

Presenteeism Towards Absenteeism: Manual Work Versus Sedentary Work, Private Versus Governmental – A Croatian Review

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ABSTRACT

The research objectives were to find out the extent of presenteeism and absenteeism in manual workers and whether it differs in clerks that perform sedentary jobs. For that purpose 121 manual workers of »3.maj« were polled, of whom 61 are employed by the shipyard in state ownership and 60 are sub-contracted workers. Also 120 clerks were interviewed, 60 postal employees of »Telecom« Zadar and 60 of the police administration. The Stanford Presenteeism Scale (SPS-6), the internationally recognized questionnaire for assessing presenteeism was used as well as the Rijeka Presenteeism Scale (RPS-6), the new questionnaire compiled for this research, and also the Rijeka Absenteeism Scale (RAS-6). The results have shown that in our country the RPS-6 test is adequate for assessment of presenteeism with high reliability for this type of testing, Crombach's $\alpha=0.757$. The RAS-6 test has shown a low level of reliability and so have our questions on absenteeism which therefore cannot be considered an official scale. All four groups of employees have shown high positive presenteeism with no considerable differences, $p=0.3610$, $p>0.05$. Only when the question referred to one's performing efficient work with maximum care there were considerable differences $p=0.023$, $p<0.05$. The research has shown that the use of SPS-6 is not suitable in our parts probably because of cross-cultural differences, reasoning and speech differences. The research has also shown that the notion presenteeism as a positive presenteeism has to be distinguished from the »sickness-presenteeism« for which the SPS-6 scale could conditionally be suitable, which showed medium presenteeism in our workers, but that cannot be considered reliable due to low correlations. To conclude, although the workers show good, positive presenteeism the working conditions are to be further enhanced as well as the contact with the company management, to maintain such presenteeism and not to exhaust the worker's positive energy.

Key words: presenteeism, absenteeism, occupational medicine

Introduction

Inclination, circumstances, personal, objective and subjective causes of absenteeism represent a permanent problem for family physicians and lately also for occupational medicine specialists. Since January 2008 occupational medicine in the Republic of Croatia has taken over the treatment of work injuries and professional diseases, i.e. the assessment of temporary disability¹. Women are more often absent from work than men. That depends on work place, the country, age and professional group women belong to². The job esteem and job perspectives are the factors that have a strong impact on men against absenteeism while in women it is related to satisfaction with income³. The use of alcohol may have an impact on

absenteeism and presenteeism in men. Therefore besides the usual care in industry the so-called brief intervention (BI) is recommended within the employee assistance program (EAP)⁴. Mental instability, particularly depression depending on its intensity, influence work productivity and absenteeism⁵. Presenteeism is a self-rated measurable loss of work performance due to health problems in the workplace⁶. The consequences of presenteeism are considerable and they range from diminished quality of life and health status to increased health costs, adverse effects on colleagues, increased occupational accidents and deterioration of product quality. Some health conditions like allergies and irritable bowels increase presen-

teeism⁷. Increased presenteeism is considerably associated with high stress, life dissatisfaction and back pain, while absenteeism is significantly associated with overweight and diabetes⁸. The percentage of work impairment, disruption of work, family and social life, increase systematically from normal weight to obese, $BMI > 28 \text{ kg m}^{-2}$ ⁹. The employees with metabolic syndrome (MetS) are significantly prone to arthritis, chronic pain, diabetes and heart disease¹⁰.

Sickness presenteeism as a present-day phenomenon is highly significant for such presenteeism may lead to future sickness absenteeism¹¹. Increased presenteeism is associated with poor working conditions, ineffective management and work/life imbalance¹².

On the other hand positive presenteeism, that is presenteeism, signifies working enthusiasm, high productivity, high motivation and working energy.

The objectives of the research were to study the level of presenteeism and absenteeism in manual workers and whether it differs compared to employees that perform sedentary jobs. Another objective was to see if there is a difference between those employed by the state and private owners.

The Stanford Presenteeism Scale (SPS-6), the internationally recognized questionnaire for presenteeism assessment was used, also the Rijeka Presenteeism Scale (RPS-6), the new questionnaire for assessing presenteeism compiled for this research, as well as the Rijeka Absenteeism Scale (RAS-6), the group of six questions for assessing absenteeism.

