

Coverage of Food Security and Environmental Sustainability Issues in Saudi Arabia's Electronic Press

Abdal halim M. Y. Abdalrazig*, Alanoud A. Al-Melhem and Afraa M. Al-Dossary

Department of Media, College of Arts, King Faisal University, Alahsa, Saudi Arabia

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Abstract: This study aimed to investigate the importance of food security and environmental sustainability in achieving the goals of Vision 2030 in Saudi Arabia. Data was collected using a survey approach with a questionnaire administered to 200 male and female students at different educational stages in the Faculty of Education at King Faisal University. Results showed that 82.5% of the total sample read Saudi electronic newspapers for at least one hour a day, with 14% reading for 1-3 hours, and 3.5% reading for three or more hours per day.

Keywords: Electronic Press - Food Security issues- Environmental Sustainability.

1. Introduction

Achieving food security as one of the goals of the Saudi Vision 2030 in the Kingdom of Saudi Arabia is at the core of sustainable development. In this context, the Kingdom has adopted several strategies and programs to promote sustainable agricultural development and increase the agricultural area, contributing to achieving food security at the national, regional, and international levels, and preserving natural and environmental resources, including the Food Security Strategy and the Rural Development Program, to achieve measurable progress towards achieving the 2030 Sustainable Development Goals, Raising awareness of food security and sustainable development, through several means, including various media such as newspapers, magazines, radio, and television. King Faisal University has also made food security and environmental sustainability issues one of its main concerns, as they are part of its identity. It also aspires to be productive in research and development, enabling it to achieve several national goals, foremost of which is to contribute to achieving environmental sustainability and food security for the Kingdom.

The term “fourth power” is usually applied to the media in general and the press in particular. The traditional media in its three forms has developed as a result of the digital revolution that we are living in today. It has abolished time and space barriers, given individuals an opportunity to express their opinions and interests, and opened up horizons for them towards accessing information and producing knowledge.

Digital media has become a fundamental role in raising the public’s interest in news and political, social, and environmental issues, by benefiting from its effectiveness in society and its widespread that helps form opinions and trends, as well as becoming one of the main sources that the public resorts to in obtaining information.

2. The Study Problem and Questions

The Study Problem:

Press is one of the influential societal institutions in the awareness; guidance, development, and education process, which makes it, play the main role in its impact on the public’s attitudes towards local and regional issues and contributes to prioritizing their issues. The research problem came to address the role played by electronic press on security food and environmental sustainability issues. Mohammed Ibrahim Khader believes that the study problem can be formulated in the form of questions that can link the two main variables in the study (Khader, Mohammed Ibrahim, 1). The formulation of the research problem comes in the main question: How did Saudi electronic press care about covering issues of food security and environmental sustainability? This question has some questions, including:

- 1) What are the most prominent Saudi electronic newspapers that dealt with food security and environmental sustainability issues?

*Corresponding author e-mail: Ahali24@kfu.edu.sa

- 2) What is the public's interest in food security and environmental sustainability issues?
- 3) What are the public's attitudes toward food security and environmental sustainability issues?
- 4) What methods do electronic newspapers use to highlight food security and environmental sustainability issues?
- 5) What is the role of news websites in arranging the priorities of male and female students of the Faculty of Education toward issues of food security and environmental sustainability?
- 6) What is the role of Saudi electronic newspapers on issues of food security and environmental sustainability?

3. The Study Hypotheses:

- 1) There is a statistically significant difference between the mean scores of males and females on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society.
- 2) There are statistically significant differences between the mean scores of the respondents on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society, according to the difference in qualification.
- 3) There are statistically significant differences between the mean scores of the respondents on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society according to the difference in age.
- 4) There is a statistically significant correlational relationship between the intensity of respondents' exposure to electronic newspapers and their knowledge of food security issues and sustainable development in society.

4. The Study Significance:

- 1) Food security and environmental sustainability issues are important issues at the regional and global levels because it is one of the pillars of the economy.
- 2) The impact of food security and environmental sustainability on development.
- 3) The lack and scarcity of studies that addressed the issue of food security and environmental sustainability in the Kingdom of Saudi Arabia.
- 4) The interest of the Kingdom's Vision 2030 in this issue because it is one of the central issues in the Kingdom.

5. The Study Objectives:

- 1) Identifying the most prominent Saudi electronic newspapers that dealt with food security and environmental sustainability issues.
- 2) Identifying the extent of the public's interest in food security and environmental sustainability issues.
- 3) Identifying the public's attitudes toward food security and environmental sustainability issues.
- 4) Identifying the methods electronic newspapers use to highlight food security and environmental sustainability issues.
- 5) Recognizing the role of news websites in arranging the priorities of male and female students of the Faculty of Education toward issues of food security and environmental sustainability.
- 6) Identifying the role of Saudi electronic newspapers on issues of food security and environmental sustainability.

