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SCAFFOLDING COMPANY INITIATIVE TO IMPROVE PSYCHOSOCIAL WORK ENVIRONMENT OF WORKERS

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Work is a mechanism that enables persons to develop and express their identities. Building the identity through work gives the necessary context for a meaningful life. Work pace control, autonomy, learning new skills, or participation in company decision making are specific psychological factors included in the job control dimension. On the other hand, high absenteeism and poor health are symptoms used to associate with poor psychosocial working environment. This industry paper presents the effort of a scaffolding company to improve the psychosocial work environment in the organisation. Due to several long sick leaves among its personnel the management have contacted a health and safety consultant to help perform an assessment of the current conditions. Previously, the company have measured the employees psychosocial work environment using various approaches. Together with the consultant, an updated questionnaire that targeted specific psychological aspects that was deemed important was formulated. A total of 148 questionnaires were sent out, but only 38% responded to the questionnaire. The result shows that the workers are overall satisfied with their psychosocial work environment. However, there are few factors that achieved low responses and this merit the attention from the management: lack of communication and structure in the company, no feedback when an incident was reported; and lack of performance appraisal from management. Even though the response rate is low, the management had used the results to improve the situation.

Keywords: psychosocial, work environment, scaffolding workers, health and safety

INTRODUCTION

For the past 60 years, many research attempts were undertaken to gain better understanding of the relationship between work-related psychosocial risks and employees' health by means of theoretical models. Back in 1997, Jonge and Kompier had already highlighted the changing nature of work itself and its increased psychosocial workload. Psychosocial work environment means an individual's mental health and development that are affected by the conditions prevailing in the environment and the interaction with other people (Lenn er and Thylefors 2005). More specifically, the term may include job satisfaction, good physical condition, opportunity to grow, satisfactory wages, committed management, clear organisation, high job control and respect and empathy (Benavides et al 2002; Salem et al. 2008).

Psychosocial factors include exposures that effect the well-being and health of workers (e.g. temporal aspects of employment and the work itself, wages, work content, co-workers; supervision, organisational conditions) (Sobeih et al 2009; Tabenelli et al 2008 . Zika-Viktorsson 2003). Additional, Kasl (1987) and Kristensen (1995) claimed that strain (i.e. workers' psychological and physiological reactions to stressors in terms of anxiety, depression, high blood pressure, heavy smoking, alcohol consumption, etc.) and coping strategies.

Today much work poses mental and emotional demands, apart from the physical demands. Work is a mechanism that enables persons to develop and express their identities (Christiansen 1999) where individual will, habits and experiences are integrated in their occupational identity (Kielhofner 2002). Building the identity through work gives the necessary context for a meaningful life, which facilitates the feeling of well-being (Arwedson et al 2007). People are healthy when they feel well and they function well in a social context. The essential health requisites are at a psychological and social level. Efforts have been made to gain more wisdom into the relationship between work-related psychosocial risks and health by means of theoretical models.

AIM OF THE STUDY

This study aims to present the initiative taken by a scaffolding company to measure the current psychosocial factors experienced by its employees. The management of the company is keen to continuously work hard to improve physical safety and well-being of its employees. Over the years the progress and success enjoyed by the company have had an impact on the psychosocial health of the employees. Therefore, the management deems it necessary to carry out regular assessments of the psychosocial environment throughout the organisation. This study presents the results of the latest assessment performed in 2014.

COMPANY PROFILE

The company in this study was founded in 1986 and started as a small family run scaffolding company. It has grown to include five regions and a number of subsidiaries. The regions are Industry (region 1), Sk ne (region 2), Stockholm (region 3),  sterg tland (region 4) and Bor s (region 5). Each region consists of its own management and project leaders, administrators and scaffold workers.

The company strive to provide safe scaffolding for every type of building projects. The personnel vary between 140 and 200 employees. During 2013, 96 accidents or near-misses were reported in all five regions. Of the reported accidents, most were fall

to a lower level, tripping or struck by materials. Ten percent of these led to sick leave and close to ten percent required first aid. Fifty percent was considered to be due to unsafe behaviour.