Examinees and Methods

Examinees

A hundred and twenty-one employees of the shipyard »3.maj« in Rijeka were polled voluntarily and anonymously. Out of that number 61 are workers of »3.maj« which is at present in the state ownership, and 60 are sub-contracted workers, employed by a private sub-contractor.

The mean age of 61 »3.maj« workers is 38.16 (19–60 range). Their mean work experience is 15.90 years (1–40 range). The mean age of 60 sub-contracted workers is 41.96 (22–59 range) and the mean work experience is 19.71 years (1–43 range).

The polled workers of »3.maj« are frame builders and carpenters, while the sub-contracted workers are mainly employed on anti-corrosive and painting jobs. Two groups of clerks were interviewed by questionnaires, also.

The first group consisted of 60 clerks, employees of Croatian post in Zadar (43 women and 17 men), mean aged 42.71 years (25–57 range), with work experience 20.45 (1–40 range), and 60 clerks of the Police administration Zadar (33 women and 27 men), mean aged 45.55 years (28–62 range), with work experience 23.15 years (5–42 range).

Methods

The research has been approved by the Ethical Committee, Class No. 641-01/09-01/21, Office No 2170 24-4-10-2, University of Rijeka, School of Medicine, January 11th 2010.

Three tests and a general questionnaire were used. SPS-6 Stanford Presenteeism Scale¹³ is an internationally recognized tool for assessing presenteeism based on presence or absence of illness or weakness, where maximum number of points means high presenteeism, i.e. high energetic levels and high productivity in a positive sense. Minimum number of points means low presenteeism, poor work quality and low productivity.

RPS-6 Rijeka Presenteeism Scale is modified test that assesses presenteeism primarily on the grounds of motivation and positive attitude to work.

RAS-6 Rijeka Absenteeism Scale gives the answer to the question whether one is on-sick leave because of illness, work injury and what is the worker's attitude to sickness absence, i.e. whether he will use it if it is not necessary, whether he will use it longer than necessary, in other words what is his attitude towards sickness absence. Contrary to SPS-6 and RPS-6, here the maximum number of points means low absenteeism and minimum number means high absenteeism. The outline of specific tests:

Stanford Presenteeism Scale (SPS-6)

It consists of 6 questions:

1. Because of my health problem with stress it was much harder to carry out my tasks.
2. In spite of my health problem I was able to complete the hard tasks my job required.

TABLE 1
ASSESSING THE SPS-6 TEST

Questions	1, 3, 4 (scores)	2, 5, 6 (scores)
Disagreed completely	5	1
Disagreed to some extent	4	2
Uncertain	3	3
Agreed to some extent	2	4
Agreed completely	1	5

TABLE 2
ASSESSING THE RPS-6 TEST

Questions	4, 5, 6 (scores)	1, 2, 3 (scores)
Disagreed completely	5	1
Disagreed to some extent	4	2
Uncertain	3	3
Agreed to some extent	2	4
Agreed completely	1	5

3. Because of my health problem I don't find satisfaction in my work.
4. Due to my health problem I was desperate about completing certain tasks.
5. At work I was able to focus on achieving my objectives despite my health problem.
6. In spite of my health problem I was energetic enough to complete my job.

Rijeka Presenteeism Scale (RPS-6)

It consists of 6 questions:

1. I do my job with maximum care careful not to hurt myself.
2. I take care of the tools and the product.
3. I pay attention to good relations with my colleagues.
4. Present at work but completely uninterested.
5. I do not care if my colleague has do additional work (doing my share).
6. I am not interested if the employer has a loss because of me.

Rijeka Absenteeism Scale (RAS-6)

It consists of 6 questions:

1. I take sick – leave only if really unable to work.
2. I take sick – leave to get a little rest.
3. I take sick – leave only if it is related to work injury, though it is not necessary.
4. I am often injured at work.
5. I was justifiably on sick – leave due to health problem last year days/month.

TABLE 3
ASSESSING THE RAS-6 TEST

Questions	1, 5 (scores)	2, 3, 4, 6 (scores)
Disagreed completely	1	5
Disagreed to some extent	2	4
Uncertain	3	3
Agreed to some extent	4	2
Agreed completely	5	1

6. If I am entitled to it I will use my sick – leave fully due to health problem for rehabilitation, also several years successively.

