

RESEARCH ARTICLE

# OPINIONS OF HEALTHCARE PROFESSIONALS ON GREEN ACCOUNTING: THE EXAMPLE OF KOCAELİ PROVINCE

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## ABSTRACT

Healthcare institutions aiming to provide world-class service have increased awareness of providing environmentally friendly healthcare services by both the public, international organizations, and patients and healthcare professionals. One of these conservation activities is the accounting of transactions carried out for the purpose of protecting the environment. In this context, it is thought that it would be beneficial for employees in the healthcare sector to be aware of green accounting. By examining the concept of green accounting, which is a new concept for hospitals, the importance of green accounting for hospitals has been tried to be revealed and it has been aimed to raise awareness about this issue among healthcare professionals. In this study, the data obtained from 370 health professionals working in public and private health institutions in Kocaeli were analyzed with the SPSS program. Descriptive statistics and explanatory factor analysis were used as the analysis method in the research. As a result of the research, it has been determined that the vast majority of healthcare professionals have not received education about green accounting, they reconcile green accounting practices with environmental sustainability. The statement they most agreed with was 'everyone should do their part to protect the environment due to social responsibility' and it was found that their awareness of green accounting was high. This study supports the literature with its findings that healthcare professionals relate their views on green accounting to environmental issues and environmental sustainability. In this direction, it was emphasized that green accounting practices can be applied in health institutions and the necessity of green accounting education.

**Keywords:** green accounting, environmental accounting, sustainability, healthcare professionals

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## SAĞLIK ÇALIŞANLARININ YEŞİL MUHASEBE HAKKINDAKİ GÖRÜŞLERİ: KOCAELİ İLİ ÖRNEĞİ

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### ÖZ

Dünya standartlarında hizmet sunmayı amaçlayan sağlık kurumları gerek kamu gerek uluslararası kuruluşlar gerekse hastalar ve sağlık çalışanları tarafından, çevreye duyarlı bir sağlık hizmeti vermesi konusundaki bilinci artmıştır. Bu koruma faaliyetlerinden birisi de çevrenin korunması amacıyla gerçekleştirilen işlemlerin muhasebeleştirilmesidir. Bu kapsamda sağlık sektöründe çalışanların yeşil muhasebe konusunda bilinçli olmalarının faydalı olacağı düşünülmektedir. Hastaneler için yeni bir kavram olan yeşil muhasebe kavramı incelenerek, yeşil muhasebenin hastaneler açısından önemi ortaya konulmaya çalışılmış ve sağlık çalışanlarında konu ile ilgili farkındalık yaratmak amaçlanmıştır. Bu çalışmada, Kocaeli'deki kamu ve özel sağlık kurumlarında görev yapmakta olan 370 sağlık çalışanından elde edilen veriler SPSS programı ile analiz edilmiştir. Araştırmada analiz yöntemi olarak tanımlayıcı istatistikler ve açıklayıcı faktör analizi kullanılmıştır. Araştırma sonucunda; sağlık çalışanlarının büyük bir çoğunluğunun yeşil muhasebe hakkında eğitim almadıkları, yeşil muhasebe uygulamalarını çevresel sürdürülebilirlik ile bağdaştırdıkları tespit edilmiştir. En çok katıldıkları ifadenin 'sosyal sorumluluk gereği çevreyi korumak için herkes üzerine düşeni yapmalıdır' olmuştur ve yeşil muhasebe farkındalıklarının yüksek olduğu tespit edilmiştir. Bu çalışma; sağlık çalışanlarının yeşil muhasebe hakkındaki görüşlerini çevresel konular ve çevresel sürdürülebilirlik ile ilişkilendirdiği yönündeki bulguları ile literatürü destekler niteliktedir. Bu doğrultuda yeşil muhasebe uygulamalarının sağlık kurumlarında uygulanabileceği ve yeşil muhasebe eğitiminin gerekliliği vurgulanmıştır.