The company allocate a lot of resources and effort to meet the requirements of several ISO-standards, e.g. ISO 9001 in Quality Management and the Swedish SIS-OHSAS 1001:2007 for work environment.

SCAFFOLDING WORK

Scaffold workers or scaffolders, are often exposed to physical and psychosocial stress. In 2013 there are as many as 204 reported accidents with absence of work (Samuelsson 2014). The biggest cause is fall followed by body movement with and without physical stress. Their work includes erecting and dismantling of scaffolds. Workers must have adequate training to identify the specific risks involved to perform the work safely.

To work with the assembling and dismantling of scaffolds requires an extensive amount of training and work experience. First, the scaffolder needs to work as a trainee for 4200h under supervision. During this time he or she will also receive education in the theoretical knowledge of scaffolding, mathematics, construction, weather impact as well as health and safety, including ergonomics. Upon completion of the trainee program, the worker is accepted as a certified scaffolder. This means he or she can build scaffolds independently. All trainings must meet the Swedish requirement. It is always the employer that is responsible for ensuring that the workers have the training required. A written plan must be provided before the work of assembling, using, making significant changes to, or dismantling a scaffold can begin.

In a scaffolding work, tasks are often carried out in unfavourable postures with highly repetitive movements, and thus generating a load believed to increase the risk of injury. Siebert et al (2001) stressed that despite innovation in the working condition in the construction industry, adverse effects resulting from heavy lifting and carrying, static work, climate factors, noise, dust and stress still impose heavy burden that force workers into early retirement. Zika-Viktorsson et al (2003) noted that workers must be able to make quick adjustments and decisions regarding situations that may arise. They need a certain degree of autonomy in planning their work to meet deadlines. Additionally, rigid frames in term of time and resources, and the pressure to coordinate work with others at all times, can generate a heavy workload. Extended exposure to heavy workload, alongside ambiguous project roles and continuous changes in plan, may result in psychosocial stress reactions. In 2013, 56 % ill-health problems among construction workers constitute of work load issues (Samuelsson 2014). The same report shows that 3 cases per 1000 workers are reported to be on sick absence for more than 14 days. Even though the figure is small, efforts must still be in place to reduce sick leave due to occupational ill-health.

CONSEQUENCE OF AN UNHEALTHY PSYCHOSOCIAL WORK ENVIRONMENT

It is the employer's responsibility to ensure that illness and accidents at work are prevented and that a satisfactory work environment is acquired.

According to Labriola et al (2006) there is a positive correlation between a good work environment and low rates of absenteeism. A sign of an unhealthy psychosocial work environment is where the individual is experiencing ill-health which leads to prolong

sickness absence. Benavides et al (2002) found that sickness absence is related to high work demand and low work control. Long sick absences will affect the company negatively by first losing skills that can be difficult to replace. Secondly, this will affect the company's economic in terms providing medical and rehabilitation program and replacement of the lost skill. In Sweden, the employer will be responsible to pay the sick leave for days 2-14 day (the first day is a waiting day, where the employer does not need to pay anything). For example an employer earning 300 000kr/year with job benefits such as 31.4% employers fees + 12 % holiday semester + 20% overhead will earn as follows:

Table 1 - Salary earned when working (A) and salary earned when absent from work (B) in kr/hr.

A - Salary earned when working (kr/hr)		B - Salary earned when absent from work (kr/hr)		
Reimbursement rate 100%		Reimbursement rate	Day 1	Day 2-14
			0 %	80 %
Salary	160	Salary	0	128
Employees fees	56	Employees fees	6	46
Holiday salary	19	Holiday salary	19	19
Total	235	Total	25	193
Overhead	32	Overhead	32	32
Total salary paid by employer	267	Total salary paid by employer	57	225

* Day 15–180 can vary depending on the employment contract.

