

# Mediator Role of Depression on the Relationship Between Mobbing and Life Satisfaction of Health Professionals

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## ABSTRACT

Mediator role of depression on the relationship between mobbing and life satisfaction of health professionals

**Objective:** While an individual has both material and spiritual gains at workplace s/he might also be strained because of different stress factors. In some cases, tension results from mobbing. In the present study, it is aimed to identify the mediator role of depression on the relationship between mobbing at workplace and life satisfaction of health professionals.

**Method:** Two hundred and forty-four health personnel who have been working for at least 6 months at the hospitals of a medium-sized city in the middle part of Turkey were given Negative Actions Questionnaire (NAQ), Beck Depression Inventory (BDI) and Life Satisfaction Scale (LSS). Data were analyzed by using t-test, one-way ANOVA, Pearson Correlation Analysis, simple and multiple linear regression analysis.

**Results:** At the first step of the analysis in the mediator role of depression on the relationship between exposure to mobbing and life satisfaction, it was found that exposure to mobbing significantly predicted a negative relation to life satisfaction, and that it significantly predicted a positive relation to depression. Moreover, it was observed that depression significantly predicted life satisfaction and that depression has partly mediated the relationship between mobbing and life satisfaction. This result shows that mobbing, both directly and indirectly through depression has negative effect on life satisfaction.

**Conclusion:** Exposure to mobbing at workplace among health professionals leads depression and, this results in negative evaluation of one's life quality. If we consider this result with respect to the individual and health service, we can argue that individual's life satisfaction decreases, his/her job performance declines, and the person feels boredom and reluctance to his/her job, and efficiency of the health institution decreases. Thus, seminars can be organized to increase the awareness of the victim, other workers and manager related to the problem of mobbing and victims can be acquired skills to cope with mobbing.

**Key words:** Depression, life satisfaction, mobbing



## ÖZET

Sağlık çalışanlarında iş yerinde mobbing ile yaşam doyumu arasındaki ilişkide depresyonun aracı rolü

**Amaç:** Birey, iş yaşamında maddi-manevi kazanç elde ederken aynı zamanda çeşitli stres faktörleri nedeniyle gerginlik yaşayabilmektedir. Bazı durumlarda gerginlik, yıldırmanın (mobbing) sonucu olarak ortaya çıkabilmektedir. Bu çalışmada sağlık çalışanlarının iş yerinde yıldırmaya maruz kalma düzeyleri ile yaşam doyumu arasındaki ilişkide depresyonun aracı rolünü ortaya koymak amaçlanmıştır.

**Yöntem:** İç Anadolu bölgesinde yer alan orta büyüklükte bir il merkezindeki hastanelerde en az altı aydır çalışan 244 sağlık personeline Olumsuz Davranışlar Ölçeği (ODO), Beck Depresyon Envanteri (BDE) ve Yaşam Doyumu Ölçeği (YDÖ) uygulanmıştır. Verilerin çözümlenmesinde t testi, tek yönlü varyans analizi, Pearson Momentler Çarpımı Korelasyon analizi, basit ve çoklu doğrusal regresyon analizi kullanılmıştır.

**Bulgular:** Yıldırmaya maruz kalma ile yaşam doyumu arasındaki ilişkide depresyonun aracılık rolüne ilişkin yapılan analizin ilk aşamasında, yıldırmaya maruz kalmanın yaşam doyumunu negatif ve anlamlı düzeyde, depresyonu ise pozitif ve anlamlı düzeyde yordadığı saptanmıştır. Ayrıca, depresyonun yaşam doyumunu anlamlı düzeyde yordadığı ve yıldırmaya maruz kalma ile yaşam doyumu arasındaki ilişkide depresyonun kısmen aracı rolü olduğu görülmüştür. Bu sonuç yıldırmının hem doğrudan hem de depresyon aracılığıyla yaşam doyumunu olumsuz etkilediğini göstermektedir.

**Sonuç:** Sağlık çalışanlarının iş yaşamında yıldırmaya maruz kalması depresyona neden olmakta bu durum da bireylerin yaşam kalitesini olumsuz değerlendirmesine yol açmaktadır. Bu sonuç hem birey hem de sağlık sektörü açısından değerlendirildiğinde; bireyin iş doyumunun azalmasına, performans düşüklüğüne, işe karşı bıkkınlık ve isteksizliğe yol açabileceği, sağlık kurumunun ise verimliliğini azaltabileceği düşünülmektedir. Bu nedenle yıldırmaya mağdurunun, diğer çalışanların ve yöneticilerin soruna ilişkin farkındalığını artırmak için seminerler vb. düzenlenebilir ve mağdurlara bu yaşamının üstesinden gelmede yardımcı olacak başa çıkma becerileri kazandırılabilir.

