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Investment in work health promotion in small and medium-sized enterprises in Germany

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Abstract

Economic success of companies is related to the rate of absenteeism and the rate of fluctuation, but also to the subjective experience of the employees. During economic difficult situations, enterprises wanted and had to motivate their employees to maintain their productivity and motivation to work. Investments in work health promotion-measures resulted to be a good way to do this. Workplace health promotion turned out to be a suitable way to boost and/or maintain the motivation of employees. Authors of the article give an overview of work health promotion (WHP) in Germany (especially in small and medium enterprises) and analyze implementation strategies, costs, key-success-factors and obstacles before or during the implementation of WHP-measures.

Key words: investment in Work Health Promotion, work health management, workplace health promotion

Słowa kluczowe: inwestowanie w ochronę zdrowia w miejscu pracy, ochrona zdrowia w miejscu pracy, zarządzenie zdrowiem w miejscu pracy

Introduction

In the last five years a straight increase of mental health problems, like burnout, depressions and even suicide are documented, several of them related to the financial and economic crisis, which started in 2007 [1–4]. The common trend of rising numbers of chronic diseases like coronary heart disease or diabetes [5, 6], also provoke high costs due to absenteeism and shortfall in production. A changing working environment, globalization and the increasing use of technology (automation and information technology) are raising the pressure on enterprises to be as competitive as possible, to maintain in the market [7]. This pressure is also felt by the employees, especially during times of crisis. Enterprises have therefore two big challenges to manage during crisis: to maintain in the market and at the same time, preserve their trained staff.

More and more companies and service providers have recognized these challenges and the changes in working requirements and started innovative human resource (HR) management systems. They are combined with a systematic health and generation management to face the new requirements: demographic change and shortages in skilled workers [7]. Several works illustrate examples of successfully implemented worksite health management (WHM) programs. Just mere rare are the works concerning the financial issue of WHM.

This paper aims to give an overview of the current status of work health promotion measures in Germany, possible implementation strategies and costs related to the implementation. The terms of Workplace Health Promotion (WHP), worksite health promotion and work health promotion do all refer to the same issue: health-promoting activities at the workplace and will be used mutually.

1. Work Health Promotion

The Ottawa Charter defines health promotion as "the process of enabling people to increase control over, and to improve their health. […] Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being" [8]. Health should therefore be considered where people spend a lot of time, like in schools and universities, in the environment and urban planning and of course in the working environment. *Behavioral prevention*, on the one side, deals with the modification of people's behavior or habits, to enhance them to act positively up on their health

(for example to stop smoking or do more physical activity). *Setting-based prevention*, on the other side, modifies the conditions, having an impact on people's health (for example leadership interventions, participative approaches or ergonomic design or correction of workplaces) [9].

The working environment is one of the most important areas of life where people spend a lot of time; that's why it is a crucial topic in the everyday life of employers and employees. In the Luxembourg Declaration of 1997, WHP is named as "the combined efforts of employers, employees and society to improve the health and well-being of people at work" [10]. They figured out that this can just be achieved through a combination of improvements in the organizational and working environment, the promotion of active participation and the encouragement of personal development of the employees. These three issues include the situational prevention and setting-based prevention approach and emphasize the WHO approach to have an integral view on health [10]. So WHP can be seen, as the application of the health promotion term of the Ottawa Charter on the working sector and the people working in it. Understood in this way, "health promotion generates living and working conditions that are safe, stimulating, satisfying and enjoyable" [8]. As a normal working person spends at least eight hours per day at work, the working environment should be beneficial for health. That's exactly the aim of work health promotion: to make an impact on peoples behavior in making healthy choices, but also in changing the setting to be favoring health instead of burdening it.

In many enterprises health issues are still equalized with *occupational safety* (OS). But occupational safety is characterized by the relationship of work and illness, and therefore (still) mainly determined by occupational medicine [11]. Occupational safety and worksite health promotion are overlapping areas, but it has slightly different aims than WHP. Main goals of OS is to prevent work-related illnesses, illness-related absence from the workplace and workplace accidents. It should preserve the work ability of the employees (especially of the older ones), reduce noise, the exposure to hazardous substances and psychological stress at the workplace [12]. OS is therefore mainly oriented at illnesses and diseases. WHP on the contrary is mainly oriented in maintaining and improving health and enhancing health-favoring conditions. Issues like globalization, unemployment, increasing use of technology (automation and information technology) or the changes in employment practices (e.g. part-time, tele-work or loan-workers) are affecting in one way or another everybody and makes it necessary to act [13]. Working persons are affected in a special way: longer working hours or shorter deadlines to deliver products or services to clients on time; global readiness to travel, to collaborate or supervise colleagues in subsidiaries around the globe and the need to multitask. Uncertainty about the job, short-term contracts vs. permanent contracts, double-burden for working parents or people with family members in need of care, organizing job and family; etc. are social requirements or challenges an individual has to cope with. At the same time, values as personal development, appreciation, communication and participation got more important [13]. It's clear, that "work can cause ill-health if employees have to work within health-damaging working conditions, the available skills are inadequate, or the mutual support from colleagues is lacking. At the same time work can be a resource for personal development and enhancement of personal skills" [10].