6. Literature review:

Referring to the scientific literature related to the current study subject, the research took advantage of them; the objectives set in each study, the tools, the method, and the results of previous studies in terms of differences, similarities, and distinctions. These studies also dealt with twofold; the first part is related to electronic press coverage, while the second part deals with food security and environmental sustainability issues. A set of previous studies were reviewed chronologically, as follows:

The First Study: (Masoud, Talha, 2)

The research aimed to reconsider the complex and exact relationships between man and his environment and clarify the importance of culture in achieving environmental sustainability, especially since this culture is absent and highlighting its role as a basis for sustainable development in contemporary society as a strategy. It is based on highlighting the importance of environmental culture in achieving environmental sustainability to create a positive and lasting environmental behavior and a sense of responsibility toward future generations. The research was based on the descriptive-analytical method. The

research results indicate the need for man to restore his investment relationship with the environment and his investment as a sustainable capital is determined by applying the foundations and dimensions of environmental culture.

The Second Study: (Al-Muhanna, Ahmed Saud, 3).

The study aimed to identify and evaluate the policies taken by the Kingdom of Saudi Arabia to achieve food security in general. It also aimed to study the possible economic factors affecting the food supply available for consumption for the most important strategic food commodities such as wheat, rice, vegetable oils, and meat. The study reached some results, the most important is the existence of a relationship between food security in the Kingdom with a set of the most important economic factors; the income level because of the increase in income at the individual level and the national level, which is represented by the rise in foreign currency reserves, leads to an increase in the ability to bear the costs of importing these basic foods and an increase in food supplies available for consumption. The most important recommendations of the study are the commitment to national initiatives in facing challenges and implementing national transformation programs aimed at achieving sustainable development including achieving sustainable economic growth and sustainable protection of the environment and natural wealth sources.

The Third Study: (Sbabha, Safaa Sobh& Naseem Faris Ibrahim, 4)

The study aimed to identify the reality of food security in the Kingdom of Saudi Arabia and the future food gap. The analytical descriptive approach was used to investigate the reality of food security in the Kingdom. Food security is currently an important priority for the Kingdom of Saudi Arabia, especially since the Kingdom imports about (70% - 80%) of its basic food commodities needs. The results of the study showed that Foreign agricultural investment is a modern method adopted by the Kingdom to provide for its food needs, and the Kingdom achieved high rates of self-sufficiency through local agriculture at the end of the Seventh Development Plan (101%), vegetable oils (47.5%) and red meat (57.3%), and (63.7) for meat and poultry. The study recommends the necessity of re-examining the decision to stop subsidizing the cultivation of grain and constructing a database on the foreign agricultural investment initiative.

The Fourth Study: (Youssef, Berkan & Amina Ben Khaznaji, 5)

The study aimed to identify the economic integration and its importance for the economy of the Central Maghreb countries, and highlight the possibility of the contribution of Maghreb economic integration to achieving food security in the Central Maghreb. The descriptive approach was used to cover the theoretical aspect, and the analytical approach to analyze the reality of food security in the Central Maghreb countries and explore its horizons within the framework of Maghreb economic integration. The results concluded that the integration between the countries of Central Maghreb is beneficial and positive for all countries. These three figures indicate a positive, rather than insignificant, impact on food and ecological exchanges that would help achieve long-term levels of food security over long periods.

The Fifth Study: (Al-Toukhi, Mona Muhammad, 6)

The study aimed to identify to what extent Saudi university youth depend on electronic newspapers to find out the Kingdom of Saudi Arabia's Vision 2030. The study was based on the survey method. The study sample consisted of (200) students from Umm Al-Qura and King Abdul-Aziz universities, using the questionnaire as a tool for data collection. The study results concluded that the students, the study sample, depend on the Saudi electronic newspapers to follow up on the steps taken by the Kingdom in light of implementing its Vision 2030, and they also depend on them to know the Kingdom news in general.

7. Commenting on Previous Studies:

- 1) The scarcity of Arab studies and research related to food security and the sustainable environment on the Internet in the literature of the Arab scientific heritage particularly.
- 2) The previous studies aimed to create a positive and lasting environmental behavior and a sense of responsibility toward future generations. They also aimed to study the potential economic factors affecting the food supply of the most important strategic commodities and identify the change in the reality of food security in the Kingdom of Saudi Arabia, highlighting the possibility of its contribution, Maghreb Economic Integration in Achieving Food Security in the Central Maghreb.
- 3) It sought to explain the relationship between the level of food security of commodities (such as wheat, rice, and vegetable oils) and some economic variables.
- 4) The interest of the Kingdom of Saudi Arabia in the issue of food security and the sustainable environment, as it is an important economic pillar.

