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## General mental state and quality of working life of call center employees

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### ABSTRACT

Working conditions of call centers lead to serious mental problems in employees as well as affecting their working life quality due to factors such as excessive workload, complex and uncertain work environment, repetitive tasks, type of tasks that ignore notions of employees, benefiting from only a part of their skills, and poor labor inspection. This study aims to determine the general mental state and quality of working life of call center employees. The sample of this descriptive study consisted of 200 employees working at Sivas 'ALONET' call center between December 01, 2018, and December 31, 2018. We used the Personal Information Form, General Health Questionnaire-28 (GHQ-28), and Professional Quality of Life Scale (ProQOL) as data collection tools. We collected the data from the employees through face-to-face interviews during working hours. During the analysis, we used Pearson's Product Moments Correlation Analysis, *t*-test, Mann Whitney U test, Kruskal Wallis H test, and Dunnett T3 Post Hoc test. We found that the mean score of the employees in GHQ-28 was  $5.34 \pm 5.60$ , and the compassion satisfaction, burnout, and compassion fatigue subscales of the ProQOL were  $36.07 \pm 9.88$ ,  $14.40 \pm 7.74$ , and  $13.89 \pm 9.31$ , respectively. While the score of the employees from the overall GHQ-28 was significantly negatively correlated with the score from the compassion satisfaction subscales of the ProQOL, we found a significantly positive correlation between the scores of burnout and compassion fatigue subscales of the ProQOL. The findings of this study revealed that approximately 45.8% of the call center employees were mentally in the at-risk group, that their compassion satisfaction level was moderate, and that their burnout and compassion fatigue levels were low. Therefore, stress factors that employees facing in their working life should be determined, and training, counseling, and support programs should be carried out to prevent them from suffering from burnout and compassion fatigue.

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Call center employees;  
mental state; quality of  
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### Introduction

Call centers are new organizations aiming to provide technology and offer services required by institutions that can be accessed 24 hours a day and 7 days a week. They rapidly transfer customer complaints to relevant units to find solutions and answers to customers' questions by analyzing their requests and make the establishment, maintenance, and management of customer relationships possible. In countries that have reached or are progressing to reach certain levels, call centers with increasing numbers aim to find the right solution to the problems of customers and increase the service standard they provide with the knowledge they have.<sup>1</sup>

Call centers, despite being a unique business field, cause employees to experience several physical, biological, economic, and psychosocial challenges. The

general health state of people working at the call centers may deteriorate due to musculoskeletal problems, visual impairments, hoarseness, and loud noise-induced acoustic trauma.<sup>2,3</sup> The working environment with an open office design, poor indoor air quality, and a large number of employees working together poses a risk for contagious diseases and infections. Low wages and health expenses increase the economic burden of call center employees. Working at a call center causes employees to suffer from stress due to reasons such as excessive workload, concentration problems, complex and uncertain work environment, shift work, repetitive tasks, and desire to achieve the goal.<sup>4-6</sup> In addition, the intense and complex tasks, and widespread control and supervision over the production process, employees being forced by managers to take fewer and shorter breaks, and to meet their needs in a short time are among the other factors that

increase employees' stress.<sup>7</sup> That call center employees are expected to communicate with the customer affably on the phone, and that imbalances between the emotions expressed and felt cause burnout and depression by decreasing control over the job.<sup>8,9</sup> Such negative factors that employees face over time and the accompanying mental problems are thought to affect the quality of working life.

Studies conducted to determine the quality of working life of call center employees focus on the investigation of the organizational structure. Therefore, there is a need for studies in which the individual characteristics, social conditions, and mental states of employees are evaluated together with organizational dynamics. This study was conducted to determine the general mental state and quality of working life of call center employees.

## Methods

The population of this descriptive study consisted of 200 customer service representatives working in the 'ALONET' call center in Sivas, a province located in the eastern part of the Central Anatolia region of Turkey. Of these people in the study population, 177 who accepted to participate in the study, who were not taking in-service training, and who were not on leave or sick leave were included in the study sample. Those who did not want to participate in the study did not state any reason.

## Ethical issues

Before the study was conducted, the ethics committee approval was obtained from Sivas Cumhuriyet University Faculty of Medicine Ethics Committee (dated April 30, 2018, numbered 04/28) and permission was obtained from the institution where the study was to be conducted. After the participants were told that their participation in the study was voluntary, and they were informed about the study verbally and in writing, their consent was obtained.

