

Investigation of Green Eating Behaviour in University Student

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Abstract

The current food system causes environmental destruction by depleting natural resources. One third of food is lost during the production, transportation, distribution and consumption stages. This loss in the food chain draws attention to the inadequacy of the system and contradicts the concept of sustainable food. Existential loss of food also means the loss of water, energy and money spent to produce it. Consumers have a decisive role in minimizing losses in the food chain and making it more sustainable. Consumers can establish a link between the environment and nutrition by developing conscious eating behaviors. Green Eating (GE) is a new dietary model that encompasses human health, food footprint and ethical values. This model prioritizes minimizing the consumption of processed products, consuming fair trade certified products that care about the earnings of the producer, prioritizing local products, and observing the presence of organic certification in the products consumed. The awareness of this model is a matter of curiosity in the society in general and the view of university students on the subject is important. Therefore, the aim of this study was to determine the prevalence of GE behavior among university students. The study was conducted between 17.04.22-17.05.22 with the participation of 208 university students. Data were collected using "Demographic Data Form" prepared by the researchers and the "GE Scale" developed by Weller et al., in 2014. In addition to descriptive statistical methods (number, percentage, mean, median, standard deviation, etc.), Mann-Whitney U Test and Kruskal Wallis-H Test were used to test the quantitative differences between groups. According to our findings, the mean scores of school self-efficacy ($p=0.005$) and home self-efficacy ($p=0.001$) of the students who did not practice and did not plan to practice GE behavior were found to be low and statistically significant. The mean scores of students living in dormitories at the stage of implementing and maintaining this model were also low and significant ($p=0.018$). The independent variables affecting GE behavior were school and home self-efficacy factors. As a result of our study, it was seen that the arrangements made in school, home and dormitory conditions can be effective for the implementation of GE. It is recommended that necessary arrangements should be made in common dining areas at school and dormitory, and students should raise awareness and reconsider their consumption preferences at home.

Keywords: Green eating, environment and student, sustainability

Üniversite Öğrencilerinde Çevreye Duyarlı Beslenme Davranışının İncelenmesi

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Özet

Mevcut gıda sistemi, doğal kaynakları tüketerek çevresel bir yıkıma neden olmaktadır. Üretim,

taşıma, dağıtım ve tüketim aşamalarında gıdaların üçte biri yitirilmektedir. Gıda zincirindeki bu kayıp sistemin yetersizliğine dikkat çekmekte ve sürdürülebilir gıda anlayışına ters düşmektedir. Gıdanın varlıksal kaybı onu üretmek için harcanan su, enerji ve para kaybı anlamına da gelmektedir. Gıda zincirindeki kayıpları en aza indirmek ve onu daha sürdürülebilir kılmak için tüketici belirleyici bir role sahiptir. Tüketiciler, bilinçli yeme davranışı geliştirerek çevre ile beslenme arasında bir bağlantı kurabilmektedirler. Çevreye duyarlı beslenme, insan sağlığını, gıdanın ayak izini ve etik değerlerini kapsayan yeni bir diyet modelidir. Bu model işlenmiş ürün tüketimini en aza indirmeyi, üreticinin kazancını önemseyen adil ticaret sertifikalı ürünleri tüketmeyi, yöresel ürünlere öncelik vermeyi, tüketilen ürünlerde organik sertifika varlığını gözetmeyi ön planda tutmaktadır. Toplumun genelinde bu modelin farkındalığı merak konusu olup üniversite öğrencilerinin konuya bakışı önemsenmektedir. Bu nedenle çalışmanın amacı üniversite öğrencileri arasında çevreye duyarlı beslenme davranışının yaygınlığını saptamaktır. Çalışma 17.04.22-17.05.22 tarihleri arasında 208 üniversite öğrencisinin katılımı ile gerçekleştirilmiştir. Veriler araştırmacılar tarafından hazırlanmış olan "Demografik Veri Formu" ve 2014 yılında Weller ve arkadaşları tarafından geliştirilmiş "Çevreye Duyarlı Beslenme Ölçeği" aracılığıyla toplanmıştır. Verilerin analizinde tanımlayıcı istatistiksel metodların (sayı, yüzde, ortalama, ortanca, standart sapma vb.) yanında, gruplar arasındaki nicel farklılığın test edilmesinde Mann-Whitney U Testi ve Kruskal Wallis-H Testinden yararlanılmıştır. Bulgularımıza göre çevreye duyarlı beslenme davranışını uygulamayan ve uygulamayı düşünmeyen öğrencilerin okul öz yeterlilik ($p=0,005$) ve ev öz yeterlilik ($p=0,001$) puan ortalamaları düşük ve istatistiksel olarak anlamlı bulunmuştur. Yurtta kalan öğrencilerde bu modeli yürütme ve sürdürme aşamasındaki puan ortalamaları da düşük ve anlamlıdır ($p=0,018$). Çevreye duyarlı beslenme davranışını etkileyen bağımsız değişkenler ise okul ve ev öz yeterlilik faktörleridir. Çalışmamızın sonucunda çevreye duyarlı beslenmenin yürütülebilmesi için okul, ev ve yurt koşullarında yapılan düzenlemelerin etkili olabileceği görülmüştür. Okul ve yurtta ortak yemek alanlarında gerekli düzenlemelerin yapılması, öğrencileri bilinçlendirerek evdeki tüketim tercihlerini yeniden gözden geçirmeleri önerilmektedir.

