

Turkish Academics' Activities of Daily Living During Early in The Pandemic

Türk Akademisyenlerin Pandeminin Erken Döneminde Günlük Yaşam Aktiviteleri

İlker Murat AVCIBAŞI¹

ABSTRACT

Aim: In extraordinary situations, more is expected from academicians in terms of knowledge and behaviour. Due to the restrictions applied during the pandemic universities switched to distance education. This study aimed to examine the changes in the daily life activities of academics who have experienced the lockdown and the flexible working model for the first time.

Methods: In the e-survey form had 46 questions, 10 about the socio-demographic characteristics, 4 about residence, 32 about their activities of daily living and their perceptions of flexible working model.

Results: Approximately 1/3 of the participants stated that they had problems while urinating and defecating. Most participants reported a change in their sleep schedule, and half said changes were attributed to going to bed later. The asynchrony in the daily routines, called "social

Keywords: Activities of daily living, feeding behaviour, drinking behaviour, sleep, university

Amaç: Akademisyenlerden olağanüstü durumlarda bilgi ve davranış olarak daha fazlası beklenmektedir. Üniversitelerde, pandemi döneminde uygulanan kısıtlamalar nedeniyle uzaktan eğitime geçildi. Bu çalışma, karantina döneminde esnek çalışma modelini ilk kez deneyimleyen akademisyenlerin günlük yaşam aktivitelerinde meydana gelen değişiklikleri incelemeyi amaçlamıştır.

Yöntem: E-anket formunda sosyo-demografik özelliklerle ilgili 10 soru, ikametle ilgili 4 soru, günlük yaşam aktiviteleri ve esnek çalışma modeli tercihleri ile ilgili 32 soru olmak üzere toplam 46 soru bulunmaktadır.

Bulgular: Katılımcıların yaklaşık 1/3'ü idrar ve dışkı yaparken sorun yaşadığını ifade etti. Katılımcıların çoğu uyku örüntüsünde değişiklik olduğunu bildirdi ve bu değişikliklerin yarısı daha geç yatağa gitme ile ilgiliydi. Akademisyenlerde, "sosyal jetlag" olarak adlandırılan, günlük

Anahtar Kelimeler: Günlük yaşam aktiviteleri, beslenme davranışı, içme davranışı, uyku, üniversite

jetlag", was revealed among academics. 34.3% of the participants stated they were confused about which day of the week they were on. Academics' aesthetic concerns were assessed, 42.9% had a decrease in hair care, and %56 had a decrease in face and body care. 34.8% of the participating academicians stated that they did not want to continue in the flexible working model. The preference of the academicians under the age of 40 was to continue the flexible working model, and this was a statistically significant result compared to the older ones.

Conclusions: In similar situations in academics, it is recommended that they stick to their sleep routines, reduce their caffeine consumption, not disrupt their daily exercises, and continue their body care as much as possible.

ÖZET

rutinlerdeki uyumsuzluk ortaya çıktığı görüldü. Katılımcıların %34.3'ü haftanın hangi gününde olduklarını karıştırdıklarını ifade etti. Akademisyenlerin estetik kaygıları değerlendirildiğinde, saç bakımında %42.9, yüz ve vücut bakımında ise %56 oranında azalma görüldü. Katılımcı akademisyenlerin %34,8'i esnek çalışma modelinde devam etmek istemediklerini belirtti. 40 yaş altı akademisyenlerin tercihi esnek çalışma modelinin devam etmesi yönündeydi, bu diğer akademisyenlere göre istatistiksel olarak anlamlı bir sonuçtu.

Sonuç: Akademisyenlerde benzer durumlarda uyku rutinlerine sadık kalmaları, kafein tüketimlerini azaltmaları, günlük egzersizlerini aksatmamaları ve mümkün olduğunca vücut bakımlarına devam etmeleri önerilmektedir.

