15-17 June, State Environment Health Centre, 50-51.

Hyypä M. 2010. *Healthy Ties. Social Capital, Population Health and Survival*. Springer, Dordrecht, Heidelberg, London, New York.

Health Care Act 30.12.2010/1326. Retrieved on 26 Jun 2014 at: <http://www.finlex.fi/fi/laki/ajantasa/2010/20101326>

Ilmarinen J, Gould R, Järvikoski A & Järvisalo J. 2008. Diversity of work ability. In: R Gould, J Ilmarinen, J Järvisalo & S Koskinen (ed.) *Dimensions of work ability. Results of the health 2000 survey*. Waasa Graphics Oy, Vaasa, 13-24.

Jin P, Yeung AS, Tang TO & Low R. 2008. Identifying teachers at risk in Hong Kong: Psychosomatic symptoms and sources of stress. *Journal of Psychosomatic Research*, 65(4), 357–362.

Jokinen H, Taajamo M, Miettinen M, Weissmann K, Honkimäki S, Valkonen S & Välijärvi J. 2013. *Pedagoginen asiantuntijuus liikkeessä –hankkeen tulokset [Mobility among Pedagogical Experts – Research findings]*. University of Jyväskylä, Finnish Institute for Educational Research. Research publications 50. Retrieved on 26 June 2014 at: <https://ktl.jyu.fi/julkaisut/julkaisuluettelo/julkaisut/2013/g050.pdf>

Juniper B. 2011. Defining employee wellbeing. *Occupational Health*, 63(10), 25.

Khunti K, Stone MA, Bankart J, Sinfield P, Pancholi A, Walker S, ... Davies MJ. 2008. Primary prevention of type-2 diabetes and heart disease: Action research in secondary schools serving an ethnically diverse UK population. *Journal of Public Health*, 30(1), 30-37.

Kline RB. 2005. *Principles and practice of structural equation modeling* (2nd ed.). Guilford Press, New York.

Laine S, Saaranen T, Ryhänen E & Tossavainen K. 2014. A case study on interventions promoting occupational well-being in a school community and the development of leadership in the years 2000–2009. (manuscript; submitted in March 2014)

May C, Finch T, Mair F, ym. 2007. Understanding the implementation of complex interventions in health care: The normalization process model. *BMC Health Services Research*, 19(7), 148.

May C, Mair F, Finch T, ym. 2009. Development of a theory of implementation and integration: Normalization process theory. *Implementation Science*, 4, 29. Retrieved on 7 June 2014 at: <http://www.implementationscience.com/content/4/1/29>.

MINEDU (Ministry of Education and Culture). 2010. Perusopetuksen laatukriteerit. [Quality criteria for basic education] Publications of the Ministry of Education and Culture 6. Retrieved on 26 June 2014 at:

<http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2010/liitteet/opm06.pdf>

MINEDU. 2012. Child And Youth Policy Programme 2012–2015. Publications of the Ministry of Education and Culture 6. Retrieved on 26 June 2014

at: <http://www.minedu.fi/OPM/Julkaisut/2012/liitteet/OKM06.pdf>

Mitchell EA, Conlon AM, Armstrong M & Ryan AA. 2005. Towards rehabilitative handling in caring for patients following stroke: A participatory action research project. *International Journal of Older People Nursing in Association with Journal of Clinical Nursing*, 14(3a), 3-12.

Moore J, Crozier K & Kite K. 2012. An action research approach for developing research and innovation in nursing and midwifery practice: Building research capacity in one NHS foundation trust. *Nurse Education Today*, 32(1), 39-45.

MSAH (Ministry of Social Affairs and Health). 2004. Quality Recommendation for School Health Care. 2004. Handbooks of the Ministry of Social Affairs and Health 8. Ministry of Social Affairs and Health, The Association of Finnish Local and Regional Authorities, Helsinki.

