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# THE EFFECT OF RESTING TIME ON EMPLOYEE SATISFACTION: THE EXAMPLE OF DUZCE FOREST PRODUCTS INDUSTRY

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#### Abstract

Job burnout can be defined as the decrease of power due to the work load. Decrease in performance because of exhaustion can be stabilized with the help of a short break from work. Both the workers' expectations and the requirements of law in terms of breaks are met by the workplaces. With the help of this study it is aimed to find out the effects of breaks, had by the workers of forest products industry in Düzce during their working hours, on their job satisfaction. In accordance with this purpose, a survey has been applied on the workers. The results of the study show that the workers have 10-15 minute breaks during both their morning and afternoon shifts. The workers find this amount of time adequate for having a break. Furthermore, the workers have stated that social facilities which are essential for breaks are provided by the institution. With these breaks they can make time for themselves by spending this time the way they want. It eventually increases their performance at work.

**Keywords:** Resting time, employee satisfaction, forest products industry, Düzce

### DİNLENME ARALARININ ÇALIŞAN MEMNUNİYETİNE ETKİSİ: DÜZCE ORMAN ÜRÜNLERİ ENDÜSTRİSİ ÖRNEĞİ

#### Özet

Çalışma sebebiyle meydana gelen güç azalması iş yorgunluğu olarak tanımlanır. Yorgunluk sebebiyle verim gücünde meydana gelen azalmalar dinlenme ile tekrar denge durumuna gelebilmektedir. İşyerlerinde gerek Kanun'un gerektirdiği gerekse de çalışanların dinlenme beklentileri karşılanmaktadır. Yapılan bu çalışma ile Düzce orman ürünleri sanayisinde işyerlerinde uygulanan dinlenme aralarının çalışan memnuniyetine etkisinin araştırılması amaçlanmıştır. Bu amaç doğrultusunda çalışanlara yönelik bir anket çalışması yapılmıştır. Çalışma sonucunda, çalışanların sabah vardiyasında ortalama 10-15 dk, öğleden sonra vardiyasında da ortalama 10-15 dk. dinlenme arası verdikleri ve çalışanların verilen bu dinlenme süresini yeterli buldukları belirlenmiştir. Ayrıca, çalışanlar dinlenme aralarını geçirdikleri alanların dinlenme için gerekli sosyal imkânları sunduğunu, dinlenme aralarını kendilerine ayırarak bu zamanı istedikleri şekilde geçirebildiklerini ve bu durumun da kendilerinin performanslarını arttırdığını belirtmişlerdir.

Anahtar Kelimeler: Dinlenme araları, çalışan memnuniyeti, orman ürünleri endüstrisi, Düzce

#### 1 Introduction

Tiredness can be defined as loss or decrease in productivity and it can be balanced with the help of breaks. Job fatigue can be defined as decrease in power which occurs as a result of working. Break in work is used for resting and eating. Breaks differ in frequency and time which allows it to minimize job fatigue [1]. According to current labor act, the general working hours are 45 hours the most in a week. If it is needed the employees can be made to work till 270 hours at most in a year. Most institutions, despite the restrictions which take place in law, exceed this amount of time. Employees try to catch up with their incomplete works at night or at the weekend by working overtime which increases the cost [2].

Breaks can be defined as the resting time that is given to employees during work time. According to article 68 in the law no. 4857; breaks are provided for the employees as long as they are fixed in accordance with the institution's traditions and job requirements [3]. Accordingly, breaks are fixed as [4];

- 1. 15 minutes for 4 or less hour-work,
- 2. Half an hour for more than 4 and less than 7.5 hour (including) work,
- 3. An hour for more than 7.5 hour work.

These breaks are the least ones and they are had continuously. However they can be used intermittently by considering the climate, season, traditions and job requirements of the institution. Breaks are not regarded as working hours [4].

