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# The Effect of Some Managerial Motivators on Employee Motivation in Furniture Enterprises



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#### Abstract

This study determines the effects of some economic, psychological and sociological motivators on the motivation levels of employees in furniture industry companies depending on some sociodemographic characteristics. To measure their motivation levels, a questionnaire was applied to 100 people working in enterprises that employ 10 or more people, which are thought to apply a motivation system in the Furniture Manufacturers Site in Ankara. The obtained data were processed using package programs for statistical analysis and the data were evaluated. According to the results: The type of production was not effective on employee motivation. While increasing occupational health and safety and giving more responsibility provided more motivation for male employees, the openness of career paths was more effective for female employees. The effect of both factors that "job assurance" and "independent work and performance feedback" effects on employee performance increased as the working time of employees in the current workplace increased.

# 1. INTRODUCTION

The execution is one of the five important tasks of business management along with planning, organizing, coordination and control. The execution process of activities includes mobilizing, guiding and motivating employees in line with business goals. Leadership, command and motivation are the main variables in this process. The motivation within these three pillars is the systematic effort made to ensure that the business can achieve its projected goals by managing employees' working behavior and performance. These systematic efforts reveal motivation management. Economic, psychological and sociological factors influence employees' working behavior and performance, and studies on motivation focus on these stimuli.

Financial conditions are more motivating for younger age groups. For single employees, it places more emphasis on financial factors and training and development opportunities. For employees, in the first workplace, the motivational effect of job guarantee stands out as an important factor. As the working time increases, the importance of psychological factors such as the sense of achievement and motivation levels increase. Generally, the motivation of the employees decreases due to the increase in working time [1].

In businesses that produce goods and services; organizational-managerial motivation factors such as the characteristics of the work done, satisfaction with group relations, spatial satisfaction and satisfaction from participatory practices are effective on productivity but not on performance [2].

Differences exist in the motivation perception of employees according to occupational classes, e.g. manager, white-collar and blue-collar. While there are significant differences in motivation perception between genders among blue-collar workers, there is no significant difference between the motivation perceptions of other occupational classes [3].

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In the case of Slovakia, attention should be paid to factors such as age, gender, and job position as workers' motivations differ depending on socio-demographic factors. It is recommended that enterprises focus their motivation programs on supporting motivation factors related to financing, mutual relationships, and working conditions [4].

Significant differences exist in the factors such as atmosphere in the workplace, good work team, basic salary and a fair appraisal system affecting the level of motivation of managers, white-collar and blue-collar workers. Blue-collar workers emphasize motivation factors such as the basic salary, supervisor's approach, and a fair appraisal system. Unlike blue-collar workers, managers and white-collar workers prefer similar motivation factors such as an atmosphere in the workplace and a good work team [5].

According to the results of a study conducted on 493 senior managers, base salary, job security and a fair appraisal system are the first, second and third most important motivational factors among 36 factors, respectively [6].

The fairness of the managers among the employees, the good relations of the employees with their colleagues in the workplace, the level of wages(salary and bonuses) they receive, the managers' being with their employees on special days(wedding ceremonies, birthdays, etc.) are listed as factors that affect the motivation of the university staff at a high level [7].

A strong relationship is observed between job satisfaction and dissatisfaction of the employees and their performance. While there are significant differences in job satisfaction and job performances according to some demographic characteristics such as gender, age, education level and seniority, there is no relation with marital status [8].

Work environmental factors such as building design and age, workplace layout, workstation set-up, furniture and equipment design and quality, ergonomically suitable working environment(space, temperature, ventilation, lighting, noise, vibration, radiation and air quality) positively affect job satisfaction [9,10].

Workers' heart rate and body mass index(BMI) harms the feeling of safety and proactive work behavior among older workers, but there is no significant relationship among young workers. However, regardless of the workers' age, the feeling of safety affects job satisfaction, and that work skills and proactive work behaviors affect perceptions regarding team performance [11].

Intrinsic motivation tools are more effective than extrinsic motivation tools on employees' work motivation. The effect of motivator on motivation does not differ according to the age, education level, marital status, average income, and status in the business and work experience of the employees [12].

Employee empowerment, employee training and teamwork applications have significant effects positive on the motivation of employees in the higher education sector [13].

Physical work demands, "interestingness" of work, the usefulness of one's qualification work independence, the content of work, working hours, work safety, company's reputation job security, variability of work are the top 10 factors affecting employee job satisfaction in furniture manufacturing companies in the Slovak Republic [14].

According to a study that analyzed the level of motivation of employees working in a wood products enterprise before and after the world economic crisis in 2012, the world economic crisis does not affect employee motivation [15].

In another study conducted to determine the current situation of motivation of the employees in Croatian wood processing and furniture manufacturing companies in the period of the deepest crisis in Croatian industry in the year 2010, it has been found that the company's management pays the greatest attention to assuring employees' security and their reciprocal relations. Salary and subsequent safety have been identified as the two most important motivating factors [16].

The factors that affect the motivation of employees differ before and after the economic crisis. During the crisis, employees mostly prioritize their psychological needs, and after the crisis, they prioritize their social needs [17].

With this research, it is aimed to determine the effects of some economic, psychological and sociological motivators on motivation levels of employees in furniture industry companies depending on some sociodemographic characteristics.