¹ Research Assistant, BSN, MSc, PhD(c), Trakya University, Faculty of Health Sciences, Nursing, Public Health Nursing, Edirne/Turkey
e-mail: imavcibasi@gmail.com

INTRODUCTION

COVID-19, the first pandemic of the 21st century caused by a coronavirus family virus, has taken the world by storm. Due to the rapid transmission pattern of this highly contagious disease, incidence and death rates have steadily increased worldwide (Guan et al. 2020, Yıldırım and Güler 2020). As a result, countries have implemented various quarantines to adapt their health systems to the pandemic and contain the disease's rate of spread (Di Renzo et al. 2020, Kantermann 2020, Majumdar et al. 2020). As a result of the quarantine practices, the education sector was forced to make a significant and sudden change. Approximately one hundred and fifty countries around the world have fully closed their schools of all levels, including universities, and 80% of the world's student population has been affected. Not only students but also educators, such as academics, have been touched by this situation.

After this decision was taken to control the epidemic or reduce the rate of transmission, the Turkish academy entered a period that it had not widely experienced before; distance education and flexible working model (Azhari and Fajri 2022, Dikmen and Bahçeci 2020). In extraordinary situations such as epidemics, more is expected from academics in terms of knowledge and behavior (Vijaya 2014). Education with the closure of schools; started to be conducted online via the internet. Academics were challenged to conduct their duties flexibly and distantly. COVID-19 has significantly impacted academics because they are in the high-risk category (in terms of age, especially professors), and their

daily habits have changed. Due to the restrictions applied during the pandemic, changes have occurred in many daily life activities, especially in eating and drinking habits, sleep patterns, and mobility (Di Renzo et al. 2020, Blume et al. 2020, Kumar and Dwivedi 2020).

This study was organized to examine the changes in the daily life activities of academics who have experienced the flexible working model for the first time during the pandemic. The residence characteristics, eating-drinking and excretory habits, exercise and resting, personal care, and changes in work routines, which can be questioned via an e-survey of daily life activities, constitute the questions of this research. Based on the results of this retrospective study, it was aimed to help protect the health of scholars in similar situations in the future.

METHODS

This descriptive cross-sectional study was conducted at Trakya University, located on the northwest border of Turkey. Between the study dates, there were 1868 (exclude researcher) academicians working at the university. It was aimed to reach the universe voluntarily without any sampling.

The electronic questionnaire form prepared by the researcher as a result of the literature review was applied (Dias et al. 2019, Dunlay et al. 2015, Mlinac and Feng 2016). In the e-survey form, there were ten questions about the socio-demographic characteristics of the academicians, four questions

about the characteristics of residence, 32 questions about their Activities of Daily Living and their perceptions of COVID-19, a total of 46 questions. For the e-survey, the website www.surveey.com, which the researcher had experienced before, was used. The survey link was sent to the institutional e-mail addresses of the academicians between 01.05.2020 and 01.06.2020. Cookie blocking was enabled to prevent re-data entry. For individuals who had trouble filling out the e-survey and could not complete it, a new link containing an exact copy of the e-survey was sent to the participants. Because the academicians' daily living behaviours altered independently of COVID-19 during the investigation, individuals who claimed they were pregnant in the relationship status option were not included in the study. The completed answers of 175 academicians, 104 women, and 71 men, who agreed to participate in the study were evaluated. The obtained data were evaluated with percentage distribution, mean, standard deviation, median, minimum and maximum values, on IBM SPSS Statistics 21.

To conduct the study, necessary approvals were obtained from Trakya University Scientific Research Ethics Committee (TÜTF-BAEK 2020/181), Republic of Türkiye Ministry of Health and the Rectorate of Trakya University.

RESULTS

Sociodemographic Findings

One hundred seventy-five academicians (9.36%) participated in the study. 59.4% of the participants were women (n=104), 37.7% (n=66) were married and had 1 child, 33.7% (n=59) were assistant professor, 80% (n=140) were working at a faculty/school and 66.3% (n=116) of them did not have an administrative duty. The oldest of the participants was 64 years old, and the youngest was 24 years old, with a mean of 39.96 ± 9.06 and a median value of 39 (Table 1.).

When the flexible working model was started, 98.3% (n=172) of the participants stated that they resided at home, and 34.3% (n=60) lived with two family members. The rate of those who leave their residence every day was 24.6% (n=43), and 38.9% (n=68) stated that they were out of the home for less than 1 hour (Table 2.).