## Data collection tools

We used the Personal Information Form, General Health Questionnaire-28 (GHQ-28), and Professional Quality of Life Scale (ProQOL) to collect data.

## Personal information form

The form was developed by the researcher based on the pertinent literature.<sup>7,10-12</sup> It consists of 16

questions related to the employees' sociodemographic variables (age, sex, marital status, educational status, family type, etc.), health variables (physical activity level), and job variables (choosing the profession willingly, considering the profession suitable for oneself, etc.).

## General health questionnaire-28 (GHQ-28)

This questionnaire was developed by Goldberg in 1972. The reliability and validity of the Turkish version of the questionnaire were studied by Kılıç (1996), and the Cronbach's alpha value was found 0.94. According to the factor analysis conducted in this study, the Cronbach's alpha value was 0.93. The GHQ-28 is a self-administered screening test developed to detect mental health problems encountered in the community and non-psychiatric clinical settings. The questionnaire consists of four subscales: somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. Each subscale consists of seven items. The minimum and maximum possible scores from the scale are 0 and 28 respectively, and a higher score indicates more probability to have mental disorder. A score of five and above indicates the person is at risk of mental health.<sup>13,14</sup>

## Professional quality of life scale (ProQOL)

The ProQOL was developed by B. Hudnall Stamm in 2005. The reliability and validity study of the Turkish version of the ProQOL was performed by Yeşil et al. (2011). It is a self-report assessment tool consisting of 3 subscales (compassion satisfaction, burnout, and compassion fatigue) and 30 items. The responses given to the items in the scale are rated on a six-point Likert type scale ranging from "Never" (0) to "Very often" (5). Alpha reliability values of the subscales are 0.87, 0.72, and 0.80, respectively. According to the factor analysis conducted in the present study, the Cronbach's alpha values of the compassion satisfaction, burnout, and compassion fatigue subscales were 0.86, 0.89, and 0.83, respectively. The scale is reported to be an effective measurement tool in collecting data, especially for those working under intense stress.<sup>15,16</sup>

## Data collection

Data collection tools were administered at appropriate hours after the approval of the managers of the institution was obtained. The participating employees filled in the tools in groups during breaks between

09.00 a.m. and 5 p.m. from December 01, 2018 to December 31, 2018, under the supervision of the researcher after they were informed about the study. It took them approximately 15 minutes to fill in the questionnaires.

### Data analysis

The data were analyzed using the SPSS 22.0 software. The Kolmogorov-Smirnov test was used to determine whether the data were normally distributed. When the data met the parametric conditions (obtaining the data with the interval and ratio scales, normal distribution), the independent samples *t*-test was used. When two independent groups were compared in terms of a nonparametric variable obtained by measurement, the Mann Whitney U test was used, while the Kruskal-Wallis test was used for independent groups more than two. Dunnett's T3 Post Hoc test was used to determine whether the groups were different from each other. The relationship between variables was determined through Pearson's correlation analysis. All the mean values were given as "± SD min-max" and the margin of error was taken as 0.05.

### Results

The mean age of the employees included in the study was  $29.76 \pm 4.524$  (Min: 20; Max: 47) years. Of these employees, 61.6% were women, 54.2% were in the 20–29 age group, 71.2% were university graduates, 58.2% were single, 13.6% were extended family, 14.7% perceived their physical activity level as sedentary, 29.4% did not choose their profession willingly, and 24.3% did not consider their profession suitable for them (Table 1).

While the mean score of the participants from the overall GHQ-28 was  $5.34 \pm 5.60$ , the mean scores from the compassion satisfaction, burnout, and compassion fatigue subscales of the ProQOL were  $36.07 \pm 9.88$ ,  $14.40 \pm 7.74$ , and  $13.89 \pm 9.31$ , respectively (Table 2), and 45.8% obtained a score of 5 and above from the GHQ-28 (Table 3).

According to correlation values of the GHQ-28 and ProQOL subscales, we found that the correlation values between the GHQ-28 scores and compassion satisfaction scores were negatively significant, while the correlation values between burnout and compassion fatigue scores were positively significant. The GHQ-28 scores decreased as the compassion satisfaction scores increased, and the GHQ-28 scores increased with the burnout and compassion fatigue scores (Table 4).