#### 2. MATERIALS AND METHODS

#### 2.1. Sample Number

The universe of the research included employees in businesses that employ 10+ people, who are thought to apply a motivation system in the Furniture Manufacturer Site in Ankara. Approximately 12000 people work in the Ankara Furniture Manufacturer Site, and it is estimated that approximately 20% of them work in enterprises employing 10+ people included in the sample [18,19]. Based on these data, the sample size was calculated as 93 under the conditions of 2400 sampling universe, 5% Type 1 error level( $\alpha$ ) and 0.1 sampling error(d).

# 2.2. Questionnaire and Data Collection

To measure the economic, psychological and sociological motivation levels of employees in furniture industry enterprises according to their socio-demographic characteristics, a questionnaire consisting of 24 questions was prepared with a five-point Likert scale, and this questionnaire was applied to 100 people between Jan.10 and Dec.10 in 2020 by face-to-face interview method. In practice, attention was paid to the balanced distribution of the number in terms of independent variables such as age, gender and education level. The selected socio-demographic characteristics of the individuals subject to the questionnaire are given in Table 1.

Table 1. Selected socio-demographic characteristics of the individuals subjected to the questionnaire

Socio-demographic Characteristics		Frequency	(%)
Gender	Man	78	78.0
	Woman	22	22.0
Age (years)	18-25	15	15.0
	26-35	34	34.0
	36-45	31	31.0
	46-55	16	16.0
	<i>56</i> +	4	4.0
Education Level	Primary education	7	7.0
	High School	43	43.0
	Associate Degree	25	25.0
	Undergraduate	20	20.0
	Graduate	5	5.0
Income Level (\$)	Up to 375	6	6.0
	376-750	31	31.0
	751-1250	40	40.0
	1251-2500	20	20.0
	2501 and Above	3	3.0
Status	Unskilled Worker	17	17.0
	Skilled Worker	30	30.0
	Foreman/Section Chief	21	21.0
	Department Chief	17	17.0
	Manager/Assistant Manager	15	15.0
Working Time	Up to 3	34	34.0
At The Current Workplace (Years)	4-10	43	43.0
	11-20	19	19.0
	21-30	3	3.0
Total Working Time (Years)	Up to 3	12	12.0
	4-10	31	31.0
	11-20	36	36.0
	21-30	15	15.0
	31 and above	6	6.0

# 2.3. Data Analysis

The data collected through questionnaires were analyzed in SPSS 22 program. Independent group t-test and one-way analysis of variance(ANOVA) were used to determine whether some economic, psychological and sociological motivators were effective on motivation levels, depending on the socio-demographic characteristics of employees, such as age, gender, income level, and education level. In testing the reliability of the scales, Cronbach's Alpha Coefficient, which is the most appropriate technique for Likert type scales, was used. According to this method, if  $0.7 \le \alpha < 8$ , the questionnaire is acceptable, if  $0.8 \le \alpha < 0.9$ , the reliability is considered good, and if  $0.9 \le \alpha$ , the reliability is considered perfect. The Cronbach's alpha coefficient of the study was calculated as 0.877, and this value showed that the results of the study were "good" reliable.

# 3. RESULTS

Table 2 shows some statistical data on the motivation levels of employees depending on the economic, psychological and sociological factors without considering any socio-demographic characteristics.

As shown in the table, the most motivating factor for furniture industry employees, regardless of any sociodemographic factor, was "Granting economic and financial awards" with a motivation level of 3.09. These were followed by "Communicating with everyone whenever desired" with 3.05, "High occupational health and safety" with 3.04, "Higher wages than other businesses in the sector" with 3.01. The three factors that motivate employees the least were "Bonus fee application" with a motivation level of 2.36, "Organizing regular and systematic social and cultural activities within the business" with 2.50 and "Job assurance" with 2.62.

**Table 2.** Some statistical data on the motivation levels of employees depending on the economic, psychological and sociological factors (Selected motivators)

Motivators	Freq.	Min.	Max.	Mean	Std. Dev.
Higher wages than those of other businesses in the sector	100	0.00	5.00	3.01	1.12
Bonus fee applications	100	0.00	5.00	2.36	1.48
Job assurance	100	0.00	5.00	2.62	1.51
Social benefits (insurance, transportation support, discounted product, lunch and tea and coffee service, etc.)	100	0.00	5.00	2.95	1.43
Granting economic and financial awards	99	0.00	5.00	3.09	1.41
Giving authority and responsibility for the work done	100	0.00	5.00	2.95	1.45
Educational opportunities (external and in-service)	100	0.00	5.00	2.64	1.62
Openness of the promotion routes	100	0.00	5.00	2.90	1.39
Indirect work control (independent work) and performance feedback	100	0.00	5.00	2.81	1.45
Business support for solving individual problems	100	0.00	5.00	2.84	1.39
Participating in management	100	0.00	5.00	2.98	1.47
Working in different jobs within the business	100	0.00	5.00	2.85	1.35
Taking more responsibility	100	0.00	5.00	2.97	1.40
Communicating with everyone whenever desired	100	0.00	5.00	3.05	1.33
High occupational health and safety	100	0.00	5.00	3.04	1.46
Managers' compliance with the rules of rights, law and justice	100	0.00	5.00	2.88	1.29
Organizing regular and systematic social and cultural activities within a business	100	0.00	5.00	2.50	1.55

(Freq.: Frequency, Std. Dev.:. Standard Deviation)

#### 3.1. Effect of Gender on Motivation Level

Motivation levels based on gender for different motivators are given in Table 3. "Independent group t-test" was applied to determine whether the difference between the motivation levels of male and female employees belonging to each motivator was significant.