Table 1. Statistics on socio-demographic characteristics of the participants (n= 175)

	<i>Min.</i>	24	
	<i>Max.</i>	64	
	<i>Median</i>	39	
	<i>Mean</i>	39.96	
	<i>SD</i>	9.06	
		n	%
Sex	Woman	104	59.4
	<i>Man</i>	71	40.6
Unvan	<i>Prof. Dr.</i>	16	9.1
	<i>Assoc. Prof.. Dr.</i>	15	8.6
	<i>Assist. Prof. Dr.</i>	59	33.7
	<i>Res. Assist.. Dr.</i>	15	8.6
	<i>Res. Assist.</i>	32	18.3
	<i>Lect. Dr.</i>	9	5.1
	<i>Lect.</i>	29	16.6
Marital Status	<i>Single, not in a relationship.</i>	29	16.6
	<i>Single, in a relationship.</i>	16	9.1
	<i>Single, with 1 child.</i>	4	2.3
	<i>Single, with 2 children.</i>	1	.6
	<i>Married, no children.</i>	25	14.3
	<i>Married, with 1 child.</i>	66	37.7
	<i>Married, with 2 children.</i>	29	16.6
	<i>Married, with more than 2 children.</i>	5	2.9
Dept.	<i>Faculty / College</i>	140	80.0
	<i>Vocational School</i>	29	16.6
	<i>Other</i>	6	3.4
Chronic Disease	<i>No.</i>	127	72.6
	<i>Yes, I have 1 chronic disease.</i>	38	21.7
	<i>Yes, I have 2 chronic diseases.</i>	10	5.7
Regular Medication	<i>No.</i>	118	67.4
	<i>1</i>	31	17.7
	<i>2</i>	17	9.7
	<i>3 and above.</i>	9	5.1

Table 2. Residency characteristics of the participants during the lockdown

		n	%
Place of residence	Home	172	98.3
	Summer resort / vineyard house vb.	3	1.7
Accompanying in residence	Alone.	29	16.6
	1 member of the family	34	19.4
	1 member of the non-family	3	1.7
	2 members of the family	60	34.3
	2 members of the non-family	1	.6
	3 members of the family	35	20.0
	4+ members of the family	13	7.4
Frequency of leaving residence	Everyday.	43	24.6
	1 in 2 days.	18	10.3
	1 in 3 days.	35	20.0
	1 in 4-6 days.	25	14.3
	1 time per week.	32	18.3
	1 time per 2-week.	10	5.7
	Less than 1 time per 2-week.	12	6.9
Hours spent outside of residence	Less than 1 hour.	68	38.9
	1-2 hours.	65	37.1
	3-5 hours.	28	16.0
	6-10 hours.	13	7.4
	10+ hours.	1	.6

Eat & Drink Habits

Considering their eating and drinking habits, it was determined that 69.1% (n=121) of the participants had main meals and 50.3% (n=88) had snacks. 62.3% (n=109) of participants' daily drinking water and 40.6% (n=71) caffeine consumption did not change. According to the academics, the average amount of drinking water consumed per day was 2.00 ± 1.11 liters (Table 3.).

Table 3. Eating and drinking habits in early pandemic

		n	%
Number of Main meals	Same	121	69.1
	Increased	23	13.1
	Decreased	31	17.7
number of snacks	Same	88	50.3
	Increased	68	38.9
	Decreased	19	10.9
Daily drinking water	Same	109	62.3
	Increased	44	25.1
	Decreased	22	12.6
	mean (lt)	2.00 ± 1.11	
Caffeine	Same	71	40.6
	Increased	62	35.4
	Decreased	35	20.0
	Not consume	7	4.0
Alcohol	Same	44	25.1
	Increased	10	5.7
	Decreased	25	14.3
	Not consume	96	54.9

Excretory Habits

Accordingly, 29.7% (n=52) of the participants stated that they had problems while urinating, while 34.3% (n=60) stated that they had problems with defecation. Those who had problems while urinating stated an increase in the number of going to the toilet with 29.1% (n= 51), and a decrease in the frequency of going to the toilet with the highest

14.3% (n=25) for those who had problems while defecating (Table 4.).