It has been seen that breaks in practices are given mainly as lunch break. As well as providing the opportunity of increasing labor productivity, working accidents resulted from tiredness and distraction can be also decreased with the help of these breaks [5]. For the sake of positive effect of those breaks, the employee that is on the break should be free. The employee may spend the break time in the institution or outside. If the employee spends this time in the institution, no work should be given to him/her. Using break time as giving permission to start late or to finish the job early does not fit for the purpose. The break time must be used in the daily working period [6]. For the purpose that the employee benefits from the breaks as much as possible, the employer should provide private resting and eating places for the employees to the full extent of his/her power [5].

Employee satisfaction is a positive emotional state that one's feeling about his/her job as a result of his/her experiences. As the satisfaction of the employees increases [7];

Their productivity and motivation levels will increase,

- The quality of the service will increase,
- It will help employees try more to satisfy the customers,
- Absenteeism of the employees with various excuses will decrease,
- Their loyalty to the institution will be stronger as if it was their own,
- As a result, the profit rate will increase.

In the breaks given for intense working pace, with short walking, physical resting or different activities; the employee can eliminate his/her tiredness by gaining his/her strength again. By this way, the employee can work more productively and in a healthy way.

An employee should be able to spend the break time however she/he wants. That's why the necessary environmental factors should be provided. Proper resting places should be built and employee satisfaction should be ensured. It can be seen that performance of the employees increases if employee satisfaction is provided. This study aimed to find out the effects of breaks, had by the workers of forest products industry in Düzce during their working hours, on their job satisfaction.

#### 2 Materials and Methods

This study has been planned in Düzce, Turkey and it has been applied on the employees of forest products industry with the help of face-to-face surveys. The purpose of the survey is to find out the effects of breaks on employee's job satisfaction. Surveys have been prepared by using the sources [2, 3, 7] which take place in the literature. The survey consists of 3 different sections and 27 questions. Demographic features of the participants are questioned in the first section. Second section consists of the working time of the participants and third section consists of the relationship between the duration of the breaks and their effects on the participants' job satisfaction degree. In this context, registered members of Chamber of Commerce and Industry have been examined and 3296 employees are reported to be working in forest product industry [8]. Sample size is specified as 345 with 95% confidence interval and 5% margins of error [9]. 372employees were participated in the study. 28 of all surveys were considered as invalid and 345 of them were evaluated. The reliability of the scale was evaluated by the Cronbach's alpha coefficient. The Cronbach's alpha of the scale was 0.705. Acceptable alphas can range from 0.60 to 1.00; thus, the scales in this study were reliable [10].

Results of the survey were evaluated by SPSS (2003) program with statistical methods [11]. Frequency, Percentage and Chisquare tests were used.

#### 3 Results and Discussion

Findings of the study which has been done in forest products industry in Düzce have been summarized below.

#### 3.1 Demographic Features of the Participations

Some demographic features like gender, age, marital status, educational background of the participants can be seen in Table1.

Table 1. Demographic features of the participations.

| Demograj    | Demographic Features |     | Percent |
|-------------|----------------------|-----|---------|
| Gender      | Male                 | 284 | 83.3    |
| Genuer      | Female               | 61  | 17.7    |
|             | 18 to 24             | 29  | 8.4     |
|             | 25 to 34             | 191 | 55.4    |
| A ac amoun  | 35 to 44             | 89  | 25.7    |
| Age group   | 45 to 54             | 21  | 6.1     |
|             | 55 to 64             | 3   | 0.9     |
|             | No response          | 12  | 3.5     |
| Marital     | Married              | 229 | 66.4    |
| status      | Single               | 116 | 43.6    |
|             | Primary school       | 76  | 22      |
|             | Secondary school     | 97  | 28.1    |
| Edwartional | High school          | 109 | 31.6    |
| Educational | Vocational school    | 28  | 8.1     |
| status      | Undergraduate        | 22  | 6.6     |
|             | Graduate             | 2   | 0.6     |
|             | No response          | 11  | 3.2     |

17.7% of the participants are women and 83.3% of them are men. 55.4% of the participants are between the age of 25-34. 66.4% of the participants are married. 22% of them are primary school graduate, 28.1% of them secondary and 31.6% of them are high school graduates.

