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Original article

Does mindful eating have a relationship with gender, body mass index and health promoting lifestyle?

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Summary. *Objective:* Present study, we aimed to examine the relationship between university students' mindful eating and health promoting lifestyle status with their gender and body mass index among students from a university sample in Turkey. *Methods:* This cross-sectional descriptive study was conducted 368 randomly selected undergraduate students in Fall 2018. Participants completed sociodemographic form, Mindful Eating (MEQ) and Health Promoting Lifestyle Profile II (HPLP-II) questionnaires that included questions related to their mindfulness, eating habits and control, disinhibition, nutritional knowledge etc. Weight and height of participants were measured. *Results:* In this study, 68.5% of the participants were male and 31.5% were female, the mean age was 21.29 ± 1.77 years and BMI (kg / m²) was 21.92± 2.99. Total score of MEQ was 3.25±0.37 and HPLP-II was 131.74±17.60. There was no statistically significant difference between mean MEQ and HPLP-II scores of males (3.29±0.37, 130.38±19.59) and females (3.23±0.38, 132.36±16.61) ($p > 0.05$). Preobese-obese (POW) group was found to be having less MEQ scores than the other BMI classes ($p = 0.008$). While the participant's age increased, BMI increased ($r=0.144$, $p=0.006$), and mindful eating decreased ($p > 0.05$). A significant relationship was found between age, BMI both sub-factors of MEQ (disinhibition: $r=-0.120$, $r=-0.294$, eating control: $r=-0.133$, $r=0.211$, mindfulness: $r=0.190$, $r=0.285$, eating discipline: $r=-0.122$, $r=0.226$, conscious nutrition: $r=0.153$, $r=0.128$, and additionally for BMI, emotional eating: $r=-0.158$, interference: $r=-0.139$; $p<0.05$) and HPLP-II (age; spiritual growth: $r=-0.211$, health responsibility: $r=0.125$, stress management $r=-0.110$ and BMI; physical activity: $r=0.192$, nutrition: $r=0.120$, $p<0.05$). Emotional eating, nutrition and stress management had good correlation ($p<0.05$). There was strong relationship among MEQ and HPLP-II ($p<0.000$). *Conclusion:* Adolescence is an important stage of life to create lifelong lifestyle and eating habits. With age, body mass index, lifestyle and nutrition can be impaired. Health-promoting lifestyle and mindful eating can be related strongly. It is crucial to detect lifestyle choices and eating habits than giving education to have a healthy, qualified and not-disordered eating life.

Key words: Mindful eating, health promoting lifestyle promoting, body mass index, health behavior, lifestyle

Introduction

Health is defined by WHO as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (1). Even though there are some limitations about this characterization, it's guidance for well-being brings researches to become real. Health promoting lifestyles include well-being style behaviors that improve overall general health (2). For health promotion, it is important to look health from different angles as sustainability of nourishing body by listening to internal signals, besides physical, psychological, emotional, interpersonal and spiritual development.

Mindfulness is becoming popular in recent years. Mindfulness had become a treatment plan for eating

disorders and disordered eating (3-6). Mindful eating focuses on how and why eating behavior occurs rather than what is eaten (3,7). Internalizing physical hunger-satiety and being aware of emotions and thoughts, environmental factors and being focused on meals that the present moment without judging the food choices are the aims of mindful eating (3-5,7). Because they are the one of the basic needs and center of life, eating and nutritional habits can affect whole life (8,9). Young adulthood is a crucial period of life for habits (10,11). Although the developments in this period cannot be understood exactly at the time of duration, they are the elements that form the basis of life in later adulthood (12-14). Early adulthood is the most important period of life in which lifelong habits such as eating, interpersonal relationships and physical activity lay the base (15-19). It is important to detect health promoting behaviors and mindful eating status.

Besides eating issues, appearance anxiety increases and shows up in adolescence and early adulthood much more than other stages in life (5,9,20). Perceived negative evaluation of physical appearance starts from this period and effects everything in daily life (7,9). These disordered habits should be identified and intervened. Adolescent period is the most common period that eating disorders begin (8,9). Disordered eating and nutritional habits may cause eating disorders such as binge eating or bulimia nervosa, disordered eating habits or obesity in the future. In today's world, where it is difficult to reach correct information, young adults, especially university students, should be able to be provided quality information about healthy living and nutrition (21-23).