Since  $p \le 0.05$ , the differences between the motivation levels of male and female employees belonging to "Openness of the promotion routes", "Taking more responsibility" and "Organizing regular and systematic social and cultural activities within the business" were found to be significant, while other motivators were found to be insignificant.

While increasing occupational health and safety and giving more responsibility provided more motivation for male employees, the openness of career paths was more effective for female employees. Other motivators were equally effective in the motivation of male and female employees(Table 3).

Table 3. Independent group t-test for the motivators to determine the effect of gender on motivation level

Motivators	Gender	Freq.	Mean	Std. Dev.	t	p
Higher wages than those of other businesses in the sector	Male	78	2.97	1.06	-0.595	0.55
	Female	22	3.14	1.36		
Bonus fee applications	Male	78	2.40	1.45	0.474	0.63
	Female	22	2.23	1.60		
Job assurance	Male	78	2.71	1.44	1.063	0.29
	Female	22	2.32	1.73		
Social benefits (insurance, transportation support, discounted product,	Male	78	2.88	1.45	-0.859	0.39
lunch and tea and coffee service, etc.)	Female	22	3.18	1.37		
Granting economic and financial awards	Male	77	3.01	1.44	-1.025	0.30
	Female	22	3.36	1.33		
Giving authority and responsibility for the work done	Male	78	3.08	1.34	1.660	0.10
	Female	22	2.50	1.77		
Educational opportunities (external and in-service)	Male	78	2.60	1.57	-0.432	0.66
	Female	22	2.77	1.85		
The openness of the promotion routes	Male	78	2.76	1.35	-1.975	0.05
	Female	22	3.41	1.44		
Indirect work control (independent work) and performance feedback	Male	78	2.79	1.51	-0.195	0.84
	Female	22	2.86	1.25		
Business support for solving individual problems	Male	78	2.73	1.35	-1.488	0.14
	Female	22	3.23	1.48		
Participating in management	Male	78	2.95	1.45	-0.399	0.69
	Female	22	3.09	1.57		
Working in different jobs within the business	Male	78	2.96	1.24	1.566	0.12
	Female	22	2.45	1.65		
Taking more responsibility	Male	78	3.22	1.35	3.513	0.001
	Female	22	2.09	1.23		
Communicating with everyone whenever desired	Male	78	3.09	1.25	0.561	0.57
	Female	22	2.91	1.60		
High occupational health and safety	Male	78	2.85	1.47	-2.819	0.008
	Female	22	3.73	1.24		
Managers' compliance with the rules of rights, law and justice	Male	78	2.87	1.25	-0.119	0.90
	Female	22	2.91	1.44		
Organizing regular and systematic social and cultural activities within a	Male	78	2.50	1.48	0.000	1.00
business	Female	22	2.50	1.79		
GENERAL	Male	78	2.85	0.78	-0.085	0.933
	Female	22	2.86	1.01		

(t: t-test value, p: probability, Freq.: Frequency, Std. Dev.: Standard Deviation)

# 3.2. Effect of Age on Motivation Level

The results of the ANOVA test was used to compare the differences between motivation levels depending on age groups for different motivators are given in Table 4.

Table 4. ANOVA test to compare the differences between motivation levels depending on age groups

Motivators	F	p
Higher wages than those of other businesses in the sector	1.186	0.322
Bonus fee applications	1.235	0.301
Job assurance	1.180	0.325
Social benefits (insurance, transportation support, discounted product, lunch and tea and coffee service, etc.)	0.480	0.750
Granting economic and financial awards	1.483	0.214
Giving authority and responsibility for the work done	1.520	0.203
Educational opportunities (external and in-service)	0.517	0.723
Openness of the promotion routes	0.654	0.625
Indirect work control (independent work) and performance feedback	3.050	0.021
Business support for solving individual problems	0.065	0.992
Participating in management	1.114	0.354
Working in different jobs within the business	1.126	0.349
Taking more responsibility	1.765	0.142
Communicating with everyone whenever desired	2.098	0.087
High occupational health and safety	0.392	0.814
Managers' compliance with the rules of rights, law and justice	2.653	0.038
Organizing regular and systematic social and cultural activities within a business	1.676	0.162
GENERAL	2.242	0.070

(F: Fisher test value, p: Probability)

Since  $P \le 0.05$ , age group was found to be effective on motivation levels for the motivators of "Indirect work control(independent work) and performance feedback" and "Managers' compliance with the rules of rights, law and justice" and ineffective for all other motivators. The motivation levels for the effective motivators are given in Table 5 depending on the age groups.

**Table 5.** Motivation levels for effective motivators depending on age groups

Motivators	Age Group	Freq.	Mean	Std. Dev.	Std. Err.
Indirect work control (independent work) and performance feedback	18-25	15	2.33	1.45	0.37
	26-35	34	2.35	1.35	0.23
	36-45	31	3.10	1.49	0.27
	46-55	16	3.62	1.36	0.34
	<i>56</i> +	4	3.00	0.82	0.41
	Total	100	2.81	1.45	0.14
Managers' compliance with the rules of rights, law and justice	18-25	15	2.87	1.36	0.35
	26-35	34	2.35	1.25	0.22
	36-45	31	3.32	1.19	0.21
	46-55	16	3.12	1.31	0.33
	<i>56</i> +	4	3.00	0.82	0.41
	Total	100	2.88	1.29	0.13
GENERAL	18-25	15	2.70	0.94	0.24
	26-35	34	2.57	0.86	0.15
	36-45	31	3.05	0.73	0.13
	46-55	16	3.16	0.78	0.19
	<i>56</i> +	4	2.96	0.49	0.25
	Total	100	2.85	0.83	0.08

(Freq.: Frequency, Std. Dev.: Standard Deviation, Std. Err.: Standard Error)

The motivation effect of both "the indirect work control(independent work)" and "performance feedback" motivator and "Managers' compliance with the rules of rights, law and justice" motivator was higher in the age range of 36-55 compared to the 18-35 age range. After the age of 56, the motivation effect of both motivators decreased.