#### 3.2 Working Sections

Packing, maintenance, grinding, bureau, storage, chopping, upholstery, sizing, forklift, guillotine, security, human resources, quality control, covering, lumber, ready-made clothing, drying, laboratory, machine line, accounting, packing, cutting, marketing, planning, press, project, delivery, sand paper and production planning are the sections and departments which the participants work in.

#### 3.3 Average Monthly Income

Average monthly income of the participants can be seen in Table  $2. \,$ 

Table 2. Average monthly income.

| Options                         | Frequency | Percent |
|---------------------------------|-----------|---------|
| 650 Turkish Liras and less      | 8         | 2.3     |
| Between 651-1000 Turkish Liras  | 160       | 46.4    |
| Between 1001-2500 Turkish Liras | 160       | 46.4    |
| Between 2501-4000 Turkish Liras | 15        | 4.3     |
| No response                     | 2         | 0.6     |

48.7% of the participants has a monthly income that is less than  $1001\ Turkish\ Liras.$ 

# 3.4 Satisfaction Levels of the Participants in terms of Their Capacity

Two different attitudes helped in examining the satisfaction level of the participants in terms of their capacity. It is found out that the participants are satisfied with their capacity in daily activities and work (Table 3).

Table 3. Satisfaction levels.

| Options   | Average* | Standard<br>deviation |
|---|----------|-----------------------|
| Are you satisfied with the capacity of your daily activities? | 3.7536   | 0.84575               |
| Are you satisfied with your working capacity?                 | 3.9333   | 0.76528               |

<sup>1:</sup> Very dissatisfied 2: Dissatisfied 3: Neither satisfied nor dissatisfied

<sup>4:</sup> Satisfied 5: Very satisfied

Chi-square test was applied in order to find out the relationship between the marital status of the participants and their satisfaction level in terms of their capacities, and significant differences were revealed (p<0.05). It was found out that married participants are more satisfied with their capacities compared to single ones.

A significant difference was detected when chi-square test was applied to see the relationship between educational background of the participants and their satisfaction level in terms of their capacities (p<0.05). Participants with bachelor degree are seemed to be much more satisfied with their capacities than other participants.

A significant difference was found when chi-square test was done in order to show the relationship between the income level of the participants and their satisfaction level in terms of their capacities (p<0.05). It was revealed that the more the participants earn, the more they are satisfied with their capacities.

#### 3.5 Working Hours

72.8% of the participants work 6 days a week and 27.2% of them work 5 days a week.

7.5% of the participants work 7.5 hours a day, 42.9% of them work 8 hours and 44.3% work 9 hours (Table 4).

Table 4. Working hours

| rable 4. Working nours. |           |         |
|-------------------------|-----------|---------|
| Options                 | Frequency | Percent |
| 7.5 hours               | 26        | 7.5     |
| 8 hours                 | 148       | 42.9    |
| 8.5 hours               | 1         | 0.3     |
| 9 hours                 | 153       | 44.3    |
| 9.5 hours               | 3         | 0.9     |
| 10 hours                | 4         | 1.2     |
| 11 hours                | 2         | 0.6     |
| 12 hours                | 8         | 2.3     |
|                         |           |         |

86.1% of the participants starts working at 8.00 am, 2.9% starts at 8.20 am and 11% starts at 8.30 am.

Participants have stated that they have a lunch break between 12.00 and 13.00 (Table 5).

