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## Evaluation of Working Conditions and Professional Independence Perceptions of Occupational Health and Safety Professionals

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#### ABSTRACT

The aim of this article is to provide quantitative information about occupational health and safety professionals' working conditions and professional independence. The data were obtained through questionnaires applied to employees in the field of occupational health and safety. The validity value of the questions in the questionnaires was calculated as 0.901. The obtained data were analyzed with descriptive statistical techniques. According to the results, the wages and job satisfaction level of occupational health and safety professionals are average, but below what it should be. Health and safety professionals are employed above legal limits. Some of them cannot adequately benefit from their rights such as overtime pay, annual leave, rest breaks and severance pay. On the other hand, there is no job security to ensure the professional independence of health and safety professionals.

**Keywords:** safety and health, work-related accidents, working conditions, professional independence, health and safety professionals.

#### INTRUDUCTION

With entry into force of the Occupational Health and Safety Act in 2012, preventive approach was introduced on occupational health and safety (OHS) in Turkey. Many legal regulations have been made regarding protective and preventive OHS services in workplaces. One of these is the assignment of OHS professionals in the workplaces depending on the hazard class and the number of employees. Occupational safety expert, occupational physician and other healthcare staff (workplace nurse) were defined as OHS professionals.

In this context, more than one hundred thousand OHS professionals completed their compulsory training, received their certificates and were assigned to workplaces. Despite these positive developments, it is claimed that as the number of OHS professionals increases, there is an irregular competition in the market in this field, which worsens the working conditions of OHS professionals. It is stated that the legal regulations regarding the working conditions and job security of OHS professionals are insufficient, and that OHS professionals working in the Common Health and Safety Units (CHSU) are employed with low wages, long hours, even without insurance. In a working relationship where the wages of OHS professionals are paid by the employer, it is argued that OHS professionals cannot be fully independent from the employer in identifying the hazards and recommending the necessary measures. For these reasons, the problems related to working conditions of OHS workers are increasing in importance today.

Millions of work-related accidents and thousands of deaths occur every year in developing countries due to unsafe working conditions. Sufficient measures cannot be taken against the risks that cause accidents. As a developing country, Turkey also cannot prevent thousands of workrelated accidents and deaths that occur every year. According to the official data of 2019 in Turkey, more than 400 thousand occupational accidents and 1100 deaths occurred due to these accidents. In Turkey, 35% of work-related accidents and half of work-related deaths occur in the construction sector. For this reason, protective and preventive regulations such as the appointment of OHS professionals have been made in recent years in Turkey. Reducing the financial losses caused by occupational accidents in developing countries is of great importance in terms of ensuring sustainable economic development.

Protective and preventive legal regulations made in developing countries in order to prevent occupational accidents impose important duties and responsibilities on OHS professionals. Personal abilities and working conditions of OHS professionals affect their professional success while performing their duties. It is one of the issues to give importance to researching and improving the working conditions of OHS professionals, who are the leading actors in determining the risks that cause occupational accidents and occupational diseases, planning, implementing, monitoring, supervising preventive actions and training and raising awareness of employees.

However, studies addressing the working conditions of OHS professionals are limited. In this study, the perceptions of OHS professionals regarding working conditions such as wages, working hours, annual leave and rest periods as well as professional independence and job security were investigated. With the research, it is aimed to obtain objective and quantitative information about working conditions of all OHS employees, who are defined as occupational safety experts, occupational physicians, other health personnel (workplace nurses) and support personnel as OHS professionals in Turkish labor legislation. The research was conducted with a questionnaire prepared for this purpose. The obtained data were classified by descriptive statistical methods and presented for readers' evaluation.