**Anahtar kelimeler:** Depresyon, yaşam doyumu, mobbing

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## INTRODUCTION

Life satisfaction, which forms cognitive dimension of the subjective wellbeing, is defined as “a general evaluation of one’s life quality based on his/her own criteria” (1,2). Life satisfaction demonstrates the outcome resulted from the comparison between the individual’s expectations and the reality. In other words, life satisfaction refers to how much an individual likes the way he/she lives his/her life. People who have high level of life satisfaction are those who evaluate life events and circumstances positively. Unhappy people are individuals who evaluate most of the life factors as harmful or as obstacles for their objectives (3). According to Diener et al. (4), life satisfaction covers willing to change life, satisfaction about current, past and present life and views of significant others about that person’s life. Satisfaction areas are stated as family, free time, health, money, identity, close environment and job. Employers’ negative and positive opinions about their jobs explain their job satisfaction. Job satisfaction and life satisfaction explain each other and these two concepts are nested and complementary. Employers share good or bad experiences related to work with their family members and friends. In the same manner, employers share their good or bad experiences with family members and friends with their co-workers (5). More specifically, life satisfaction means more comprehensive satisfaction which includes employers’ job satisfaction.

Stress, which has negative effects on employers’ job satisfaction and life satisfaction, might result from many factors such as physical structure of the work environment, work load, role conflict, and relationships with superiors and coworkers. One of the stressors caused by relationships between individuals in the work environment is mobbing. Theoretically, mobbing is an extreme example of social stress in work environment. According to Vartia (6) mobbing begins with attacks to employer’s honor, integrity, credibility and professional efficiency. Leymann (7) defines mobbing concept as “hostile and unethical communication, which is directed by one or more individuals, mainly toward one individual in working

life”. In mobbing, one or more individuals show negative behaviors to one’s personality and violate one’s personal rights in a systematic manner (8). It is stated that individuals exposed to mobbing in organizations experience long term psychological and physical problems (9). Depression is one the most prevalent psychological effects of mobbing (10,11). The person who has been exposed to mobbing does not share this experience with anyone else, and this creates the real problem (11). Recently, mobbing is considered as an important job related stress factor due to it becomes more harmful for employers than other stress disorders (12) and its strong influence on mental health (10,13,14). Leymann (15) argues that exposure to mobbing at work leads to significant problems such as social isolation, social maladaptiveness, psychosomatic disorders, depression, obsessive behaviors, hopelessness, anger, anxiety and despair. In the literature, there are many research which show that exposure to mobbing is highly related to depression (10,11,13,16-21). In the first step of mobbing, victim usually shows some symptoms such as crying with no reason; sleep disorders, getting angry easily and difficulty in concentration. In the second step, symptoms such as high blood pressure, stomach problems, depression, reluctance to go to work, going late to job are added to the symptoms observed in the first step. At the third step, severity of depression increases. At the last step, accidents and suicide attempts are observed (22). Social outcome of mobbing is that friends of the victim leave the victim because they get bored of his/her depressive attitudes. People perceive the victim as “unsuccessful and lost what s/he has previously owned”. The person, who has been excluded at work and lost his professional identity, begins to lose his significance in his social life and in this family (23). Furthermore, mobbing causes decrement in job satisfaction and job performance, and increase in reluctance to work, pays off day after day, and sick reports (23). Getting satisfied from social environment, family relations and work have an important role in life satisfaction and productivity (24,25). Life satisfaction identified as wellbeing with respect to different aspects such as happiness and morale is an assessment about life events

such as family, free time, health, money, job, good relationships. Life satisfaction is closely related to psychological health. It is known that people who are healthy have higher life satisfaction than those who are unhealthy (24). Stein and Heimberg (26) found that people with general anxiety disorder and major depression have lower life satisfaction scores than the general population. Moreover, there are research showing negative relationship between job satisfaction and harassment at work (6,16). Karakus and Cankaya (27) in their research on teachers demonstrated that mobbing directly and via stress, exhaustion and job satisfaction negatively affects life satisfaction and that stress negatively affects life satisfaction via exhaustion and job satisfaction. Cakir (28) found that mobbing victims feel themselves unhappy and emotionally alone and therefore they have low level of life satisfaction.

As seen from the explanations above, mobbing has both relationships with depression and life satisfaction. Apart from this, since depression is related to life satisfaction, depression might have a mediator role in the relationship between mobbing and life satisfaction. In Turkey, health sector is one of the sectors where mobbing is very prevalent (11,29-31). People who have been working in health sector have more risks than people in other sectors. Work related problems of health employers such as high workload, irregular and unclear work circumstances, and problems associated with relations and division of labor, guard duty and associated sleep problems, financial problems lead to job related stress and tension (32). These issues increase the probability of psychological violence and level of exhaustion among health professionals (33). Thus, investigating mobbing, depression and life satisfaction of health workers is important in terms of workers quality of life as well as the quality of the provided health service.

