MCBU SBED
MANİSA CELAL BAYAR ÜNİVERSİTESİ SAĞLIK BİLİMLERİ ENSTİTÜSÜ DERGİSİ
MANISA CELAL BAYAR UNIVERSITY JOURNAL OF INSTITUTE OF HEALTH SCIENCE
ISSN: 2147-9607

ARAŞTIRMA MAKALESİ
RESEARCH ARTICLE
CBU-SBED, 2024, 11 (4): 681-688

Evaluation of Diet Quality, Work Stress and Anxiety Status of White and Blue Collar Industrial Workers

Beyaz ve Mavi Yakalı Sanayi Çalışanlarının Diyet Kalitesi, İş Stresi ve Kaygı Durumlarının Değerlendirilmesi

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Gönderim Tarihi / Received:19.02.2024
Kabul Tarihi / Accepted: 19.12.2024
DOI: 10.34087/cbusbed.1439816

Öz

Amaç: Bu çalışma, endüstriyel kuruluşlarda farklı pozisyonlarda çalışan bireylerin beslenme kalitesi, iş stresi ve kaygıları arasındaki ilişkiyi incelemek için yürütülmüştür.
Gereç ve Yöntemler: Bu çalışma İstanbul'daki sanayi kuruluşlarında çalışan 18-65 yaş aralığındaki 45'i beyaz ve 87'si mavi yakalı olan toplam 132 gönüllü ile yürütülmüştür. Çalışmada, iş stresi ve kaygı ölçümleri için İş Stresi Ölçeği ve Beck Anksiyete Envanteri, diyet kalitesi için ise Sağlıklı Yeme İndeksi-2015 (HEI-2015) kullanılarak 24 saatlik yemek kayıtları kullanılmıştır.
Bulgular: Bu araştırmada beyaz yakalı çalışanların %48,9'u, mavi yakalı çalışanların ise %49,4'ü yüksek düzeyde iş stresi yaşadığı bulunmuştur (p>0,05). Beyaz yakalı çalışanların %48,9'unda, mavi yakalı çalışanların ise %39,1'inde kaygı tespit edilmiştir (p>0,05). Beyaz yakalı çalışanların %75,6'sının, mavi yakalı çalışanların ise %72,4'ünün beslenme kalitesi kötü bulunmuştur. Beck Anksiyete Envanteri ve HEI-2015 sonuçları ile iş stresi karşılaştırıldığında istatistiksel olarak anlamlı farklılıklar tespit edilmiştir (sırasıyla p=0,005 ve p=0,030). Mavi yakalı sanayi işçileri, beyaz yakalı işçilere (enerji 1979,1 kkal; karbonhidratlar 261,2±78,61 g/gün) kıyasla daha yüksek günlük enerji (2277,3 kkal) ve karbonhidrat (295,5±77,50 g/gün) alımı olduğu belirlenmiştir (p=0,015). İş stresini etkileyen dikkat çekici beslenme alışkanlıkları arasında atıştırmalıkların ve öğle yemeğinin atlanması yer almıştır (p<0,001). İş stresinin kaygıyı artırdığı ve beslenme kalitesini olumsuz etkilediği belirlenmiştir (p<0,05). İş stresi, Beck anksiyete ve HEI-2015 ölçeği verilerinde mavi yakalı ve beyaz yakalı çalışanlar arasında fark gözlenmemiştir (p>0,05).
Sonuç: İşe bağlı stres, çalışanların fiziksel ve psikolojik refahı ve beslenme kalitesi açısından çok önemlidir. Organizasyonlarda beslenme kalitesini artırmaya yönelik stratejiler geliştirmek, iş stresi ve kaygıyı hafifletmeye yardımcı olabileceği düşünülmektedir.

Anahtar Sözcükler: Diyet kalitesi, iş stresi, kaygı, sağlıklı beslenme indeksi, sanayi çalışanı

Abstract

Aims: This study examines the relationship between nutritional quality, work stress, and anxiety of individuals working in different positions in industrial organizations.
Material and Methods: This study was conducted with a total of 132 volunteers, 45 white-collar and 87 blue-collar, between the ages of 18-65, working in industrial establishments in İstanbul. The study employed the Work