Anahtar kelimeler: Çevreye duyarlı beslenme, çevre ve öğrenciler, sürdürülebilirlik

1. Introduction

The current food system causes environmental problems in many issues that extend from deforestation to pollution by consuming natural resources. The production and consumption stages of food become a fundamental trigger of environmental destruction (Hajer et al., 2016). Food is the sector that uses more than two-thirds world's freshwater in production phase (Gilbert et al., 2012). It is known that excessive water consumption and land use cause soil degradation and deforestation (Hajer et al., 2016). Agriculture system can cause losses in the habitats of mammals, insects and birds. Also threaten the richness of the species and lead to decline in biodiversity (Pilling et al., 2020).

In addition to land use, the agricultural sector provides the second main contributor to global climate change caused by human-induced greenhouse gas emissions (GHGs) af-

ter fossil fuels (Jia et al., 2019). Food-borne GHGs are difficult to calculate but are responsible for approximately 19-30% of emissions (Vermeulen et al., 2012).

To reduce the above-mentioned environmental impacts of the existing food system, consumption patterns need to be revised (Riley et al., 2011). Sustainability of agriculture, which includes dimensions such as economic, sociocultural values, differentiation in forms of production, consumer behaviour changes, and community awareness, refers to a process rather than a goal (Pocol et al., 2020). Due to its multidimensional structure, achieving sustainability in the global food system is considered to be one of the major challenges experienced by humanity (Ibarrola-Rivas et al., 2022). Dietary changes, on the other hand, have been frequently discussed recently as a basis for the effects of the food system on the environment (Willett et al., 2019). Apart from

the health benefits of making predominantly plant-based choices, it is known that the effect on the environment is less compared to animal-based diets. FAO determines the share of GHGEs produced by industrial animal husbandry as 14.5% (FAO, 2013). Reasons related livestock production emissions are methane gas emitted from mammals, methane and ammonia release from fertilizer, nitrogen oxide emission arising from feed production etc. In addition to dietary consumption choices, preventing food waste is also considered among sustainability goals. It is known that the food packaging process, which extends the life of food and reduces the frequency of food waste generation and increases food safety, also creates an environmental concern (Deshwal, 2019). Apart from packaging, the type of transportation of food increases the GHGE into the atmosphere and makes a significant impact on environment (Kan et al., 2022). It is known that alongside the environment, food choices also affect ethical values. Directly supporting the producer can lead to fairer and more ethical consumption. The fact that the local product is fair trade certified shows that the producer is financially supported and that workers in the sector are compensated for their labor. While the interest in fair trade certified products is increasing in Europe, data for Turkey is inadequate in terms of interest to fair trade (Süyün, 2015). However, some food communities alternatively take their places in the organization and try to fill the deficiency in Turkey (Çelik, 2016).