There are many studies investigating health professionals and mobbing in Turkey. Some of these research investigated the relationship between exposure to mobbing and demographical characteristics (31,34-38). In one of these studies, for instance, it was found that male workers were more exposed to mobbing than female workers (35,37). In contrast, there are other studies showing insignificant relationship between

gender and exposure to mobbing (36,38). Other studies conducted with health workers found that the higher the age of health workers the lesser their perceived mobbing scores and that auxiliary staff in health sector were more exposed to mobbing (35,36,38). Karcioglu and Akbas (37) argue that there is no relationship between age of health workers and exposure to mobbing. In Turkey, other studies related to health workers and mobbing found positive relationship between mobbing and exhaustion (33) and depression (11); but negative relationship between mobbing and job satisfaction (37).

In the present study, a model was assessed by using a sample from health workers. Model consists of three structures: life satisfaction, mobbing at workplace and depression. Considering these three variables together is one of the starting points of the present study. Moreover, the present study might be important in terms of scarcity of related research in the field and potential contribution of results for future studies. In this respect, the aim of the present study is to identify the mediating role of the depression in the relationship between health workers' exposure to mobbing and their life satisfaction.

## METHOD

### Sample

Sample of the study consists of 244 health personnel who have been working for at least 6 months at the hospitals of a medium-sized city in the middle part of Turkey and who have volunteered to participate to the study. The reason why health professionals were selected is because health workers have higher risk to be exposed to mobbing than other business sectors (10,22,29,31,39). Seventy nine of participants were males (32.4%), 165 of them were females (67.6%). Sixty eight were (27.9%) doctors, 89 were (36.5%) nurses and 87 were (35.7%) other health professionals (psychologist, dietician, midwife, health officer, laboratory assistant, health technician and medical). Age range of health workers was between 18 and 58 (Mean±SD=33.50±8.04).

## Measures

**Negative Acts Questionnaire (NAQ):** To measure mobbing at workplace, Negative Acts Questionnaire (NAQ), developed by Einarsen and Skogstad (16) was used. NAQ, consists of 21 items that measure exposure to various negative behaviors directly (verbal abuse, inappropriate statements, and mocking) or indirectly (social exclusion and calumny). Even though there are many scales measuring mobbing in the literature, the reason why NAQ was chosen is because of its number of items (item numbers of other scales change from 33 to 68). At the same time, items in the scale are related to behaviors and mobbing concept was not explicitly stated in any of the item. The advantage of this is that the level of exposure to mobbing behavior for the responder can be measured without labeling the behavior as mobbing. This also assures more objective definition of behavior types covered by the items. NAQ is a 5 point Likert-type self-report scale ranging from “Never (1)” to “Everyday (5)”. Participants were asked how often they have been exposed to behaviors mentioned in each item within the last 6 months. The frequency order was never, sometimes, every month, every week and every day. Turkish adaptation of the scale was conducted by Cemaloglu (40). Factor analysis indicated one factor for 21 items, and total variance was 0.71, internal consistency co-efficient was 0.94 and factor loads were between 0.59 and 0.87. Cemaloglu (41-43) reports that scale items are loaded on one factor in other studies. In the present study, internal consistency coefficient was 0.90.

**Beck Depression Inventory (BDI):** The inventory, developed by Beck et al. and adapted to Turkish by Hisli (44) has 21 items. There are four subscales (Impairment in performance, negative feelings toward one’s self, somatic disorders, feeling guilty). Total scores were used in the present study. Hisli (45) reported that split-half reliability of the scale was 0.74 and criterion dependent validity was 0.63. Internal consistency coefficient of the scale was 0.85 for this study.

**Life Satisfaction Scale (LSS):** Diener et al. (1) developed the scale, and it was adapted to Turkish by Koker (46) and Yetim (47). The scale is a 7 point Likert-type self-report scale ranging from “Does not apply at all (1)” to “completely applies (7)”. Koker (46) found that test re-test reliability of the scale, which was done with three weeks interval, was 0.85. In the present study, internal consistency coefficient of LSS was 0.82.

## Procedure

After consent was taken from Health Management Office of city where the study was conducted, data collection inventories were individually applied to the participants after their office hours. Consent form was read to the participants and their consent was taken verbally. Other volunteers from the same hospital were selected to substitute for those who do not want to participate to the study. 18 individuals rejected to respond to scales due to their high workload. Each participant completed scales approximately within 30 minutes.

## Statistical Analysis

Previous research showed that exposure to mobbing indicated difference with respect to gender, age and title (31,34-38). Thus, preliminary analysis of NAQ, BDI and LSS scores was done for gender, age and title differences. T-test and one-way ANOVA were used for the preliminary analyses. In the present study, mediator role of the depression in the relationship between mobbing and life satisfaction was investigated by using Pearson correlation coefficient, simple and multiple linear regression based on Baron and Kenny’s (48) proposed conditions. Conditions are as follows: (1) Two variables – mobbing at workplace and life satisfaction- should be significantly correlated. (2) Suggested mediator variable –depression– should be correlated with these two variables. (3) When mediator variable was controlled the correlation between the two variables should diminish. The significance of the decay between Beta ( $\beta$ ) values were analyzed by using Sobel test.