Stress Scale and Beck Anxiety Inventory for work stress and anxiety measurements and the Healthy Eating Index-2015 (HEI-2015) for diet quality, using 24-hour food records.
Results: In this research, 48.9% of white-collar employees and 49.4% of blue-collar employees experience high levels of job stress ($p>0.05$). Anxiety was found in 48.9% of white-collar workers and 39.1% of blue-collar workers ($p>0.05$). The diet quality of 75.6% of white-collar workers and 72.4% of blue-collar workers was poor. Statistically significant differences were identified when comparing job stress with the Beck Anxiety Inventory and HEI-2015 results ($p=0.005$ and $p=0.030$, respectively). Blue-collar industrial workers reported higher daily energy intake (2277.3 kcal) and carbohydrates (295.5±77.50 g/day) compared to white-collar workers (energy 1979.1 kcal; carbohydrates 261.2±78.61 g/day), with significant differences in calorie and carbohydrate consumption ($p=0.015$). Noteworthy dietary habits influencing work stress included skipping snacks ($p<0.001$) and lunch ($p<0.001$). Work stress was found to exacerbate anxiety and negatively affect diet quality ($p<0.05$). No differences between blue and white-collar workers were observed in work stress, Beck anxiety, and HEI-2015 scale data ($p>0.05$).
Conclusion: Work-related stress is pivotal in employees' physical and psychological well-being and diet quality. Developing strategies to enhance diet quality within organizations can aid in alleviating work stress and anxiety.

Keywords; Anxiety, diet quality, healthy eating index, industrial worker, work stress

1. Introduction

Employee well-being and mental health are critical in modern workplaces due to challenging and high-pressure working environments. In organizations, the need to meet deadlines, handle complex tasks, and manage increased workload results in increased stress levels and anxiety among employees. High-quality, balanced, and healthy nutrition significantly affects employee performance [1]. Research shows that maintaining a healthy and nutritious diet increases workers' ability to focus and stay physically fit while tackling challenging tasks [2].
Work occupies a significant portion of daily life, and stress in the workplace is often influenced by factors such as long working hours, excessive workload, time constraints, complex tasks, role ambiguity, lack of social support, and more [3]. Recent research has extensively explored the connection between diet and mental health, revealing that dietary choices are crucial for managing stress and anxiety [4,5]. Nevertheless, the relationship between diet quality, job-related stress, and anxiety in the industrial workforce, which faces distinct challenges and job demands, remains less explored.

Stress has a notable impact on our daily food choices [6]. Research indicates that stressful situations often lead to increased consumption of fatty, sweet, and salty foods while reducing the intake of fruits and vegetables. Moreover, stress can trigger the desire to eat even when not hungry [7]. Malnourished employees may experience exhaustion, weakness, and fatigue. Frequent consumption of high-sugar and carbohydrate-rich foods can lead to fluctuations in blood sugar levels, causing drowsiness, reduced cognitive function, and difficulty in perception [8].
Emotional factors such as trauma, loss, and significant stress can increase the risk of developing anxiety disorders, which is estimated to affect approximately 10% of the population [9]. Individuals with anxiety disorders often grapple with persistent thoughts and worries [10]. The workplace is one setting where anxiety is frequently experienced, potentially leading to feelings of despair and tension [11]. Elevated feelings of hopelessness and tension can contribute to reduced diet quality, diminished overall performance, and increased complexity in problem-solving [12]. The relationship between diet quality and anxiety is intricate and multifaceted. Research demonstrates that adopting a healthy dietary pattern can reduce the risk of anxiety development [8, 13, 14]. Organizations can enhance their mass nutrition services to improve diet quality, a significant factor affecting workplace stress and anxiety. This improvement can lead to a healthier work environment, ultimately enhancing employees' overall quality of life and mood. This research will contribute to improving the diet quality of industrial workers facing high job-related stress, raising awareness, and fostering evidence-based strategies.

2. Material and Methods

2.1. Study Design and Sample

This descriptive study was conducted on employees working in the mechanical installation, textile and iron and steel sectors in Istanbul province between July and September 2022. Written approval was obtained from the institutions to conduct the study. The sample size of the study was found to be at least 132 people with an effect size of 0.72 with a margin of error of 0.05 and a power of 0.80 with the G*Power 3.1 program. A total of 132 people were included in the study, 44 from the iron and steel sector, 31 from the mechanical installation sector and 57 from the textile sector.

2.2. Inclusion and Exclusion Criteria

Individuals who were between the ages of 18 and 65, volunteered to participate in the study, worked in an industrial establishment, and did not have a chronic disease were included in the study. Individuals under

the age of 18, individuals over the age of 65, and those with a chronic disease were excluded.