In the future, successful organizations will have to have well-qualified, motivated and healthy employees. This includes a shift in the attitude of owners, in recognizing employees as more than a mere cost factor, but as a necessary success factor for the organization. Work health promotion can play an important role to equip people and organizations with the necessary skills to face all these challenges. The organizations can benefit with reduced sickness related costs, increased productivity, better motivated employees and improved working relationships to be ready for future challenges [10, 14, 15]. But its not an utopia: Degner could already show, that in successful companies employees have more extensive possibilities for participation, higher demands in quality and responsibility, intrinsic values as well as higher motivation, higher disposition for mobility and better team orientation, professional efficiency and a lower emotional exhaustion [16].

2. Work health promotion measures

There are several activities in the working environment, which may have an impact on the health of the employees. Any activity is just successful, if it is implemented in a way, that the employees (can) accept it. It has to be taken into account different preferences, accessibility, the form of (co-)payment and the estimated time (duration and execution during working hours or in leisure time).

Physical activity

The positive impact of physical activity is well known, but in Europe most of the people (60%) say about themselves, that they are never or very seldom physically active. In Germany the situation is just marginally better: 51% are not at all or seldom physically active [17]. But a lack of physical activity is one of the reasons for obesity, cardiovascular diseases, high blood pressure or diabetes. These are the most common diseases in developed countries [5]. This is the reason, why several programs of work health promotion try to activate employees to more physical activity and make an impact on their health behavior. Typical activities realized through WHP are Yoga, back therapy training, running groups or "activity breaks" of 10–15 minutes, during working sessions [18]. Bigger enterprises often have their own sports club.[1] WHP programs can cooperate with those clubs or make a membership with incentives more attractive to employees.

Nutrition

Nutrition at work is not always easy. Several people regularly do not have the time to have a lunch break, with sufficient time to eat calmly. Probably they are eating a "quick sandwich" at their desks or walking form one appointment to another [19]. This is a common phenomenon in the "globalized work". Inadequate nutrition combined with little or no physical activity, can lead to obesity and diabetes and/or high blood pressure [5].

Companies oriented on their employees well-being try to counteract with adequate activities: sufficient time for breaks; nutrition seminars to raise awareness about healthy and equilibrated alimentation; cooking courses for employees (fun for the participants, but expensive); co-operations with the company restaurant or with the restaurants close by (to make the healthy choice the easy choice), fruit baskets (fruits for free once a week or every two weeks); encourage employees to drink more water, juice or tea instead of soft drinks or coffee (for example water dispensers on every floor) or putting "healthy choices" in food/sweet-dispensers [20].

Stress management

Everybody has experienced stress some day. There is positive stress (Eustress), which motivates and thrills to achieve a special goal and then there is negative stress (Distress), which is exhausting, because someone is not able to cope with it (anymore) [21]. Examples are time pressure due to short deadlines (371 out of 417 questioned employees (89%) reported it [21, p. 17]); overstimulation of the amount of information which has to be selected and processed in little time, shift work or the increase in technologization, which brings the necessity to learn constantly to handle new equipment or new computer programs, to be "up to date" [7].The problem is not always the stress itself, but the effects of stress if someone is not able to cope with it. Effects of stress can be various: emotional void, feeling of loneliness, trepidation, social isolation or a-volition, reaching until burnout. It is also possible, that people are more irritable, getting annoyed more easily or having feelings of losing control. They might be less able to concentrate and less motivated to do anything. The consequences of having stressed or burned out employees can lead to more occupational accidents or higher error rates, which therefore may result in a worse outcome for the enterprise [22–24]. Common WHP activities in this context are Yoga, progressive muscle relaxation or Pilates as activity oriented courses or time-management and conflict-management courses, to be able to cope better with stress. But it's not all about the employees. Components of setting-based prevention include trainings especially for management staff "how to lead in a healthy style". It helps to improve appreciation for employees and fosters the working atmosphere. Several big companies offer support in form of psychological help through trained psychologist e.g. once or twice a week [25]. This may help to clarify reasons for severe cases. Especially in the case of burnout, it is helpful to alert the social environment and to reduce prejudices towards it, to avoid stigmatization.