### BACKGROUND

In reviewing the literature on this subject, it has increased interest in Turkey in recent years. For example, Acar (2014) provided important information about wage levels, working status (public-private, part-time-full-time) and working hours of OHS professionals in his research. It was determined that 77.34% of the 2837 OHS Professionals participating in the research work in the private sector, 10.33% work in the public sector and 12.33% have their own workplace. The rate of those who stated that they had a contract with only one workplace was 33.69%, and the rate of those who said that they had a contract with 10 or more workplaces was 22.69%. 51% of the participants stated that they were assigned tasks other than OHS. He also stated that the wages of OHS professionals are low [1]. Tulu (2014), on the other hand, conducted a research in which the results were evaluated by determining the opinions, perceptions and expectations of OHS professionals about the working conditions they are in [2].

Karakaya (2018), in his master's thesis, in which occupational safety experts examined the work stress levels, it was stated that 29.5% of the participants have been specializing in occupational safety for one year or less and 36.7% for 1-3 years. It has determined that 64 % of them work in the Common Health and Safety Unit (CHSU) in the private sector, 27.8% of them are also occupational safety specialists besides their main job (engineering, architecture, etc.). 8% of the participants have never used their annual leave, and 16.5% stated that they can use it incompletely. 8% of OHS professionals stated that they have to work longer than their normal working hours. It was stated that 83% of the participants found the income they earned through safety expertise insufficient, and found that the job security and training of the experts were not sufficient, and that this had a negative effect on work stress [3]. In another study of Akboğa et al. (2015) who examined the subject, the functioning and adequacy of the system were evaluated based on the working status and the adequacy of the training they received [4].

Another study carried out with the semi-structuring technique reveals that occupational safety experts do not feel themselves in a sufficient professional independence climate within the current working system according to the relevant legislation and legal regulations [5]. There are also various studies examining the obligation to employ OHS professionals in the workplace in terms of legal, education and job security [6-12].

In the international literature; Elbir (2020) discussed the issue of occupational physicians' job security. In his review study discusses the function of occupational physicians in relation to their preventive role in occupational health and the significance of maintaining their professional independence [13]. Another study

conducted in 1995, discusses the possible roles of professionals in the context of the complexities of Occupational Health and Safety (OHS) management. It presented the roles using the metaphor of parent-adult-child relationships and discusses the ways in which different relationships can lead to different problems of functioning. It concluded with presenting the possible role of training in tackling these problems [14].

Another study conducted in 2019 examined the historical development of OHS professionals in the UK, their current situation and their role in workplaces [15]. In another study published by Hale, the roles and functions of occupational health and safety experts were examined comparatively at European level. [16]. Freaitas and Silva (2019) also discussed the role of OHS trainers in delivering training in their work [17]. Bohalteanu (2019) also tried to define the role of occupational safety professionals in Romania by using historical perspectives and experiences [18]. And also, it was conducted by Nillson and Vänje (2019), highlighting the role of occupational health and safety professionals in the workplace. The results show needs to work more preventively than today comprehending aspects as system understanding, integrated work teams, participation, a clear role in change projects plus skills in risk assessments [19].

According to another study on the role of OHS consultants in Denmark, the consultant is political in the sense of pursuing a work environment agenda; the consultant is reflective in the sense of being able to switch between different roles and mobilize different types of knowledge depending on the context; the consultant is a navigator in the sense of knowing how to navigate in the complex organization surrounding the technological change process [20].

In another review study conducted in 2017, factors affecting the role of safety professionals were examined. Over the past 25 years, it has been suggested that societal pressure and political interference in the management of safety risks in organizations has led to a significant change in safety professional practice. This paper reviews more than 100 publications. Thematic analysis identified 25 factors in three categories: institutional, relational, and individual. The review highlights a dearth of empirical research into the practice and role of safety professionals, which may result in some ineffectiveness. Practical implications and an empirical research agenda regarding safety professional practice are proposed [21]. Thompson,

on the other hand, in his 2012 research, reviewed professional autonomy and independence of occupational health nurses in the United States. She emphasized the collaborative aspect of occupational health and safety and the coordination role of occupational health nurses [22].