2.3. Data Collection Tools

The survey form, which included the participants, work stress scale, Beck Anxiety Inventory, HEI-2015, and 24-hour food consumption record, was filled out during the face-to-face interview. In the study, office workers (manager, secretary, executive, engineer, technician, accountant, etc.) were white-collar (n=45), and factory workers (workers working on production lines) were blue-collar (n=87).

Demographic characteristics, eating habits, and anthropometric measurements were recorded in the survey form. The minimum wage at the time of the study was 5500 TL. A clinical-type TANITA BC-601 professional device was used for body weight measurement. TANITA Portable Height Meter was used for height measurement. Body Mass Index (BMI) (kg/m^2) was calculated from weight and height measurements.

The job stress scale developed by Dr. Suzanne Haynes and, validated in Turkish by Aktaş was used [15]. As a result of the scale, scores below 12 indicate low, scores between 12-30 indicate medium, and scores of 30 and above indicate high work stress. Anxiety levels were assessed using the Beck Depression Inventory, which was developed by Beck et al. [16] and, found to be valid and reliable in Turkish by Hisli [17]. In the scoring, 0-7 points indicate minimal anxiety, 8-15 points indicate mild anxiety, 16-25 points indicate moderate anxiety, and 26 points indicate severe anxiety. Diet quality was assessed using the Healthy Eating Index-2015 (HEI-2015), which has a maximum score of 100. HEI-2015 scores were categorized as follows: ≤50 for poor, 51-80 for diet quality needing improvement, and ≥80 for good diet quality [18]. Participants provided 24-hour food consumption records, which were analyzed using the BEBIS 7.2 program.

2.4. Ethical Consideration

The study was approved by the relevant institutional Human Research Ethics Committee at the İstanbul Bilgi University (Date: 20.07.2022, Project Number: 2022-20016-124**)**. Voluntary written consent was obtained from the participants. And also, written approval was obtained from the institutions to conduct the study.

2.5. Statistical Analysis

Data analysis was conducted using the IBM SPSS version 25.0. In comparing categorical variables, the Pearson Chi-square test or Fisher's Exact test was used, depending on the suitability of the data. Bonferroni correction was applied for post-hoc analyses. The normal distribution of quantitative variables was assessed using the Kolmogorov-Smirnov and Shapiro-Wilk tests. Independent Samples T Test was applied to parametric quantitative variables, and non-parametric quantitative variables were analyzed using the Mann-Whitney U test. In correlation analyses, Pearson's coefficient was used for normal distribution, and Spearman's Rho correlation coefficient was used for non-normal distribution. Statistical significance was determined as $p<0.05$.

3. Results

The study included 132 voluntary industrial workers (43.2% textile, 33.3% iron and steel, and 23.5% mechanical installation). Among the participants, 67.4% were male, and 32.6% were female. A significant portion of blue-collar employees (65.9%) had an education level of high school or below, were more likely to be in the textile sector, and had longer tenure in the organization compared to white-collar workers ($p<0.05$). Moreover, 95.4% of blue-collar workers had a monthly income of <8500 TL and this was statistically different from the monthly incomes of white-collar workers ($p<0.001$). No statistically significant differences were observed in age or anthropometric measurements between white-collar and blue-collar employees ($p>0.05$). The median body mass index for men was 27.28 (range: 18.72-37.98) kg/m^2, and for women, it was 24.03 (range: 18.83-35.49) kg/m^2 (Table 1).

It's worth noting that the HEI-2015 evaluation is not presented in the tables due to the absence of individuals classified as having good diet quality and low stress as determined by the Work Stress Scale. Furthermore, no statistically significant differences were observed between the body mass index classifications and the scale results ($p>0.05$). Notably, 48.9% of white-collar and 49.4% of blue-collar workers experienced high stress, and 72.4% of blue-collar workers and 75.6% of white-collar workers had poor diet quality. Among white-collar workers, 48.9% reported anxiety (Table 2).

Statistically significant differences were identified when comparing job stress with the Beck Anxiety Inventory and HEI-2015 results ($p=0.005$ and $p=0.030$, respectively). The analysis revealed that those classified as high-stress individuals also exhibited anxiety and poor diet quality (Table 3).

The median daily energy intake of white-collar workers is 1979.1 kcal, while that of blue-collar workers is 2277.3 kcal ($p=0.015$) (Table 4).