**Table 1.** Sociodemographic, health, and working life variables of the employees.

Characteristics	N	%
<b>Sex</b>		
Women	109	61.6
Men	68	38.4
<b>Age</b>		
20–29	96	54.2
30–39	75	42.4
40–49	6	3.4
<b>Mean age (SD ± Mean):</b> $29.76 \pm 4.524$ (Min: 20; Max:47)		
<b>Educational status</b>		
High school or equivalent	48	27.1
University	126	71.2
Postgraduate	3	1.7
<b>Marital status</b>		
Single	103	58.2
Married	64	36.2
Divorced	10	5.6
<b>Family Type</b>		
Nuclear	139	78.5
Extended	24	13.6
Fragmented	14	7.9
<b>Physical activity level</b>		
Very active	12	6.8
Active	57	32.2
Irregularly active	82	46.3
Sedentary	26	14.7
<b>Choosing the profession willingly</b>		
Yes	125	70.6
No	52	29.4
<b>Considering the profession suitable for oneself</b>		
Yes	134	75.7
No	43	24.3

**Table 2.** Distribution of the mean scores of the employees from the GHQ-28 and ProQOL.

	N	Min–Max <sup>a</sup>	Min–Max <sup>b</sup>	Mean ± SD
<b>GHQ-28</b>	177	0–28	0–22	$5.34 \pm 5.60$
<b>ProQOL</b>				
Compassion satisfaction	177	0–50	0–50	$36.07 \pm 9.88$
Burnout	177	0–50	0–31	$14.40 \pm 7.74$
Compassion fatigue	177	0–50	0–40	$13.89 \pm 9.31$

<sup>a</sup>The minimum and maximum possible scores to be obtained from the scale.

<sup>b</sup>The minimum and maximum scores obtained from the scale in the present study.

There was no statistically significant correlation between the variables such as sex, age groups, education level, marital status, and the mean scores from the overall GHQ-28 and all the subscales scores of the ProQOL ( $p > 0.05$ ). There was a significant correlation between the family type variable and the mean scores from the overall GHQ-28, and the burnout and compassion fatigue subscales of the ProQOL, and between the physical activity level variable and the mean scores from the overall GHQ-28, and the burnout subscale of the ProQOL ( $p < 0.05$ ) (Table 4).

There was a significant difference between choosing the profession willingly and considering the profession suitable for oneself variables related to work and the GHQ-28 mean scores. Also, there was a statistical

**Table 3.** Distribution of the mean scores of the employees from the GHQ-28.

GHQ-28 scores	<i>N</i>	%
0–4	96	54.2
≥5	81	45.8

**Table 4.** Correlation values related to the relationship between GHQ-28 and ProQOL subscales.

		Compassion satisfaction	Burnout	Compassion fatigue
GHQ-28	<i>r</i>	-.438*	.530*	.330*
	<i>p</i>	.000	.000	.000

\* $p < 0.001$ .

significance between choosing the profession willingly, all subscales of ProQOL and considering the profession suitable for oneself, and the mean scores of the ProQOL compassion satisfaction and burnout subscales ( $p < 0.05$ ) (Table 5).

## Discussion

Call centers are a large work field in both developed and developing countries all over the world. In Turkey, with the high number of employees employed in call centers, their contribution to employment in the service sector is exponentially increasing. Job-specific factors in this sector expose employees to many physical, biological, economic, and psychosocial risk factors. This study aims to determine the general mental state and quality of working life of call center employees, and it is expected to fill a significant part of the gap in the literature because the number of studies in which the mental state and quality of working life of call center employees (compassion satisfaction, burnout, and compassion fatigue) are addressed together is quite few.

The mean age of the employees participating in the study was 29.76 years. Of these employees, 61.6% were women and 71.2% were university graduates. We investigated the relationship between the sociodemographic variables of call center employees and the mean GHQ-28 scores and the mean score of the ProQOL subscale (compassion satisfaction, burnout, and compassion fatigue).

We found that the mean GHQ-28 scores of the employees were  $5.34 \pm 5.60$  and 45.8% had 5 scores or higher. This finding revealed that call center employees are in the risk group of depression and anxiety disorders. Similar to our results, the mean GHQ-28 score was found  $5.79 \pm 4.01$  in a study conducted with 254 factory employees in Japan.<sup>17</sup> A couple of studies in the literature showed that a significant percentage of call center employees are in the mentally risky

group.<sup>7,10,11,18</sup> That approximately 45.8% of call center employees are in the risk group in this study is associated with high stress, working conditions, negative work experiences, intense work tempo, and emotional distress.