Table 5. Lunch break time

| Lunch break time | Frequency | Percent |
|------------------|-----------|---------|
| 12:00            | 106       | 30.7    |
| 12:15            | 1         | 0.3     |
| 12:20            | 25        | 7.2     |
| 12:30            | 127       | 36.8    |
| 12:45            | 1         | 0.3     |
| 13:00            | 85        | 24.6    |

It is stated that the participants leave work at between 16.00 and 20.00 pm. 20.3% of the participants leave work at 16.00 pm, 18.8% leave at 17.30 pm and 2% leave at 20.00 pm (Table 6).

Table 6. Time that the participants leave work.

| rable of rame that the participants reave worm |           |         |
|--|-----------|---------|
| Options  | Frequency | Percent |
| 16:00  | 70        | 20.3    |
| 16:30  | 32        | 9.3     |
| 17:00  | 17        | 4.9     |
| 17:30  | 65        | 18.8    |
| 18:00  | 63        | 18.3    |
| 18:05  | 17        | 4.9     |
| 18:15  | 45        | 13      |
| 18:30  | 27        | 7.8     |
| 19:00  | 2         | 0.6     |
| 20:00  | 6         | 2       |

#### 3.6 Breaks

#### 3.6.1 Breaks in the Morning Shift

The participants have a break at between 10.00 and 13.00. 11.6% of the participants have no break during their shifts (Table 7).

Table 7. Breaks in the morning shift.

|             |           | O       |
|-------------|-----------|---------|
| Break time  | Frequency | Percent |
| No break    | 40        | 11.6    |
| 10:00       | 226       | 65.5    |
| 10:15       | 21        | 6.1     |
| 10:30       | 30        | 8.7     |
| 13:00       | 2         | 0.6     |
| No response | 26        | 7.5     |
|             |           |         |

11.6% of the participants said they had no break, 5.8% had 10 minute break, 73.3% had 15 minute break when they were asked how much their break lasted. 0.3% of the participants have 20 minute break, 1.4% have 30 minute break and 0.3% of them have 60 minute break. 7.3% of the participants did not answer this question.

#### 3.6.2 Lunch Break

The participants have lunch break at between 12.00 and 13.00. 23.5% of the participants have break at 12.00 and 4.9% of them have at 13.10 (Table 8).

Table 8. Lunch break.

| Options | Frequency | Percent |
|---------|-----------|---------|
| 12:00   | 81        | 23.5    |
| 12,15   | 2         | 0.6     |
| 12:20   | 21        | 6.1     |
| 12:30   | 137       | 39.7    |
| 12:35   | 2         | 0.6     |
| 13:00   | 85        | 24.6    |
| 13:10   | 17        | 4.9     |

When they were asked how much time they spent on lunch break (eating and resting) they answered as between 15 and 60 minutes (Table 9).

Table 9. Time for lunch break.

| Time for lunch break (minute) | Frequency | Percent |
|-------------------------------|-----------|---------|
| 15                            | 4         | 1.2     |
| 20                            | 3         | 0.9     |
| 30                            | 169       | 49      |
| 40                            | 18        | 5.2     |
| 45                            | 99        | 28.7    |
| 50                            | 1         | 0.3     |
| 60                            | 51        | 14.8    |

#### 3.6.3 Breaks in the Afternoon Shift

The participants have break at between 14.00 and 16.00 in the afternoon shift. 15.1% of them have no break (Table 10).

Table 10. Breaks in the afternoon shift.

| Table 10. Breaks in the afternoon sinte. |           |         |
|--|-----------|---------|
| Options                                  | Frequency | Percent |
| No breaks                                | 52        | 15.1    |
| 14:00                                    | 50        | 14.5    |
| 14:30                                    | 2         | 0.6     |
| 15:00                                    | 79        | 22.9    |
| 15:30                                    | 50        | 14.5    |
| 15:45                                    | 25        | 7.2     |
| 15:50                                    | 17        | 4.9     |
| 16:00                                    | 53        | 15.4    |
| No response                              | 17        | 4.9     |

When they were asked how much time they spend on break in the afternoon shift they answered 15% of them said that they had no break, 5.5% of them said they had 10 minute break, 73.6% of them said they had 15 minute break, 0.3% of them had 20 minute break and 0.6% of them had 30 minute break. 4.9% of the participants did not answer this question.