Table 4. Findings on the excretory and urinary systems of the participants

		n	%
Urinary	Frequency	No complaints	123 70.3
		Increased	51 29.1
		Decreased	5 2.9
	Volume	Increased	15 8.6
		Decreased	2 1.1
	Colour	Dark	8 4.6
		Light	14 8
	Smell	Intense smell (similar to acetone)	3 1.7
	Urinating	Painful	2 1.1
		Burning feeling	3 1.7
Defecation	Frequency	No complaints	115 65.7
		Increased	23 13.1
		Decreased	25 14.3
	Consistency	Softening	8 4.6
		Solidifying	6 3.4
	Complaints	Constipation	12 6.9
		Diarrhea	6 3.4

Rest & Exercise Habits

73.7% (n=129) of the participants reported a change in their sleep schedule, with 57.7% (n=101) of these changes attributed to going to bed later; 46.9% (n=82) reported no change in dreaming frequency. In addition, 34.3% of the participants (n=60) said they were confused about which day of the week they were on, and 20.6% (n=36) said they rarely get confused about the time of day (Table 5.).

Table 5. Sleep patterns of the participants

Total sleep time (hours)	<i>min.</i>	0	
	<i>max.</i>	10	
	<i>Mean</i>	6.59	
	<i>SS</i>	1.968	
Day time sleep (hours)	<i>min.</i>	0	
	<i>max.</i>	10	
	<i>Mean</i>	1.26	
	<i>SS</i>	2.162	
		<i>n</i>	<i>%</i>
Sleep Pattern	<i>No change</i>	46	26.3
	<i>Going to bed early</i>	6	3.4
	<i>Going to bed lately</i>	101	57.7
	<i>Splitting in sleep</i>	26	14.9
	<i>difficulty falling asleep</i>	28	16.0
Confusing the days of the week	<i>Never</i>	35	20.0
	<i>Rare</i>	60	34.3
	<i>Sometimes</i>	59	33.7
	<i>Frequently</i>	18	10.3
	<i>Always</i>	3	1.7
Confusing the time of day	<i>Never</i>	113	64.6
	<i>Rare</i>	36	20.6
	<i>Sometimes</i>	16	9.1
	<i>Frequently</i>	9	5.1
	<i>Always</i>	1	.6

When asked about their exercise habits during lockdown, 46.9% (n=82) of the participants said they did not exercise, and 26.9% (n=47) said they exercised 1-2 times a week for less than 1 hour each time. However, 42.9% (n=75) of the participants stated that they did not exercise before the lockdown, and 17.1% (n=30) stated that they exercised 1-2 times a week for less than 1 hour each time.

Body Image Concerns

When academics' aesthetic concerns were assessed, it was revealed that 64.6% (n=113) had no change in bathing frequency, 42.9% (n=75) had a decrease in hair care, and %56 (n=98) had a decrease in face and body care.

Spare Time Activities

When asked about non-educational activities that they could select more than one option, 74.9% (n=131) said they do housekeeping, 72% (n=126) said conduct intellectual pursuits, and 52.6% (n=92) said they spend time on the internet.

FWM Preferences

The rate of those who wanted to continue the flexible working model after the COVID-19 pandemic was 20.6% (n=36), and the rate of those who wanted it to be partially continued was 44.6% (n=78). 34.8% (n=61) of the participating academicians stated that they did not want to continue in the flexible working model.

When the genders of those who do not want the flexible working model and those who want it or partially want it are examined, it was observed that male academics did not want the flexible working model (Pearson Chi-Square, p=.019). When this situation was compared with the academicians under the age of 40 and those aged 41 and over, it was found statistically significant that the relatively young academicians wanted a flexible working model (Pearson Chi-Square, p=.002). As a result of the analysis, it was found that

academicians with children wanted a flexible working model significantly compared to academics without children (Pearson Chi-Square, $p=,017$). However, a relationship could not be established between those with and without chronic disease, those with and without administrative duties, and those who are married and single, whether they want a flexible working model (Pearson Chi-Square, $p=.795$, $p=.630$, $p=.229$ respectively).

DISCUSSION

Universities are educational institutions dedicated to the production of knowledge, the transmission of that knowledge, and the development of qualified human resources. Therefore, academics in charge of carrying out this mission are crucial. In addition, academics strive to stay current with changing circumstances and discover solutions to challenges in unusual scenarios like epidemics.