**Anahtar Kelimeler:** yeşil muhasebe, çevre muhasebesi, sürdürülebilirlik, sağlık çalışanları

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## **I. INTRODUCTION**

It is known that the environment we are in is starting to deplete for various reasons, and the increasing environmental awareness against these emerging threats has led everyone, including businesses, to 'green' practices. As an individual, due to social responsibility, it is necessary for the individual to assume the duties assigned to protect the environment and ensure sustainability. However, sometimes these studies are insufficient and legal measures are applied. The increase in the level of environmental awareness, the steps taken by the official authorities to protect the environment, have convinced companies that they should be more environmentally friendly due to the shift of consumer perception to more environmentally friendly companies. In this context, the data revealed by green accounting are made accessible to all stakeholders in the form of reports. While the activities exhibited to protect the environment are poured into accounting, financial accounting is helpless to record environmental sensitivity. This situation is followed up by considering it within the scope of green accounting, which is a specialized accounting.

Hospital enterprises are service enterprises where energy and water consumption are intensive, the amount of chemical and non-chemical waste is high, the potential hazardous material output is high, and the purchased materials are numerous and varied. Limited resources, narrow scope of training on the use and disposal of hazardous substances, insufficient storage and disposal areas, and few incentives for the use of renewable energy sources have also brought the concept of 'green' to the agenda in hospitals due to social responsibility awareness. The concept of 'Green Hospital' is used to define hospitals that meet at least one of the options such as choosing an environmentally friendly settlement, using sustainable and efficient designs, purchasing environmentally friendly building materials and products (Terekli et al., 2013).

Green accounting, which has an important place in the global arena, is also developing in our country and is being used by enterprises. However, it is not used as a specific account group in the accounting information system (Karakoyun, 2020).

The aim of this study is to determine the opinions of healthcare professionals by taking their perceptions and perspectives about green accounting into account. By examining the concept of green accounting, which is a new concept for hospitals, the importance of green accounting for hospitals has been tried to be revealed and it is aimed to raise awareness about this issue among health professionals. For this purpose, a survey application was made to the health professionals working in Kocaeli province. Studies in the literature on green accounting awareness of healthcare professionals are limited. In this context, researching the awareness of green accounting of healthcare professionals can help them develop strategies for the environmental impact of health services, resource efficiency, reducing costs, public health and environmental sustainability. It can support sustainability efforts in the healthcare industry.

First of all, theoretical information about green accounting is given in the study, previous studies related to the study is examined, and finally, detailed information about the application is given in the research section.

## **II. CONCEPTUAL FRAMEWORK**

### **2.1. The Concept of Green Accounting**

Green accounting: making improvements in accounting systems based on environmental factors at the measurement stage of financial accounting and the effects of using environmental resources (Çelik, 2007), it is the reflection of the enterprise through reporting to the related parties by synthesizing the physical and monetary changes encountered during the storage of its inventory by classification with financial statements (Dalgar and Yıldırım, 2016).

The basic philosophy of green accounting; it is based on the proverb of the North American Indians, 'We did not inherit this world from our ancestors, we borrowed it from our children' and similar views, which express the importance of the natural environment in a very impressive way (Özkol, 1998). Green accounting offers businesses the opportunity to report the environmental costs they undertake in order to protect the environment by preventing damage to the environment (Süklüm, 2020). Yalçın and Sarıgül Sümerli (2021), defined green accounting as an environmental accounting system created by businesses to reduce the environmental impacts caused by them.

Green accounting can also be defined as businesses transferring their activities to protect the environment and minimize damage to the accounting information system.

## 2.2. Objectives of Green Accounting

The objectives of green accounting can be discussed at macro and micro levels. The macro-level purpose of green accounting is to gather environmentally related financial transactions under one roof in national income calculations by determining the monetary equivalents of environmentally related assets and resources. Its purpose at the micro level is to reflect financial events related to the environment in the financial statements in the same way as financial statements are used to evaluate financial transactions (Melek, 2001). The purpose of green accounting is to prepare the ground for the evaluation of the impacts on the environment during the production activities of businesses (Rakos and Antohe, 2014).

## 2.3. Usage Areas of Green Accounting

The usage areas of Green Accounting are shown in Table 1.

**Table 1. Usage Areas of Green Accounting**

Accounting Fields	Target Group	Sides
National Income Accounting	Country	External Environment
General Accounting	Business	External Environment
Management Accounting	Business, Department, Production facility	Internal Environment

**Reference:** Yereli and Yakın, 2009

Green accounting directly or indirectly affects all segments of society, especially businesses. Because the environment is one of the important factors that serve the sustainability of business activities. Emphasizing the importance of green accounting in accounting of country economies is an expression of the fact that development orientation can be achieved with environmental awareness.