There are 5 possible answers for every question (for all 3 tests):

- disagreed completely
- disagreed to some extent
- uncertain
- agreed to some extent
- full agreed.

Results

The points scored on particular scales are shown in Table 4. On the Rijeka Presenteeism Scale (RPS-6) all four groups of employees have shown high positive presenteeism and they did not differ statistically significantly, $p=0.3610$, $p>0.05$, (Figure 1). Studying individual questions of RPS-6 scale, in answering question 1 – where one's is doing job with maximum care, careful not to hurt himself, there were considerable differences between the groups, $p=0.023$, $p<0.05$ (Figure 2). Assessment scales have been tested. Our scale RPS-6 has shown high reliability, Cronbach's $\alpha=0.744$, Standardized $\alpha=0.757$, Mean 27.21. The international scale SPS-6 has shown poor reliability, Cronbach's $\alpha=0.326$, Standardized $\alpha=0.331$, $X=20.93$. Our group of questions RAS-6 for assessing absenteeism has also shown low reliability, Cronbach's $\alpha=0.236$, Standardized $\alpha=0.324$, $X=23.58$.

Discussion

The results have shown no statistically significant differences among four groups of examinees. Without de-

TABLE 5
ESTIMATION OF ACHIEVED SCORES

Scores	6	Insufficient
Scores	7–14	Very low
Scores	15–18	Low
Scores	19–22	Medium
Scores	23–26	High
Scores	27–30	Very high

TABLE 4
SHIPYARD AND SUB-CONTRACTED WORKERS DATA, POSTAL AND POLICE CLERKS DATA

	N	Age (X)	Yrs.empl.	SPS-6	RPS-6	RAS-6
Ship. w.	61	38.16	16	20	27	23
Sub-contr	60	41.96	20	21	28	24
Postal cl.	60	42.71	21	21	27	23
Police cl.	60	45.55	21	21	27	23

N – total number of examined workers; Yrs.employ – years of employment; Ship. w. – shipyard workers; Sub-contr – sub-contracted workers; Postal cl. – postal clerks; Police cl. – police clerks; SPS-6 – Stanford Presenteeism Scale – 6, achieved scores; RPS-6, Rijeka Presenteeism Scale – 6, achieved scores; RAS-6, Rijeka Absenteeism Scale – 6, achieved scores

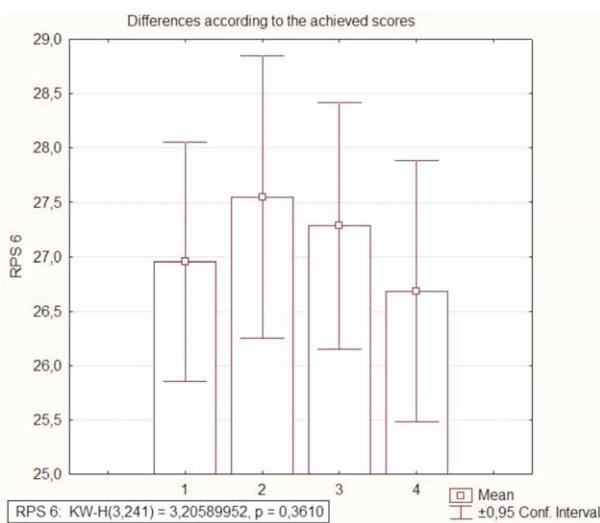


Fig. 1. Differences according to the achieved scores (RPS-6). Between four groups of examinees there are no statistical differences, $p=0.3610$, $p>0.05$.

tailed analyses one would think that shipyard manual workers do by far heavier work than employees in air-conditioned offices and that their positive presenteeism would be significantly higher but the results have not proved that.

First of all it has to be stated that both groups of examinees in »3.maj« do similar jobs, on the same location, working on steel-ships. Often, especially when a ship is about to be launched, in the effort to observe the terms of contract, workers do overtime. Long work hours, particularly weekly schedules at the 60 hour or above mark, lead to health and safety problems¹⁴.