It is seen that there are a limited number of studies examining the working conditions and professional independence of OHS professionals in the literature. Some of the previous studies examine the subject in terms of legal and job security, and some as the role of OHS experts in the workplaces. This study aims to bring a different perspective to the subject. In this study, data on wage levels of OHS professionals and working conditions such as overtime, annual leave, rest breaks and working hours were compiled. In addition, personal evaluations of OHS experts based on perceptions of professional independence and job security were investigated and the results obtained were presented quantitatively.

## MATERIAL AND METHOD

Questionnaire method was used as data collection method in the research. The data used in the research were obtained through questionnaires, all of which consist of closed-ended questions, applied to OHS Professionals. The questionnaire was applied to 521 people who actively work as OHS professionals in various sectors, especially in the construction and metal sectors.

The questionnaire form consists of 3 parts. The questions in the first part consist of questions about the demographic characteristics of the participants such as age, gender, marital status, education level, and job position. The second part of the questionnaire is covering questions about working conditions such as working status of the OHS professional (part-time-full-time or permanent-in-workplace etc.), the sector in which he / she works, working time in the workplace, monthly earnings, graduation, housing ownership and social security status, rest periods, overtime and annual leave status.

In the third part of the questionnaire, questions based on personal perception were included in order to rate the opinions of OHS professionals about their working conditions, professional independence and job security (See Table 4). The questions in this section were prepared with a 5-point Likert scale. Participant was asked to give a score of 1-5 to any of the propositions in this section.

The validity (Cronbach alpha coefficient) value of the questions in the questionnaire was calculated as 0.901. The data obtained from the questionnaires were analyzed with descriptive statistical techniques in the form of frequency, ratio and cross tables with the help of SPSS computer program and presented in consolidated tables. Demographic characteristics of the participants such as age, gender, education, marital status, part-time-full-time, within the CHSU company or their self-employment status, their distribution according to their job and the sector they work in, and monthly earnings averages for each variable were calculated and prepared in summary tables. In addition, data such as severance pay, overtime pay, annual leave, working hours and rest breaks are also presented. Finally, the average scores of the responses given by OHS professionals regarding their working conditions, professional independence and job security were calculated, tabulated and interpreted.

## **RESULTS AND DISCUSSION**

## Monthly Average Wage Distributions of OHS Professionals by Demographic Characteristics

It is observed that OHS professionals are predominantly male (62.8%) and the average monthly earning of men is 14% higher than that of women. One of the most objective and quantitative measures of gender equality is the wage. Monthly wages of women OHS professionals are significantly lower than men. Also, married people earn 12% more than singles. It can be said that this situation is relatively due to social payments such as family and child benefits in wages. OHS professionals in the 35-44 age group earn higher wages than all other age groups. Looking at the distribution by education level, it is seen that as the education level increases, the monthly earnings also increase. As the level of experience and education increases in the OHS profession, as in many professions, wage levels increase (See Table 1).

## Employment Status, Sectors and Monthly Wages of OHS Professionals

In Turkey, some of the OHS professionals work part-time or on a freelance basis. 25.1% of OHS professionals work part-time, 58.5% work in CHSU and 12.5% work on a freelance basis. Part-time workers earn 19% more than full-time employees, and 37% more freelancers than dependent workers. In addition, employees working within the CHSU earn more than those working within the company. However, it can be said that working within the company is more attractive for OHS professionals due to reasons such as job security, regular and fixed income guarantee, regular working hours (See Table 2).