As of the 15th day, the responsibility is transferred to the Swedish Social Insurance Agency since the sickness is classified as long-term sickness, although the company continues to pay employment taxes. For the example above, the sick benefit borne by the Swedish Social Insurance Agency is 4 466kr a week and can lead up to 232 870kr in a year for a prolonged absence. This system means that all absenteeism from work that is more than 15 days will eventually burden the society where taxpayers end-up paying for the leave. In a study performed by Jonge and Kompier (1997) state that 35% of the disabled employees claimed that they will still be working if preventive measures were taken at the early stage.

Examples of a satisfactory work environment are everything from influence, freedom of action and development, work variation, collaboration and social contacts.

Therefore, all employers must systematically plan for the daily operations including physical, psychological and social factors as stipulated in the provisions Systematic work environment, AFS 2001. The provision stipulates that employers take care of work environment by examining, implementing and monitoring activities in the organisation. There shall be a company work environment policy that explains how a satisfactory work environment is to be achieved within the organisation. For an organisation of ten workers or more, a work environment policy and procedures must be documented.

METHOD ADOPTED

A quantitative study was used in the survey. The result from a quantitative study can be measured and valued numerically. The previous assessment of psychosocial health in the organisation was made in 2011. The response rate of this survey was the lowest ever, only 34%. The results showed that the employees didn't feel involved or welcome to participate in the development of the company. The survey indicated that due to this, the employees felt less loyal and responsible towards the company.

No initiative for another assessment was taken between 2011 and 2014 mainly due to loss of key personnel. In 2014 the company initiated a new attempt with the help of a health and safety consultant company. The questionnaire of 2011 was used as a basis for the development of an improved questionnaire for 2014. Many questions were re-written or re-formed to capture better psychosocial aspects. Among the changes made were removing irrelevant questions that did not involve any psychosocial aspects, for e.g. questions about material-supply, material storage, clothes and the company magazine. Unlike the survey of 2011, where the questions were mixed without any special order or theme, the re-writing of questions resulted in the formulation of five themes to ease the understanding of the questions asked. The themes are: appreciation and participation; job satisfaction; perception of safety; near-miss and accident reports and structure and routines. In comparison, the survey of 2011 measured the employee's perceived routines, management, well-being, commitment, participation and development.

The questionnaire is based on a scale with six different alternatives, ranging from 1 - strongly disagree to 6 -

strongly agree. There is also an option for responding "do not know". Additionally, three questions have been added to give the respondents a chance to express their thoughts and opinions in free writing.

RESULTS AND DISCUSSION

.A total of 148 surveys were sent out to all employees in the company. The response rate was only 38% despite several reminders and prolonged deadline. It is a small difference from 2011 and below the expectations of the company. The company must consider the low response rate and examine the reasons for it before making the next assessment. The suggestions from the consultants are that management must improve feed-back and communication within the organisation.

Despite the low response rate, the results should be considered a reflection of the present situation. Table 1 presents the mean value for each theme for all five regions combined. The result indicates that the company has satisfied employees that perceive their work to be safe. They do however; need to work on the routines for near-miss and accident reporting.

Table 1: Theme results from all five regions

Themes	Mean value
1. Appreciation, participation	3,8
2. Job satisfaction	4,1
3. Perception of safety	4,0
4. Near-miss and accident reports	3,5
5. Structure and routines	3,9

To analyse the result and see how the regions fare separately, see figure 1 below. The best result is that from Region 5 while Region 1 and 3 have the lowest score in total. Further discussion of the results of each theme is presented below.