Table 1. Demographic Characteristics, Dietary Habits and Anthropometric Measurements

		White collar (n=45)	Blue collar (n=87)	p
Age (years)		32 (18-53)	38 (18-58)	0.348[a]
Gender	Men (n, %)	32 (71.1)	57 (65.5)	0.562[b]
	Women (n, %)	13 (28.9)	30 (34.5)	
Educational level	Primary school (n, %)	5 (11.1)	20 (23)	**<0.001[b]**
	Middle school (n, %)	1 (2.2)	21 (24.1)	
	High school (n, %)	11 (24.4)	35 (40.3)•	
	University (n, %)	28 (62.3)	11 (12.6)	
Working period	<2 years (n, %)	7 (15.6)	22 (25.3)	**0.047[b]**
(years)	2-5 years (n, %)	11 (24.4)	35 (40.3)•	
	5-10 years (n, %)	14 (31.1)	17 (19.5)	
	≥10 years (n, %)	13 (28.9)	13 (14.9)	
Monthly income (TL)	Minimum wage (n, %)	-	9 (10.3)	
	> Minimum wage-8500 TL (n, %)	27 (60)	74 (85.1)•	**<0.001[b]**
	>8500 TL (n, %)	18 (40)	4 (4.6)	
Main meal frequency	2 meals (n, %)	21 (46.7)	34 (39.1)	0.458[b]
	3 meals (n, %)	24 (53.3)	53 (60.9)	
Snack frequency	Never (n, %)	19 (42.2)	44 (50.6)	0.611[b]
	1 snack (n, %)	12 (26.7)	24 (27.6)	
	2 snacks (n, %)	8 (17.8)	13 (14.9)	
	3 snacks (n, %)	6 (13.3)	6 (6.9)	
Height (cm)		173.5 ± 9.35	170.2 ± 9.63	0.064[c]
Body weight (kg)		79.8 ± 16.89	78.6 ± 14.71	0.695[c]
BMI (kg/m^2)		25.77 (19.23-37.98)	26.57 (18.72-37.78)	0.262[a]

[a]*Mann-Whitney U Test.* [b]*Chi-square test;* [c] *Independent Samples T-Test* •*: It was determined that there was a significant difference with Post-Hoc analysis. n: Number. %: Percentage; The parameter is given over the total number. Median (Minimum–Maximum); Arithmetic mean ± Standard deviation. BMI: Body Mass Index*

Table 2. Scale Results by Job Position, Gender and BMI Classification

	White collar (n=45)	Blue collar (n=87)	p*	Normal (n=46)	Overweight (n=58)	Obese (n=28)	p*
Work Stress Scale							
Stressful (n, %)	23 (51.1)	44 (50.6)	1	24 (52.2)	31 (53.4)	12 (42.9)	0.674
High stress (n, %)	22 (48.9)	43 (49.4)		22 (47.8)	27 (46.6)	16 (57.1)	
HEI-2015							
Poor (n, %)	34 (75.6)	63 (72.4)	0.836	36 (78.3)	38 (65.5)	23 (82.1)	0.159
Need Improvment (n, %)	11 (24.4)	24 (27.6)		10 (21.7)	20 (34.5)	5 (17.9)	
BDI							
No anxiety (n, %)	23 (51.1)	53 (60.9)	0.353	23 (50)	35 (60.3)	18 (64.3)	0.412
Yes anxiety (n, %)	22 (48.9)	34 (39.1)		23 (50)	23 (39.7)	10 (35.7)	

[*] Chi-square test, n: Number. %: Percentage, HEI-2015: Healthy Eating Index-2015, BDI:Beck Depression Inventory

A positive but weak relationship was found between the work stress scale result and the HEI-2015 result, and a moderate positive relationship was found between the Beck anxiety inventory (r= 0.198 and p=0.023; r=0.522 and p<0.001). A low negative

relationship was found between the number of snacks and work stress and HEI-2015 (r=-0.275 and p=0.001; r=-0.197 and p=0.024). A significant negative relationship was determined with HEI-2015 between daily fat consumption (r=-0.199, p=0.002). Positive relationships were determined between daily intake of vitamin E, B_1, C and fiber, folate, potassium, and magnesium ($p<0.05$) (Data are provided as supplementary material).