The sector with the highest monthly average earnings for OHS professionals is the construction sector. Service, health, metal and shipbuilding sectors follow respectively. It is thought that there are public employees in the service and health sectors and this situation may affect the monthly earnings. If these two sectors are excluded, it can be said that the monthly wage increases

Table 1. Demographic characteristics and average wages of OHS professionals

Ch	aracteristic	Frequency (N)	Rate (%)	Average monthly wage (\$)
Condor	Male	327	62.8	1095.28
Gender	Female	194	37.2	963.64
Marital status	Single	205	39.3	973.60
	Married	316	60.7	1093.41
	18-24	29	5.6	606.53
Age	25-34	258	49.5	907.66
	35-44	116	22.3	1288.17
	45-54	68	13.1	1220.32
	55 +	50	9.6	1218.57
Education	Associate degree	47	9.0	752.66
	Undergraduate	277	53.2	995.75
	Graduate	128	24.6	1180.10
	Doctorate	69	13.2	1200.82
Total		521	100.0	1067.41

Characteristic		Frequency (N)	Rate (%)	Average Monthly Wage (\$)
Working Status 1	Part Time	131	25.1	1186.89
	Full Time	390	74.9	999.03
	Common Health and Safety Unit	305	58.5	1018.14
Working Status 2	In Company	151	29.0	976.94
	Self-employment	65	12.5	1339.28
	Construction	86	16.5	1218.23
Sector	Mine	34	6.5	875.51
	Metal	90	17.3	1047.42
	Machine manufacturing- automotive	57	10.9	948.30
	Ship building	28	5.4	1041.44
	Food	54	10.4	963.94
	Health	43	8.3	1076.82
	Service	66	12.7	1142.32
	Public	30	5.8	865.48
	Other	33	6.3	1011.35
Profession	Occupational Safety Expert	387	74.3	1016.28
	Occupational Physician	64	12.3	1396.21
	Other Healthcare Staff (Workplace Nurse)	13	2.5	1160.71
	Technician	27	5.2	883.58
	OHS Support Personnel	30	5.8	1150.58
Total		521	100.0	1067.41

**Table 2.** Employment status, sectors and monthly wages of OHS professionals

according to the difficulty of the job. Compensatory wage differentials are expected in sectors such as construction and shipbuilding.

Monthly earnings of occupational physicians are considerably higher than others OHS professionals. Following the workplace physicians, those who earn the most monthly earnings are other health personnel (Workplace Nurse). The average monthly wages of occupational physicians is 37.3% higher than occupational safety experts.

OHS Professionals' Overtime Work, Social Security, Severance Pay and Annual Leave Status

It was stated that 7.5% of OHS proffesionals were never paid social security premiums by the employer, while 37.4% were underpaid according to their wages. 16.5% of OHS professionals who stated that they work overtime do not receive any overtime wages, and 14.8% receive it insufficiently (See Table 3).

On the other hand, it is unclear what periods are taken into account in the calculation of overtime hours. Working hours are 10, 20, 40 minutes per month for occupational safety experts, depending on the hazard class of the workplace; for workplace physicians, it was determined as 5, 10, 15 minutes. In the legislation, working periods are specified as "the periods to be spent in the workplace". The working hours of the OHS professional are calculated on a monthly basis considering the weekly working time (45 hours) in the Labor Law. For OHS professionals who provide services to more than one workplace, it is controversial whether the time spent on the road will be included in the working time. According to the Labor Law, the time spent on the way to the place of work should be included in the working time. Especially occupational safety experts and workplace nurses cannot protect their legal rights, they are employed for excessive periods, their working hours are not calculated correctly and they cannot get all the overtime wages.

24.5% of OHS professionals stated that severance payments are not paid. Especially the occupational safety experts and workplace nurses working within the CHSU are not paid severance pay, as they are employed on contracts with a duration not exceeding one year.

On the other hand, it is observed that approximately 30% of OHS professionals cannot use their annual leaves in accordance with legal limits. Similarly, 34.9% of OHS professionals think that the rest periods do not comply with the legal limits. 42% of OHS professionals live in a rental house and 27% live with their family.