The International Accounting Standards Committee (IASC) requires businesses to record environmental factors in the recording system (Çalış, 2013).

## 2.4. The Importance of Green Accounting in Hospitals

Nowadays, as environmental resources become depleted, the importance of the environment becomes more effective, and every segment of the society becomes more sensitive. In order to respond to this sensitivity of the society, the importance of environmental accounting is becoming more effective day by day.

Hospital businesses are businesses that require intense fixed capital investment both in the establishment phase and in the service delivery phase. For this reason, they need to take environmental factors into consideration both in the stage of choosing the location of the establishment and in the stage of carrying out their activities and adapt these factors to their financial statements (Peyziner and Özkan, 2014).

The main uses of the information provided by green accounting in terms of management decisions are: product pricing and budgeting, evaluation of annual environmental costs and revenues, ranking environmental activities according to their importance, ensuring and evaluating the sustainability of business activities by providing information that will shed light on hospital managers in decision-making (Akbaş, 2011).

### **III. LITERATURE REVIEW**

When the studies related to green accounting are examined, it has been seen that concepts such as environmental accounting and ecological accounting are also used in some studies instead of the concept of green accounting. Green accounting draws a future trend that will lead to innovations in the accounting system. Although there is a significant literature gap in the field of environmental reporting and social responsibility, the developments indicate that environmental reporting and auditing will become a general practice in the near future (Bengü and Can, 2009). It is expected that the recent increase in the importance of green management, especially for hospital enterprises, will play a role in the adaptation of environmental factors to the accounting system of hospital enterprises, and thus green accounting practices will gain momentum and shed light on the decisions of healthcare professionals. Previous studies on the subject have been reviewed and are indicated below (Table 2).

The research was conducted in order to see what results were achieved due to the inadequacy of the studies conducted because of the importance of green accounting awareness within the framework of the opinions of health professionals and the importance given to the health sector, and in this respect, it is different and unique from the studies in the literature.

**Table 2. Related Literature Studies**

<b>Halberg et al., (2005)</b> , conducted a study on farms located in Europe that green accounting practices are useful for determining environmental indicators, and as a result of the application on farms located in 8 European countries, it was concluded that green accounting can be used as an environmental indicator on farms.
<b>Merrill (2005)</b> , in the study it conducted stated that the environmental impacts of companies should be shared with the public during the presentation of their financial reports, and that green accounting is important in making investment decisions to help the sustainable economy, and that this was evaluated by the SEC as a policy in financial reporting.
<b>Fleischman (2006)</b> , conducted a study showing that the future effects of environmental accounting and reporting in terms of education and training are necessary for students, and after green accounting education, student's thoughts about the environment were analyzed and the necessity of green accounting education was emphasized.
<b>Rout (2010)</b> , conducted a study stating that the traditional national accounting systems, which are still valid for countries, are not possible to measure the impact of economic events, their contribution to the environment and non-marketable national resources by excluding them, and it has been stated that green accounting policies should be used for the sustainability of national income.
<b>Ali et al., (2010)</b> , conducted a study stating that they discussed the applicability of environmental accounting and the problems encountered in businesses operating in Bangladesh.
<b>Egbunike and Okoro (2018)</b> , in the study where they investigated the effect of green accounting on business profitability in Nigeria, they found that there is no significant relationship between green accounting and business profitability.
<b>Rounaghi (2019)</b> , in his study, stated that green accounting should be considered as a subheading of environmental accounting. In the study, the opportunities that green accounting practices will offer to companies are summarized.
<b>Süklüm (2019)</b> , in her study, aimed to determine the environmental awareness and green accounting awareness of the students taking accounting courses. As a result of the analysis, a significant difference was found between the genders of the students and their awareness of green accounting.
<b>Endiana et al., (2020)</b> , in their study, investigated the impact of green accounting, which is included in the application of Corporate Sustainability Management System (CSMS) in Indonesia, one of the developing countries, on the financial performance of the enterprise. As a result of the research, it has been determined that manufacturing enterprises in Indonesia have implemented green accounting practices by allocating appropriate environmental costs in order to improve their financial performance.
<b>Yelgen (2022)</b> , in his study, examined the current literature on green accounting and explained what environmental costs are and how these costs should be included in the current accounting system through examples.
<b>Çil Koçyiğit et al., (2023)</b> , in their study, aimed to examine the structure of the studies conducted on green accounting in the field of health with the science mapping technique. As a result of the analysis, although there is no regular increase in publication and citation trends, it was found that the most effective year was 2018. In both analyses, it has been found that the keywords are centered around the environmental accounting set.
<b>Kestane and Çelik (2023)</b> , in the study they conducted, aimed to determine the perception levels of students studying accounting towards green accounting. As a result of the study, they concluded that the accounting courses taken by the students had a positive effect on the perception of green accounting, but the characteristics of the students related to age, gender, grade and academic average did not have any effect on the perceptions of green accounting.
<b>Kurt (2023)</b> , in his study, examined the perceptions and awareness of independent CPA's in Istanbul Bağcılar district about green accounting. As a result of the research, it was seen that independent professionals operating in the Bağcılar region of Istanbul are generally sensitive to the environment, but they generally do not have information about green accounting.
<b>Atagan Çetin and Doğan (2023)</b> , in the study they conducted, aimed to address the issue theoretically by performing a conceptual study on green accounting. As a result of the study, it has been suggested that the effect on variables such as the firm performance and/or stock returns, profitability, etc. of green accounting practices in the future studies can be investigated.