Regardless of motivators, according to the general averages depending on the age group, the motivation level of employees in the 26-35 age group was higher than those in the 18-25 age group. A decrease was seen in the motivation levels of employees aged 56 and over.

#### 3.3. Effect of Income Level on Motivation

The results of the ANOVA test performed to compare the differences between motivation levels depending on income groups for different motivators are given in Table 6.

**Table 6.** ANOVA test was used to compare the differences between motivation levels depending on income groups

Motivators	F	p
Higher wages than those of other businesses in the sector	2.33	0.06
Bonus fee applications	1.91	0.11
Job assurance	1.21	0.31
Social benefits (insurance, transportation support, discounted product, lunch and tea and coffee service, etc.)	1.81	0.13
Granting economic and financial awards	2.55	0.04
Giving authority and responsibility for the work done	1.53	0.20
Educational opportunities (external and in-service)	1.88	0.12
Openness of the promotion routes	1.05	0.38
Indirect work control (independent work) and performance feedback	2.26	0.07
Business support for solving individual problems	0.70	0.60
Participating in management	1.80	0.13
Working in different jobs within the business	1.87	0.12
Taking more responsibility	0.76	0.55
Communicating with everyone whenever desired	0.26	0.90
High occupational health and safety	0.23	0.92
Managers' compliance with the rules of rights, law and justice	0.66	0.62
Organizing regular and systematic social and cultural activities within a business	2.61	0.04

(*F*: *Fisher test value*, *p*: *Probability*)

Since  $p \le 0.05$ , age group was found to be effective on motivation levels for the motivators of "Granting economic and financial awards" and "Organizing regular and systematic social and cultural activities within the business" and ineffective for all other motivators.

Motivation levels for effective motivators depending on income groups are given in Table 7.

Table 7. Motivation levels for effective motivators depending on income groups

Motivators	Income Group	Freq.	Mean	Std.	Std.
	_	_		Dev.	<b>Error</b>
Granting economic and financial awards	Up to 375	5	1.80	1.30	0.58
	376-750	31	2.84	1.55	0.28
	751-1250	40	3.13	1.31	0.21
	1251-2500	20	3.55	1.23	0.28
	2501 and Above	3	4.33	1.16	0.67
	Total	99	3.09	1.42	0.14
Organizing regular and systematic social and cultural	Up to 375	6	2.83	1.72	0.70
activities within the business	376-750	31	2.07	1.63	0.29
	751-1250	40	2.73	1.49	0.24
	1251-2500	20	2.30	1.30	0.29
	2501 and Above	3	4.67	0.58	0.33
	Total	100	2.50	1.55	0.16
GENERAL	Up to 375	6	2.81	0.93	0.38
	376-750	31	2.65	0.90	0.16
	751-1250	40	2.79	0.78	0.12
	1251-2500	20	3.19	0.73	0.16
	2501 and Above	3	3.51	0.90	0.52
	Total	100	2.85	0.83	0.08

(Freq.: Frequency, Std. Dev.: Standard Deviation, Std. Err.: Standard Error)

As the income level increased, the influence level of the "Granting economic and financial awards" motivator increased. While the effect level was 1.8 for employees with a monthly income of up to 375 \$, this value increased to 4.33 for employees with a monthly income of 2500 \$ or more.

The level of influence of the "Organizing regular and systematic social and cultural activities within the business" motivator was 2.83 for employees with a monthly income of up to \$ 375 and was higher than

employees with an income of \$ 376-2500. The influence level of this motivator was 4.67 for employees with an income of \$ 2 501 and above, and it was the highest.

Regardless of motivators, according to the general averages depending on the income group, the higher the income level, the higher the average effect levels of all motivators. The average effect of the motivators, which was 2.81 in the lowest income group, increased to 3.51 in the highest income group.

# 3.4. Effects of Education Degrees on Motivation

The results of the ANOVA test performed to compare the differences between motivation levels depending on education degree for different motivators are given in Table 8.