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Characteristics	Frequency (N)	Rate (%)				
Social Security Contributions						
Not paid at all	39	7.5				
Paid incompletely	195	37.4				
Fully paid	287	55.1				
Over Time Pay						
No overtime work	254	48.8				
Overtime, but no payment	86	16.5				
Overtime but underpaid	77	14.8				
Paid in full	104	19.9				
Severance Pay						
Not paid at all	128	24.57				
Paid incompletely	141	27.06				
Fully paid	252	48.37				
Annual Leave						
No annual leave	34	6.53				
Incomplete	126	24.18				
Fully	361	69.29				
Rest Break						
Enough	339	65.07				
Not enough	182	34.93				
Housing Ownership Status						
I live in a rented house	219	42.77				
I stay in the office housing (lodging)	66	12.9				
I live with my family	140	27.34				
I have my own house	87	16.99				
Total	512	100				

**Table 3.** OHS professionals' overtime work, social security, severance pay and annual leave status

# OHS Professionals' Perceptions on Working Conditions and Professional Independence

OHS professionals were asked various questions with a 5-point Likert scale on working conditions, authority and responsibility levels in their workplaces, their relations with employees and managers, professional independence and job security, and they were asked to mark the appropriate option and give points. The mean scores calculated for all questions are presented in Table 4.

In general, scores in all titles are at an average level. The question with the lowest score was "I can put all OHS-related issues on the agenda of the OHS board and record it" (1.994). When evaluated together with the score of the question numbered 13 (3.163); It can be said that OHS committees are not sufficiently considered by OHS professionals, and employers pressured OHS professionals by interfering with the agenda and decisions of the OHS board. **Table 4.** Average scores of the answers given by OHS

 professionals to questions about working conditions

 and professional independence

	professional independence	A
No	Questions	Average Scores
1	I wear out physically while doing my job	2.562
2	I wear out spiritually while doing my job	2.286
3	My job satisfies me financially	2.981
4	I'm glad I made this profession	2.722
5	Employers or managers support me enough	2.795
6	Quick and sufficient resources are allocated when it is necessary to spend on OHS in the workplace	3.117
7	I can directly explain my problems and requests to the top management	2.440
8	I have enough authority to do my job	3.079
9	Workers respect me for my job	2.313
10	Workers follow the rules, cooperate with me	2.754
11	I work in harmony with other OHS professionals	2.253
12	I can put all OHS-related issues on the agenda of the OHS board and record it	1.994
13	The employer intervenes in the agenda and decisions of the OHS board	3.163
14	When material, PPE or service is required, it is supplied quickly and efficiently	2.958
15	Employers and managers allocate time enough for me	2.933
16	No change of organization and equipment	0.070
16	in the workplace without my knowledge.	3.378
17	I can devote enough time to workplace audits	2.432
18	I can devote enough time to training activities	2.528
19	Employers or managers talk to me in an oppressive way	3.534
20	I feel like a manager at work	3.140
21	I don't hesitate to notify employers or mana- gers when I see a risk in the workplace.	2.123
22	I always write my notifications in the manda- tory OHS notebook or report them in writing	2.205
23	Employers and managers do not prevent me from stopping work when I detect an immediate and imminent danger	3.306
24	The current legislation provides me an adequate level of professional independence	2.660
25	I live in fear of dismissal because of my task	3.409
26	I'm under pressure from employers and managers because of my role	3.512
27	Current legislation provides me sufficient job security	2.478
28	I know the legal regulations about the profes- sional independence of OHS professionals	2.430

The highest average scores were "Employers or managers talk to me in an oppressive way" (3.534), "I'm under pressure from employers and managers because of my role" (3.512) and "I live in fear of dismissal because of my job" (3.409). In relation to these answers, the average score of the responses given to the statement "Current legislation provides me sufficient job security" is also 2.478. In Turkey, the legislation imposes heavy responsibilities on OSH professionals but there is no legislation to protect them adequately against the employer. Therefore, the average scores of the answers given to these questions are quite high.