In short, considering the effect of consumer patterns on social, economic and environmental sustainability dimensions, new forms of nutrition are needed GE which is one of these trends, emerges as a multidisciplinary approach that includes environmental, social and economic dimensions. The substances such as observing the existence of a fair trade certificate in purchased products, limiting the consumption of processed packaged products, restricting meat consumption at least once a week, preferring organic foods as much as possible, and minimizing food waste including in GE diet model (Weller et al., 2014). Our study aims to determine its prevalence

among university students and identify main obstacles to maintain this diet.

2. Materials and Methods

2.1. Materials

Our cross-sectional study was carried out in Hakkari province and its surroundings between March and June 2022. This research was performed with approval of the of the Ethics Committee of Hakkari University on 21.02.22 and number of the study is 2022/38. In the study, the calculation (d-value) method developed by Cohen was used to calculate the effect size in order to determine the sample size to be used in determining students' environmentally sensitive nutritional attitudes and behaviors. In order to determine the d value, which is the effect size index, the findings reported by Tan et al. (2021) were used in the study investigating the effects of consumer awareness, and healthy lifestyle on GE.

The effect size for this study was determined as 0.151. Study sample was calculated consists of 171 participants with the help of the G-power. Considering a loss of approximately 20% in the study, The planned sample size was 205 participants and the study was carried out with the participation of a total of 208 students.

2.2. Methods

Preferred method to collect data was face-to-face. Participating students were asked to sign an informed consent form and a demographic information form was utilised to gather data about age, gender, place of residency, and if any disease exists to limit diet along with a GE scale filled to determine participants nutritional attitudes towards the environment.

2.2.1. GE scale

GE scale was performed by Weller et al. (2014). The validity and reliability of the scale, which was carried out by Cambaz et al. (2021). The scale consists of 4 sections and 25 items. 1st section is used to determine stage of GE people are at. Those who do not practice and do not plan to practice GE who are considered

to be in the precontemplation stage. Those who plan to implement this diet in the next 6 months are considered to be in contemplation. Those who plan to implement it in the next 30 days are considered to be in preparation. Those who have been implementing this model for less than 6 months are considered to be in action. Those who have been implementing this model for 6 months or more are considered to be in maintenance. 2nd Section of scale, contains 6 questions were asked about the respondents' dietary attitudes and preferences (Cronbach's $\alpha = 0.81$). These questions identify the propensity to consume seasonal and local food. Respondents were also asked to answer how often they pay attention to free-range, fair or organic certification of food when purchasing products. 3rd Section of scale, contains 8 items in total, is divided into two subheadings: advantages [Cronbach's $\alpha = 0.84$] and disadvantages [Cronbach's $\alpha = 0.72$]. In this section, it is questioned to what extent the positive and negative situations that may be encountered while exhibiting GE behaviour are important in deciding to pursue this model. While deciding to prefer this model, it is asked to determine the importance of factors such as the positive health effects of consuming processed products, contributing to the local economy by consuming local products, and the fact that GE is expensive and difficult. 4th Section is divided into two sub-sections: school [Cronbach's $\alpha = 0.85$] and home self-efficacy [Cronbach's $\alpha = 0.83$]. In this section, the effect of difficulties that may be encountered in the home and school environment on maintaining this model is investigated. The scale items include variables such as receiving food service in the cafeteria, being with the family, intensity during the course period and related lack of time, and being at home.

The score is determined by summing the scores for each scale and dividing the result

by the total number of elements.

3. Evaluation of the Data

While evaluating the findings of the study, the SPSS (Statistical Package for the Social Sciences) version 25.0 (IBM Corp., Armonk, NY, USA) program are used for statistical analysis. Descriptive statistical methods (mean, standard deviation, percentage, etc.) are used while evaluating the study data etc. are used.