**Reference:** Created by the author.

## **IV.METHOD**

### **4.1. The Purpose and Importance of the Research**

The aim of this study is to determine the opinions of health care professionals by taking into account their perceptions and perspectives about green accounting. By examining the concept of green accounting, which is a new concept for hospitals, the importance of green accounting for hospitals has been tried to be revealed and it is aimed to raise awareness about this issue among health professionals. For this purpose, a survey application was made to the health professionals working in Kocaeli province.

### **4.2. The Universe and Sample of the Research**

Between October and December 2021, research was conducted in three health institutions, including 1 public hospital with 828 healthcare professionals and 2 private hospitals with 355 and 450 healthcare professionals, serving in Kocaeli province. As a result, the main mass size was determined as 1. 633. Participation in the study is voluntary and consists of health professionals (nurses, physiotherapists, midwives, medical secretaries) working in 1 public hospital and 2 private hospitals. People other than these criteria were not included in the study.

In the following formula used to determine the number of healthcare professionals to be sampled (Baş, 2010: 40), the population size (N) is 1.633, 95% confidence interval ( $\alpha= 0.05$ ) and  $t=1.96$  with an acceptable sampling error of  $d=$  values of 0.05,  $p= 0.50$  and  $q= 0.50$  were used.

$$n = N t^2 p q / (d^2 (N-1) + t^2 p q)$$

As a result of the calculations, the sample size was determined as 325. The surveys were administered between October and December 2021 and feedback was received from a total of 370 healthcare professionals.

For the research, a face-to-face survey was conducted with the participants by obtaining the necessary permissions from the Kocaeli Provincial Health Directorate. The purpose of applying the survey to healthcare professionals working in Kocaeli province is to reach more institutions and organizations and determine the opinions of healthcare professionals about green accounting.

Written permission was received from Nevşehir Hacı Bektaş Veli University Scientific Research and Publication Ethics Committee (Date: 22.09.2020 Issue: 17).

### **4.3. Data Collection and Analysis**

Survey method, one of the primary data collection methods, was used to obtain research data. During the creation of the survey scale, studies by Bezirci et. al., (2011), Fleischman and Schuele (2006) and Yılmaz and Şahin (2017) were used.

The survey is designed to consist of 2 different parts. In the first part, 7 questions were asked to determine the demographic characteristics of healthcare professionals. In the second part, 26 statements were asked to the participants using a 5-point Likert scale in order to learn the thoughts of healthcare professionals about green accounting.

Healthcare professionals who participated in the survey were asked to code each statement as ‘1: Strongly disagree’, ‘2: Disagree’, ‘3: Undecided’, ‘4: Agree’, ‘5: Strongly Agree’ in accordance with their own opinions.

The data obtained as a result of the research were analyzed with the SPSS package program. Descriptive statistics and explanatory factor analysis were used as analysis methods in the research.