We found that the mean scores of the call center workers' ProQOL subscales were  $36.07 \pm 9.88$  for compassion satisfaction,  $14.40 \pm 7.74$  for burnout, and  $13.89 \pm 9.31$  for compassion fatigue. These findings show that the compassion satisfaction of the employees is moderate while burnout and empathy fatigue is low. The study conducted by Garcia (2018) with consulting experts had consistent and similar findings to the present study.<sup>19</sup> The low level of burnout results in the present study is an unexpected finding. We think this is because that the institution has positive factors such as its good status in the sector and its structure serving in the public sphere. The studies conducted in the call center by using different measurement tools maintained that there were different results in terms of compassion satisfaction and burnout.<sup>7,20</sup> These differences may have stemmed from the unique nature of the call center business and the diversity of institutions with call centers. It is an expected finding that the level of compassion fatigue is low in this study because the institution where the study was conducted provides support services in the public sphere.

We did not find any significant difference between the sex, age, education level, and marital status of the employees and the GHQ-28 score averages. Some studies conducted with call center employees and different sample groups revealed there was no significant difference between the age, education level, and marital status of the employees and the mean GHQ score, while there was a significant difference between the sex of the employees and the GHQ score averages.<sup>7,11,21–23</sup> We found that the mean GHQ scores of female employees were higher. In general, women face more risk factors such as physical, mental, and social aspects than men during their lifetime. They are exposed to more stress due to their responsibilities outside of working life, and thus mental health problems are more common.<sup>24</sup> According to sociodemographic variables, we determined that the GHQ-28 mean score of employees with extended family type was significantly higher. It can be associated with the communication difficulties of the extended family structure because of the coexistence of more than one generation within the family and the limitations of social life. The study conducted with individuals who applied to the family health center showed that the

**Table 5.** Comparison of the sociodemographic and working life variables of the employees and the mean scores from the GHQ-28 and the subscales of the ProQOL.