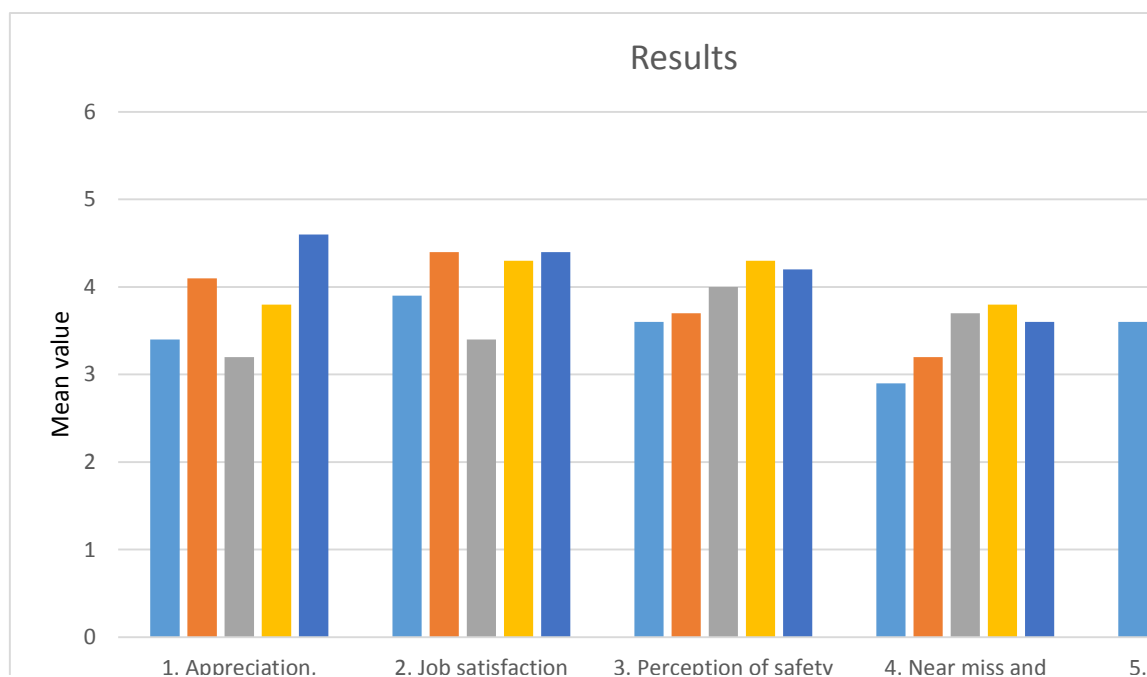


Figure 1 - Theme performance between regions

The results regarding “appreciation and participation” are interesting when compared to the results regarding “structure and routines”. Comparing region 1 and 3 to region 5 indicates that efficient and clear routines and regular meetings to further communication improves the feeling of appreciation and involvement among the company employees.

When considering the high results of Region 4 (mean 4.1) and 5 (mean 4.5) for “structure and routines” it is important to connect them to their results for “job satisfaction” and the employee’s “perception of safety” and security. Region 4 feels safe and secure which could be related to the regions good structure and routines. The employees of region 5 feels appreciated and involved and communication is good which is a clear indicator that their routines work as intended

Theme 1: Appreciation, participation

This theme comprises of appreciation by management and the employees influence on their own future and company development. The result varies greatly between the five

regions. Comments from Region 1 (mean 3.4) and 3 (mean 3.2) indicate that the management is not approachable or less concerned about their employees. The employees in these regions do not feel appreciated by their management and feel they do not have the right conditions to perform a good job, due to insufficient communication. On the other hand, Region 2 (mean 4.1) and 5 (mean 4.6) achieved very high results, so further investigation into what separates these regions could give hints on how to improve the situation.

Theme 2: Job satisfaction

This theme contains questions on whether or not the employees are satisfied with their job, if they feel positive when going to work and if the job demand is high or low. Over all, the answers about job satisfaction are on the positive side. The employees like their job and feel committed and involved. The most positive comments from the last three questions in the survey concern team spirit and colleagues. Most of the respondents feel that they have enough time to finish their daily tasks and that their supervisors are good at communicating and encouraging. Region 3 (mean 3.4), stands out compared to the rest when it comes to questions about job satisfaction. They feel neither regional management nor supervisors have the time or ability to give support and encouragement. This is in line with the results for “appreciation and participation” above.