## V. FINDINGS

The analysis of the survey data first started with descriptive statistics, frequency, percentage and mean values. Then, using explanatory factor analysis, factors regarding the perception and awareness of healthcare professionals working in Kocaeli about green accounting were determined.

### 5.1. Descriptive Statistics

Data regarding the demographic characteristics of healthcare professionals are seen in Table 2.

**Table 3. Frequency Distributions According to Demographic Characteristics (n=370)**

Variables	Category	Frequency	Percentage
<b>Gender</b>	Female	279	75.4
	Male	91	24.6
<b>Marital Status</b>	Single	219	59.2
	Married	151	40.8
<b>Age</b>	18 - 24 years	121	32.7
	25 - 34 years	154	41.6
	35 - 44 years	68	18.4
	45 -54 years	19	5.1
	55 - 64 years	7	1.9
	65 years and above	1	0.3
<b>Education</b>	High School	129	34.9
	Associate degree	93	25.1
	Bachelor's Degree	108	29.2
	Postgraduate	40	10.8
<b>Work Experience</b>	Less than 1 year	86	23.2
	Between 1-5 years	120	32.4
	Between 6-10 years	73	19.7
	More than 10 years	91	24.6
<b>State of knowledge about green accounting</b>	Yes	70	18.9
	No	260	70.3
	Undecided	40	10.8
<b>Taking courses on green accounting during training</b>	Yes	30	8.1
	No	340	91.9

According to descriptive statistics, 75,4 % of the healthcare professionals participating in the research are women, while 24.6 % are men. When the age statistics are examined, it is seen that the majority of those who express their opinions about green accounting are healthcare professionals between the ages of 25-34 with a rate of 41.6%. This is followed by those aged 18-24, 35-44, 45-54, 55-64, and those aged 65 and above, respectively. In terms of education level, the majority of healthcare professionals participating in the research are high school graduates with a rate of 34.9 %. The high school group is followed by vocational school graduates, undergraduate graduates, and postgraduate education graduates, respectively. When looking at the work experience of healthcare workers, it is seen that the highest value is 1-5 years of work experience with a rate of 32.4 %, while the lowest value is in the group with 6-10 years of work experience with a rate of 19.7 %. When the state of knowledge about green accounting is examined; it was determined that the group with the highest number of individuals answered no with a rate of 70.30 %, followed by a yes answer with 18.9 %, and an undecided answer with 10.8 %. While 8.1 % of the group took courses on green accounting during the training, 91.9 % of the majority group were individuals who did not take courses.



**Table 4. Descriptive Statistical Analysis Results of Green Accounting (n=370)**

Statements	Arithmetic Mean	Standard Deviation
1. I am careful to reduce electricity, water, and fuel consumption to protect the environment.	4.3243	0.98096
2. I warn people around me not to harm the environment.	4.1649	1.01071
3. When choosing between two types of products, I prefer to buy the product that causes the least harm to the environment.	3.8838	1.04635
4. Businesses should be financially supported to produce environmentally friendly products.	4.2595	0.95010
5. I do not use products that damage the ozone layer.	3.6135	1.08916
6. Businesses must report their environmental performance.	4.3054	0.92319
7. I believe that green accounting practices will increase clean and safe production.	3.9432	0.99567
8. To solve environmental problems, businesses need to implement green accounting practices.	3.9730	0.95669
9. As a matter of social responsibility, everyone should do their part to protect the environment.	4.5919	0.94478
10. I keep up with innovations and developments regarding environmental problems timely.	3.6892	1.00305
11. I have no knowledge of what green accounting is.	3.4216	1.34771
12. I believe that green accounting practices will be useful in limiting unnecessary consumption of natural resources.	3.8405	0.96496
13. It should be made mandatory for businesses to participate in green accounting practices by the state.	3.8784	1.01683
14. The relationship between business and environment is reported through green accounting practices.	3.6811	0.92886
15. I believe that green accounting practices are protective of the ecosystem.	3.8946	0.91196
16. Businesses should determine their environmental policies as part of green accounting practices.	3.8946	0.96397
17. Green accounting practices indirectly reduce the costs of businesses.	3.6081	0.91683
18. I believe that green accounting practices will be beneficial in sustaining biodiversity.	3.8703	0.92799
19. I buy recycled products even if they are expensive.	3.3595	1.14195
20. I believe that green accounting practices will be useful in the management of waste generated during production.	3.8270	0.92676
21. I believe that green accounting practices will be beneficial in water use and management.	3.9162	0.90826
22. I believe that green accounting practices will be useful in managing greenhouse gas emissions (CO <sub>2</sub> ).	3.7568	0.94583
23. I know the concept of green accounting only in name.	3.2027	1.25997
24. I believe that green accounting practices will increase energy savings.	3.7811	0.94176
25. I read the concept of green accounting in the sources like articles, books, internet, etc.	2.9595	1.30497
26. Green accounting should be included in the curriculum as a separate course.	3.6459	1.01295