Many researchers have found relationships and difference between gender, body mass index both and Health Promoting Lifestyle Profile II scale (2,11-14,16,18,20-32) and Mindful Eating Questionnare (3,7-10). However, there are no researches that have studied about mindful eating and health promoting lifestyle together.

The main purpose of present study is to determine any relationships between university students' gender, BMI with overall scores of HPLP-II and Mindful Eating Questionnaire (MEQ) and the sub-factors' scores of two scales.

Materials and Methods

In order to conduct the present study, we explained that participation was voluntary and all the participants were informed of the purpose and confidentiality of the study to 368 students in Uludağ University. In the present study, a questionnaire form consisting of 3 questions including age, gender, department information was used and body mass index that was calculated after measurement.

MEQ

Mindful Eating Questionnaire (MEQ) was developed in 2009 (3). Kose et al. (2016) adapted to Turkish as MEQ-30 The sub-factors of the scale were divided into 7 sub-factors as disinhibition (mindless eating), emotional eating, eating control, mindfulness, eating discipline, conscious nutrition and interference. The sub-factors of the scales provide more detailed information about the sample. Examples of items are "I eat healthy," and "I eat without thinking when something is served". The scoring (straight and reverse) of the scale is as follows: Items 1, 7, 9, 11, 13, 15, 18, 24, 25 and 27 are scored straight, and the remaining questions are scored reverse (Reverse Scoring: 1 = 5, 2 = 4, 3 = 3, 4 = 2, 5 = 1). The higher the score of the scale, the higher the mindful eating status is found.

The Health-Promoting Lifestyle Profile II (HPLP-II)

HPLP-II has 52 items and 4-point Likert type scale developed by Walker, Sechrist and Pender (1987) and has 6 sub-factors as health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management. The HPLP-II determines behaviors associated with a healthy lifestyle. HPLP-II scale's Turkish adaptation was conducted in 2008 (34). The higher the score of the scale, the higher the healthy promoting lifestyle is found.

Statistical analysis

In the study, one-way ANOVA, Pearson and Spearman correlation analysis and multiple regression analysis were used to evaluate the data obtained. Pearson correlation and regression was used to evaluate the MEQ and HPLP-II total scores and their correlations with the score groups. Body Mass Index (BMI): body

weight (kg)/height² (m²) calculated with the formula. The World Health Organization (WHO) classification was used for BMI (35). Data were analyzed by using the IBM SPSS Statistics version 21 software for Windows. Significance level was taken as $p < 0.05$.

Results

In the present study, 68.5% of the participants were male and 31.5% were female, the mean age was 21.2± 1.77 years.

Participants mean body mass index (BMI, kg/m²) was 21.92± 2.99; 21.03± 1.62 in males and 23.38± 2.64 in females. When the distributions in the BMI classification were examined, in general 10.9% were underweight (UW), 75% were normal (NW) and 14.1% pre-obese and obese (POW), 15.9% of males in the group were UW, 76.2% were NW, 7.9% were POW; 72.4% of females were NW, 27.6% were found in the POW group, and there were no underweight ($p<0.000$).

There was no statistically significant difference between mean MEQ and HPLP-II scores of males (3.29±0.37, 130.38±19.59) and females (3.23±0.38, 132.36±16.61) ($p>0.05$). POW group was found to be having less MEQ scores than the other BMI classes ($p =0.008$).

It is determined for factor scores of two scales that females had more emotional eating, eating discipline and physical activity than males and males had more disinhibition (eating without thinking), interference and interpersonal relations than males ($p<0.05$). By the time, the relationship with BMI is UW group had more disinhibition, emotional eating, eating control, interference and interpersonal relations than other classes ($p<0.05$). POW group seemed to be having more mindfulness, conscious nutrition and physical activity than other BMI groups ($p<0.05$).