Comparisons between the two groups in quantitative data were determined by Independent Sample t-test (normally distributed data) & Mann-Whitney U test (in non-normally distributed data); In comparisons of more than two groups, One-Way Analysis of Variance (One-way ANOVA) or its non-parametric equivalent Kruskal-Wallis test is used. In addition, multiple linear or logistic regression modeling is used to measure the effect of independent variables on the dependent variable. Results; Significance in the 95% confidence interval is evaluated under $p < 0.05$.

4. Results

Of the 208 students included in the study, 57.2% were female and 95.2% were single. When the academic characteristics of the students were examined, it was found that 34.1% received education in the field of health sciences, 13.9% in engineering, 28.8% in educational sciences, 23.1% in theology. According to where they live, 62.1% were in the dormitory, 34.6% were with family or friends, and 3.4% were live alone. According to the nutritional characteristics, 92.8% of the students were omnivorous, 5.3% semi vegetarian, 1.9% vegetarian. 86.5% of students consumed school cafeteria meals. 9.1% of students had a nutritional restriction health problem. Socio-demographic characteristics of participants were given in Table 4.1.

Table 4.1. Descriptive characteristics of the participants

| Features | N | % | Mean±SD | Min.-Max. |
|---|----------|----------|----------------|------------------|
| Age | 208 | 100 | 22.89±3.01 | |
| Sex | | | | |
| Female | 119 | 57.2 | | |
| Male | 89 | 42.8 | | |
| Marital Status | | | | |
| Married | 10 | 4.8 | | |
| Single | 198 | 95.2 | | |
| Department | | | | |
| Health Science | 71 | 34.1 | | |
| Engineering | 29 | 13.9 | | |
| Education Science | 60 | 28.8 | | |
| Theology | 48 | 23.1 | | |
| Accommodation | | | | |
| Dormitory | 129 | 62.0 | | |
| Stay with parent | 66 | 31.7 | | |
| Stay with friend | 6 | 2.9 | | |
| Alone | 7 | 3.4 | | |
| Diet Preferences | | | | |
| Omnivorous | 193 | 92.8 | | |
| Semi vegetarian | 11 | 5.3 | | |
| Vegetarian | 4 | 1.9 | | |
| Eating school canteen | | | | |
| Yes | 180 | 86.5 | | |
| No | 28 | 13.5 | | |
| Having nutritional restriction problem | | | | |
| Yes | 19 | 9.1 | | |
| No | 189 | 90.9 | | |

It was found that the majority of 114 (54.8%) students who participated in the change sub-dimension of GE behavior were in the pre-contemplation stage (26.3%). Eating behavior ($p=0.014$), self-efficacy at school ($p=0.005$) and at home ($p=0.001$) subdimension mean scores showed statistically significant diffe-

rence according to the nutritional stages. It was determined that the subgroup analysis resulted from the students in the pre-contemplation stage. In this context, it was observed that the students who were in the pre-contemplation phase had lower score of GE (Table 4.2).

Table 4.2. GE subdimension mean points according to participants nutritional status

| | Precontem- plation (n=30) | Contemplation (n=22) | Preparation (n=26) | Action (n=15) | Maintenance (n=21) | P value |
|---------------------|--|---------------------------------|-------------------------------|--------------------------|-------------------------------|--------------------|
| Subdimension | Mean±SD | Mean±SD | Mean±SD | Mean±SD | Mean±SD | P |
| Eating Behavior | 2.38±0.98* | 3.22±0.89 | 2.89±0.68 | 2.68±0.73 | 3.01±0.93 | 0.14* |
| DB Pros | 3.29±1.07 | 3.99±0.86 | 3.58±0.93 | 3.53±0.84 | 3.85±0.71 | 0.054 |
| DB Cons | 3.22±0.94 | 3.77±0.83 | 3.14±0.54 | 3.44±0.62 | 3.44±0.92 | 0.120 |
| SE at school | 2.17±0.92* | 3.00±0.92 | 2.85±0.63 | 2.46±0.70 | 2.91±0.85 | 0.005* |
| SE at home | 2.98±1.23* | 4.17±0.75 | 3.48±1.11 | 3.41±0.80 | 4.03±0.84 | 0.001* |

*= $p<0.05$, DB, Decisional Balance, GE Green Eating, $K-W\chi^2=$ Kruskal Wallis-H Testi, SD, Standard Deviation, SE, Self efficacy

Considering the relationship between GE stage and introductory characteristics, a difference was found only between the place where the student stayed. The rate of students

staying in the dormitory at the stage of action and maintenance was found to be statistically significantly lower (Table 4.3).