Table 4 present the averages of how healthcare professionals working in Kocaeli province responded to the 26 statements regarding green accounting in the second part of the survey.

According to Table 4, it was seen that healthcare professionals agreed most with the statement 'Everyone should do their part to protect the environment as a matter of social responsibility' with an average of 4.5919. This statement was followed by the statements 'I pay attention to reducing electricity, water, and fuel consumption to protect the environment' with an average of 4.3243 and 'businesses should report their environmental performance' with an average of 4.3054.

On the other hand, with an average of 3.3595, 'I buy recycled products even if they are expensive', with an average of 3.2027, 'I only know the concept of green accounting as a name' and

with an average of 2.9595, 'I have read the concept of green accounting in articles, books, internet, etc. 'it was determined that healthcare professionals agreed less with the statements 'I read from sources. The low mean of agreement with these statement in the study revealed that the healthcare professionals participating in the study had a low level of knowledge about green accounting. The fact that the majority of people answered no to the question 'Have you taken a course on green accounting during the training' also supports the result.

## **5.2. Explanatory Factor Analysis**

As a result of the factor analysis, 4 factors (Perception of Green Accounting, Environmental Awareness and Sustainability, Green Accounting Awareness, Green Accounting Education) emerged. However, Green Accounting Education (11-23) was not included in the study because the Cronbach Alpha Reliability statistic was low and reliable. The total variance explanation value of the 3 factors obtained in the study was determined as 56.688. The findings obtained as a result of the last factor analysis are presented in Table 5.

**Table 5. Reliability and Factor Analysis Results of the Statements**

Factors	Factors Loadings	Eigenvalue >1	% Explained Variance	A
F-1: Perception of Green Accounting		10.278	93.174	0.929
16. Businesses should determine their environmental policies as part of green accounting practices.	0.855			
13. It should be made mandatory for businesses to participate in green accounting practices by the state.	0.801			
15. I believe that green accounting practices are protective of the ecosystem.	0.794			
18. I believe that green accounting practices will be beneficial in sustaining biodiversity.	0.789			
21. I believe that green accounting practices will be beneficial in water use and management.	0.778			
22. I believe that green accounting practices will be useful in managing greenhouse gas emissions (CO2).	0.769			
20. I believe that green accounting practices will be useful in the management of waste generated during production.	0.759			
24. I believe that green accounting practices will increase energy savings.	0.702			
14. The relationship between business and environment is reported through green accounting practices.	0.696			
12. I believe that green accounting practices will be useful in limiting unnecessary consumption of natural resources.	0.675			
17. Green accounting practices indirectly reduce the costs of businesses.	0.670			
8. To solve environmental problems, businesses need to implement green accounting practices.	0.582			
7. I believe that green accounting practices will increase clean and safe production.	0.580			
26. Green accounting should be included in the curriculum as a separate course.	0.564			
F-2: Environmental Awareness and Sustainability		2.833	28.475	0.883
1. I am careful to reduce electricity, water, and fuel consumption to protect the environment.	0.813			
2. I warn people around me not to harm the environment.	0.793			
6. Businesses must report their environmental performance.	0.774			
4. Businesses should be financially supported to produce environmentally friendly products.	0.727			
9. As a matter of social responsibility, everyone should do their part to protect the environment.	0.695			
3. When choosing between two types of products, I prefer to buy the product that causes the least harm to the environment.	0.625			
5. I do not use products that damage the ozone layer.	0.585			
F-3: Green Accounting Awareness		1.627	6.550	0.581
25. Explain the concept of green accounting in articles, books, internet, etc. I read from sources.	0.705			
19. I buy recycled products even if they are expensive.	0.690			
10. I keep up to date with innovations and developments regarding environmental problems.	0.534			

In the study, exploratory factor analysis was conducted on all 26 statements. As a result of the final explanatory factor analysis applied to test the construct validity of the survey scale, the KMO value was calculated as 0.925 and the Barlett Test was calculated as 5920.645. The findings showed that the scale was perfectly suitable for factor analysis.