MSAH. 2006. Quality Recommendation for Health Promotion. Publications of the Ministry of Social Affairs and Health, Finland 19. Retrieved on 26 June 2014 at: http://www.stm.fi/c/document_library/get_file?folderId=39503&name=DLFE-9303.pdf

MSAH. 2012. National Development Programme for Social Welfare and Health Care (Kaste) 2012-2015. Publications of the Ministry of Social Affairs and Health, Finland 1. Juvenes Print – Tampereen yliopistopaino Oy, Tampere.

MSAH. 2013. School health care. Retrieved on 26 June 2014 at:

http://www.stm.fi/sosiaali_ja_terveyspalvelut/terveyspalvelut/kouluterveydenhuolto

MSAH. 2014. Occupational well-being. Retrieved on 26 June 2014 at:

<http://www.stm.fi/tyoelama/tyoohyvintointi>

Occupational Health Care Act 21.12.2001/1383. Retrieved on 27 June 2014 at:

<http://www.finlex.fi/fi/laki/ajantasa/2001/20011383>

Odense Statement: Our ABC for Equity, Education and Health. 2014. The 4th European Conference on Health Promoting Schools, Equity, Education and Health 7-9 October 2013. Retrieved on 3 June 2014 at: <http://www.childsafetyeurope.org/archives/news/2014/info/the-odense-statement.pdf>

Ozer EJ, Ritterman ML & Wanis MG. 2010. Participatory action research (PAR) in middle school: Opportunities, constraints, and key process. *The American Journal of Community Psychology*, 46(1/2), 152-166.

Paakkonen T. 2012. Lasten ja nuorten mielenterveyspalvelujärjestelmä vaikeahoitoisuuden näkökulmasta [The Mental Health Service System for Children and Adolescence the Perspective of Treatment-resistant Minors]. Publications of the University of Eastern Finland, Dissertations in Social Sciences and Business Studies No 36. Kopijyvä, Kuopio.

Polit DF & Beck CT. 2011. Nursing research. Generating and assessing evidence for nursing practice (9th ed.). Lippincott Williams and Wilkins, Philadelphia.

Potter SC, Schneider D, Coyle KK, Robin L & Seymour J. 2011. What works? Process evaluation of a school-based fruit and vegetable distribution program in Mississippi. *Journal of School Health*, 81(4), 202-211.

Putnam RD. 1994. Making democracy work. Civic traditions in modern Italy (5th ed.). Princeton University Press, Princeton, New Jersey.

Rouvinen-Wilenius P. 2008. Sosiaalinen pääoma työyhteisön voimavarana [Social capital as a resource for the working community]. Publications of the Finnish Federation for Social and Health 4. Trio-Offset, Helsinki.

Ruuskanen P. 2002. Sosiaalinen pääoma ja hyvinvointi. Näkökulmia sosiaali- ja terveysaloille [Social capital and well-being. Perspectives to the fields of social and health care]. Otavan Kirjapaino Oy, Keuruu.

Saaranen T, Tossavainen K, Turunen H & Vertio H. 2004. Työhyvinvoinnin rakentuminen kouluuyhteisössä – henkilöstön ja työterveyshoitajien arviointia [Basis of occupational well-being in school communities – evaluation by staff and occupational health nurses, abstract in English]. *Työ ja ihminen*, 18 (4), 328-341.

Saaranen T, Tossavainen K & Turunen H. 2005. School staff members' and occupational health nurses' evaluation of the promotion of occupational wellbeing – with good planning to better practice. *Journal of Interprofessional Care*, 19(5), 465-479.