While the participant's age increased, BMI ($r=0.144$, $p=0.006$) and health responsibility ($p=0.125$, $p=0.016$) increased; spiritual growth ($r=-0.211$, $p=0.000$) and stress management ($r=-0.110$, $p=0.034$) decreased statistically significant but the relationship with both health-promoting lifestyle and mindful eating decrease was not significant ($p> 0.05$). There was strong relationship among sub-factors of MEQ and

Table 1. Score of scales and their sub-factors according to gender, age and BMI classification of participants

Variables	Gender				BMI (Body Mass Index)				
	Female	Male	F	p	UW	NW	POW	F	p
BMI	23.38±2.64	21.03±1.62	45.078	0.000*	17.6±0.78	21.55±1.82	27.17±1.68	37.695	0.000*
Age	21.86±1.95	21.03±1.63	18.196	0.000*	21.10±1.83	21.10±1.51	22.46±2.49	14.044	0.000*
MEQ	3.29±0.37	3.23±0.38	1.526	0.218	3.40±0.43	3.25±0.37	3.16±0.29	4.861	0.008*
Disinhibition	3.14±0.65	3.37±.0.71	9.209	0.003*	3.84±0.81	3.29±0.67	2.95±0.54	20.047	0.000*
Emotional Eating	3.66±0.76	3.06±1.00	32.743	0.000*	3.68±1.00	3.23±0.97	3.00±0.84	5.756	0.003*
Eating Control	3.61±0.78	3.75±0.78	2.455	0.118	4.00±0.85	3.74±0.78	3.29±0.58	11.002	0.000*
Mindfulness	3.04±0.44	3.01±0.41	0.368	0.545	2.82±0.49	3.01±0.40	3.25±0.36	12.886	0.000*
Eating Discipline	3.09±0.83	2.84±0.61	11.159	0.001*	2.82±0.49	3.01±0.40	3.24±0.35	1.427	0.241
Conscious Nutrition	3.14±0.49	3.18±0.49	0.631	0.428	3.16±0.50	3.13±0.47	3.37±3.39	6.493	0.002*
Interference	3.50±0.87	3.73±0.78	6.426	0.012*	3.80±0.82	3.70±0.81	3.31±0.75	5.986	0.003*
HPLP-II	130.38±19.59	132.36±16.61	1.011	0.315	135.10±20.30	130.92±16.92	133.46±18.86	1.273	0.281
Spiritual Growth	25.37±5.27	26.24±3.72	3.213	0.074	27.00±3.87	25.89±4.09	25.53±5.38	1.463	0.233
Health responsibility	21.24±4.96	21.75±4.06	1.063	0.303	22.60±6.70	21.37±3.91	21.92±4.35	1.558	0.212
Physical Activity	18.10±3.89	16.76±4.10	8.767	0.003*	16.20±4.85	17.04±3.71	18.69±4.94	4.984	0.007*
Nutrition	21.24±3.93	20.65±3.58	2.029	0.155	20.20±4.38	20.89±3.58	21.00±3.78	0.680	0.507
Interpersonal relations	24.93±4.64	27.12±4.65	17.712	0.000*	28.50±5.77	26.26±4.61	25.77±4.29	4.553	0.011*
Stress management	19.48±3.98	19.84±4.07	0.625	0.430	20.60±4.55	19.45±3.88	20.54±4.35	2.658	0.071

*p<0.05; UW: Underweight, NW: Normal Weight and POW: Pre-obese and Obese.

HPLP-II. As the MEQ scores increased, HPLP-II scores ($p<0.001$) and all the sub-factors of HPLP-II increased significantly ($p<0.05$). Besides, HPLP-II had a correlation with 4 sub-factors (disinhibition, eating control, eating discipline and interference) ($p<0.05$).

A significant relationship was found between age, BMI both MEQ sub-factors (disinhibition: r=-0.120, r=-0.294, eating control: r=-0.133, r=0.211, mindfulness: r=0.190, r=0.285, eating discipline: r=-0.122, r=0.226, conscious nutrition: r=0.153, r=0.128, and additionally for BMI, emotional eating: r=-0.158, interference: r=-0.139; $p<0.05$) and HPLP-II sub-factors (age; spiritual growth: r=-0.211, health responsibility: r=0.125, stress management r=-0.110 and BMI; physical activity: r=0.192, nutrition: r=0.120, $p<0.05$). Emotional eating, nutrition and stress management had a strong correlation ($p<0.05$).

Discussion

Present study focused on health promoting behaviors and mindful eating status of participants. Our results stated a statistically significant association between mindful eating and healthy lifestyle behaviors. There are so many studies (11,14,16,18,20,21,23,24, 30,31,32) on students and older adults (2,12,13,25, 27,28) that searched for health promoting lifestyles. It was discussed below.