Table 3. Healthy Eating Index and Anxiety Status by Work Stress Level

	Work Stress Scale			
	Stressful (n=67)	**High stress (n=65)**	**Total (n=132)**	**p***
HEI-2015				
Poor (n, %)	55 (82.1)	42 (64.6)•	97 (73.5)	**0.030**
Need Improvment (n, %)	12 (17.9)	23 (35.4)	35 (26.5)	
BDI				
No anxiety (n, %)	47 (70.1)	29 (44.6)	76 (57.6)	**0.005**
Yes anxiety (n, %)	20 (29.9)	36 (55.4)•	56 (42.4)	

**Chi-square test; •: Post-Hoc analysis determined that there was a significant difference, n: Number, %: Percentage, HEI-2015: Healthy Eating Index-2015, BDI: Beck Depression Inventory*

4. Discussion

High work stress affects the workforce and causes productivity loss. Additionally, stress is considered an obstacle to the fast and effective flow of operations [19]. Quality and healthy nutrition is very important for low stress and positive mood [20]. Studies on the effects of the nutritional quality of industrial workers on work stress and anxiety are quite limited in the literature. In our research, the relationship between diet quality and work stress and anxiety of individuals working in industrial organizations was examined.

It was determined that blue-collar workers earn less income than white-collar workers. Wage is one of the factors affecting stress in monthly income distribution, and when the wage increases, job satisfaction and continuity also increase [20]. High-income levels are thought to be associated with nutritional quality. As income level increases, nutrition quality also increases [21]. High work stress may increase the risk of obesity in working individuals by causing unhealthy eating behaviors [22]. In this study, it was determined that according to BMI classification, approximately half of blue-collar workers were slightly overweight, while white-collar workers were of normal weight. In a study conducted with industrial workers in Korea, contrary to our results, white-collar workers were found to have higher body weight than blue-collar workers [23]. Poor diet quality, physical inactivity, increased body mass index, and accompanying depressive symptoms interact with each other and increase the risk of chronic diseases in employees [24]. Intense and challenging working conditions in heavy industry employees and a lack of practices regarding employee health in the workplace can create a source of stress and pave the way for these risks.

White and blue-collar workers have been shown to perceive work-related stress differently. White-collar workers tend to feel more uncertainty, while blue-collar workers often experience more role conflict, highlighting the unique stressors faced by each group [25]. In our study, job stress and anxiety scale results were found to be similarly moderate to high levels among white-collar and blue-collar employees. Physical conditions of the work environment, such as noise and temperature changes, are thought to be effective factors in work-related stress [26]. Interestingly, it has been suggested that white-collar workers in industrial settings can cope with stress more effectively than their blue-collar counterparts [27]. The high levels of job stress experienced by both blue-collar and white-collar workers in our study may be attributed to common environmental factors such as noise and temperature fluctuations in the workplace. The study found that there is a significant prevalence of job stress among industrial workers, with a significant number experiencing high levels of stress. Additionally, almost half of the employees had anxiety. One study in particular found that demanding physical job demands, excessive workloads, and time pressure from employers doubled the risk of anxiety in white-collar workers compared to their blue-collar counterparts [28].

Table 4. Daily Nutrient Consumption Amounts

	White collar (n=45)	Blue collar (n=87)	p
Energy (kcal)	1979.1 (1506.3-3682.2)	2277.3 (1507.8-3471.1)	**0.015**[a]
Carbohydrate (g)	261.2 ± 78.61	295.5 ± 77.50	**0.019**[a]
Carbohydrate (%)	49.3 ± 7.16	51.1 ± 6.71	0.157[a]
Protein (g)	73.2 (43.2-142.9)	85.3 (42.5-163)	0.177[b]
Protein (%)	15 (11-23)	15 (10-34)	0.428[b]
Fat (g)	85.6 ± 26.07	89.1 ± 25.93	0.465[a]
Fat (%)	35.2 ± 6.47	33.7 ± 6.17	0.178[a]
Fiber (g)	23.2 (13.3-65.5)	25.1 (9.9-57.5)	0.298[b]
Vitamin A (µg)	963 (418.5-2894.5)	991.5 (435.9-3431.6)	0.619[b]
Vitamin C (mg)	97.5 (27-385.1)	104.3 (27-374)	0.853[b]
Vitamin E (mg)	11 (3.6-30.9)	12 (3.9-38.1)	0.343[b]
Vitamin B_1 (mg)	1.1 ± 0.27	1.1 ± 0.25	0.742[a]
Vitamin B_2 (mg)	1.5 ± 0.47	1.5 ± 0.38	0.640[a]
Vitamin B_3 (mg)	29.1 (16.3-48.5)	31.5 (15.6-101.7)	0.080[b]
Vitamin B_{12} (µg)	4.5 (1.4-18.4)	4 (0.1-8.9)	0.298[b]
Folate (µg)	312.9 (155.9-786.4)	334.4 (128.8-615.8)	0.652[b]
Potassium (mg)	2888.6 (1424.9-4651.1)	2817.5 (1550.5-4686.7)	0.703[b]
Calcium (mg)	864.7 (380.1-1588)	858.9 (265.3-1551.4)	0.805[b]
Magnesium (mg)	345.5 ± 92.36	349.1 ± 80.54	0.823[a]
Phosphorus (mg)	1275.0 ± 365.23	1301.8 ± 306.34	0.675[a]
Iron (mg)	11.5 (6.7-25.5)	11.8 (5.4-25.2)	0.512[b]
Zinc (mg)	13.3 (6.7-21)	13.4 (5.9-21.6)	0.846[b]