- Saaranen T, Tossavainen K, Turunen H & Vertio H. 2006a. Occupational wellbeing in a school community – staff's and occupational health nurses' evaluations. *Teaching and Teacher Education*, 22(6), 740-752.
- Saaranen T, Tossavainen K, Turunen H & Naumanen P. 2006b. Development of occupational wellbeing in the Finnish ENHP Schools. *Health Education*, 106(2), 133-154.
- Saaranen T, Tossavainen K, Turunen H & Naumanen P. 2007a. Development project (2001-2004) of school staff and occupational health nurses as a promoter of occupational wellbeing – staff's evaluations. *Educational Research and Evaluations*, 13(1), 17-52.
- Saaranen T, Tossavainen K, Turunen H, Kiviniemi V & Vertio H. 2007b. Occupational wellbeing of school staff members: A structural equation model. *Health Education Research*, 22(2), 248-260.
- Saaranen T, Tossavainen K & Turunen H. 2007c. Koulu yhteisön henkilöstön työhyvinvointi – haaste koulun ja työterveyshuollon yhteistyölle [Occupational wellbeing of school community staff – a challenge for cooperation between the school and occupational health care services]. *Hoitotiede*, 19(2), 76-89.
- Saaranen T & Tossavainen K. 2009. Empowerment orientation and social capital as a basis for occupational well-being in school communities - research and development project in Finland. Teoksessa: G Tripp, M Payne & D Diodorus (eds.) *Social Capital*. Nova Science Publishers Inc, USA, 49-65.
- Saaranen T, Sormunen M, Streimann K, Pertel T, Hansen S, Varava L, Lepp K, Turunen H & Tossavainen K. 2012a. The occupational well-being of school staff and maintenance of their ability to work in Finland and Estonia - focus on the school community and professional competence. *Health Education*, 112(3), 236-255.
- Saaranen T, Pertel T, Kalle T, Hansen S, Varava L, Lepp K, Turunen H & Tossavainen K. 2012b. School staffs' experiences of work and working conditions in Finnish and Estonian schools. *The Open Public Health Journal*, 5, 55-69.
- Saaranen T, Tossavainen K, Ryhänen E, Turunen H. 2013. Promoting the occupational well-being of teachers for the Comenius program. *International Journal of Higher Education*, 2(2), 159-174.
- Smith MJ. 2008. Disciplinary perspectives linked to middle range theory. In: MJ Smith & PR Liehr (eds.) *Middle range theory for nursing*. Springer Publishing Company, LLC, New York, 1-11.

Sormunen M, Tossavainen K & Turunen H. 2013a. Finnish parental involvement ethos, health support, health education knowledge and participation: Results from a 2-year school health intervention. *Health Education Research*, 28(2), 179-191.

Sormunen M, Tossavainen K & Turunen H. 2013b. Parental perceptions of the roles of home and school in health education for elementary school children in Finland. *Health Promotion International*, 28(2), 244-256.

Sormunen M, Saaranen T, Tossavainen K & Turunen H. 2013c. Monimenetelmätutkimus terveystieteissä. [Mixed methods research in health sciences]. *Sosiaalilääketieteellinen aikakauslehti*, 50, 312-321.

South J, Darby F, Bagnall A-M & White A. 2010. Implementing a community-based self care training initiative: A process evaluation. *Health and Social Care in the Community*, 18(6), 662-670.

Spilt JL, Koomen HMY & Thijs JT. 2011. Teacher wellbeing: The importance of teacher-student relationship. *Educational Psychology Review*, 23(4), 457-477.

Statistics Finland. 2012. *Statistical Yearbook of Finland 2012*. Edita Prima, Helsinki.

TENK (Finnish Advisory Board on Research Integrity). 2012. Responsible conduct of research and procedures for handling allegations of misconduct in Finland.

Retrieved on 26 June 2014 at:

http://www.tenk.fi/sites/tenk.fi/files/HTK_ohje_verkkoversio040413.pdf.pdf#overlay-context=fi/ohjeet-ja-julkaisut

Vocabulary of Safety and Health at Work. 2006. Sanastokeskus, Helsinki. Retrieved on 27 June 2014 at: http://www.tsk.fi/tsk/fi/ty%C3%B6suojelusanasto_tsk_35-190.html

Whitehead D. 2010. Settings based health promotion. In: D Whitehead & F Irvine (eds.) *Health promotion & health education in nursing. A framework for practice*. Palgrave Macmillan, Basingstoke, Hampshire (95-120).