Social measures

If the working atmosphere is bad, nobody wants to go to work and the working morale is low or not existing. Managers with low leadership qualities can't motivate their employees, but exercise a high pressure to perform. The additional increase of psychosomatic illnesses[2] is not favorable for the working environment. To ease the situation it might be useful in a first step to train the management staff with a training explained in the previous paragraph. For the employees itself team-building activities, corporate trips, like a annual works outing or "regulars tables" can foster the community spirit. A special problem at the workplace is mobbing. Sensitization campaigns to raise awareness of mobbing and burnout (in employees and management staff), combined with implementing the issue in the mission statement (code of conduct) and a systematic internal conflict management, can help to reduce mobbing and burnout cases on the long run [26, 27]. Regular performance reviews with the management can support this approach [25].

Ergonomics

Remembering the paragraph of occupational safety, it should prevent the employees of occupational illnesses and diseases. One step towards preventing musculoskeletal disorders are ergonomic workplaces with ergonomic chairs, adjustable heights of the work stations or desks, sufficient lights, etc. [21]. To get to know harming workplaces, a (regular) work place analysis of an occupational health specialist (e.g. every 2 years) is necessary. Making an impact on employees behavior is possible through lectures of ergonomics combined with workshops at the workplace, how to sit correctly, how to lift and handle heavy items or complementary exercises [28, 29].

Drug cessation

Everyday drugs like alcohol and tobacco are kind of accepted in society. That an excessive consumption is harmful is also well-known. Smoking at the workplace can harm non-smoking colleagues. That's why an organizational non-smoking policy should be supported by the management and in the best case implemented it in the code of conduct. A non-smoking policy includes rules/regulations for smoke-free workplaces (e.g. just smoking corners), ban cigarette machines of the factory premises and in the context of workplace health promotion activities, hold lectures about the implications of smoking on individual health. Program offers (or the communication, where to find) smoking cessation courses would be a useful extra to ensure sustainability [30].

All measures respective smoking, can be adapted to the issue of alcohol. Drunken employees are making more mistakes or even harm their colleagues through more dangerous behavior. But it should never be forgotten, why people start excessive drug consumption. It may

just be a form to cope with the stress perceived with the tasks or at the workplace. A holistic WHM is therefore necessary, combined with regular performance reviews and/or psychological support are an option to clarify causes of excessive drug consumption.

Others

There are some more categories which do not fit in the already named ones.

First of all, *Work-Life-Balance*-efforts e.g. flexible working hours for parents/people with family members in need of care. All activities directed to balance work life and private life are indirectly helping to reduce stress. If employees feel stressed, due to double-burden, they are performing worse and the company may have worse outcomes.

A second area is the *Gender Mainstreaming*. The aim of Gender Mainstreaming is to reduce social inequalities due to sex or sexual orientation. And it is stated, that efforts in this sector are more than worthwhile: Companies with more women in their executive committees have better financial performance, than executive committees just with male representatives. The numbers are significant: First named exceed second named in terms of Return on equity (REO) by 41%. In terms of operating results they even exceed by 56% [31].

The third area is called *generation management,* with the aim to maintain employees 50+ in the active workforce. Especially social implications like the demographic change, with more older than young people in the working age and the consequent shortage in skilled workers, combined with the financing problems of old-age pensions make it necessary to think about maintaining the generation 50+ in the active workforce [23]. Several actions are favorable to achieve this: there is a need in changing the negative image of aging in society. Older people are considered as less resilient, due to their decreasing physical abilities, but often their increasing social competences are overseen. Therefore it is necessary to adapt the working conditions for older employees. They need more light, less noise and less physical work. On the other hand they are more aware of quality. So maybe it is just as easy to adapt the workplace. Conflicts are programmed when younger professionals have to manage and lead older professionals. Due to the demographic change, this can be foreseen. It's just another reason to implement strategic conflict-management policies in the organization [32].

3. Development of work health promotion in Germany

3.1. Legal framework, stakeholders and objectives

The legal framework concerning work health promotion in Germany depends on the point of view. If WHP is considered as part of the occupational safety, the German Occupational Safety and Health Act (Arbeitsschutzgesetz, ArbSchG) would be the base to build on [33]. This act is obligatory and aims to inhibit accidents and occupational diseases [34]. This is the minimum standard what businesses have to fulfill, to maintain workers health. On this basis the social act no. 5 § 20 was implemented in 1989 (Gesundheitsreformgesetz, GRG), which gave health insurance companies the task and scope to promote health and prevent diseases, through conducting health promotion interventions [9, 13, 35]. In 1996 it got abolished, and re-established in 2000, now oriented at the WHO point of view, but with the add-on just to establish programs economically efficient [36]. Due to this law, WHP activities are voluntary for businesses but obligated for health insurers. Health insurers have to provide WHP activities and pay specific interventions for businesses implementing some kind of WHP programs [34].