Table 4.3. The relationship between state of change and descriptive characteristics

| | State of Change | | | | | <i>P value</i> |
|---|----------------------------|-------------------------|-----------------------|------------------|-----------------------|----------------|
| | Precontemplation (n=30) | Contemplation (n=22) | Preparation (n=26) | Action (n=15) | Maintenance (n=21) | |
| Features | Mean±SD | Mean±SD | Mean±SD | Mean±SD | Mean±SD | |
| Age | 23.37±4.18 | 22.32±2.21 | 23.04±2.68 | 24.93±4.70 | 23.05±2.69 | 0.457 |
| | n(%) | n(%) | n(%) | n(%) | n(%) | P |
| Sex | | | | | | 0.599 |
| Female | 12(40) | 12(54.5) | 12(46.2) | 7(46.7) | 13(61.9) | |
| Male | 18(60) | 10(45.5) | 14(53.8) | 8(53.3) | 8(38.1) | |
| Marital Status | | | | | | 0.074 |
| Married | 2(6.7) | 1(4.5) | 1(3.8) | 4(26.7) | 1(4.8) | |
| Single | 28(93.3) | 21(95.5) | 25(96.2) | 11(73.3) | 20(95.2) | |
| Department | | | | | | 0.381 |
| Health Science | 11(36.7) | 7(31.8) | 7(26.9) | 4(26.7) | 4(19) | |
| Engineering | 2(6.7) | 0(0) | 5(19.2) | 1(6.7) | 6(28.6) | |
| Education | 9(30) | 8(36.4) | 7(26.9) | 7(46.7) | 6(28.6) | |
| Science | | | | | | |
| Theology | 8(26.7) | 7(31.8) | 7(26.9) | 3(20) | 5(23.8) | |
| Accommodation | | | | | | 0.018* |
| Dormitory | 19(63.3) | 19(86.4) | 17(65.4) | 6(40)* | 9(42.9)* | |
| Stay with parent/ friend/alone | 11(36.7) | 3(13.6) | 9(34.6) | 9(60) | 12(57.1) | |
| Diet Preferences | | | | | | 0.225 |
| Omnivore | 27(90) | 19(86.4) | 26(100) | 15(100) | 20(95.2) | |
| Semi V/Vegetarian | 3(10) | 3(13.6) | 0(0) | 0(0) | 1(4.8) | |
| Eating school canteen | | | | | | 0.964 |
| Yes | 26(86.7) | 19(86.4) | 23(88.5) | 13(86.7) | 17(81) | |
| No | 4(13.3) | 3(13.6) | 3(11.5) | 2(13.3) | 4(19) | |
| Having nutritional restriction problem | | | | | | 0.797 |
| Yes | 4(13.3) | 1(4.5) | 3(11.5) | 1(6.7) | 3(14.3) | |
| No | 26(86.7) | 21(95.5) | 23(88.5) | 14(93.3) | 18(85.7) | |

*= $p < 0.05$, SD, Standard Deviation

Multivariate linear regression analysis was performed with the enter method in order to predict the situations affecting the GE behaviours of the students. Accordingly, it was determined that the increasing self-effi-

cacy level of the students at school ($\beta = 0.16$; $p = 0.033$) and at home ($\beta = 0.21$; $p = 0.005$) were independent factors that increased GE behaviours (Table 4.4).