Before analyses, conformity of the data to normal

distribution was tested by looking at its skewness and kurtosis values. Distribution of NAQ, BDI, and LSS scores for all independent variables were investigated in terms of their skewness and kurtosis values. Skewness values were between -1.075 and 0.462, and kurtosis values were between -0.575 and 1.003. Skewness and kurtosis values should ideally be between +1 and -1, but values between +2 and -2 are considered as acceptable (49). The fact that skewness and kurtosis values of the scores were within the limits of  $\pm 1$  can be interpreted as scores do not extremely deviated from normal distribution. To test autocorrelation Durbin-Watson coefficient was used. The values of Durbin-Watson change between 1.761 and 1.934. Tolerance values were between 0.94 and 0.96 and VIF values were between 1.03 and 1.06. Thus, it was accepted that multiple covariance were not observed in the data because tolerance was not close to 0 and VIF value was not higher than 5. Data were analyzed by using SPSS 13.0.

## RESULTS

### Preliminary Analysis of NAQ, BDI, and LSS Scores for Gender, Age and Title.

There was no significant gender difference of NAQ ( $t=1.214$ ,  $p>0.05$ ), BDI ( $t=1.892$ ,  $p>0.05$ ) and LSS ( $t=0.949$ ,  $p>0.05$ ) scores of health workers (Table 1). There was no significant age difference of NAQ ( $F_{(4,239)}=1.193$ ,  $p>0.05$ ), BDI ( $F_{(4,239)}=1.291$ ,  $p>0.05$ ) and LSS ( $F_{(4,239)}=0.940$ ,  $p>0.05$ ) scores (Table 2). NAQ ( $F_{(2,241)}=6.936$ ,  $p<0.01$ ), BDI ( $F_{(2,241)}=5.646$ ,  $p<0.01$ ) and LSS ( $F_{(2,241)}=3.159$ ,  $p<0.05$ ) scores of health workers showed significant title differences (Table 3). According to this result, NAQ scores of doctors (Mean=26.955) were lower than those of nurses (Mean=31.64) and other health professionals (Mean=31.52). Based on this result, it can be argued that nurses and other health workers are more

**Table 1: Preliminary Analysis of NAQ, BDI, and LSS scores for gender**

	Female (n=165) Mean $\pm$ SD	Male (n=79) Mean $\pm$ SD	t	p
NAQ	30.77 $\pm$ 8.80	29.29 $\pm$ 9.11	1.214	0.226
BDI	10.64 $\pm$ 7.63	8.71 $\pm$ 7.11	1.892	0.060
LSS	23.52 $\pm$ 6.18	24.29 $\pm$ 5.51	0.949	0.343

LSS: Life Satisfaction Scale, BDI: Beck Depression Inventory, NAQ: Negative Acts Questionnaire, t: Student T test

**Table 2: Preliminary Analysis of NAQ, BDI, and LSS scores for age**

Age	n	Mean $\pm$ SD	F	p
<b>NAQ</b>				
20-25	44	30.89 $\pm$ 7.87	1.193	0.315
26-30	50	31.46 $\pm$ 10.24		
31-35	54	30.09 $\pm$ 8.49		
36-40	48	31.08 $\pm$ 9.18		
41 and above	48	27.96 $\pm$ 8.41		
<b>BDI</b>				
20-25	44	11.64 $\pm$ 7.51	1.291	0.274
26-30	50	8.52 $\pm$ 6.19		
31-35	54	9.76 $\pm$ 7.98		
36-40	48	10.96 $\pm$ 6.60		
41 and above	48	9.44 $\pm$ 8.85		
<b>LSS</b>				
20-25	44	23.32 $\pm$ 5.46	0.940	0.441
26-30	50	25.08 $\pm$ 5.77		
31-35	54	23.57 $\pm$ 6.48		
36-40	48	22.90 $\pm$ 6.00		
41 and above	48	23.90 $\pm$ 6.02		

LSS: Life Satisfaction Scale, BDI: Beck Depression Inventory, NAQ: Negative Acts Questionnaire

**Table 3: Preliminary Analysis of NAQ, BDI, and LSS scores for title**

Title	n	Mean±SD	F	p
<b>NAQ</b>				
Doctors	68	26.96 ± 8.23	6.936	<0.001
Nurses	89	31.64 ± 8.34		
Other Health Professionals	87	31.52 ± 9.38		
<b>BDI</b>				
Doctors	68	7.99 ± 7.92	5.646	0.004*
Nurses	89	9.69 ± 6.11		
Other Health Professionals	87	11.94 ± 8.07		
<b>LSS</b>				
Doctors	68	25.28 ± 5.92	3.159	0.044**
Nurses	89	23.36 ± 5.47		
Other Health Professionals	87	23.00 ± 6.35		

\*p<0.01, \*\*p<0.05, LSS: Life Satisfaction Scale, BDI: Beck Depression Inventory, NAQ: Negative Acts Questionnaire

**Table 4: The relationships between the study variables and their mean ± SDs**

	Mean±SD	NAQ	BDI
<b>NAQ</b>	30.29 ± 8.91	-	
<b>BDI</b>	10.02 ± 7.51	0.415*	-
<b>LSS</b>	23.77 ± 5.97	-0.330*	-0.497*

\*p<0.001, LSS: Life Satisfaction Scale, BDI: Beck Depression Inventory, NAQ: Negative Acts Questionnaire

exposed to mobbing than doctors. At the same time, BDI scores of nurses and other health professionals and LSS scores of doctors were higher.