Permanent full-time work, disproportion between desired and actual working hours, shift work and too long

working weeks increase sickness presenteeism. Regular overtime decreases sickness absenteeism, but increase sickness presenteeism and they are counterparts¹⁵. Highly stressogenic work and low tolerance of work burden impact the work ability index¹⁶. The job of shipyard workers is not mentally but physically stressogenic as they are exposed to adverse weather conditions, over 40°C in summer and winter temperatures under 0°C. Besides climate factors, the workers' »enemy« is working in the forced position for the spine which has repercussions on spine, knees, joints, the most important part of locomotion apparatus. Such jobs are included in jobs with special working conditions and performed by firemen, rescue workers, ambulance workers, policemen, pilots and submarine officers¹⁷. Frame builders and anti-corrosive workers are not included in that category which is bound to be corrected. After many years of hard work they find it difficult to fill the quota that makes them worried and has a negative impact on presenteeism. The cumulative impact of trauma is the highest in industry compared to crafts, services and agriculture¹⁸.

By keeping chronically ill employees on jobs the management promotes work attendance as a way of preventing absence¹⁹.

Despite hard working conditions »3.maj« workers, both state employees and sub-contracted ones, managed to maintain maximal concentration, avoiding injuries and careful not to damage tools or parts built into the ship. They take care of good relations with their co-workers, aware of the importance of team-work in such complicated jobs, knowing that the work cannot be done by someone else, i.e. if one fails the workload falls on another and under the circumstances it is impossible. In the end, they know that by their good work they will award not only the employer but also themselves since the employer will be given new orders for ships if the buyer is satisfied. Both groups of »3.maj« workers do not have a long working experience, belonging to the group of younger middle age, and that may be the reason that they do not show explicit sickness presenteeism, that is high presenteeism.

RAS-6 has not been proved reliable, so really it may not be termed a scale but the group of six independent questions. Creating a scale for absenteeism by introducing new questions and eliminating the inappropriate ones can be the impetus for new research in this field. From personal experience, the workers are prone to take sick – leave on the basis of a recognized work injury as it is paid 100 percent, and a long physical therapy they are entitled to without any payment. A good assessment by an occupational medicine specialist, and particularly prevention, sop undeserved sick – leave, and when motivation is high there is hardly any demand for such sick-leave.

The clerks belong to middle-age group with longer working experience. Among them prevail women who besides regular work have to deal with their family problems. Postal clerks but also police employees comprise the group of public administrative employees whose num-

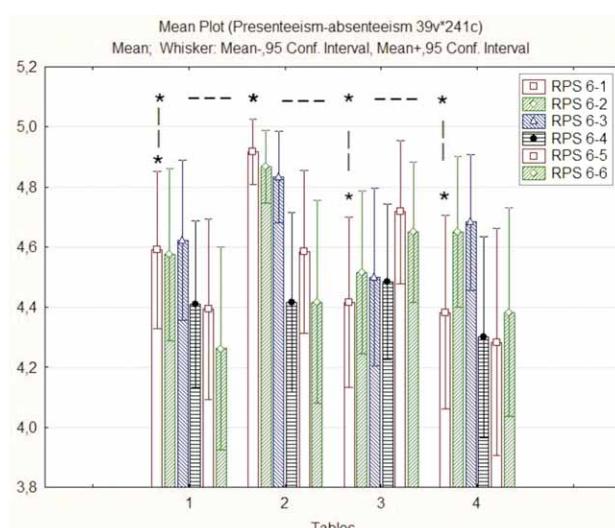


Fig. 2. Differences between examinees according to the particular questions (RPS-6). Examinees statistically differ significantly according to the first question in the RPS-6 scale, $P=0.023$, $p<0.05$.

ber is planned to be substantially reduced. So they work under stress, one employee often doing the job the scope of which would require 3 or 4 people. Naturally, they also make efforts to perform their jobs with maximal concentration to meet the job requirements, so in the end presenteeism tests do not show a significant difference in comparison with manual workers.

The impaired workers and especially the absent ones must be substituted which causes an expense for the employer²⁰. In principle, the substitution is more important when a worker is absent, but it is also the impaired worker that represents a great risk for his environment, particularly when it may lead to his injury or injuries of his co-workers.

Shipyard workers most often suffer from musculoskeletal disorders. It is very important that occupational medicine specialists should periodically examine workers. Their physical work ability is usually tested by functional capacity evaluation²¹. When assessing work ability both personal factors and environmental factors have to be considered as they make the synthesis of work ability evaluation²². Low back pain is often the cause of absenteeism and reduced work productivity²³.