Since 01.01.2009 the German government supports companies, if they are investing in WHP programs. Up to 500 Euro per year and employee, invested in specific WHP-measures are tax free. But there are strong regulations which measures count for the tax release (for more information 11). This was possible due to a change in the income tax law (Einkommensteuergesetz, EStG, § 3 No. 34) [34]. If WHP is not seen as part of the OS, there is just the § 20 of the social act no. 5 with no obligations.

The main stakeholders of WHP are the enterprises itself, with the employers and employees. Another important group are the health and accident insurance companies, company-networks and the chamber of Industry and Commerce (IHK). Beside those groups there are several other groups having an impact on the businesses conducting WHP activities or affected by it. These are family members of employers and employees, WHP-service providers, governments (local, regional, national), funds and foundations, trade unions, universities (conducting research projects respective the topic), media, jurisdiction, banks and may be company-stakeholders [35]. All those groups have influences on the supply of WHP (service provider), on the support (funds, foundation, media and banks as well as the legislative framework done by governments) and the acceptability of WHP (media, family members, company-stakeholders).

There are a lot of different objectives of WHP activities. Mayer sees the main objectives of WHP programs in the reduction of sickness related costs, absenteeism and improvements of the motivation of the employees [37]. Considering the tremendous costs of occupational illnesses, this seems just logical: in 2007 in Germany amounted the loss of gross value added 73 billion Euro. The loss of production was calculated on 40 billion Euro with an average absenteeism rated on 12.4 days/per person. Musculoskeletal disorders were the main reason of absenteeism (23.7%), followed by mental disorders, which raised to 10.9% since 2001 (6.6%). Just considering the loss of production due to mental disorders reaches 4,4 billion Euro (in 2007). Another problem with mental disorders are the long duration and recuperation time. The already mentioned average absenteeism rate of 12.4 days/person doubles for mental disorders to 27.4 days [38].

The Mercer study names the improvements in productivity, reduction of fluctuation together with improvements of the identification of the employees with the

company, as main goals [39]. Mayer and Papousek name improvements in customer satisfaction and reductions in workloads/burdens and occupational accidents as objectives [37, 38]. More and more popular are getting the objectives in maintaining employees employable due to the demographic changes and boosting the image and attractiveness of the company to attract professionals, due to the foreseen shortage of skilled workers. Interestingly, the bigger the company, the more they want to reduce mobbing[3] and absenteeism and improve the identification with the company. The smaller the company, the smaller is also the knowledge about WHP: about 31% of small business (less than 10 employees) didn't knew any reason, why it could be beneficial to invest in their employees [37].

3.2. Dissemination of workplace health promotion measures in small and medium-sized enterprises in Germany

In 2010, 47% of enterprises with 200 to 499 employees had a work related health management established, but only 30–35% of enterprises with less than 200 employees. One of the named reasons are the more detailed organizational structures (different departments, etc.) of bigger companies, to implement and carry out WHP-measures. Another reason is, that the bigger the company, the more likely they have worker representatives (or trade unions), interested in better working conditions and a healthy working environment for their colleagues. Additionally it is more interesting for health insurers to address bigger enterprises, as they can reach a lot of (potential) insured people with little effort [40]. The bigger the company, the more health-promoting measures are implemented [37]. This seems logical, due to the economies of scale. The IGA-report showed also, that the share of enterprises conducting a systematic work health management lies with 48% way higher in subsidiaries or headquarters (37%), than in private, independent enterprises [40]. About three quarter of the companies conducting a work health management say, that they are doing it as part of the occupational health and safety strategy. One fifth is doing it as an autonomous method [40]. Roundabout 20% of the smallest companies (with less than 10 employees) don't do any health-promoting measure [37].

Comparing different measures, there are some that are more attractive to be implemented by SMEs than others. First, individual interventions are more likely to be implemented than continuous concepts. This is kind of difficulty, as WHP concepts aim for holistic and sustainable interventions. Second, SMEs prefer cheap and short interventions which are little time consuming (e.g. ergonomic chairs or more light). A third group of interventions are the "in-house-events" like "health days" with health checks, as blood pressure and sugar; food-campaigns or aerobic sessions. SMEs are mostly just fulfilling the legal regulations, but the idea of a holistic concept of health management does not reach them. Workers are generally not encouraged to act upon a more healthy behavior; interventions against emotional stress are rare and the success and presence of any WHP intervention depends on the lifestyle of the managing director [37]. **Figure 1** gives an impression of the possible intervention levels of WHM:

WHM can act on the organizational level (Figure 1) or on the individual level (right side). The organizational level can be distinguished into three different assets: tangible assets, social capital and human capital. WHM can act on all of them. An example for a WHP-measure on a tangible assets would be ergonomic chairs or rooms with sufficient light. An example for a measure on the social capital would be a training for the management for "leading healthy". And an example for the last asset – the human capital – would be staff outing.