### Results related to Mean, Standard Deviation and Correlation Values of NAQ, BDI and LSS Scores

There was a positive correlation between NAQ and BDI scores of health workers ( $r=0.415$ ,  $p<0.01$ ), and there was as negative correlation between NAQ and LSS scores ( $r=-0.330$ ,  $p<0.01$ ) and there was a negative correlation between BDI and LSS scores ( $r=-0.497$ ,  $p<0.01$ ; Table 4).

### Results of Mediator Test

Regression analysis to predict the mediator role of depression in the relationship between mobbing at workplace and life satisfaction was conducted within three steps and results were presented in Table 5. Since pre-tests of NAQ, BDI and LSS scores showed

differences for titles, first "title" was entered as a control variable in the first block. Doctor category was coded as "0" and after title variable was defined as "dummy variable" it was included to the regression analysis.

According to the results, at the first step, mobbing negatively and significantly predicted life satisfaction ( $\beta=-0.313$ ,  $p<0.001$ ) and it explained 11.6% of the total variance. In other words, as the level of exposure to mobbing increases health workers' life satisfaction decreases. At the second step, mobbing positively and significantly predicted depression ( $\beta=0.388$ ,  $p<0.001$ ) and it explained 19% of the total variance. Based on this result, as the level of exposure to mobbing increases health workers' depression level also increases. At the third step, depression defined as mediator variable negatively and significantly predicted life satisfaction ( $\beta=-0.431$ ,  $p<0.001$ ). This finding indicates that as depression level increases life satisfaction decreases. Depression and mobbing together explain 26.7% of the total variance. Furthermore, the relationship between mobbing and life satisfaction decreases ( $\beta=-0.146$ ,  $p<0.05$ ) when mobbing is considered together with the



**Table 5: Regression analysis of the mediating role of depression in the relationship between mobbing and life satisfaction**

	Variables	B	S. E.	$\beta$	t	p
Step 1	Title	-0.648	0.464	-0.086	-1.397	0.164
<b>LSS (dependent variable)</b>	NAQ	-0.210	0.041	-0.313	-5.076	<0.001
		R= 0.341, R <sup>2</sup> = 0.116, F= 15.830				
Step 2	Title	1.280	0.558	0.136	2.293	0.023*
<b>BDI (dependent variable)</b>	NAQ	0.327	0.050	0.388	6.572	<0.001
		R= 0.436, R <sup>2</sup> = 0.190, F= 28.204				
Step 3	Title	-0.209	0.428	-0.028	-0.488	0.626
<b>LSS (dependent variable)</b>	BDI	-0.343	0.049	-0.431	-7.019	<0.001
<b>NAQ (independent variable)</b>	NAQ	-0.098	0.041	-0.146	2.385	0.018*
<b>BDI (mediating variable)</b>		R= 0.516, R <sup>2</sup> = 0.267, F= 29.088				

\*p<0.05, LSS: Life Satisfaction Scale, BDI: Beck Depression Inventory, NAQ: Negative Acts Questionnaire

mediator variable (depression) (Table 5). This shows that depression partly mediated the relationship between mobbing and life satisfaction (Sobel  $z=-5.767$ ,  $p<0.001$ ). Thus, mobbing influences life satisfaction both directly and via depression.

## DISCUSSION

In the present study, the mediator role of the depression in the relationship between health workers' exposure to mobbing at workplace and their life satisfaction was investigated. First, at the preliminary analysis, gender, age and title differences for NAQ, BDI and LSS scores were investigated. Results showed that there were no significant differences for gender and age. This finding supported related findings that showed no difference for gender (36,38) and age (37) in terms of exposure to mobbing. However, in the related literature there are studies showing that males were more exposed to mobbing than females (35,37) and that as the age of workers increases mobbing decreases (35,36,38). In terms of title, it was observed that NAQ scores of doctors were lower than those of nurses and other health personnel. At the same time it was found that BDI scores of nurses and other health professionals were higher than those of doctors. In contrast, LSS scores of nurses and other health workers were lower than those of doctors. In conclusion, it can be argued that nurses and other health professionals are more exposed to mobbing, more likely to experience

depression, and have less satisfied with their lives than doctors. Consistent with these findings, related literature showed that nurses are more exposed to mobbing (10,31,34) and that life satisfaction of doctors are higher than those of nurses, health officers and physical therapists (50). Furthermore, Ozgur et al.'s (51) study conducted with nurses demonstrated that 50.3% of nurses had high depression scores. Nurses do not have opportunity to get rest due to their heavy work load and shift working system. At the same time, most of the nurses are females. Thus, nurses are more risky group in terms of exposure to mobbing (52). Yildirim and Yildirim (31) found that nurses were exposed to mobbing by mostly their managers and coworkers. Björkqvist (53) also reported that women were more exposed to mobbing by females, and females who applied mobbing preferred psychological harm and passive-aggressive behaviors as methods of mobbing. The reason why nurses are more exposed to mobbing than doctors might be due to this factor.