	GHQ-28	Compassion satisfaction	Burnout	Compassion fatigue
	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD
<b>Sex</b>				
Women	5.03 $\pm$ 4.90	35.85 $\pm$ 9.683	14.03 $\pm$ 7.763	13.51 $\pm$ 9.256
Men	5.84 $\pm$ 6.57	36.43 $\pm$ 10.263	15.00 $\pm$ 7.748	14.51 $\pm$ 9.447
	$t = -.937$	$t = -.374$	$t = -.811$	$t = -.694$
	$p = .350$	$p = .709$	$p = .418$	$p = .488$
<b>Age</b>				
20–29	5.57 $\pm$ 5.33	35.36 $\pm$ 10.197	14.47 $\pm$ 8.042	14.19 $\pm$ 9.779
30–39	5.16 $\pm$ 6.08	36.52 $\pm$ 9.258	14.85 $\pm$ 7.182	13.87 $\pm$ 8.878
40–49	3.83 $\pm$ 3.19	41.83 $\pm$ 11.940	7.67 $\pm$ 8.017	9.67 $\pm$ 6.947
	KW = 1.257	KW = 3.367	KW = 4.948	KW = 1.200
	$p = .533$	$p = .186$	$p = .084$	$p = .549$
<b>Educational status</b>				
High school or equivalent	4.40 $\pm$ 5.05	35.08 $\pm$ 9.423	14.88 $\pm$ 6.809	13.75 $\pm$ 9.409
University	5.70 $\pm$ 5.74	36.52 $\pm$ 9.985	14.15 $\pm$ 8.120	13.91 $\pm$ 9.375
Postgraduate	5.33 $\pm$ 8.39	33.00 $\pm$ 15.133	17.33 $\pm$ 7.234	15.67 $\pm$ 7.638
	KW = 2.148	KW = 1.403	KW = .799	KW = .272
	$p = .342$	$p = .496$	$p = .671$	$p = .873$
<b>Marital status</b>				
Single	5.41 $\pm$ 5.81	36.20 $\pm$ 10.254	13.96 $\pm$ 7.503	13.47 $\pm$ 8.966
Married	5.58 $\pm$ 5.44	35.56 $\pm$ 9.296	15.50 $\pm$ 8.346	14.63 $\pm$ 9.781
Divorced	3.10 $\pm$ 4.09	38.00 $\pm$ 10.392	11.90 $\pm$ 5.587	13.70 $\pm$ 10.510
	KW = 1.860	KW = 1.005	KW = 2.701	KW = .318
	$p = .395$	$p = .605$	$p = .259$	$p = .853$
<b>Family type</b>				
Nuclear	4.86 $\pm$ 8.33	36.58 $\pm$ 9.850	13.53 $\pm$ 7.367	12.94 $\pm$ 8.526
Extended	8.33 $\pm$ 6.36	33.13 $\pm$ 10.238	19.50 $\pm$ 8.703	19.63 $\pm$ 11.754
Fragmented	5.00 $\pm$ 4.98	36.14 $\pm$ 9.412	14.36 $\pm$ 6.846	13.64 $\pm$ 9.394
	KW = 6.379	KW = 2.856	KW = 10.947	KW = 6.632
	$p = .041$	$p = .240$	$p = .004$	$p = .036$
	$2 > 1$			
<b>Physical activity level</b>				
Very active	3.58 $\pm$ 3.48	38.67 $\pm$ 6.155	12.50 $\pm$ 10.050	12.67 $\pm$ 9.566
Active	3.54 $\pm$ 5.23	37.81 $\pm$ 9.737	12.16 $\pm$ 8.276	11.79 $\pm$ 9.001
Irregularly active	6.12 $\pm$ 5.22	35.38 $\pm$ 9.667	15.32 $\pm$ 6.303	14.41 $\pm$ 8.586
Sedentary	7.62 $\pm$ 7.03	33.27 $\pm$ 11.671	17.31 $\pm$ 8.456	17.46 $\pm$ 11.197
	KW = 15.159	KW = 4.282	KW = 10.975	KW = 7.362
	$p = .002$	$p = .233$	$p = .012$	$p = .061$
<b>Choosing the profession willingly</b>				
Yes	4.59 $\pm$ 5.33	37.92 $\pm$ 9.156	13.32 $\pm$ 7.675	12.91 $\pm$ 8.933
No	7.13 $\pm$ 5.87	31.63 $\pm$ 10.242	17.00 $\pm$ 7.367	16.27 $\pm$ 9.866
	$t = 2.807$	$t = 4.016$	$t = 2.939$	$t = 2.208$
	$p = .006$	$p = .000$	$p = .004$	$p = .029$
<b>Considering the profession as suitable for oneself</b>				
Yes	4.70 $\pm$ 5.48	37.91 $\pm$ 8.683	13.68 $\pm$ 7.805	13.49 $\pm$ 8.867
No	7.33 $\pm$ 5.54	30.35 $\pm$ 11.242	16.65 $\pm$ 7.207	15.19 $\pm$ 10.604
	$t = 2.724$	$t = 4.609$	$t = 2.212$	$t = 1.042$
	$p = .007$	$p = .000$	$p = .028$	$p = .299$

difference between family type and GHQ score averages was not significant.<sup>25</sup> This difference is thought to be caused by the sample group. In the literature, there is not enough evidence to explain the relationship between the family type of call center employees and their mental state. This study states that the family type of the employees is a significant factor in the mental state, but further studies are required.

We found no significant difference between the sex, age, education level, and marital status of the employees and the mean scores of the ProQOL subscale. The study conducted in the emergency medical help call center in France revealed that there was no significant difference between the sex and age of the employees and the ProQOL subscale score averages

and that there was a significant difference between the education level and the mean score of the ProQOL compassion fatigue subscale.<sup>26</sup> The same study stated that the education level of employees increases as the mean score of ProQOL compassion fatigue decreases, and education level might be an effective protective factor against compassion fatigue.<sup>26</sup> This situation can be explained by the fact that call centers are a sector that can serve in many fields and can differ based on the field of employees. Unlike this present study, the studies conducted with tourism workers and nurses demonstrated that there was a significant difference between age, sex, education level, and marital status and the mean scores of the ProQOL subscales.<sup>27–29</sup> We think that this difference is motivated by the

sample groups. Sociodemographic variables also indicated that the employees with extended family type had significantly higher ProQOL burnout and compassion fatigue subscale scores. The fact that the extended family type is characterized by economic and emotional difficulties causes burnout and compassion fatigue in employees. Similar to the present study, the study conducted on factory workers suggested that the burnout level of workers with extended families was high.<sup>30</sup> In the literature, there are not enough findings revealing the effect of family type on the quality of working life of employees. The family type of employees can have positive and negative effects on business life. This study states that family type is a factor that affects the quality of working life of employees, but further studies are required. Though it is not possible to examine sociodemographic variables, the study contains essential findings since it states that the quality of working life of call center employees is not related to individual variables.