On the individual level there is the "house of work-ability."[4] The workers' health (1st floor) is the foundation for work ability. The 1st floor can sustain the working

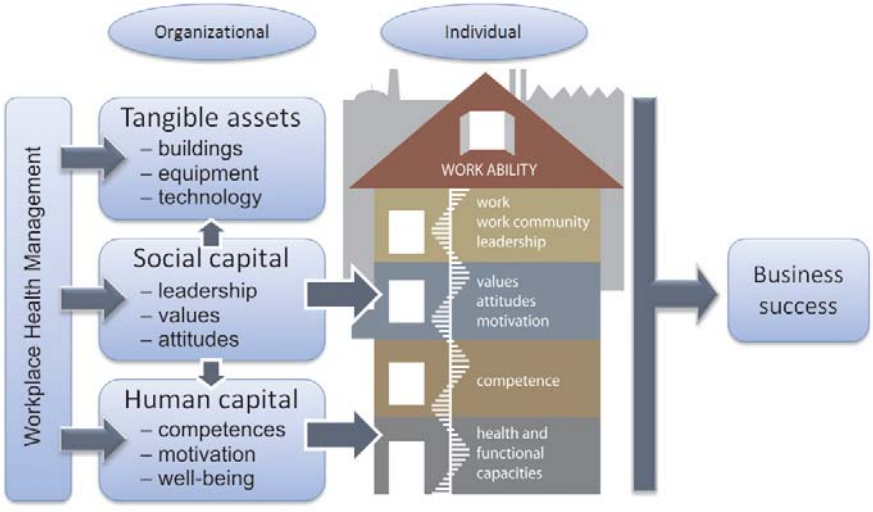

Figure 1. *Relationship between workplace health management and business success.*
Own graph modified according to 41and 42.

requirements only if enough professional and social competences are available. In current times, the relevance of the 2nd floor is increasing as continuous change is becoming a main characteristic of working life. The 3rd floor represents the social and moral values of the worker. Respect and appreciation are similar important for the organization as commitment, motivation and dedication. These values influence the ability and motivation to learn and further qualification (2nd floor). The 4th floor, finally, summarizes all aspects of work: physical, psychological and social demands, the working environment and organizational structure. Leadership style or possibilities for development are important issues here. Close by are the worker's family, private social life and society, which also have an impact on work ability [43].

3.3. Procedure of a workplace health management

The procedure of a WHM is similar to a financial management cycle. It includes four steps: Analysis, Planning, Action and Evaluation. To be able to start this circle, it is necessary to set up the organizational structure. This includes the decision to do e.g. a WHP project, announcing a project manager and a team, implementing the necessary infrastructure and information channels [26]. Afterwards it can get started with analysis. An employee-survey is the first step to find out about the status quo. It can be conducted with different tools. The German speaking world mostly uses the Work Ability Index,[5] the Human Work Index,[6] the Impuls test[7] or the SALSA-survey.[8] Additionally the absenteeism rate and the workplaces should be analyzed. Informing the employees about a WHP-project is crucial at this step [26]. In the second step (planning) there will be implemented different "health-circles". In these circles employees (volunteers) will analyze their own health problems at work, discuss possible reasons and develop possible solutions. This participative approach improves the acceptability of WHP programs, the motivation to participate in the project and (hopefully) in other company issues as well [26, 43]. After getting the approval by the Chief Executive Officer (CEO), WHP measures can be planned and implemented in the third step (action). The fourth step will be the evaluation with a second employee-survey, to check results, key-success-factors, problems and learnings and to adjust the program for future interventions. The communication of the results to all members of the organization is crucial [26].

3.4. Costs of a workplace health management

May be the most important issue one for companies willing to implement a WHM are the costs [44]. The questions to answer are: which costs will arise and who is going to pay for what? Depending on the size of the company, WHP activities may result as a huge financial and/or time-consuming burden, but considering the reduction of absenteeism and the proven return on investment (ROI) of illness related costs of 1 : 2.3 to 1 : 6.3, it is worthwhile. A company can therefore save 2,30$ to 6,30$ for each Dollar invested.[9] Illness-related absenteeism is proven to decline between 12% and 36%. The calculated ROI lays around 1 : 2.5–1 : 10.1 [14, 15].[10] The generated profit through reduced absenteeism is way higher than the costs of a strategic health management [42].