Wojnarowska-Soldan M & Weziak-Bialowolska D. 2012. Skala czynników sprzyjających dobremu samopoczuciu zawodowemu nauczycieli w szkołach promujących zdrowie – analiza psychometryczna. [Factors enhancing teachers' occupational wellbeing scale: psychometric analysis, abstract in English]. *Medycyna Pracy* 63(1), 73-83.

Appendixes

APPENDIX 1: ACTION PLAN FORM (TRANSLATED FROM THE ORIGINAL FINNISH)



University of Eastern Finland, Faculty of Health Sciences

Department of Nursing Science, Kuopio Campus

Study: Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009–2013

Contact person: Post doc researcher Terhi Saarinen, PhD (e-mail:terhi.saarinen@uef.fi)

Action Plan Form

PROMOTION OF OCCUPATIONAL WELL-BEING OF SCHOOL STAFF

Name of school community: _____

Name of occupational health care service provider: _____

Person in charge (usually school principal/manager): _____

Person in charge of work group (occupational well-being/work ability maintenance group): _____

Other members of work group (e.g., 4-6 persons; e.g., teachers, representatives of other personnel groups, occupational health care nurse, school nurse):

Before planning activities, it might be useful to describe the current situation of procedures promoting occupational well-being/work ability maintenance based on the survey results and to name reasons behind the situation

- What is in order, what resources are there in the school community?
- How does the development need (problem) manifest?
- Which factors could there be behind the development need/problem?
- Is the problem connected to some other issue?
- What can be done?
- What will happen if nothing will be done?

Aims; the aimed outcome level as concretely as possible (result, impact):

NB! For example, aims can be numbered (below are examples of aim items 1, 2 and 3) and responding numbers can be used in sections "Planned activities and costs", "Timetable", "Persons in charge according to aims" and "Evaluation".

1) _____

2) _____

3) _____

Planned activities and costs (means, methods, please name available resources/funds for realising activities):

1) _____

2) _____

3) _____

Timetable (beginning and end dates for development actions; plan your timetable according to each aim):

1) _____

2) _____

3) _____

Persons in charge according to aims:

1) _____

2) _____

3) _____

Evaluation (realisation) and timetable according to aims:

1) _____

2) _____

3) _____

Confirmation of the action plan (date): _____

Signature of principal/school manager

Signature of person in charge of work
group/work position

A copy of the action plan must be sent to post doc researchers Terhi Saaranen, PhD at the latest by 31 Jan 2011. The form may be mailed to Terhi Saaranen, Itä-Suomen yliopisto, Kuopion Kampus, Hoitotieteen laitos, PL 1627, 70211 KUOPIO or e-mailed at terhi.saaranen@uef.fi.

NB! This form may be modified to accommodate schools' individual needs provided that the named topics are made known in the action plan. .



APPENDIX 2: PHOTOGRAPHS OF INTERVENTIONS REALISED AT THE SCHOOL



TERHI SAARANEN ET AL.
*Occupational Well-being
of School Staff*

*Experiences and results from an action
research project realised in Finland
and Estonia in 2009–2014*



This publication describes the occupational well-being of school staff and reports on the findings of the Promoting the Occupational Well-being of School Staff – an action research project in Finland and Estonia in 2009–2014 and methods developed in the project for the promotion of occupational well-being. The publication also illustrates development of a theory and model for the promotion of school community staff’s occupational well-being that can be utilised in school communities. Lastly, future challenges for promoting occupational well-being at schools is discussed.



UNIVERSITY OF
EASTERN FINLAND

PUBLICATIONS OF THE UNIVERSITY OF EASTERN FINLAND
Reports and Studies in Health Sciences

ISBN 978-952-61-1675-4