Theme 3: Perception of safety

This theme comprises of questions regarding general well-being, physical health and conflicts at the work place. There are positive comments in the survey about the company's active work to improve safety. The employees feel that the management actively work to improve and prevent physical risks. When it comes to worrying about safety, physical or psychosocial, Region 4 (mean 4.3) does not seem to be worried at all, while Region 1 (mean 3.6) and 2 (mean 3.7) feels more insecure. This seems to be correlated to the perceived amount of conflicts in the regions. Region 3 (mean 4.0) seems to experience a higher amount of conflicts at work than the rest. This might be related to the fact that they also perceive their management as less involved and hard to reach, a part of the solution could be to improve routines and communication.

Theme 4: Near miss and accident reports

This theme is about knowledge of the company's safety organisation, if the employees report near-misses and accidents and if they get feed-back when reporting. Region 4 (mean 3.8) seems to have the best knowledge of the company's safety organization and their reports more often seem to lead to a visible improvement. However, there are a low number of accidents or near-misses reported in this region. This seems to be because they feel uncomfortable to convey safety flaws due to expected response from management.

Many respondents in Region 1 (mean 2.9) and 2 (mean 3.2), say that they rarely report near-misses even if they should. These low results might be caused by a lack of results and feed-back on reported incidents.

Theme 5: Structure and routines

This theme contains questions about the level of structure and routines in the region and meetings with management and between colleagues. There seems to be a general lack of scheduled meetings throughout the organisation. According to the results, the employee's wish for more regular meetings and improved communication.

Region 5 (mean 4.5) has very interesting results regarding structure and routines when comparing the surveys of 2014 and 2011. The results shown great improvement during recent years, the clear structure and good routines can be traced to a change of management in 2012. This region now stands out compared to the rest of the company. Negative results and comments for structure and routines in the other regions mainly concern information, communication and efficiency. This is directly linked to “structures and routines” since poor communication leads to a lack of information which affects efficiency. The overall conclusion is that the employees have a feeling of more talk than action from the management.

CONCLUSIONS AND RECOMMENDATIONS

In general the company’s attitude to improve the psychosocial work environment is recommended. This is evident through the company’s regular assessments of the psychosocial work environment and their will to improve the instrument used.

Overall, the physical work environment is satisfactory, and the employees acknowledge and appreciate the effort made by management regarding this. When it comes to psychosocial work environment there are certain areas that can be improved, for example communication and information. To deal with this problem, most of the employees agree on the need of having regular meetings with the management and colleagues. These meetings should be scheduled on a regular basis on both a regional and local scale to further communication. Since a relatively large amount of employees did not have a meeting with their direct manager in 2013 it is an issue that needs to be addressed. Since the survey was conducted in 2014, the company has created a human resource department to improve routines on information and communication in the organisation.

“Structure and routines” can be clarified with an improvement regarding communication and information. Since the number of reports on near-misses and accidents are very low, the management needs to improve on their feedback from reported incidents. Currently, the employees do not know if their reports lead to any improvements since they have not received any feedback.

Overall, the employees seem to enjoy their work and have a great sense of responsibility of what they do. The respondents agree that they have good colleagues and working community. The company as a working place has in general improved compared to earlier surveys. There seems to be a will and loyalty among the employees to help form and expand the company. They want to be a part of the company's result and future development, which indicates a positive trend. It is strongly suggested that the company make the management more visible to all employees, and that they make an effort to improve communication among the different levels in the hierarchy.

CRITIQUE TO METHOD

Some improvements need to be done in the next survey to make the most out of the result. The survey of 2014 contains some limitations which should be addressed before the next survey. For example, the questionnaire should be divided in two cohorts, on-site (scaffolders, supervisors) and off-site (project managers, administrators). This strategy will give a better perspective on the actual situation for both cohorts since their problems are rather different. To improve the response rate, management should make an effort to give more feedback and involve the employees in making necessary improvements. Also, to further increase the response rate,

information needs to be given on the fact that the results will be totally anonymous and collected by an external source. This will probably give a more honest result with a higher respondent rate.

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