**Table 8.** ANOVA test to compare the differences between motivation levels depending on an education degree

Motivators	F	р
Higher wages than those of other businesses in the sector	3.27	0.01
Bonus fee applications	4.19	0.004
Job assurance	2.32	0.06
Social benefits (insurance, transportation support, discounted product, lunch and tea and coffee service, etc.)	2.37	0.06
Granting economic and financial awards	4.18	0.004
Giving authority and responsibility for the work done	0.25	0.91
Educational opportunities (external and in-service)	4.55	0.002
Openness of the promotion routes	3.74	0.007
Indirect work control (independent work) and performance feedback	1.96	0.11
Business support for solving individual problems	1.39	0.24
Participate in administrative decisions	2.67	0.04
Working in different jobs within the business	1.64	0.17
Taking more responsibility	0.17	0.95
Communicating with everyone whenever desired	2.65	0.04
High occupational health and safety	3.35	0.01
Managers' compliance with the rules of rights, law and justice	3.65	0.008
Organizing regular and systematic social and cultural activities within a business	1.06	0.38

(F: Fisher test value, p: Probability)

Since  $p \le 0.05$ , education degree has been found as effective on motivation level for the motivators of "Higher wages than those of other businesses in the sector", "Bonus fee application", "Granting economic and financial awards", "Educational opportunities(external and in-service)", "Openness of the promotion routes", "Participate in administrative decisions", "Communicating with everyone whenever desired", "High occupational health and safety", and "Managers' compliance with the rules of rights, law and justice" and not for other motivators.

Motivation levels for the effective motivators depending on the education levels are given in Table 9.

**Table 9.** Motivation levels depend on the education level for the effective motivators

Motivators	Education Degree	Freq.	Mean	Std. Dev.	Std. Err.
Higher wages than those of other businesses in	Primary education	7	3.286	1.380	0.522
the sector	High School	43	2.767	1.172	0.179
	Associate Degree	25	2.840	0.898	0.180
	Undergraduate	20	3.300	1.031	0.231
	Graduate	5	4.400	0.548	0.245
	Total	100	3.010	1.124	0.112
Bonus fee applications	Primary education	7	2.000	1.528	0.577
	High School	43	2.093	1.493	0.228
	Associate Degree	25	2.080	1.222	0.244
	Undergraduate	20	2.900	1.447	0.324
	Graduate	5	4.400	0.548	0.245
	Total	100	2.360	1.481	0.148

Table 9 continuous...

Motivators	Education Degree	Freq.	Mean	Std. Dev.	Std. Err.
Granting economic and financial awards	Primary education	6	2.500	1.378	0.563
g	High School	43	2.744	1.432	0.218
	Associate Degree	25	2.920	1.470	0.294
	Undergraduate	20	3.900	0.968	0.216
	Graduate	5	4.400	0.548	0.245
	Total	99	3.091	1.415	0.142
Educational opportunities	Primary education	7	2.429	1.718	0.649
(external and in-service)	High School	43	2.279	1.608	0.245
	Associate Degree	25	2.240	1.535	0.307
	Undergraduate	20	3.550	1.356	0.303
	Graduate	5	4.400	0.548	0.245
	Total	100	2.640	1.624	0.162
Openness of the promotion routes	Primary education	7	2.571	1.512	0.571
	High School	43	2.512	1.369	0.209
	Associate Degree	25	2.800	1.190	0.238
	Undergraduate	20	3.750	1.333	0.298
	Graduate	5	3.800	1.095	0.490
	Total	100	2.900	1.389	0.139
Participate in administrative decisions	Primary education	7	3.571	1.134	0.429
1	High School	43	2.651	1.646	0.251
	Associate Degree	25	2.720	1.429	0.286
	Undergraduate	20	3.500	0.946	0.212
	Graduate	5	4.200	1.095	0.490
	Total	100	2.980	1.470	0.147
Communicating with everyone whenever desired	Primary education	7	3.429	1.512	0.571
<b>3</b>	High School	43	3.000	1.397	0.213
	Associate Degree	25	2.640	1.350	0.270
	Undergraduate	20	3.150	0.933	0.209
	Graduate	5	4.600	0.548	0.245
	Total	100	3.050	1.329	0.133
High occupational health and safety	Primary education	7	3.714	0.951	0.360
g	High School	43	2.837	1.396	0.213
	Associate Degree	25	2.520	1.558	0.312
	Undergraduate	20	3.550	1.432	0.320
	Graduate	5	4.400	0.548	0.245
	Total	100	3.040	1.463	0.146
Organizing regular and systematic social and	Primary education	7	3.857	0.690	0.261
cultural activities within a business	High School	43	2.837	1.194	0.182
	Associate Degree	25	2.640	1.221	0.244
	Undergraduate	20	2.550	1.504	0.336
	Graduate	5		0.548	0.245
	Total	100	2.880	1.289	0.129
GENERAL	Primary education	7	3.155	0.961	0.363
OE:VERUIE	High School	43	2.666	0.871	0.133
	Associate Degree	25	2.649	0.502	0.100
	Undergraduate	20	3.106	0.806	0.180
	Graduate	5	3.988	0.706	0.316
	Total	100	2.850	0.833	0.083
		100	2.050	0.033	0.003

(Freq.: Frequency, Std. Dev.: Standard Deviation, Std. Err.: Standard Error)

As the degree of education increased, the effect of the motivators of "Bonus fee applications", "Granting economic and financial awards" and "Openness of the promotion routes" on employee motivation increased. The effect of "Higher wages than those of other businesses in the sector", "Educational opportunities(external and in-service)", "Participate in administrative decisions", "Communicating with everyone whenever desired", "High occupational health and safety" and "Organizing regular and systematic social and cultural activities within the business" motivators in the motivation level of primarily educated employees were higher compared to high school and associate degree-educated employees.

The group in which all motivators were most effective in motivation increase were graduate educated employees with an average effect level of 3.99 and this group had the highest motivation level among all

motivators. The second group with the highest level of motivation excluding the motivators of "Participate in administrative decisions", "Communicating with everyone whenever desired", "High occupational health and safety" and "Organizing regular and systematic social and cultural activities within the business" were the undergraduate educated employees.