The occupational medicine authorities should introduce modern evaluation methods for worksite health promotion like SWAT (Swift Worksite Assessment and Translation). It is a worksite identification method, including site visits, post visit evaluation, evaluation capacity building, translation and dissemination²⁴.

The cost of presenteeism is sometimes lower than the direct healthcare costs but for some diagnoses it is the other way round²⁵. It is well known that only a small percentage of workers on long – lasting sick – leave return to work after 7, 8, 9 or more months. Therefore it is necessary to monitor their health insurance contracts especially with private employers²⁶.

REF E R E N C E S

1. LALIĆ H, Coll Antropol, 33 (2009) 939. — 2. BEKKER MH, RUTTE CG, RIJSWIJK K, Psychol Health Med, 14 (2009) 405. — 3. ROELEN CA, KOOPMANS PC, GROOTHOFF JW, Work, 34 (2009) 13. — 4. OSILLA KC, DELA CRUZ E, MILES JN, ZELLMER S, WATKINS K, LARIMER ME, MARLATT GA, Addict Behav, 35 (2010) 194. — 5. LERNER D, HENKE RM, J Occup Environ Med, 50 (2008) 401. — 6. YAMASHITA M, ARAKIDA M, Sangyo Eiseigaku Zasshi 48 (2006) 201. — 7. SCHULTZ AB, EDINGTON DW, J Occup Rehabil, 17 (2007) 547. — 8. MUSICH S, HOOK D, BAANER S, EDINGTON DW, Am J Health Promot, 20 (2006) 353. — 9. RODBARD HW, FOX KM, GRANDY S, SHIELD S, Am J Health Promot, 23 (2009) 353. — 10. SCHULTZ AB, EDINGTON DW, Value Health 13 (2010) 258. — 11. BERGSTROM G, BODIN L, HAGBERG J, ARONNISON G, JOSEPHSON M, J Occup Environ Med 51 (2009) 629. — 12. MUSICH S, HOOK D, BAANER S, SPOONER M, EDINGTON DW, Am J Health Promot, 2 (2006) 127. — 13. KOOPMAN C, PELLETIER KR, MURRAY FJ, SHARDA CE, BERGER ML, TURPIN RS, HACKLEMAN P, GIBSON P, HOLMES DM, BENDEL T, J Occup Environ Med, 44 (2002) 14. — 14. ALLEN HM, SLAVIN T, BUNN WB, J Occup Environ Med, 49 (2007) 148. — 15. BOCKERMAN P, LAUKKANEN E, Eur J Public Health, 20 (2010) 43. — 16. MAKOWIEC-DABROWSKA T, KOSZA-DA-WLODARCZYK W, BORTKIEWICZ A, GADZICKA E, SIEDLECKA J, JOZWIAK Z, POKORSKI J, Med Pr, 59 (2008) 9. — 17. SLUITER JK, Appl Ergon, 37 (2006) 429. — 18. MASTRANGELO G, CARRASSAI P, CARLETTI C, DE ZORZI L, MATTIONI G, MUNDO A, PICCIONI M, SARTORI A, MARANGI G, FADDA E, PRIOLLO G, SCOIZZATO L, MAR-CHIORI L, Med Lav, 99 (2008) 42. — 19. MUNIR F, YARKER J, HAS-LAM C, Disabil Rehabil, 30 (2008) 1461. — 20. PAULY MV, NICHOLSON S, POLSKY D, BERGER ML, SHARDA C, Health Econ, 17 (2008) 469. — 21. WIND H, GOUTTEBARGE V, KUIJEDER PP, SLUITTER JK, FRINGS-DRESEN MH, Int Arch Occup Environ Health, 82 (2008) 435. — 22. SLEBUS FG, SLUITER JK, KUIJER PP, WILLEMS JH, FRINGS-DRE-SSEN MH, Disabil Rehabil, 29 (2007) 1295. — 23. MANNION AF, HORISBERGER B, EISENRING C, TAMCAN O, ELFERING A, MILLER U, J Occup Environ Med, 51 (2009) 1256. — 24. DUNET DO, SPARLING PB, HERSEY J, WILLIAMS-PIEHOTA P, HILL MD, HANSEN C, LAWRENZ F, REYES M, Prev Chronic Dis, 5 (2008) A 118. — 25. SCHULTZ AB, CHEN CY, EDINGTON DW, Pharmacoeconomics, 27 (2009) 365. — 26. VERMEULEN SJ, TAMMINGA SJ, SCHELLART AJ, YBEMA JF, ANEMA JR, BMC Public Health, 14 (2009) 232.