#### 3.6.4 Breaks except Official Breaks Times

It is tried to found out how many times the participants have break to smoke or go to bathroom etc. except their official break times. It was revealed that 35.9% of the participants had breaks 2 times (Table 11).

Table 11. Breaks except official breaks times (times/day).

| Options     | Frequency | Percent |
|-------------|-----------|---------|
| No breaks   | 18        | 5.2     |
| 1           | 42        | 12.2    |
| 2           | 124       | 35.9    |
| 3           | 66        | 19.1    |
| 4           | 28        | 8.1     |
| 5           | 10        | 2.9     |
| 6           | 5         | 1.4     |
| 7           | 2         | 0.6     |
| No response | 50        | 14.5    |

## 3.6.5 Satisfaction Level of the Participants in terms of Break Times

The participants were asked if they were satisfied with their break times. 3.5% of the participants state that they are not satisfied with them at all. 6.7% of them are not satisfied, 15.7% are indecisive, 63.2% of them are satisfied and 11% of them are very satisfied with break times.

A significant difference was detected when chi-square test was done in order to find out the relationship between educational background of the participants and their satisfaction level (p<0.05). Participants with bachelor degree and secondary school graduates are more satisfied with break times compared to others.

A significant difference was found when chi-square test was applied to find out the relationship between monthly income of the participants and their satisfaction level (p<0.05). The more the participants earn the more they are satisfied with break times.

### 3.7 The Place in which the Participants Spend Break Times

The participants spend break times in the garden, studio, dining hall, grinding studio, factory, storage, the places that are assigned for the employees, office, working area, bathroom, changing room, tea room and the places that are assigned for resting.

The participants are asked whether they find the places that they spend break times enough or not. 4.3% of them think they are not sufficient at all. 10.4% think they are not sufficient, 16.2% of them are indecisive, 58.3% think they are sufficient and 9.6% of them think they are very sufficient. 1.2% of the participants did not answer this question.

The participants were asked what can be done in order to make them think that the places are enough. The answers can be seen below:

- There could be rest areas outside.
- There could be areas that are designed for some activities.
- There could be a garden.
- Benches could be located outside.
- Indoor sitting areas could be designed.

- Environmental planning could be done A camellia could be built.
- There could be some areas in which we can play table tennis or backgammon etc.
- · There could be some areas for sport activities.

#### 3.8 The Activities that They Do During Break Times

The participants were asked what they do during break times and their answers can be seen below:

- We chat with our friends and have tea with them.
- We sit in the garden.
- I read a book.
- I listen to music.
- I read new on the internet.
- I play games. I eat lunch.

# 3.9 The Effects of Break Times on Performance of the Participants

The participants were asked how break times affected their performances at work and the answers can be seen below:

- Resting makes us healthier.
- · It motivates us.
- It enhances my willing to work.
- It improves my performance at work.
- Even if it lasts short, I feel rested.
- It helps us get rid of the workload.
- It is an escape from job stress.
- It makes me more productive and rested.

#### 3.10 Problems Faced at Work

The participants were asked if they face any problems at work. 80.6% of them said they did not come across any problems while 15.9% of them said the opposite. 3.5% of the participants did not answer this question. The answers can be seen below:

- Inequality of salaries between the employees and their superiors,
- The fact that some people see themselves superior which makes it hard for them to adapt to work,
- The fact that salaries are unfair in terms of work performance of the employees,
- · Inadequacy of break times,
- Inadequacy of the places that are assigned for break times,
- · Inadequacy of break times,
- Unstable working hours,
- Unstable shifts.
- Lack of communication,
- · Cold work environment,
- Unhygienic bathrooms,
- In coordination between the employees,
- Job stress that is faced commonly,
- Having trouble with leave of absence,
- The fact that salaries are not paid on time,
- The problems with bus services,
- Poor dishes.