Unlike academics in countries that have had epidemics such as H5N1, Ebola, and MERS, academics in Turkey have not had similar experiences (Karagöz and Ağadayı 2020, Serçemeli and Kurnaz 2020). Academics had to change both their daily routines and work routines due to the COVID-19 pandemic in the middle of the spring semester. On the one hand, they tried to adapt to the working order that they were not accustomed to; on the other hand, they tried to adapt to their daily lives.

Despite complying with the "stay at home" call and quarantine warnings, the academics were not alone

in their homes. More than half of the academicians participating in our study were at least three people at home. In the study performed by Çerçi and Dumludağ on research assistants, it was stated that the average household size was 2.42 ± 1.13 people (Cerci and Dumludag 2019). In the study of Seyahi et al. involving teachers and academicians, the household size is similar to this study (Seyahi et al. 2020). In the study conducted by Yıldırım and Güler during the COVID-19 process, 2/3 of the participants stated that they had at least three people at home (Yıldırım and Güler 2020). It may be concluded from this study that academics are not entirely isolated. Spouses and caregivers/receivers have been found to be at risk of developing COVID-19 in studies (Li et al. 2020).

Academics have a weekly syllabus, meetings, and other obligations. They perform these activities in a programmed way at certain times of the day. In the COVID-19 restrictions and flexible working model, it was observed that academics went to bed late, experienced sleep interruptions, and disrupted daytime sleep hours and time orientation. This situation can be explained by sleep disorders. In the studies conducted by Blume et al. in 3 European countries, Cellini et al. in Italy, and Majumdar et al. in India, it is seen that sleep patterns of people are disrupted, and social jetlag develops due to restrictions (Majumdar et al. 2020, Blume et al. 2020, Cellini et al. 2020). The asynchrony in the daily routines of academics can be explained by "social jetlag". Social jetlag affects sleep quality and academic achievement, alcohol consumption,

eating and drinking habits, and depression (Borgio and Louzada 2021, Borisenkov et al. 2019, Önder et al. 2014, Wittmann et al. 2006).

It was observed that there was no significant change in the eating and drinking habits of the academicians in the first months of the lockdown. The increase in the daily amount of water drinking was a positive change. However, the increase in the number of meals was an undesirable change, although its pre- and content is not known precisely. The multicenter studies conducted by Ammar et al. at the very beginning of the pandemic, the studies conducted by Rodriguez-Perez et al. in adult Spaniards and the studies conducted by Brancaccio et al. in university population also draw attention to the increase in the number of meals in the participants in parallel with the data of this study (Ammar et al. 2020, Brancaccio et al. 2021, Rodríguez-Pérez et al. 2020). Caffeine consumption is daily among academics even before the pandemic (Bakır and Çalapkorur 2020). This study supports this. One out of every three academicians stated that their caffeine consumption has increased. In the research conducted by Karahan Yılmaz and Eskici on the Turkish population, it is seen that the most frequently consumed foods are "tea & coffee" (Karahan Yılmaz and Eskici 2020). The study of Di Renzo et al. also indicates that the consumption of hot beverages such as coffee increased in this process (Di Renzo et al. 2020). Therefore, caffeine consumption by academics is an issue that needs to be closely examined.

Contrary to caffeine consumption, it is a positive attitude that more than half of the academicians do not consume alcohol and that those who do reduce it in this process. Similar results were obtained with this study in a multicenter study consisting mainly of West Asian and North African countries (Ammar et al. 2020). However, in studies conducted in various European countries, it is stated that people in a similar age range experience a significant increase in alcohol consumption (Brancaccio et al. 2021, Daly and Robinson 2020, Drieskens et al. 2021, Jackson et al. 2020).

Within the scope of the measures for the COVID-19 pandemic, barbers, hairdressers, beauty salons, gyms, etc., business activities were suspended. This situation creates dissatisfaction in people with their external appearance. About half of the academicians working in flexible working order stated a decrease in hair, face and body care. In cases where mobility decreases and meal habits are disrupted, negative emotions in body image appear to develop, especially in women and young people (Brown 2020, Robertson et al. 2021).