On the other hand, the analysis done to see the mediator role of depression on the relation between mobbing and life satisfaction showed that mobbing significantly and negatively predicted life satisfaction and positively predicted depression. The people who have high life satisfaction are those who assess their life events and life circumstances in a positive way. A person who is the victim of mobbing loses his self-confidence in every aspect; and he gets surprised, becomes ineffective, gets afraid, feels shame and

hesitates. This continues not only in work environment but also in inter personal relations (54). All these negative outcomes also negatively influences life satisfaction, which is a general assessment of one's life quality (24,25,55). Consistent to the results of this research, in the present study it was found that victims of mobbing have lower level of life satisfaction (27,28).

As it is known, mobbing refers to behaviors systematically directed to employers by their superiors, subordinates, or their peers such as bad treatment, threat, violence, and insult (23). Mobbing puts one in a situation in which the victim cannot defend himself against negative behaviors because of disproportionate power dynamics in parties (7). Thus, mobbing has quite serious physical and psychological outcomes for the victim. Social damages are damage to public image, exclusion at workplace and losing professional identity, losing his status in social environment and in family (23). One of the psychological consequences of mobbing is depression (21,31,56). How the individual perceives negatively himself, his life experiences and his future is named as "negative trilogy" by Beck and it explains almost all symptoms of depression (57). A person who is in depression perceives himself as worthless, inefficient, morally handicapped, and he blames himself for his negative experiences, and he thinks that others do not like him. Furthermore, he thinks that too many things were demanded from him, and that the world is full of insurmountable obstacles. He perceives the future as dark, prone to failure, and as a hopeless situation (57). It is not surprising that systematic exposure of the individual to bad treatment, threats, violence and insults together with inability to defend herself/himself due to disproportionate power dynamics causes depression symptoms. In parallel with this research results, it is reported in the literature that mobbing is highly correlated with depression (10,11,13,16-21).

The main finding of the present study is that depression partly mediates the relationship between mobbing and life satisfaction. This result shows that mobbing negatively influences life satisfaction both directly and via depression. According to Davenport et al. (22), mobbing begins with

conflicts between parties, and it continues with negative behaviors and attitudes towards the victim by one or more individuals. In this process, superior(s) support assailant(s) against victim because they misinterpret the situation under the influence of assailant(s). Assailant(s) in collaboration to superiors label the victim as mentally ill or difficult person. In general, the victim at this level, the victim is fired by giving way or he is compelled to resign. At the final step, if the victim feels hopeless against mobbing he experiences psychological problems, psychosomatic complaints due to his intense emotional tension and trauma. Life satisfaction is closely related to psychological health. There are studies in the literature reporting that depression negatively affects life satisfaction (24,26,27,32). Based on this study, it can be argued for interactions between mobbing-depression and life satisfaction.

Results of the present study conducted with health workers demonstrate that depression mediates the relationship between mobbing at workplace and life satisfaction. In sum, exposure to mobbing at workplace for a person (especially health worker) results in the emergence of depressive symptoms and this leads person to view his life quality as negative. When consider this in terms of the individual and the health sector, this situation creates reduction in job satisfaction, decrease in job performance, reluctance, feeling of boredom to work and decrement in productivity of the health institution. Therefore, seminars, conferences can be organized to increase the awareness of the mobbing victim, other workers and managers related to mobbing problem. Victim can acquire skills to cope with this life, to empower himself, to regain the control and to recover. Moreover, agencies helping mobbing victims and supportive groups can be formed. As also shown in this study, exposure to mobbing has serious outcomes for the individual. Therefore, to remove managerial and organizational factors related to mobbing, necessary precautions should be taken to generate an organization culture in which healthy personal relationships are considered as important.

In the present study, among the personal outcomes of mobbing depression and life satisfaction was



emphasized. There might be other mediators besides depression (self-esteem, exhaustion, job satisfaction, stress, loneliness) in the relationship between mobbing and life satisfaction. In the future, studies that provide the clearer picture of the current situation can be conducted by working on a model who also considers the variables mentioned above. One of the limitations of the study is that the sample constitutes health personnel who have been working for at least 6 months at the hospitals of a medium-sized city in the middle part of Turkey. Thus, results cannot be generalized to whole health professionals in Turkey. In the present study, gender, age and title variables among

socio-demographical variables were studied. "Working conditions" can also be an important socio-demographical variable for mobbing, depression and life satisfaction. The fact that this variable was not studied is another limitation of the present research. Certainly, studies which control more variables and use a broader sample would provide more comprehensive results. Another limitation is that data is based on health workers' self-report. Responses provided by choosing items from the scale may not truly represent real behaviors of the health workers. Therefore, results should be interpreted within the limitations of the scales.