Regardless of motivators, according to the general averages depending on the education degree, graduate educated employees had the highest motivation level with 3.99; primarily educated employees with 3.16 followed this group. High school, associate degree and undergraduate educated employees had lower motivation levels compared to primarily educated employees (Table 9).

# 3.5. Effect of Employees' Status in Their Workplace on Their Motivation Level

The results of the ANOVA test performed to compare the differences between motivation levels depending on employees' status in their workplace for different motivators are given in Table 10.

**Table 10.** ANOVA test was used to compare the differences between motivation levels depending on employees' status in their workplace

Motivators	F	р
Higher wages than those of other businesses in the sector	6.626	0.000
Bonus fee applications	4.867	0.001
Job assurance	2.466	0.05
Social benefits (insurance, transportation support, discounted product, lunch and tea and coffee service, etc.)	4.576	0.002
Granting economic and financial awards	5.459	0.001
Giving authority and responsibility for the work done	2.533	0.05
Educational opportunities (external and in-service)	6.356	0.000
Openness of the promotion routes	10.291	0.000
Indirect work control (independent work) and performance feedback	6.822	0.000
Business support for solving individual problems	0.763	0.60
Participate in administrative decisions	2.869	0.03
Working in different jobs within the business	3.204	0.02
Taking more responsibility	0.932	0.45
Communicating with everyone whenever desired	3.137	0.02
High occupational health and safety	2.210	0.07
Managers' compliance with the rules of rights, law and justice	2.055	0.09
Organizing regular and systematic social and cultural activities within a business	1.630	0.17
GENERAL	9.203	0.000

(F: Fisher test value, p: Probability)

Since  $P \le 0.05$ , the status of employees in the workplace has been found as effective on the level of motivation for all motivators other than the motivators of "Business support for solving individual problems", "Taking more responsibility", "High occupational health and safety", "Managers' compliance with the rules of rights, law and justice" and "Organizing regular and systematic social and cultural activities within a business motivators".

Motivation levels for the effective motivators depending on the "employees' status in their workplace" are given in Table 11.

**Table 11.** Motivation levels for the effective motivators depending on the "Employees' status in their workplace"

Motivators	Status in Workplace	Freq.	Mean	Std. Dev.	Std. Err.
Higher wages than those of other businesses in the sector	Unskilled Worker	17	2.706	1.047	0.254
·	Skilled Worker	30	2.367	1.129	0.206
•	Foreman/Section Chief	21	3.476	0.602	0.131
•	Department Chief	17	3.235	1.251	0.304
•	Manager/Assistant	15	3.733	0.884	0.228
	Manager				
·	Total	100	3.010	1.124	0.112
Bonus fee applications	Unskilled Worker	17	1.706	1.047	0.254
J	Skilled Worker	30	1.800	1.400	0.256
•	Foreman/Section Chief	21	2.667	0.913	0.199
•	Department Chief	17	2.706	1.687	0.409
·	Manager/Assistant	15	3.400	1.765	0.456
	Manager	13	3.400	1.703	0.450
	Total	100	2.360	1.481	0.148
Job assurance	Unskilled Worker	17	2.118	1.269	0.308
Joo assurance	Skilled Worker	-	2.118	1.448	
		30			0.264
	Foreman/Section Chief	21	2.810	1.721	0.376
	Department Chief	17	2.941	1.478	0.358
	Manager/Assistant	15	3.400	1.298	0.335
	Manager				
	Total	100	2.620	1.509	0.151
<i>y</i> , , , , , , , , , , , , , , , , , , ,	Unskilled Worker	17	2.706	1.490	0.361
product, lunch and tea and coffee service, etc.)	Skilled Worker	30	2.367	1.402	0.256
	Foreman/Section Chief	21	3.000	1.183	0.258
	Department Chief	17	3.118	1.495	0.363
	Manager/Assistant	15	4.133	0.990	0.256
	Manager	_			
	Total	100	2.950	1.431	0.143
Granting economic and financial awards	Unskilled Worker	17	2.882	1.453	0.352
•	Skilled Worker	29	2.310	1.491	0.277
·	Foreman/Section Chief	21	3.524	1.167	0.255
•	Department Chief	17	3.235	1.200	0.291
·	Manager/Assistant	15	4.067	0.961	0.248
	Manager				
•	Total	99	3.091	1.415	0.142
Giving authority and responsibility for the work done	Unskilled Worker	17	2.294	1.572	0.381
guarante de la composition del	Skilled Worker	30	2.700	1.442	0.263
·	Foreman/Section Chief	21	2.952	1.499	0.327
·	Department Chief	17		1.004	0.243
·	Manager/Assistant	15		1.407	0.363
	Manager Manager	13	3.407	1.407	0.505
	Total	100	2.950	1.452	0.145
Educational amountswiting (output all and in semina)		-	2.000	1.541	
Educational opportunities (external and in-service)	Unskilled Worker	17			0.374
	Skilled Worker	30	1.900	1.561	0.285
	Foreman/Section Chief	21	3.190	1.327	0.290
	Department Chief	17	2.765	1.715	0.416
	Manager/Assistant	15	3.933	1.033	0.267
	Manager				0
	Total	100	2.640	1.624	0.162
		17	2.471	1.328	0.322
The openness of the promotion routes	Unskilled Worker	-			
The openness of the promotion routes	Skilled Worker	30	2.067	1.172	0.214
The openness of the promotion routes		-			0.214 0.176
The openness of the promotion routes	Skilled Worker	30	2.067	1.172	
The openness of the promotion routes	Skilled Worker Foreman/Section Chief	30 21	2.067 4.048	1.172 0.805	0.176
The openness of the promotion routes	Skilled Worker Foreman/Section Chief Department Chief	30 21 17	2.067 4.048 2.824	1.172 0.805 1.510	0.176 0.366

Table 11 continuous...