#### 3.11 Opinions and Suggestions of the Participants

Opinions and suggestions of the participants related to the issue are given below:

- I would like to see that I am valued.
- Working and resting conditions should be better. In this way employers may make a profit.
- Break times should be longer.
- Working hours should be shorter.
- Dishes should be better.
- Temperature should be suitable for working.
- Labor laws should be enforced in favor of the employees.

- Employer pressure should be prevented with the help of government.
- Engineers and officers should stick to break times.

#### 4 Conclusions

As a result of the study, it is found out that the employees are partially satisfied with daily activities and their capacities at work. It can be said that employees with bachelor's degree and married participants are more satisfied with their capacities. Furthermore it is stated that the more the employees earn the more they are satisfied with their capacities. Most of the participants work 6 days (72.8%) a week and 8-9 hours (42.5%) a day. They have lunch break at between 12.00-13.00 and they have a break at 10.00 am (65.5%) in the morning shift. They also have a break at between 14.00-15.30 pm (42.5%) in the afternoon shift. 11.6% of the participants do not have any break during the morning shift and 15.1% of them do not have any break during the afternoon shift. It is necessary to provide the employees with breaks during both morning and afternoon shifts according to Act No. 6331 on Occupational Health and Safety. It is also a crucial factor in order to enhance employees' performances at work. Business managers should give great importance to breaks in order to enhance employees' performances. Places and facilities should be provided for the employees in order to make sure that they have the opportunity to rest.

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#### 6 References

- [1]. Yıldırım, M., 1989. *İş Etüdü ve Planlaması*, İstanbul Üniversitesi Orman Fakültesi Yayınları, İ.Ü. Yayın No: 3556, O.F. Yayın No: 402
- [2]. Aydın, M.A., "Vardiyalı Çalışma Düzenine Yeni Bir Yaklaşım: 11 Saatlik Mesai", 1. Konya Kent Sempozyumu, 26-27 Kasım, 2011, 315-317.
- [3]. Açar, F., "Ara Dinlenmesi ve Antraktlı Çalışma Uygulamalarının 3008 Sayılı Kanundan İtibaren Değerlendirilmesi". İş Müfettişliği Yardımcılığı Etüdü. Çalışma ve Sosyal Güvenlik Bakanlığı İş Teftiş Kurulu Başkanlığı, 2013.
- [4]. Anonymous, İş Kanunu, 2003. https://www.tbmm.gov.tr/kanunlar/k4857.html. [Date of Access: 18/07/2016]
- [5]. Yetik, M., İş Hukukunda Ara Dinlenmesi ve Uygulamaları, 2014 http://www.alomaliye.com/2014/01/06/ishukukunda-ara-dinlenmesi-ve-uygulamalari/ [Date of Access: 18/04/2016]
- [6]. URL., http://www.sgkdestek.com/calisanin-aradinlenmesi.html [Date of Access: 18/04/2016]
- [7]. Kanoğlu, B., "Employee Satisfaction and the Factors that Affect the Motivation: Istac Co. Case Study". *M.Sc. Thesis*, Marmara University, Institute of Social Sciences, 2007.
- [8]. Anonymous, Düzce Chamber of Industry and Commerce Records List., 2015
- [9]. Yamane, T. 2001. Temel Örnekleme Yöntemleri, Çeviri. Çevirenler; Esin A, Aydın C, Bakır M.A, Gürbüzsel E, Literatür Yayınları: 53, Birinci Basım, İstanbul, ISBN 975-8431-34-x
- [10]. Özdamar K. 2002. Paket Programlar ile İstatistiksel Veri Analizi, Kaan Kitabevi.
- [11]. SPSS, 2003. Institute Inc., SPSS Base 12.0 User's Guide, 703 p.