U. Kainz and E-M. Wolfbauer made a detailed record about the estimated costs of different WHP measures and the process costs [45].[11]

Costs for measures include the costs for seminars/lectures, events or health favoring adjustments in the company (e.g. ergonomic chairs). Lectures or seminars normally cost between 50 and 300 Euro per 60 min. unit (price for groups). Depending on the total duration (amount of units), it may reach up to 2000 Euro per seminar [45].[12] Due to their listing, workshops cost between 70 and 200 Euro per unit, ongoing courses 500–1000 Euro per semester (about 15 units), daily events or trips about 50–100 Euro per person and health checks between 35 and 150 Euro per person. Adjustments like ergonomic chairs can cost up to 1500 Euro per chair, providing free fruits for the employees about 40–50 Euro per month (~10 persons) [45].

Process costs include costs for the dissemination of information, labour costs or the cost of external consultants. The training for a project manager costs about 400–500 Euro. To print paper based information material depends on the amount of flyers, posters, etc. but 1000 posters cost about 850 Euro. To organize a special *information event* for the entire company it can reach costs up to 9000 Euro [45]. The costs for the analysis of the health status of employees are separated into fixed and variable costs. Fixed costs for such an analysis reach about 1700–2100 Euro. Variable costs consist of about 40 cent per questionnaire (development, paper, etc.) and about 2 Euro per questionnaire for the data handling. Calculating the labour costs for the researchers, there will be costs of about 7–30 Euro per employee [45]. The costs for an ongoing health circle with 5–10 employees participating (during normal working hours), costs between 1000 and 6000 Euro/year. Hiring WHP specialized staff part time or full time can be a mere cost factor of 14 000–38 000 Euro/year [45]. Indirect costs, e.g. the time employees spend in participating in given activities (during working hours), have to be considered. Depending on the salary and the amount of time needed, it has to be calculated for each employee. It is very important to say, that employees are way more motivated to participate in any WHP measures, if it is conducted during working hours [20]. But these will result in double costs for the employer, as the employees are not working for the original purpose of the company profit, but for their health [45]. A systematic process evaluation has to be calculated with about 840 to 7500 Euro [45]. But exactly these costs could be a reason for the little amount of evaluated studies, of the already rare WHP projects in SMEs. As there are little competent evaluators and little acceptance by the CEOs that evaluation could improve processes, it's the typical part to save money and therefore not a fix part of the program [46].

It is important not to loose the focus: WHM is not the core business of an enterprise and therefore "just" a subsidiary. This has to be considered when motivating CEOs

to invest in WHP-measures, but also when motivating employees to participate in it. If "it is more economically to have in-house personnel to operate on-site facilities" or to contract service providers depends on each company and the infrastructures given on-site and in the region.

4. Key success factors and obstacles in implementing workplace health promotion programs

There are several factors helping to introduce a successful WHP program. First, the expectations towards a WHP program and the personal lifestyle of the managing director are determining crucially the way the company deals with WHP. Smoking CEOs invest about 25% less in WHP for their employees. On the contrary, CEOs who see themselves as "health conscious" invest more likely into WHP measures for their employees. A second factor is the age of the CEO – it determines the probability of investing in WHP: CEOs younger than 40 invest more likely, than CEOs older than 40. But not just the age, also the education is important: non-technical educated CEOs invest more likely in health measures, than technically educated CEOs [37]. So the characteristics and the commitment of CEOs are main success factors. The third factor is the procedure of implementing WHP-measures: Having an autonomous budget for WHP-projects and following certain criteria for WHP (e.g. BGF-guidelines of the FGÖ), are helpful to bring WHP projects to a successful end and hopefully to a sustainable implemented part of the organizational culture. The fourth factor are networking activities with companies or networks already conducting (successful) WHM. The last success factor is the following of three principles in health promotion: participation (on all organizational members), integration (of all hierarchy levels) and holism, to conduct an individual program for the special needs of the organization (combination of behavior-based and setting-based prevention) [34].