Based on their age distribution, we can divide academicians into two generations, X and Y. The X generation is riskier than the Y generation when it speaks to COVID-19. On the other hand, the X generation did not favor the flexible working model that includes distance education. Because the X generation is hardworking and prefers direct communication (Fırın and Tunçer Helvacioğlu 2019), this scenario can be explained because the Y generation has improved their flexibility in

working models, job motivation, and openness to technological communication (Ciarniene and Vienazindiene 2018, Setiyani et al. 2019). The flexible working model brought with it the distance education system. The approach to the distance learning model, whose pedagogical foundations and the efficiency of academics were discussed, was cautious even before COVID-19 (Ali 2020, Brady et al. 2019). While there was much ambiguity regarding the pandemic and its consequences in the study, academicians may have been forced to choose the traditional way by the unexpected change in the teaching style (Ślaski et al. 2020).

Limitations

This study was designed when the flexible working model was adopted. There was a short period of approximately 2.5 months for the necessary permissions to be obtained and applied to academics. For this reason, while the reliability of the data was high, the number of participants was low. Readers should take this into account when evaluating.

CONCLUSIONS

It is observed that academicians have disrupted sleep routines, increased the number of meals, disrupted their exercises, increased their caffeine consumption and decreased their personal care during lockdown.

As a result, in similar situations of academics, it is recommended that they stick to their sleep routines, reduce their caffeine consumption, not disrupt their

daily exercises, and continue their care as much as possible.

Acknowledgements

I would like to thank all the academics of Trakya University to show willingness during the pandemic, even if participate or not.

The author state that the views expressed in the submitted article are his own and not an official position of the institution.

Author is government employee and has no industrial relationship. This study was not supported by any institution/foundation.

Conflict of interest

The Author declares that there is no conflict of interest.

Funding sources

None declared.