Motivators	Status in Workplace	Freq.	Mean	Std. Dev.	Std. Err.
Indirect work control (independent work) and performance	Unskilled Worker	17	2.118	1.269	
feedback	Skilled Worker	30	2.167	1.416	0.259
	Foreman/Section Chief	21	3.476	1.167	0.255
	Department Chief	17	2.882	1.616	0.392
	Manager/Assistant	15	3.867	0.834	0.215
	Manager				
	Total	100	2.810	1.454	0.145
Participate in administrative decisions	Unskilled Worker	17	2.941	1.391	0.337
	Skilled Worker	30	2.300	1.705	0.311
	Foreman/Section Chief	21	3.238	1.179	0.257
	Department Chief	17	3.412	1.121	0.272
	Manager/Assistant	15	3.533	1.407	0.363
	Manager	_			
	Total	100	2.980	1.470	
Working in different jobs within the business	Unskilled Worker	17	2.706	1.490	0.361
	Skilled Worker	_ 30	2.767		0.238
	Foreman/Section Chief	21	2.190	1.436	
	Department Chief	_ 17	3.294	1.105	
	Manager/Assistant	15	3.600	0.986	0.254
	Manager	_			
	Total	100	2.850	1.351	
Communicating with everyone whenever desired	Unskilled Worker	_ 17	2.765	1.033	0.250
	Skilled Worker	30	2.633	1.474	0.269
	Foreman/Section Chief	21	3.143	1.424	0.311
	Department Chief	_ 17	3.118	1.111	
	Manager/Assistant	15	4.000	1.000	0.258
	Manager	_			
	Total	_ 100	3.050	1.329	0.133
GENERAL	Unskilled Worker	_ 17	2.512	0.532	
	Skilled Worker	_ 30	2.379	0.744	
	Foreman/Section Chief	_ 21	3.053	0.664	
	Department Chief	_ 17	3.097	0.832	
	Manager/Assistant	15	3.612	0.806	0.208
	Manager				
	Total	100	2.850	0.833	0.083

(Freq.: Frequency, Std. Dev.: Standard Deviation, Std. Err.: Standard Error)

As the status level increased, the effect of "Bonus fee applications" and "Job assurance" motivators on employee motivation increased.

The effect of the motivators of "Higher wages than those of other businesses in the sector", "Social benefits(insurance, transportation support, discounted product, lunch and tea and coffee service, etc.)", "Granting economic and financial awards", "Educational opportunities(external and in-service) The level of influence of the motivators "Openness of the promotion routes", "Participate in administrative decisions", and "Communicating with everyone whenever desired" on the skilled workers was lower compared to the unskilled workers.

The effect of the motivators of "Higher wages than those of other businesses in the sector", "Granting economic and financial awards", "Educational opportunities(external and in-service) Openness of the promotion routes", "Indirect work control(independent work) and performance feedback", and "Communicating with everyone whenever desired" on employees with a status of department chief was lower compared to employees with status of Foreman/Section Chiefs.

Unlike other motivators, the group most influenced by the "Openness of the promotion routes" motivator was the employees with the status of Foreman/Section Chief. Apart from that, the group most affected by all motivators was the employees with the status of Manager/Assistant Manager.

Regardless of motivators, according to the general averages depending on "employees' status in their workplace", employees with skilled worker status had the lowest motivation level with 2.38, followed by

employees with unskilled worker status with 2.51. Except for those working in these two states, the higher the status level, the higher the level of motivation. The highest motivation level of 3.61 was seen in employees with "Manager/Assistant Manager" status.

# 3.6. Effect of Production Type on Motivation Level

The results of the ANOVA test performed to compare the differences between motivation levels depending on the type of production for different motivators are given in Table 12.

**Table 12.** ANOVA test was used to compare the differences between motivation levels depending on the type of production

Motivators	F	p
Higher wages than those of other businesses in the sector	0.582	0.628
Bonus fee applications	1.548	0.207
Job assurance	0.524	0.667
Social benefits (insurance, transportation support, discounted product, lunch and tea and coffee service, etc.)	1.857	0.142
Granting economic and financial awards	0.405	0.750
Giving authority and responsibility for the work done	1.094	0.355
Educational opportunities (external and in-service)	0.377	0.769
Openness of the promotion routes	2.546	0.061
Indirect work control (independent work) and performance feedback	1.156	0.331
Business support for solving individual problems	1.475	0.226
Participate in administrative decisions	0.876	0.456
Working in different jobs within the business	1.606	0.193
Taking more responsibility	0.102	0.959
Communicating with everyone whenever desired	0.279	0.840
High occupational health and safety	0.780	0.508
Managers' compliance with the rules of rights, law and justice	1.668	0.179
Organizing regular and systematic social and cultural activities within a business	1.496	0.221
GENERAL	1.474	0.226

(F: Fisher test value, p: Probability)

Since  $p \ge 0.05$  for all motivators, the type of production(furniture, decoration, project works and building elements) was not effective on employee motivation and the differences between motivation levels depending on the type of production were statistically insignificant.