There are several obstacles, when implementing WHP programs. First of all, if there is no knowledge about WHM, there can't be a WHM. Second, the initiator (if it is not the management itself) has to convince the management and later on the employees of WHP [20, 44]. The CEOs often want to see "hard" financial benefits, before willing it to implement a WHP program.[13] The "daily business" is more important to them than WHP. If a CEO is convinced to implement WHP-measures, there is still the question about the resources: financially, timely, personally and spatially. This is where several programs fail: the financial resources. Third, it is difficult to motivate employees to participate in activities out of working hours. Especially commuters (and their families) will not be amused to participate in it. On the other side it is very difficult to convince CEOs to do activities like back therapy training during working hours, as they are oriented on the behavior of the individual, even if the benefits of such programs are shown [44]. Setting-based prevention measures, like health-circle meetings, are mostly held during working hours. In any way, activities hold during working hours are very expensive for employers and by 56% named as a hurdle [37, 40]. The "loss" of output of the profit-generating work and paying the worker at the same time, may be a huge financial burden for implementing WHP measures during working hours. Another issue is the cost-benefit ratio: the costs are emerging straight during the implementation, but the benefits can be expected in distant future. To convince CEOs, that WHM is a "long term investment" is not easy.

5. Investments in WHM during the crisis

Thinking about the investments in WHP-measures is sometimes difficult for companies. Comparing investments in tangible and intangible assets, investments in human beings should be conducted differently. A new machine can be bought next year, if the current one is still fine. But investments in people might not be postponed, as they can fall ill, retire, move or "flee" to a competitor during the current year. Absenteeism and illness-related costs could be a bigger financial burden than an investment in these people (with trainings, workplace health promotion, etc.). Machines additionally can be depreciated, people can't. Any investment in people should therefore be conducted in a more stable, holistic and sustainable way to reach the objectives.

An Austrian WHP project – conducted during the economic and financial crisis – decided to question their employees at their follow up employee survey some questions about the impact of the crisis on their personal well-being outside and at work. It turned out that 70% of the employees felt an impact of the crisis on the work itself and 50% on their personal well-being. This single survey can't be representative for all German employees, but it can be assumed, that German employees have felt similar pressures, due to the crisis. And it is even visible in the statistics: In 2006 obtained Germany the lowest rate of absenteeism of 12.4 days/employee for last 30 years. With the start of the economic crisis in 2007 these rates increased since and reached 14.8 days/employee in 2010 [47]. It can be assumed that the economic crisis had an impact on this rate. These influences were known by the CEOs and may explain, why 80% of the companies maintained or raised their investments in WHP-measures. Even if they decreased their general investments and therefore didn't followed the trends seen before (see above). An Austrian WHP expert also says that WHP investments are normally done acyclic with the economical situation. This has a reason: If the economy is booming, nobody has "time" to conduct WHP. If the economic trends are decreasing, there is time and willingness to do it [20]. Young German enterprises dealt with the crisis through reducing their costs and maintaining the motivation of the employees. These information let conclude that companies tend to maintain or even increase their investments during worse economic situations, to preserve their trained staff and to be prepared for future challenges. WHM is a good and more than suitable way to boost and/or maintain the motivation of the employees and also the main goal of companies.

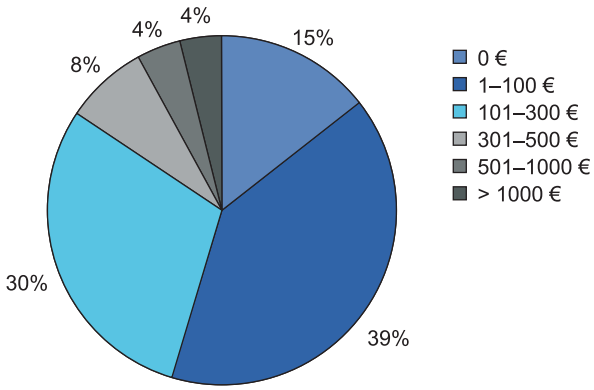

Figure 2. *Average expenditure per year and employee [39].*

Papousek J., Detailstudie zu betrieblichen Gesundheitsleistungen in Österreich und Europa. Mercer – Consulting, Outsourcing, Investments, Wien 2011; http://www.mercer.com/flipbook/BGM_Studie_v2/files/publication.pdf (last time accessed 5.04.2012).

The Mercer study questioned in 2010 about 200 enterprises in Austria and 550 European enterprises to WHP issues. The following graph illustrates how much money is invested each year per employee in WHP-measures (**Figure 2**).

The results show that the majority of respondents (39%) spend 1–100 Euro per year and employee. 30% invest 101–300 Euro, followed by 8% investing 301–500 Euro. A small share of respondents (4%) spend 501–1000 Euro or more than 1.000 Euro per year and employee. 15% of the participants didn't spend any money on WHP or entered nothing (0 Euro) [39].