In the conclusion, the polled workers, those employed by the state and by private contractors, have shown enthusiasm and eagerness in completing their tasks.

The research has shown that there are no considerable differences between employees in the state and private sector, between manual and sedentary employees, i.e. there is no significant difference in their work enthusiasm.

Regardless of the employer the workers in »3.maj« perform almost the same job under the same conditions and on the same location. The results and conclusions of the research are of interest now when Croatian shipyards are on the verge of privatisation.

Also, by the research we have got a reliable tool to measure presenteeism in Croatia and that is Rijeka Presenteeism Scale (RPS-6).

The internationally recognized test SPS-6 has not been proved reliable and it cannot be recommended in our parts. It was proved objectively in this paper by conducting official tool – Crombach's α test for reliability.

The terms »sick-leave« and »absenteeism« with different meanings have been used for a long time. Similarly, the relatively new terms »sickness presenteeism« and »positive presenteeism« should be distinguished. »Presenteeism« should mean only positive presenteeism, high working enthusiasm, high motivation and energy. The term presenteeism can also be used in negative context, but then it is necessary to accentuate that it is »sickness presenteeism«.

Otherwise it causes confusion since in literature high presenteeism is often mentioned in negative context meaning »sickness presenteeism«, which is confusing.

At the end, regardless of high presenteeism, i.e. positive presenteeism shown by the workers, permanent contact with the management is required, control of working hours and working week, to maintain such situation also in the future.

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**PREZENTIZAM PREMA ABSENTIZMU: FIZIČKI RAD PREMA SEDENTARNOM, DRŽAVNO
PREMA PRIVATNOM – HRVATSKI PRIKAZ**

S A Ž E T A K

Ciljevi istraživanja bili su ispitati koliki je prezentizam i absentizam u fizičkih radnika, te postoje li razlike u odnosu na službenike koji obavljaju sedentarni posao. Željelo se ispitati postoji li razlika između zaposlenih kod državnih i privatnih poslodavaca. U tu svrhu, anketiran je 121 fizički radnik u »3.maju«, od toga 61 su zaposlenici državnog dijela brodogradilišta, a 60 su privatni kooperanti. Anketirano je 120 službenika, 60 poštanskih službenika zadarskog »Telekoma« i 60 službenika zadarske Policijske uprave. Korišteni su Stanford Presenteeism Scale (SPS-6), međunarodno priznati upitnik za procjenu prezentizma, Rijeka Presenteeism Scale (RPS-6), novi upitnik za procjenu prezentizma sastavljen za ovo istraživanje te Rijeka Absenteeism Scale (RAS-6) za procjenu absentizma. Rezultati su pokazali da je kod nas za procjenu prezentizma adekvatan test RPS-6, sa visokom pouzdanošću za ovu vrstu ispitivanja, Crombachova $\alpha=0,757$. SPS test pokazao je niski nivo pouzdanosti, kao i naša pitanja za absentizam, stoga je nismo mogli proglašiti službenom skalom. Sve 4 grupe radnika pokazale su visoki pozitivni prezentizam, nisu se značajno razlikovali, $p=0,3610$, $p>0,05$. Samo kod čestice RPS-1, bilo je značajnije razlike, $p=0,023$, $p<0,05$. Istraživanje je pokazalo da korištenje upitnika SPS, vjerojatno zbog kros-kulturalnih razlika, rezoniranja, govornih razlika, nije pogodno za nas. Također, pokazalo se da je potrebno razlikovati pojam prezentizam, kao pozitivni prezentizam, od tzv »sickness prezentizma«, za kojeg bi bila uvjetno pogodna SPS skala, kojom su dobiveni rezultati osrednjeg prezentizma kod naših ispitanika, ali se ne može smatrati pouzdanom zbog niskih korelacija. Zaključujemo da, iako radnici imaju dobar pozitivni prezentizam, i dalje treba raditi na poboljšanju radnih uvjeta, biti u kontaktu s menađmentom poduzeća, da se takav prezentizam održi i ne iscrpi pozitivna energiju radnika.

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