# 3.7. Effects of Working Time at Current Workplace on Motivation Levels

The results of the ANOVA test performed to compare the differences between motivation levels depending on "Working Time at the Current Workplace" for different motivators are given in Table 13.

**Table 13.** ANOVA test was used to compare the differences between motivation levels depending on Working Time at the Current Workplace

Motivators	F	p
Higher wages than those of other businesses in the sector	0.313	0.816
Bonus fee applications	0.337	0.798
Job assurance	3.274	0.024
Social benefits (insurance, transportation support, discounted product, lunch and tea and coffee service, etc.)	1.258	0.293
Granting economic and financial awards	1.511	0.217
Giving authority and responsibility for the work done	1.556	0.205
Educational opportunities (external and in-service)	1.420	0.242
Openness of the promotion routes	0.345	0.793
Indirect work control (independent work) and performance feedback	2.853	0.041
Business support for solving individual problems	1.729	0.166
Participate in administrative decisions	1.521	0.214
Working in different jobs within the business	1.289	0.283
Taking more responsibility	1.240	0.300
Communicating with everyone whenever desired	0.445	0.721
High occupational health and safety	0.835	0.478
Managers' compliance with the rules of rights, law and justice	0.146	0.932
Organizing regular and systematic social and cultural activities within a business	1.528	0.212
(F. Fisher test value n. Probability)		

(F: Fisher test value, p: Probability)

Since  $P \le 0.05$ , the working time in the current workplace is effective on employee motivation for the motivators of "Job assurance" and "Indirect work control(independent work) and performance feedback".

The motivation levels for the effective motivators are given in Table 14 depending on the "Working time in the current workplace".

Table 14. Motivation levels depending on working time in the current workplace for effective motivators

Motivators	Working Time (Years)	Freq.	Mean	Std. Dev.	Std. Err.
Job assurance	Up to 3	34	2.029	1.605	0.275
	4-10	43	2.837	1.430	0.218
	11-20	19	3.158	1.259	0.289
	21-30	3	3.333	1.155	0.667
	Total	99	2.636	1.508	0.152
Indirect work control (independent work) and	Up to 3	34	2.471	1.581	0.271
performance feedback	4-10	43	2.651	1.378	0.210
	11-20	19	3.526	1.172	0.269
	21-30	3	3.667	0.577	0.333
	Total	99	2.788	1.445	0.145
GENERAL	Up to 3	34	2.688	0.993	0.170
	4-10	43	2.799	0.704	0.107
	11-20	19	3.220	0.712	0.163
	21-30	3	3.353	0.778	0.449
	Total	99	2.858	0.834	0.084

(Freq.: Frequency, Std. Dev.: Standard Deviation, Std. Err.: Standard Error)

The effect of both factors "Job assurance" and "Indirect work control(independent work) and performance feedback" whose effects on employee performance increased as the working time of employees in the current workplace increased.

Regardless of motivators, according to the general averages depending on working time in the current workplace, as the working time of the employees increased in their current workplaces, their motivation levels also increased(Table 14).

#### 4. CONCLUSIONS

This study was aimed to determine the effects of some economic, psychological and sociological motivators on the motivation levels of employees in furniture industry companies depending on some socio-demographic characteristics.

The type of production(furniture, decoration, project works and building elements) was not effective on employee motivation.

While increasing occupational health and safety and giving more responsibility provided more motivation for male employees, the openness of career paths was more effective for female employees. Other motivators were equally effective in the motivation of male and female employees.

The motivation effect of both motivators "Indirect work control(independent work) and performance feedback" and "Managers' compliance with the rules of rights, law and justice" are higher in the age range of 36-55 compared to the 18-35 age range. After the age of 56, the motivation effect of both motivators decreased. The other motivators were equally effective in all age groups.

Regardless of motivators, according to the general averages depending on the income group, the higher the income level, the higher the average effect levels of all motivators. Motivation levels of the employees with a monthly income of up to \$ 375 for the motivators of "Organizing regular and systematic social and cultural activities within a business" were higher than that of employees with an income of \$ 376-2500 and it was the highest for employees with an income of \$ 2 501 and above.

The group in which all motivators were most effective in motivation increase were graduate educated employees with an average effect level of 3.99 and this group had the highest motivation level among all motivators.

According to the general averages depending the employees' status in their workplace, employees with skilled worker status had the lowest motivation level with 2.38, followed by those with unskilled worker status with 2.51. Except for those working in these two states, the higher the status level, the higher the level of motivation. The highest motivation level of 3.61 was seen in employees with "Manager/Assistant Manager" status.

The effect of both factors "Job assurance" and "Indirect work control(independent work) and performance feedback" effects on employee performance increased as the working time of employees in the current workplace increased. Regardless of motivators, according to the general averages depending on working time in the current workplace, as the working time of the employees increased in their current workplaces, their motivation levels also increased.

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All participants were informed that the information would not be shared with any third parties in accordance with Article 10 of the Law on the Protection of Personal Data No.6698 and universal scientific values, which are the basis of the rules of the institution to which the authors are affiliated, and data were collected from the volunteers after this was provided.

The data sets used in this study can be shared with the mutual approval of the author team, upon request from other researchers. In accordance with the open science approach, in a way, that does not violate the privacy of the survey participants and only; digitized data can be shared.

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