Table 4.4. Independent factors associated with GE behaviours

| Features | Unstandardized Coefficients | | Standardized Coefficients | T | P |
|--------------|-----------------------------|-------|---------------------------|-------|---------------|
| | B | SE | Beta(β) | | |
| (Constant) | 1.377 | 0.298 | - | 4.620 | <0.001 |
| DB Pros | 0.081 | 0.075 | 0.089 | 1.078 | 0.282 |
| DB Cons | 0.021 | 0.084 | 0.020 | 0.247 | 0.805 |
| SE at Home | 0.161 | 0.075 | 0.157 | 2.143 | 0.033* |
| SE at School | 0.172 | 0.061 | 0.211 | 2.826 | 0.005* |

*: $p < 0.05$, DB, Decisional Balance, GE, G.E., SE, Self efficacy, SD, Standard Deviation

5. Discussion

In this study, we investigate the GE behaviours in students. When the findings were examined, it was seen that the highest number of students were found in the precontemplation stage of the nutrition stages in this study. In the precontemplation stage, there are people who do not regularly apply and do not plan to apply the GE model. In studies conducted with students, it is seen that most of the students are in the precontemplation stage (Weller, 2014; Brown, 2013; Green, 2012). In our study, it is revealed that students at this stage have low mean scores in nutrition attitudes and do not attach importance to GE ($p=0.014$). Cambaz (2021) was found no relationship between the stages and nutritional attitudes in their study. However, Weller et al. (2014) found a statistically significant relationship between nutritional attitudes and people in the precontemplation stage. According to the study, people in this stage were found to adopt more unhealthy eating behaviours than those in the action and maintenance stages. In a study, it was concluded that university students in the action stage ate more fibrous diet and less processed meat than those in the precontemplation stage (Brown, 2013). Green and Weller (2012) found that people in the precontemplation stage consumed less fruits and vegetables and more fast food.

In our study, the relationship found between nutritional attitude and students in the precontemplation group can be interpreted as that students in the precontemplation do not pay attention to certification when purchasing products and do not pay attention to the consumption of seasonal and local products. As a consumer, paying attention to organic, free-range and fair trade certificates opens the doors to ethical consumption. It is seen that ethical consumption, which also includes the consumption of local and seasonal products, is kept in the background by individuals in the precontemplation stage. In the another study conducted to compare the ethical purchasing behaviors of the participants included in the study from America and Turkey and their predisposition to environmentally friendly shopping, the fact that the awareness of being a green consumer in Turkey was found to be lower than Americans (Basgoze et al., 2012). This result supports our finding.

Another finding in our study was that the school ($p < 0.005$) and home ($p < 0.001$) self-efficacy scores of those in the precontemplation stage were found to be low. In the study conducted by Weller et al. (2014), it was found that school and self-efficacy scores increased linearly as the stages of the students progressed.

No such finding was found in the study conducted by Cambaz (2021). The findings of the study are consistent with the study of Weller et al. (2021).

The rate of students staying in the dormitory at the stage of action and maintenance was found to be statistically significantly lower ($p < 0.018$). Green and Weller (2012), found that most of the people with eating habits in dormitories and school cafeterias were in the precontemplation stage. This result supports the finding in our study. When the findings that may cause this situation are examined, the inadequate conditions in the dormitory environment stand out. According to the qualitative study conducted by Kavak (2018). Problems related to the nutritional status of students staying in dormitories are identified. The lack of food variety and the lack of alternative venues around the school are seen as limiting factors for students. At the same time, the difficulty in accessing fresh fruits and vegetables pushes students to consume fast food. Long dining hall queues and the overlap of meal times with class hours were found to be other factors affecting students' food consumption (Kavak, 2018). In a study, the risk of developing unhealthy eating behaviours was found to be higher among the students who started university due to the high prevalence of skipping meals and fast food consumption in the dormitory compared to those living with their families (Alghamdi et al., 2018). According to the findings of our study, inadequate dormitory conditions constitute an obstacle in developing GE behaviour. Our findings are in parallel with other studies.