In particular, occupational safety experts are held responsible for occupational accidents even when they report the risks to the employer, and lawsuits are filed against them. It is a legal obligation for OHS professionals to inform the employer about the shortcomings they detect in the workplace. However, there are many OHS professionals who are fired when they do this.

Employers and managers put pressure on OHS professionals with concern of responsibility in OHS related matters. As a matter of fact, in our research, the average scores of the answers "I don't hesitate to notify employers or managers when I see a risk in the workplace" and "I always write my notifications in the mandatory OHS notebook or report them in writing" are also very low. In addition, the scores of the questions about professional independence and job security (2.660 and 2.478) are low. However, OHS professionals do not know the legal regulations on the subject sufficiently.

It can be said that OHS professionals think their work is not tiring. In terms of wages, the satisfaction score is slightly above average. Job satisfaction score is also slightly above average. "Quick and sufficient resources are allocated when it is necessary to spend on OHS in the workplace" (3.117), "having enough authority to do job" (3.079), "no change of organization and equipment in the workplace without my knowledge" (3.378) acores are at good levels. However, the scores of "I can directly explain my problems and requests to the top management" (2.440), "Workers respect me for my job" (2.313), "I work in harmony with other OHS professionals" (2.253), "I can devote enough time to workplace audits" (2.432), and "I don't hesitate to notify employers or managers when I see a risk in the workplace" (2.123) are below average and lower than they should be. In addition, it can be said that OHS professionals think that they cannot devote enough time to workers' OHS trainings.

## CONCLUSION

More than one hundred thousand OHS professionals completed their compulsory training, received their certificates and were assigned at workplaces in Turkey. Despite this positive development, there are legal and organizational deficiencies regarding working conditions, professional independence and job security of OHS professionals.

In this study, OHS professionals' perceptions of working conditions, professional independence and job security were investigated. According to the results of the research, OHS professionals are employed with low wages, extra hours over legal limits and without job security. OHS professionals also have problems in overtime payments, rest periods, social security, severance pay and annual leave. OHS professionals also believe that their job security and professional independence are not sufficient. It is observed that especially occupational safety specialists and workplace nurses are more problematic. Despite the enormous responsibilities imposed by the laws, how OHS professionals can safely fulfill these responsibilities is not defined both in written legal rules and in organizational terms within the workplace. Despite all these negativities, the overall job satisfaction score of OHS professionals is above the average.

In Turkey, externalization and marketization has already begun in OSH services along with legal obligations. This process reduces the quality of OHS services. This process also negatively affects the working conditions of OHS professionals. The approaches of CHSUs established for commercial purposes further deepen the problem. The primary purpose of CHSU is to profit. Therefore, OHS services in many workplaces have turned into paperwork. The competition conditions created by the current OHS service model create a great pressure on CHSUs. Under these circumstances, CHSUs pay low wages, overwork, and abolish their legal rights such as annual leave and severance pay, especially to occupational safety specialists and workplace nurses who seem more vulnerable. Under these circumstances, CHSUs pay low wages and overwork, especially to occupational safety specialists and workplace nurses who seem more vulnerable.

It is necessary to take measures to regulate and stabilize the competition in the market. The most important of these measures is the determination of "base wages" for both OHS experts and CHSU. In addition, the job security problem of OHS professionals must also be regulated. It is necessary to eliminate the wage dependency of OHS professionals with the employer and to introduce clear and understandable job security provisions.

OHS is an area that is constantly developing and open to innovations in the world. In order to prevent occupational accidents, OHS professionals also need to be adapted quickly to changing conditions. One way to achieve this adaptation is to improve the working conditions of OHS employees. Especially in developing countries, OHS workers experience similar problems. It is important to improve the working conditions of OHS professionals in order to reduce the accident rates in developing countries where occupational accidents and death rates are high. Therefore, there is a need for more studies in the world on the working conditions and professional independence of OHS professionals. Although this study has been conducted under certain restrictions in a country, it may be a reference to more comprehensive studies to be conducted in the future.

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