In addition, because of Cronbach's Alpha statistic applied for the structure reliability of the scale, the reliability coefficient ( $\alpha$ ) for all statements was calculated as 0.922, and this result showed that the scale was at a good level of reliability. Reliability coefficients for each factor are also given in Table 5.

As seen in Table 5, 3 factors were obtained because of factor analysis with varimax rotation. These factors are called, green accounting perception, environmental awareness and sustainability, green accounting awareness.

When the positive answers given by healthcare professionals to the scale questions were examined, it was seen that they strongly agreed with the question 'everyone should do their part to protect the environment as a matter of social responsibility' and that healthcare professionals' perception and awareness of the environment was high. It was also determined that they highly agreed with the questions 'pay attention to reducing electricity, water and fuel consumption to protect the environment' and 'businesses should report their environmental performance', respectively. It has been observed that healthcare professionals attach importance to activities such as reporting, regulating, recording, and interpreting the environmental activities of businesses. Finally, it has been determined that businesses think that they should be financially supported in producing environmentally friendly products.

When the negative answers given by healthcare professionals to the scale questions were examined, it was seen that the majority of them marked yes to the question 'I did not receive training on green accounting during the training' and that they did not receive training on green accounting throughout their education life. In addition, the concept of 'green accounting' can be used in articles, books, the internet, etc. It was determined that they did not agree with the questions 'I have read from the sources' and 'I only know the concept of green accounting as a name'. It has been observed that healthcare professionals only know green accounting in name or have no knowledge about green accounting.

## VI. CONCLUSION AND DISCUSSION

The increase and universalization of environmental problems all over the world necessitates acting with environmental awareness, creating awareness, and making regulations in this direction. Within the scope of green accounting practices, environmental costs, including the use of environmental resources, are accounted for, and reported to users in financial statements. In this study, first the concept of green accounting is explained, then the purpose of green accounting, the importance, and characteristics of green accounting in hospitals, and examples of green accounting applications in hospitals are mentioned. In this study, the opinions of healthcare professionals about green accounting were analyzed and the factors affecting their opinions about green accounting were determined.

As a result, when we compare the research findings with other studies in the literature, it can be said that there is a difference between the perception and awareness of healthcare professionals about green accounting and accounting and business administration graduates. It is thought that this difference is due to accounting and business administration graduates taking more and more diverse accounting courses than healthcare professionals. However, it was emphasized that the training provided was not sufficient and should be increased. In this respect, since the number and content of accounting courses create a perception and awareness about green accounting, importance should be given to green accounting in these courses. As a result of the study conducted by Kestane ve Çelik (2023), it was stated that the accounting courses taken by the students had a positive effect on the perception of green accounting and green accounting. In the study of Kurt (2023), it was observed that CPAs are generally sensitive to the environment, but they don't have information about green accounting in general. In this respect, the result of the study supports the literature.

Since environmental awareness is responsibility that we must take personally, as well as being important for businesses and countries, businesses need to act with environmental awareness when carrying out their accounting transactions and determining their strategies. Therefore, the information

provided by green accounting has an important place in healthcare businesses, as in all businesses. Accounting transactions are the most important building block of businesses, and the transactions performed here can produce results that will affect not only the people working in the accounting unit but also all internal and external customers. It is essential to provide environmental training to everyone, not just to employees working in accounting and business departments.

This study was limited to the opinions of 370 healthcare professionals working in 1 public and 2 private hospitals in Kocaeli province between October and December 2021. In future studies on green accounting, health institutions that implement green accounting practices can be compared with health institutions that do not implement green accounting practices and it can be investigated whether there is a difference between them. The opinions of health workers in different provinces about green accounting can be examined. Awareness about green accounting education can be determined by taking the opinions of healthcare professionals who have been trained on green accounting.

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