Conclusion and outlook for future research needs

Hypothesizing, that German companies are taking advantage of incentives and will invest more in WHP-measures than those not using it, could not be verified. The tax exemption of 500 Euro/year/employee by the government, turned out to be not very attractive [48]. Austrian companies state that an incentive system (similar to the German one) would motivate them to invest more in WHP [39]. Hupfeld rebuts this, as the IGA initiative conducted a survey to find out if the incentive system of Germany in giving a tax exemption on WHP-measures, is a success factor or not, and it turned out to be not. An incentive system with tax exemption like in Germany will probably not lead to a more in investments in Austria. For Germany should be thought about the modification of the incentive system to make it more attractive or abolish it, as currently it has only little impact.

We now know, that investments in WHM are influenced by the economical situation, but the social and cultural changes in society are that strong, that companies realized that they have to act upon those changes urgently. The investments in WHM are an issue which has to be balanced: to invest (regardless the financial situation of the company) to act upon the social and cultural changes and set up the future for a competitive market position or not to invest, because of the financial situation, but accepting possible disadvantages in the future market position. The knowledge and understanding that companies have to fulfill this balancing act, can help decision makers to develop more attractive incentive systems (in politics) and insurance companies and external service providers to conduct more target oriented programs.

There is still the need to investigate if companies, who have invested in WHM programs *before* entering the crisis are recuperating quicker from crisis? Or if they even get less hit, due to the higher flexibility, lower absenteeism and higher motivation of their employees? Degner could show that the economic success of a company is related to the rate of absenteeism and the rate of fluctuation, but also to the subjective experience of the employees. If they "feel fine" the company is doing better (economically) [16]. So may be those companies are also dealing better with economically difficult situations. Long term research is necessary, taking into consideration enterprises with and without WHM management. Further research must be conducted to investigate the importance of WHP programs for employees. Facing the already ongoing shortage of highly qualified and skilled workers and the demographic change, WHP programs might be an incentive. WHP-measures are shown to be a good way to maintain the motivation and productivity of employees – even or especially during the crisis.

Notes

[1] E.g. the Daimler sports club SG Stern has more than 60 settlements in Germany (www.sgstern.de).

[2] The number of mental and psychosomatic disorders increased in 53% from 2006 to 2010 [50, p. 94].

[3] Mobbing is the systematic social exclusion and brings the affected person, but also the working environment into trouble. It is just talked about mobbing, if the harassment occurs at least once a week for half a year [49, p. 7].

[4] Workability is "having the occupational competence, the health required for the competence, and the occupational virtues that are required for managing the work tasks, assuming that the tasks are reasonable and that the work environment is acceptable" [51].

[5] More information e.g. http://www.arbeitsfaehigkeit.uni-wuppertal.de (last time accessed 04.04.12).

[6] More information e.g. http://www.ibg.co.at/leistungen/befragungen-kennzahlen/human-work-index-hwi/ (last time accessed 4.04.2012).

[7] More information e.g. http://www.impulstest.at/ (last time accessed 4.04.2012).

[8] More information e.g. http://www.ooegkk.at/portal27/portal/ooegkkportal/channel_content/cmsWindow?action=2&p_menuid=67560&p_tabid=3&p_pubid=2540 (last time accessed 4.04.12).

[9] Studies conducted in the US, that's why all costs are calculated in US-Dollars.

[10] Both studies [14, 15] have been meta-analysis. There was no information, if the monetary terms mentioned (costs and savings) were discounted or not. Proper and van Mechelen state the importance of discounting prevention programs, especially if they have a time horizon of more than one year (as most of WHP programs do) [52]. A decline of illness-related costs and reduced absenteeism of these amounts are usually achieved in an average period of about 3,6 years [15].

[11] All costs were calculated for Austria in 2009/2010. But it can be assumed that the costs for Germany are comparable. The living expenses are slightly higher in Austria [http://www.bauslandsvermittlung.de/lang_de/nn_2784/DE/LaenderEU/Oesterreich/Arbeiten/arbeiten-knoten.html__nnn=true] (last time accessed 4.04.2012), for example consumer prices are about 4.57% higher in Austria than in Germany [http://www.numbeo.com/cost-of-living/compare_countries_result.jsp?country1=Germany&country2=Austria (last time accessed 25.04.2012) – updated April 2012]. A reason can be the sales tax which is 3.5% higher in Austria (22.,5%) than in Germany (19%). The higher salaries in Germany are compensated through a 13th and 14th salary in Austria (tax reduced).

[12] There is no information what is included in these prices. If these are just the costs for the trainer or also for the potentially needed room and necessary material, remains unclear.

[13] There is evidence of the economical benefits of WHM in Germany since 2003, but there are still many companies without the knowledge or the persuasion about it [53].

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