Age, gender, BMI and BMI Classifications

With the original form of HPLP, Walker et al. (1988) have found the mean age 39.2 years and their sample's age ranged from 18 to 88. Al-Kandari et al. (2008) and Diez et al. (2012) similarly studied with students 17-23 and 17-35 aged. Peker and Bermek (2010) conducted a research on dental students that 50.5% of them were female and mean age was 19.43±0.89 years. Wei et al. (2011) conducted a research on students that their mean age was 20.1±1.5 years. In a study, Gokyildiz et al. (2014) stated that their participants' mean age was 26.9 ±5.59 and they classified age to 3 groups. Polat et al. (2016) stated mean age 20.91±2.15 years, Lolokote et al. (2017) found mean age 22.18 years, and as Bahar et al. (2008) stated, most of the participants

Table 2. Correlations between age, BMI and MEQ, HPLP-II (n=368)

Variables	Age		BMI		HPLP-II		Spiritual Growth		Health responsibility		Physical Activity		Nutrition		Interpersonal relations		Stress management	
	r	p	r	p	r	p	r	P	R	p	r	p	r	p	r	p	r	p
Age	1		0.144	0.006*	-0.070	0.178	-0.211	0.000**	0.125	0.016*	0.051	0.328	-0.049	0.348	-0.098	0.061	-0.110	0.034*
BMI	1		1		0.095	0.069	0.009	0.864	0.036	0.492	0.192	0.000**	0.120	0.021*	-0.034	0.516	0.102	0.051
MEQ	-0.008	0.872	-0.098	0.060	0.274	0.000**	0.163	0.002*	0.225	0.000**	0.108	0.039*	0.257	0.000**	0.125	0.017*	0.288	0.000**
Disinhibition	-0.120	0.022*	-0.294	0.000**	0.157	0.002*	0.074	0.159	0.164	0.002*	-0.015	0.777	0.161	0.002*	0.102	0.050	0.177	0.001*
Emotional Eating	0.090	0.086	-0.158	0.002*	0.076	0.144	0.075	0.149	0.046	0.376	-0.001	0.981	0.110	0.035*	-0.015	0.767	0.121	0.020*
Eating Control	-0.133	0.010*	0.211	0.000**	0.193	0.000**	0.284	0.000**	0.102	0.051	-0.016	0.757	0.076	0.144	0.185	0.000**	0.158	0.002*
Mindfulness	0.190	0.000**	0.285	0.000**	-0.068	0.195	-0.133	0.011*	0.013	0.801	-0.137	0.009*	-0.104	0.046*	0.015	0.776	0.047	0.368
Eating Discipline	-0.122	0.020*	0.226	0.000**	0.472	0.000**	0.179	0.001*	0.400	0.000**	0.484	0.000**	0.501	0.000**	0.119	0.023*	0.348	0.000**
Conscious Nutrition	0.153	0.003*	0.128	0.014*	0.085	0.104	-0.006	0.908	0.064	0.224	0.121	0.021*	0.072	0.167	-0.039	0.459	0.165	0.001*
Interference	-0.051	0.330	-0.139	0.008*	0.118	0.024*	0.070	0.179	0.109	0.037*	-0.014	0.793	0.119	0.023*	0.099	0.058	0.111	0.034*

*p<0.05, **p<0.001; MEQ: mindful eating questionnaire, HPLP-II : health-promoting lifestyle profile II

were female. Shaahmadi et al. (2019) found in their research women mean age was 15 to 49 years. Bakouei et al. (2018) conducted a research on a sample that %58 of them were female, mean age was 21.37±2.28 years. Zhang 2013, Tsuobi 2011, Aslan 2017, Keele (2019), Aygar et al. (2019), Fisher and Kridli (2013) studied with older adults. In the present study, 68.5% of the participants were male and 31.5% were female, similar to other searches the mean age was 21.2± 1.77 years. As it is seen most of researches conducted with students because this is a critical age group for healthy lifestyle choices.

Framson et al. (2009) found BMI (kg/m²) ranged from 17.7 to 62.0 in their researches with a good consistency. Al-Kandari et al. (2008) stated that participants' mean BMI (kg/m²) was 24.4; 24.1 of females and 25.2 of males. In a study, Wei et al. (2011) found mean BMI as 20.9±2.3 and there was a significant difference between genders as %83.6 were in normal weight group. In this study participants' mean body mass index (BMI, kg/m²) was 21.92± 2.99; 21.03± 1.62 in males and 23.38± 2.64 in females. When the distributions in the BMI classification were examined, similar to other researches, in general 10.9% were underweight (UW), 75% were normal (NW) and 14.1% pre-obese and obese (POW), 15.9% of males in the group were UW, 76.2% were NW, 7.9% were POW; 72.4% of females were NW, 27.6% were found in the POW group, and there were no underweight ($p<0.000$). Our study with a consistency in itself and other researches, conducted on mostly normal weighted students.