## REFERENCES

- Diener E, Emmons RA, Larsen RJ, Griffin S. The satisfaction with life scale. *J Pers Assess* 1985; 49:71-75.
- Veenhoven R. The Study of Life Satisfaction. Chapter 1: In Saris WE, Veenhoven R, Scherpenzeel AC, Bunting B. (editors). *A Comparative Study of Satisfaction with Life in Europe*. Budapest: Eötvös University Press, 1996, 11-48.
- Diener E. Assessing subjective well-being: Progress and opportunities. *Soc Indic Res* 1994; 31:103-157.
- Diener E, Suh EM, Lucas RE, Smith H. Subjective well-being: three decades of progress. *Psychol Bull* 1999; 125:276-302.
- Dikmen AA. The relationship between work life and life satisfaction. *The Journal of the Faculty of Political Sciences* 1995; 3:115-140. (Turkish)
- Vartia M. The sources of bullying psychological work environment and organizational climate. *Eur J Work Organ Psy* 1996; 2:203-214.
- Leymann H. The content and development of mobbing at work. *Eur J Work Organ Psy* 1996; 5:165-184.
- Leymann H, Gustafsson A. Mobbing at work and the development of post-traumatic stress disorders. *Eur J Work Organ Psy* 1996; 5:251-275.
- Erturk, A. The course of mobbing experienced by school teachers and principals. Unpublished Master Thesis, University of Gazi, Ankara, 2005. (Turkish)
- Quine L. Workplace bullying in nurses. *J Health Psychol* 2001; 6:73-84.
- Yildiz S, Yildiz SE. Correlation between bullying and depression: a research on health persons in Kars. *Istanbul Commerce University Journal of Social Sciences* 2009; 8:133-150. (Turkish)
- Wilson CB. U.S. Businesses suffer from workplace trauma. *Pers J* 1991; 70:47-50.
- Niedhammer I, David S, Degioanni S. Association between workplace bullying and depressive symptoms in the French working population. *J Psychosom Res* 2006; 61:251-259.
- Einarsen S. Harassment and bullying at work: a review of the Scandinavian approach. *Aggress Violent Behav* 2000; 5:379-401.
- Leymann H. Mobbing and psychological terror at workplace. *Violence Vict* 1990; 5:119-126.
- Einarsen S, Skogstad A. Bullying at work: epidemiological findings in public and private organizations. *Eur J Work Organ Psy* 1996; 5:185-201.
- Hansen AM, Høgh A, Persson R, Karlson B, Garde AH, Ørbæk P. Bullying at work, health outcomes, and physiological stress response. *J Psychosom Res* 2006; 60:63-72.
- Lewis SE, Orford J. Women's experiences of workplace bullying: changes in social relationships. *J Community Appl Soc Psychol* 2005; 15:29-47.
- Nolfe G, Petrella C, Blasi F, Zontini G, Nolfe G. Psychopathological dimension of harassment in the workplace (Mobbing). *Int J Ment Health* 2007; 36:67-85.
- Sacco WP, Dumont CP, Dow MG. Attributional, perceptual, and affective responses to depressed and nondepressed marital partners. *J Consult Clin Psychol* 1993; 61:1076-1082.