In our study, school ($p < 0.005$) and home self-efficacy ($p < 0.033$) were found to be independent factors affecting GE behaviour. In a study aiming to spread GE behaviour among university students, it was observed that the school self-efficacy of the trained student group and the adoption of GE behaviour increased (Monroe et al., 2015).

This result is in line with our school self-efficacy finding. However, the fact that

the home self-efficacy scores of the intervention group in Monroe's study were not found to be higher than the control group does not coincide with our study. It is thought that this situation can be explained by the fact that the consumption habits of people in the home environment are different from each other and that people interact with each other. In the study conducted by Monroe et al. (2015), it was observed that the level of knowledge increased in the intervention group and according to the results of the study, it was stated that informing students was a priority issue.

In order to increase students' awareness and provide permanent behavioural change, environmental regulations and providing education to students are of great importance. In this direction, a campus area built with green metric criteria ranging from waste management to transportation, which is among the environmental regulations, can increase environmental awareness among students. Although sustainable campus practices are very new in Turkey, they are insufficient especially in terms of renewable energy use (Kaya et al., 2019). The inaccessibility of sustainability in all areas is associated with insufficient environmental awareness (Ralph and Wendy, 2014).

In a qualitative study conducted by Mann et al. (2018), it was found that while health, taste and money were among the important motivations in developing a sustainable eating behaviour pattern. The environment was not included among this motivations and the participants did not have sufficient information about the subject. Although behavior change is not guaranteed, it has been pointed out that the deficiency should be closed by conducting information campaigns. Again in this direction, Dos Santos et al. (2022), stated that education should take place in practice for the spread of sustainability and that it will push students to think about universal issues such as climate crisis, environmental changes, social inequalities.

According to Green and Weller (2012), students who eat in dormitories and school cafeterias cannot have a healthy and environmentally friendly diet shows the effect of school on their consumption habits. In our study, the low school self-efficacy scores, which included consumption from the school cafeteria and the intensity of students' classes, indicate that the school catering systems should be reviewed. The school has public food systems that can affect the nutritional attitudes of many people (Cömert, 2022). Catering services at schools have great potential in supporting sustainable food systems and changing eating habits due to their relationship with social institutions (Peano et al., 2022).

There are studies that offer the necessary suggestions to students in order to increase sustainability in common dining areas in schools and to present an environment where they can develop a GE behaviour. In a study conducted by Volanti et al. (2022), to determine the environmental burden of foods served in catering services, it was found that meatballs made from beef were the worst option in terms of the ratio obtained by comparing the carbon footprint in terms of the energy load given by the food, while margarita pizza and gnocchi were the best options. It is also recommended that fruits and vegetables should be included in the menus more frequently. Because their carbon footprint is lower than that of foods containing meat and fish. Another study suggested that sustainability could be increased by using similar models in schools by introducing an inclusive model that meets the conditions of being affordable, environmentally friendly and nutritious that can be used in the cafeteria of schools (Ribal et al., 2016).

There are hardly any studies about green

eaters in Turkey. This study gains its originality by filling the gaps by working this issue and this will pave the way for other studies on this subject. However, there are some limitations such as students unwilling to answer the question that asked about state of GE and almost half of them chose the "I do not want to answer" option. The reason might be participants' reluctance to read the explanation about GE and having difficulties on deciding what stage they are at.

6. Conclusions

As a result of our study, most of the students were found to be reluctant to practice GE. Informing students about the consumption of local, seasonal products and the importance of certificates may pave the way for ethical consumption and an environmentally friendly diet. At the same time, school and home conditions were found to be independent factors directly affecting GE providing busy students with appropriate food options in communal dining areas can encourage them to make healthier and more informed choices. Building the school campus in accordance with green criteria can instill in students an awareness of environmental sustainability, including the arrangements in the dining area. It is also important that the awakening of consciousness that begins in the social order is carried to the family through the students. The interaction between students and family members can change the conditions in the home environment. It is recommended that political arrangements should be made in educational institutions and awareness should be raised among students in order to ensure the prevalence of a nutrition model that is environmentally sensitive, ethical and in line with sustainability.

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