[a]*Independent Samples T-Test,* [b]*Mann-Whitney U Test, Median (Minimum – Maximum), Arithmetic mean ± Standard deviation*

These findings underscore the widespread occurrence of stress and anxiety in industrial workers and raise concerns about employee well-being and organizational productivity. However, it is important to recognize that different studies report different results on this issue. For example, Smet et al. In certain regions of Europe, it has been observed that job stress levels vary between different job sectors, with the highest stress reported among blue-collar workers [29]. It is worth noting that the majority of industrial workers have poor nutritional quality; This underlines the need to promote healthy eating behaviors among them.

Our study found a significant association between high levels of stress, poor diet quality, and the presence of anxiety. Mood has a significant impact on eating habits, affecting energy and macronutrient intake. Research has observed that increased work-related stress has a negative effect on nutrition [30]. Stress is believed to change food preferences and trigger emotional eating [31]. Adequate and balanced menus that allow for a healthy lifestyle in workplaces, offering healthy options in the cafeteria and food vending machines, and providing group or individualized education trainings on stress prevention and diet for employees are important [24].

It was determined that the daily energy and carbohydrate consumption amounts of blue-collar workers were higher than white-collar workers. It is thought that stressed individuals eat more or change their eating behavior [32]. It has also been observed that consumption of simpler carbohydrates and saturated fat increases under stress. The reason for this can be considered blue-collar workers working harder jobs and needing more energy, and the stress level leads people to consume carbohydrate foods.

The average daily energy consumption of individuals is 2272 kcal; 50.5 ± 6.89 % of this energy comes from carbohydrates, 15% from protein, and 34.2 ± 6.30% from fats. Although industrial workers meet recommended macronutrient levels, their diet quality is inadequate. Excessive fat intake poses a particular risk for chronic diseases [33]. Another important determinant of diet quality is saturated fat intake [34]. Our study revealed a significant relationship between high saturated fat consumption and low healthy nutrition indices. Participants with

poor diet quality had higher levels of total fat consumption than those in need of improvement. This relationship is believed to be influenced by high levels of work stress, which can increase cravings for foods rich in saturated fats. We emphasize the importance of providing industrial workers with accessible and healthy food options to improve the quality of their nutrition and protect their health.

In this study, the relationship between work stress scale and anxiety was found to be moderate; A positive, low-level significant relationship was detected with HEI-2015. Although stress is a part of modern life, it affects many parameters in life, from eating behaviors to anxiety. In our study, it was found that those with high work stress had poor diet quality indexes, and this result was statistically significant. Both acute and chronic stress have been observed to increase saturated fat consumption, leading to high fat intake, and are associated with lower fiber and less fruit and vegetable consumption [35].

It has been suggested that there is a relationship between the number of meals and nutritional quality [36, 37]. In this study, a negative relationship was found between the HEI-2015 score and the number of snacks. Although there is a negative relationship with the number of main meals, it is not statistically significant. Skipping main and snack meals is reported to negatively affect the quality of the diet [38]. A statistically significant positive correlation was determined between the fiber, vitamin C, vitamin E, vitamin B_1, folate, potassium, and magnesium intakes of industrial workers and their HEI-2015 scores. These results indicate that workers should consume sufficient amounts of vegetables, and It is thought to be caused by consuming fruit.

5. Conclusion

This study examined the significant impact of job stress on psychological well-being and dietary habits among blue- and white-collar individuals working in the industrial sector. Addressing job stress and encouraging healthier lifestyles may improve employees' overall health and productivity. Future research should replicate these findings with more employees working in various industrial organizations using different survey instruments.

6. Limititations of the Study

The limitations of this study are that the individuals participating in the study were only industrial workers from three different sectors. Since the study was conducted using a non-probability sampling method, the job stress and diet quality of industrial workers who were not included in the study could not be evaluated.

7. Acknowledgements

The authors would like to thank the industrial workers who participated and supported the study and the organizations that gave work permits.

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