21. Zapf D. Organizational, work group related and personal causes of mobbing/bullying at work. *Int J Manpow* 1999; 20:70-85.
22. Davenport N, Schwartz RD, Eliot GP. Emotional Abuse in the Workplace Mobbing. Onertoy OC (Translation Editor) Istanbul: Sistem Publication, 2003, 67-72. (Turkish)
23. Tinaz P. Mobbing: Mobbing in the workplace. *Labour and Society* 2006; 3:11-22. (Turkish)
24. Diener E, Ryan K. Subjective well-being: a general overview. *S Afr J Psychol* 2009; 39:391-406.
25. Dockery AM. Happiness, life satisfaction and the role of work: evidence from two Australian surveys. [http://worlddatabaseofhappiness.eur.nl/hap\\_bib/freetexts/dockery\\_am\\_2003.Pdf](http://worlddatabaseofhappiness.eur.nl/hap_bib/freetexts/dockery_am_2003.Pdf). Accessed August 13, 2012.
26. Stein MB, Heimberg RG. Well-being and life satisfaction in generalized anxiety disorder: comparison to major depressive disorder in a community sample. *J Affect Disord* 2004; 79:161-166.
27. Karakus M, Cankaya IH. Examining a model related to mobbing incurred by teachers. *H. U. Journal of Education* 2012; 42:225-237. (Turkish)
28. Cakir B. The effect of bullying in the workplace on leave the job. Unpublished Master Thesis, University of Marmara, Istanbul, 2006. (Turkish)
29. Cobanoglu S. Mobbing, Fighting Methods and Emotional Aggression in the Workplace. Istanbul: Timas Yayinlari, 2005, 141-142. (Turkish)
30. Yildirim D, Yildirim A, Timucin A. Mobbing behaviors encountered by nurse teaching staff. *Nursing Ethics* 2007; 14:447-463.
31. Yildirim A, Yildirim D. Mobbing in the workplace by peers and managers: mobbing experienced by nurses working in healthcare facilities in Turkey and its effect on nurses. *J Clin Nurs* 2007; 16:1444-1453.
32. Yildirim A, Hachisanoglu R. Quality of life and effective variables among health care professionals. *Journal of Psychiatric Nursing* 2011; 2:61-68. (Turkish)
33. Dikmetas E, Top M, Ergin G. An examination of mobbing and burnout of residents. *Turk Psikiyatri Derg* 2011; 22:137-149. (Turkish)
34. Bahceci-Gecici N, Sagkal T. A Survey about the state of nurses who experienced mobbing in Odemis. *Journal of Nursing Science & Art* 2011; 4:53-62. (Turkish)
35. Tutar H, Akbolat M. Perceptions of mobbing of health employees in terms of genders of managers. *S.U. Journal of the Social Sciences Institute* 2012; 28:19-29. (Turkish)
36. Caricki IH, Yavuz H. The mobbing (psychological violence) perception among employees: a study on health sector. *SDU Journal of the Social Sciences Institute* 2009; 2:47-62. (Turkish)
37. Karcioğlu F, Akbas S. The relationship between mobbing and job satisfaction in workplace. *Journal of Economics & Administrative Sciences* 2010; 24:139-161. (Turkish)
38. Yavuz H. The mobbing (psychological violence) perception factors in employees: a study on SDU Medical Faculty. Unpublished Master Thesis, University of Suleyman Demirel, Isparta, 2007. (Turkish)
39. Kingma M. Workplace violence in the health sector: a problem of epidemic proportion. *Int Nurs Rev* 2001; 48:129-130.
40. Cemaloglu N. The relationship between organizational health and bullying that teachers experience in primary schools in Turkey. *Educ Res Quarterly* 2007; 31:3-28.
41. Cemaloglu N. The relationship between school administrators' leadership styles and bullying. *H. U. Journal of Education* 2007; 33:77-87. (Turkish)
42. Cemaloglu N. The exposure of primary school teachers to bullying: an analysis of various variables. *Soc Behav Pers* 2007; 35:789-801.
43. Cemaloglu N. Primary principals' leadership styles, school organizational health and workplace bullying. *J Edu Admin* 2011; 49:495-512.
44. Hisli N. A study on the validity of the Beck depression inventory. *Turkish Journal of Psychology* 1988; 6:118-126. (Turkish)
45. Savasir I, Sahin NH. The Evaluation in Cognitive Behavioral Therapy: Frequently Used Scales. Ankara: Turkish Psychological Association Publications, 1997, 29-30. (Turkish)
46. Koker S. Comparison of life satisfaction of healthy and unhealthy adolescents. Unpublished Master Thesis, University of Ankara, 1991. (Turkish)
47. Yetim U. Life satisfaction: a study based on the organization of personal projects. *Soc Indic Res* 1993; 29:277-289.
48. Baron RM, Kenny DA. The moderator-mediator variable distinction in social psychological research: conceptual, strategic and statistical considerations. *J Pers Soc Psychol* 1986; 51:1173-1182.
49. Karaatli, M. Regulation and Representation of the Data: In Kalaycioglu S (editor). *SPSS Applied Multivariate Statistical Techniques*. Second ed., Ankara: Asil Yayin Dagitim Ltd. Sti., 2006; 3-47. (Turkish)
50. Dogan A, Deniz ME, Odabas H, Ozyesil Z, Ozgirgin N. Job and life satisfaction of the medical staff in rehabilitation centers. *Turkish Journal of Physical Medicine and Rehabilitation* 2012; 58:16-21.

51. Ozgur G, Gumus AB, Gurdag S. Investigation of psychiatric symptoms in nurses working in a hospital. *Düşünen Adam: Journal of Psychiatry and Neurological Sciences* 2011; 24:296-305. (Turkish)
52. Alcelik A, Deniz F, Yesildal N, Mayda AS, Serifi BA. Health survey and life habits of nurses who work at the Medical Faculty hospital at AIBU. *TAF Preventive Medicine Bulletin* 2005; 4:55-65. (Turkish)
53. Björkqvist K. Social defeat as a stressor in humans. *Physiol Behav* 2001; 73:435-442.
54. Gokce AT. Mobbing: Example of mobbing training in the workplace. Ankara: Ogreti Publication, 2008, 46-49. (Turkish)
55. Extremera N, Duran A, Rey L. The moderating effect of trait meta-mood and perceived stress on life satisfaction. *Pers Individ Dif* 2009; 47:116-121.
56. Hansen AM, Hogh A, Persson R. Frequency of bullying at work, physiological response, and mental health. *J Psychosom Res* 2011; 70:19-27.
57. Savasir I, Yildiz S. Cognitive-Behavioral Treatment of Depression: In Savasir I, Boyacioglu G, Kabakci E (editors). *Cognitive-Behavioral Therapy*. Ankara: Turkish Psychological Association Publications, 1996, 17-49. (Turkish)