In this study, a significant difference was found between the GHQ-28 and the ProQOL burnout subscale mean scores of the employees who defined their physical activity level as sedentary ( $p < 0.05$ ). It is stated in the literature that the GHQ scores and burnout levels of employees with regular physical activity are significantly lower, and they are similar to these findings.<sup>31,32</sup> In addition, certain studies emphasize that regular physical activity reduces the probability of mental health problems and improves mental health.<sup>33–37</sup> Call center employees generally work by sitting in the same position and looking at the computer screen. Therefore, this situation increases the risk of mental problems such as anxiety, burnout, and depression in employees who do not have regular physical activity outside of work, thus adversely affecting the quality of working life.

According to work-related variables of call center employees, it was found that there was a significant relationship between choosing the profession willingly and the mean scores of all subscales of GHQ-28 and ProQOL. Also, there was a significant relationship between considering the profession suitable for oneself and the mean scores of GHQ-28, ProQOL compassion satisfaction and burnout ( $p < 0.05$ ). Similar studies found that the GHQ and burnout mean scores of call center employees choosing the profession willingly and considering it suitable for themselves were significantly lower.<sup>7,11,38</sup> Furthermore, in studies conducted on different sample groups, it was stated that the variables of choosing the profession willingly and considering the profession suitable for oneself significantly

affect the levels of compassion satisfaction and compassion fatigue of employees.<sup>39–41</sup> Thus, it is not wrong to say that positive attitudes toward the profession increase compassion satisfaction and decrease compassion fatigue of employees. The fact that the call center is considered a temporary job place, that employees have no career goals in this field, and that call centers have a high turnover rate may be closely related to work-related variables. For this reason, we think that call center employees choosing the profession willingly and finding the job suitable for them will allow them to be more productive and successful in their business life, which positively affects their mental state and working life quality.

The correlation of the GHQ-28 scores with the ProQOL subscale scores maintained a significance for each subscale ( $p < 0.001$ ). There was a significantly negative correlation between the GHQ-28 score and the ProQOL compassion satisfaction subscale scores, and a significantly positive relationship between burnout and compassion fatigue subscale scores. It can be said that as the compassion satisfaction score increases, the GHQ-28 score decreases, and as the burnout and empathy fatigue scores increase, the GHQ-28 score increases. The ProQOL compassion satisfaction and burnout subscales were significant predictors of GHQ-28. In addition to decreasing the level of burnout, increasing the level of compassion satisfaction can have a certain positive impact on the mental state of employees and their working life quality. Yadollahi et al. (2016) found a negative and significant relationship between GHQ-28 and the ProQOL compassion satisfaction subscale and a significantly positive relationship between burnout and compassion fatigue subscales.<sup>42</sup> According to the pertinent literature, it is not wrong to say that burnout adversely affects mental health, and compassion satisfaction protects employees from lack of self-confidence, anxiety, and depression.<sup>7,20,43,44</sup> Our study presents similar findings to other studies.

## Conclusion

In the present study, approximately 45.8% of the call center employees were mentally in the at-risk group, and while they had a moderate level of compassion satisfaction, their burnout level was low. We found that organizational factors affected the employees' general mental state and quality of working life more than individual factors did due to the working conditions of call centers. The attitudes of the employees toward the profession appear as the determining

factors. We think that compassion satisfaction, which affects the quality of working life, protects employees against mental problems such as anxiety, burnout, and depression that may adversely affect their health. Therefore, it is useful to pursue strategies that will improve employees' relations with their job. The stress factors that employees are likely to face in their working life should be determined, and training, support, and counseling programs that will prevent mental health problems and increase their quality of working life should be carried out. We recommend that call center employees should have mental health screenings at regular intervals, and they should be supported by physical and social activities.

### Limitations of the study

The most notable limitation of the study was that it was carried out in a single institutional call center. The fact that the call center included in the study was a public institution and that the institution was in a quite successful position in the sector may have caused the employees to have positive thoughts about the institution they worked for. We recommend that future studies should include larger samples and more than one call center so that it would be possible to obtain results that can be generalized to a larger population.

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