Al-Kandari et al. (2008) couldn't determine any difference between BMI and gender ($p>0.05$) but they stated a statistically significant difference between age groups as the youngest age group had the lowest BMI ($p<0.001$). In their study, Fisher and Kridli (2013) couldn't find any correlation between age and BMI. In this study, we found a strong association as the younger had lowest BMI. It is not unexpected and had a consistency to have low BMI in young adulthood.

Assesments between MEQ, HPLP scores and gender, BMI

There are so many studies about healthy lifestyle on college students. Because it is a vital period for life. In score Al-Kandari et al. (2008) reported in their study that mean HPLP-II score of students was 2.6±0.5 and they found the lowest sub-factor as physical activity (2.2±0.71). Wei et al. (2011) found overall mean score of HPLP-II as 2.50±0.29 and Lolokote et al. (2017) stated 2.44±0.42, Bakouei et al. (2018) reported as 126.79±19.28, all of them couldn't find a significant difference between gender. Wei et al (2011) reported that females practiced better health responsibility, nutrition and interpersonal relations than males ($p<0.05$) but males had significantly higher scores on physical activity ($p<0.0001$). Polat et al. (2016) reported that mean HPLP-II score was 133.68±19.07 and lowest sub-factor was physical activity (17.04±4.50), too. Peker and Bermek (2010) found the overall mean score of HPLP-II was 2.49±0.32, 2.50±0.33 in females and 2.48±0.32 in males ($p>0.05$). And also, they stated a significant difference between gender and health responsibility, physical activity sub-factors ($p<0.05$). Nacar et al. (2014) found that mean score of 2118 students was 127.9±18.2. Chen et al. (2017) stated that mean HPLP-II score of cases was 144.48±18.66 and controls was 150.22±19.01. There is only one study that we know about mindfulness and health promoting lifestyle and Gedik (2017) found in that study that total HPLP-II scores are positively correlated with mindfulness. In present study, we couldn't find a statistically significant difference between mean MEQ and HPLP-II scores of males (3.29±0.37, 130.38±19.59) and females (3.23±0.38, 132.36±16.61) ($p> 0.05$). POW group was found to be having less MEQ scores than the other BMI classes ($p =0.008$). Some of the scores showed differences depending on the adaptation of scale. In our study, a scoring system without arithmetic average was used.

Associations between scales, sub-factors and age, gender, BMI

Can et al. (2008) stated that females have better healthy lifestyle behaviors and health responsibility, nutrition, interpersonal relations and stress management sub-factors ($p<0.05$). Zhang et al. (2013) stated that females have higher scores of HPLP-II and sub-factor scores ($p<0.01$) except physical activity and stress management factors ($p>0.05$). Polat et al. (2016) found that there is a statistically significant difference between genders, males have higher physical activity score ($p<0.001$) and females have more in-

terpersonal relations (p<0.003). Diez (2012), Aslan et al. (2017) and Aygar et al. (2019) found that females have more health-promoting behaviors than males (p<0.05). Similarly, Keele (2019) stated that there is a statistically significant difference between males and females, in addition, females have higher HPLP-II scores (p=0.025), and health responsibility sub-factor (p=0.009). However, Al-Kandari et al. (2008) reported that males have higher HPLP-II scores and physical activity, interpersonal relations, and stress management sub-factors (p<0.05) than females. In present study, females sub-factor scores of two scales had statistically significantly higher emotional eating, eating discipline and physical activity than males and males had more disinhibition (eating without thinking), interference and interpersonal relations than males (p<0.05), males had higher overall scores but not significant (p>0.05). Our results show a difference from other researches, just one similarity with one of them (20) and this result may be due to the high percentage of females. Additionally, these sub-factors can be change by the time of year or semester, it should be randomized.