REFERENCES

- Guan W-j, Ni Z-y, Hu Y, Liang W-h, Ou C-q, He J-x, et al. Clinical Characteristics of Coronavirus Disease 2019 in China. *New England Journal of Medicine*. 2020;382(18):1708-20. doi: 10.1056/NEJMoa2002032.
- Yıldırım M, Güler A. COVID-19 severity, self-efficacy, knowledge, preventive behaviors, and mental health in Turkey. *Death Studies*. 2020;1-8. doi: 10.1080/07481187.2020.1793434.
- Di Renzo L, Gualtieri P, Pivari F, Soldati L, Attinà A, Cinelli G, et al. Eating habits and lifestyle changes during COVID-19 lockdown: an Italian survey. *Journal of Translational Medicine*. 2020;18(1):229. doi: 10.1186/s12967-020-02399-5.
- Kantermann T. Behavior: How a Global Social Lockdown Unlocks Time for Sleep. *Current Biology*. 2020;30(14):R822-R3. doi: https://doi.org/10.1016/j.cub.2020.06.037.
- Majumdar P, Biswas A, Sahu S. COVID-19 pandemic and lockdown: cause of sleep disruption, depression, somatic pain, and increased screen exposure of office workers and students of India. *Chronobiology International*. 2020;37(8):10.
- Azhari B, Fajri I. Distance learning during the COVID-19 pandemic: School closure in Indonesia. *International Journal of Mathematical Education in Science and Technology*. 2022;53(7):1934-54. doi: 10.1080/0020739X.2021.1875072.
- Dikmen S, Bahçeci F. Covid-19 Pandemisi Sürecinde Küresel Çapta Uygulanan Yükseköğretim Kurumlarındaki Uzaktan Eğitim Süreçleri Hakkında Durum Çalışması: Fırat Üniversitesi Örneği. *Turkish Journal of Educational Studies*. 2020;7(2):78-98. doi: 10.33907/turkjes.721685.
- Vijaya R. Awareness of Disaster Management among Teachers of Higher Education. *International Journal of Social Science and Humanities Research*. 2014;2(2):92-6.
- Blume C, Schmidt MH, Cajochen C. Effects of the COVID-19 lockdown on human sleep and rest-activity rhythms. *Current Biology*. 2020;30(14):R795-R7. doi: https://doi.org/10.1016/j.cub.2020.06.021.
- Kumar M, Dwivedi S. Impact of Coronavirus Imposed Lockdown on Indian Population and Their Habits. *International Journal of Science and Healthcare Research*. 2020;2(2):10. doi: 10.4444/ijshr.1003/433.
- Dias EN, da Silva JV, Pais-Ribeiro JL, Martins T. Validation of the advanced activities of daily living scale. *Geriatric Nursing*. 2019;40(1):7-12. doi: https://doi.org/10.1016/j.gerinurse.2018.05.008.
- Dunlay SM, Manemann SM, Chamberlain AM, Cheville AL, Jiang R, Weston SA, et al. Activities of Daily Living and Outcomes in Heart Failure. *Circulation: Heart Failure*. 2015;8(2):261-7. doi: doi:10.1161/CIRCHEARTFAILURE.114.001542.
- Mlinac ME, Feng MC. Assessment of Activities of Daily Living, Self-Care, and Independence. *Archives of Clinical Neuropsychology*. 2016;31(6):506-16. doi: 10.1093/arclin/acw049.
- Karagöz N, Ağadayı E. Behaviors and problems of a medical school students' related to distance education in pandemic medical education in the pandemic process. *The Journal of Turkish Family Physician*. 2020;11(4):149-58. doi: 10.15511/tjtfp.20.00449.
- Serçemeli M, Kurnaz E. COVID-19 Pandemi Döneminde Öğrencilerin Uzaktan Eğitim Ve Uzaktan Muhasebe Eğitimine Yönelik Bakış Açuları Üzerine Bir Araştırma. *Uluslararası Sosyal Bilimler Akademik Araştırmalar Dergisi*. 2020;4(1):40-53.
- Cerci PA, Dumludag D. Life Satisfaction and Job Satisfaction among University Faculty: The Impact of Working Conditions, Academic Performance and Relative Income. *Social Indicators Research*. 2019;144(2):785-806. doi: 10.1007/s11205-018-02059-8.
- Seyahi E, Poyraz BC, Sut N, Akdogan S, Hamuryudan V. The psychological state and changes in the routine of the patients with rheumatic diseases during the coronavirus disease (COVID-19) outbreak in Turkey: a web-based cross-sectional survey. *Rheumatology International*. 2020;40(8):1229-38. doi: 10.1007/s00296-020-04626-0.
- Li W, Zhang B, Lu J, Liu S, Chang Z, Peng C, et al. Characteristics of Household Transmission of COVID-19. *Clinical Infectious Diseases*. 2020;71(8):1943-6. doi: 10.1093/cid/ciaa450.
- Cellini N, Canale N, Mioni G, Costa S. Changes in sleep pattern, sense of time and digital media use during COVID-19 lockdown in Italy. *Journal of Sleep Research*. 2020;29(4):5. doi: 10.1111/jsr.13074.
- Borgio JG, Louzada FM. The mediating effect of conscientiousness on the academic consequences of social jetlag. *Chronobiol Int*. 2021;1-5. Epub 2021/01/22. doi: 10.1080/07420528.2021.1873800. PubMed PMID: 33472445.
- Borisenkov MF, Vetosheva VI, Kuznetsova YS, Khodyrev GN, Shikhova AV, Popov SV, et al. Chronotype, social jetlag, and time perspective. *Chronobiol Int*. 2019;36(12):1772-81. Epub 2019/10/30. doi: 10.1080/07420528.2019.1683858. PubMed PMID: 31658823.
- Önder İ, Beşoluk Ş, İskender M, Masal E, Demirhan E. Circadian preferences, sleep quality and sleep patterns, personality, academic motivation and academic achievement of university students. *Learning and Individual Differences*. 2014;32:184-92.
- Wittmann M, Dinich J, Merrow M, Roenneberg T. Social Jetlag: Misalignment of Biological and Social Time. *Chronobiology International*. 2006;23(1-2):497-509. doi: 10.1080/07420520500545979.
- Ammar A, Brach M, Trabelsi K, Chtourou H, Boukhris O, Masmoudi L, et al. Effects of COVID-19 Home Confinement on Eating Behaviour and Physical Activity: Results of the ECLB-COVID19 International Online Survey. *Nutrients*. 2020;12(6):1583. doi: 10.3390/nu12061583.
- Brancaccio M, Mennitti C, Gentile A, Correale L, Buzzachera CF, Ferraris C, et al. Effects of the COVID-19 Pandemic on Job Activity, Dietary Behaviours and Physical Activity Habits of University Population of Naples, Federico II-Italy. *Int J Environ Res Public Health*. 2021;18(4). Epub 2021/02/11. doi: 10.3390/ijerph18041502. PubMed PMID: 33562476.
- Rodríguez-Pérez C, Molina-Montes E, Verardo V, Artacho R, García-Villanova B, Guerra-Hernández EJ, et al. Changes in Dietary Behaviours during the COVID-19 Outbreak Confinement in the Spanish COVIDiet Study. *Nutrients*. 2020;12(6):1730. doi: 10.3390/nu12061730.

- Bakır B, Çalpakorur S. Akademisyenlerin Uyku Süresi ve Kalitesinin Beslenme Durumlarına Etkisi. *Journal of Nutrition and Dietetics*. 2020;1-10. doi: 10.33076/2020.bdd.1340.
- Karahan Yılmaz S, Eskici G. Evaluation of emotional (depression) and behavioural (nutritional, physical activity and sleep) status of Turkish adults during the COVID-19 pandemic period. *Public Health Nutr*. 2020;1-8. Epub 2020/12/10. doi: 10.1017/S136898002000498X. PubMed PMID: 33292903; PubMed Central PMCID: PMCPMC7804078.
- Daly M, Robinson E. High-Risk Drinking in Midlife Before Versus During the COVID-19 Crisis: Longitudinal Evidence From the United Kingdom. *Am J Prev Med*. 2020. Epub 2020/11/26. doi: 10.1016/j.amepre.2020.09.004. PubMed PMID: 33234355; PubMed Central PMCID: PMCPMC7680033.
- Drieskens S, Berger N, Vandevijvere S, Gisle L, Braekman E, Charafeddine R, et al. Short-term impact of the COVID-19 confinement measures on health behaviours and weight gain among adults in Belgium. *Arch Public Health*. 2021;79(1):22. Epub 2021/02/24. doi: 10.1186/s13690-021-00542-2. PubMed PMID: 33618770; PubMed Central PMCID: PMCPMC7897894.
- Jackson SE, Garnett C, Shahab L, Oldham M, Brown J. Association of the COVID-19 lockdown with smoking, drinking and attempts to quit in England: an analysis of 2019-20 data. *Addiction*. 2020. Epub 2020/10/23. doi: 10.1111/add.15295. PubMed PMID: 33089562.
- Brown S. Changes in the aesthetic industry and the impact of lockdown on body image. *Journal of Aesthetic Nursing*. 2020;9(9):388-9. doi: 10.12968/joan.2020.9.9.388.
- Robertson M, Duffy F, Newman E, Prieto Bravo C, Ates HH, Sharpe H. Exploring changes in body image, eating and exercise during the COVID-19 lockdown: A UK survey. *Appetite*. 2021;159:105062. doi: 10.1016/j.appet.2020.105062.
- Fırın S, Tunçer Helvacıoğlu E. X Ve Y Kuşağı Çalışanlarının Motivasyon Araçlarının Karşılaştırılması. *Fırat Üniversitesi Sosyal Bilimler Dergisi*. 2019;29(2):203-10. doi: 10.18069/firatsbed.542875.
- Ciarniene R, Vienazindiene M. Flexible Work Arrangements from Generation and Gender Perspectives: Evidence from Lithuania. *Engineering Economics*. 2018;29(1). doi: 10.5755/j01.ee.29.1.19247.
- Setiyani A, Djumarno D, Riyanto S, Nawangsari L. The Effect of Work Environment on Flexible Working Hours, Employee Engagement and Employee Motivation. *International Review of Management and Marketing*. 2019;9(3):112-6. PubMed PMID: 2288759657.
- Ali W. Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Higher Education Studies*. 2020;10(3):16-25.
- Brady M, Devitt A, Kiersey RA. Academic staff perspectives on technology for assessment (TfA) in higher education: A systematic literature review. *British Journal of Educational Technology*. 2019;50(6):3080-98. doi: 10.1111/bjet.12742.
- Ślaski P, Grzelak M, Rykała M. Higher Education-Related Problems During Covid-19 Pandemic. *European Research Studies Journal*. 2020;23(3):167-86.