Framson et al. (2009), Grinnel et al. (2011), Moor et al (2013) and Choi and Lee (2019) concluded that emotional eating factor increased with age. In their study, Framson et al. (2009) stated that as the age of the participants increased, mindfulness, disinhibition, emotional eating and external cues factors increased, but the total MEQ score and distraction factor did not change. In another study, Choi and Lee (2019) found a relationship between age and emotional eating (p<0.05). Al-Kandari et al. (2008) and Aygar et al. (2019) stated that there are significant differences between age groups and when age increased HPLP-II and all sub-factor scores increased and Aygar et al. reported that it was statistically significant (p<0.001). Nacar et al. (2014) reported a significant difference between age and HPLP-II scores (p<0.0001). Shaahmadi et al. (2019) and Lolokote et al. (2017) couldn't find any correlation between age, BMI and total and sub-factor scores of HPLP-II (p>0.05). Polat et al. (2016) reported differences between age groups and all scores as older age had higher total HPLP-II score and sub-factor scores (p<0.05) but interpersonal relations and stress management was not statistically significant. Other study conducted in Turkey it was found as age increased, HPLP-II scores increased significantly (32). In their study, Can et al. (2008) determined better health responsibility but poorer stress management in older participants and as age increased, HPLP-II level increased. Peker and Bermek (2010) found negative correlation with age and HPLP-II scores, spiritual growth, health responsibility, physical activity, nutrition and interpersonal relations but it was not statistically significant (p>0.05). Wei et al. (2011) stated that as age increased, only health responsibility sub-factor increased (p<0.01). In the present study, age and MEQ scores' correlation was not significant (p>0.05) and as the age increased, BMI and health responsibility increased; spiritual growth and stress management decreased significantly (p<0.05) but the relationship with both health-promoting lifestyle and mindful eating decrease was not significant (p> 0.05).

Framson et al. (2009) found that there was a strong relation between BMI groups and MEQ scores (p<0.001) and also BMI and MEQ and all sub-factors had negative correlation (p<0.001). In other studies, Grinnell et al. and Beshara et al. (2013) found a negative correlation with MEQ scores and body weight, and a negative correlation with emotional eating and disinhibition factors (p <0.05). Moor et al. (2013) and Mason et al. (2016) found that participants with high BMI values had lower MEQ scores and decreased emotional eating scores. However, Webb et al. (2018) couldn't find any significant relationship between BMI and MEQ scores. Can et al. (2008) couldn't find correlation between BMI and sub-factors, but only physical activity (r=0.11, p=0.001). Al-Kandari et al. (2008) stated a difference between BMI groups and HPLP-II and sub-factors scores as overweights had the highest overall HPLP-II and obese group had the highest health responsibility score (p<0.05). Fisher and Kridli (2013) found that when age, BMI decreased, HPLP-II increased (p<0.05) but they did not give any variable about sub-factors. Gokyildiz et al. (2014) conducted that with aging HPLP-II scores increasing significantly (p=0.003). And in elder people, Zhang et al (2013) found that after 50 years, overall HPLP-II and sub-factor scores can be decreased but Tsuobi et al. (2011) couldn't find any relationship with both age and BMI aged more than 60 (p>0.05), similarly Aslan et al. (2017) (p>0.05). In our study, similar to some

searches, there was a relationship with BMI is UW group had more disinhibition, emotional eating, eating control, interference and interpersonal relations than other classes and POW group seemed to be having more mindfulness, conscious nutrition and physical activity than other BMI groups ($p<0.05$).

MEQ and HPLP-II correlations

As the MEQ scores increased, HPLP-II scores ($p<0.001$) and all the sub-factors of HPLP-II increased significantly ($p<0.05$). Besides, HPLP-II had a correlation with 4 sub-factors (disinhibition, eating control, eating discipline and interference) ($p<0.05$). This is the first known study that studied the relationship between mindful eating and healthy lifestyle promoting profiles with the scales of them. In Turkey, there are so many researches about healthy lifestyle and mindful eating. Especially healthy promoting lifestyle profile II (HPLP-II) scale is used with elder people, students, and nurses.

Emotional eating, nutrition and stress management found to be related. As we expect healthy life choices is associated with being mindfulness and in future studies, healthy life searches can be carried out especially regarding conscious nutrition and emotional eating, which are among MEQ's sub-factors.

Conclusion

Nutrition, psychology, communication skills, sports educations that are given in the university period can make adulthood life much more qualified and livable. It is stated that there is a need for more detection and support for eating and lifestyle habits especially supported with educations.

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