8. The Field of Benefiting from Previous Studies:

- 1) The previous studies are considered an important heritage in the field of food security and sustainable environment.
- 2) Previous studies did not discuss the role of the electronic press and the new media in educating societies about the issue of food security and sustainable environment and this is what this study attempts to explain by answering research hypotheses. This study also attempts to enhance the role of the electronic press in educating Saudi society on the issue of food security and sustainable environment.
- 3) The researchers noted that previous studies adopted the descriptive survey method, as the most appropriate to answer the questions of the studies and achieve their objectives.

9. The Study Terms:

Electronic Press: It is issued and published on the Internet, whether it is a copy or an electronic version, not a print, whether it is an accurate recording of the paper version, or is a summary of the publication in the paper edition, as long as it is issued periodically and regularly and its content is specified from time to time according to publication and the possibilities of the source .(Amin, Reda Abdel Wajid, 7)

There are several definitions of the electronic press, including:

It is a MULTIMEDIA medium in which news, articles, and all journalistic arts are published via the international information network, the Internet, periodically and with a serial number, using techniques for displaying texts, graphics, animation, and some interactive features. It reaches the reader through the computer screen, whether it has a printed origin or a purely electronic press. (Metwally, Amal Saad, 8)

- 1) **Food Security:** Means the society's ability to provide for its needs regularly, either by producing them locally or by providing adequate proceeds from export earnings that can be used to import what is needed to fill the shortfall in local production.(Salman ,Muhammad,9)
- 2) **Sustainable Environment:** Environmental sustainability in the Prophetic Sunnah: it is the positive interaction of humans with the environmental components and their investment in a way that ensures their continuity by Islamic principles and regulations. Environmental sustainability is based on the concept of limited resources that appeared during the seventies and was confirmed during the eighties, which led to the emergence of the concept of sustainable development, which requires that humans deal with the environment and its resources in a way that guarantees his immediate needs and the needs of future generations at the same time. (Al-Kharman, Bakr Abdullah, 10).

10. Theoretical framework:

Agenda-Setting Theory was relied upon in this study. It focuses on studying the interrelationships between the media and the public exposed to these media to give priority to political, economic, and social issues of public interest and the relationship between the public's increased interests in these issues. In addition, the content of media messages is accompanied by agents that spread specific messages in messages of different content, highlighting the media's ability to change public attitudes, interests, and motivations on an issue.

This Theory Has Three Features:

- 1) **Stability and Continuity:** This theory is considered one of the theories that have developed and passed through several study stages, and each stage presented new concepts and ideas, and the research methods, tools, and statistical treatments used varied.
- 3) **Integration:** There is a kind of integration between some researches in different branches under one umbrella. The fields of press, media, social, political, and economic sciences, and others have been linked.
- 4) **The Continuous Ability to Launch New Research Problems:** By searching for new research variables and criteria and linking them with other theories such as the spiral of silence, cultural implantation, and the transmission of information in two stages, the media gatekeeper.(Combs, E. Mc, Donald Shaw .L,11)

The Theory Hypotheses:

The hypothesis of **Agenda-Setting Theory** consists of three elements to the agenda-setting process. Studies have focused on researching the relationships between these components to find out which of them has an impact on the other. These components are:

- 1) **Media Agenda:** It is based on the premise that the media, especially the press, select and prioritize topics and issues that will be raised in society.

- 2) **Public Agenda:** Public Agenda is based on the premise that the public may control the priorities of issues that will be raised in the media due to its interest in them.(Nowak, Ewa,12)
- 3) **Political Agenda or Decision-Makers:** The political agenda is based on the premise that decision makers control the priorities of the topics and issues raised according to their importance to them.(Mcquail, Denis,13)

The Theory Trends:

The concept of the "issue attention" is related to agenda-setting theory, which refers to the reciprocal relations between the media and the masses they are exposed to by defining the issues priorities that concern the public and the impact of this issue attention and their arrangement among priorities, and its reflection on the emergence and disappearance of those issues intensely or low according to the agenda of those in charge of the media. The agenda-setting research witnessed several dimensions, variables, and modern research trends.

Effects of Agenda-Setting Theory on the Audience:

- 1) The Issues' Nature: That is, how close they are to the Audience's concerns, which must be given attention by the media in agenda setting. (Hamada, Bassiouni Ibrahim, 14).
 - 2) Personal Communication: That is, topics that are tangible or close to the audience affect the media's agenda.(Hassan, Emad Makkawi,15)
 - 3) The Issues' Importance: The importance of local or regional issues contributes to the media agenda setting, which will be reflected in the Audience's concerns about them.
 - 4) The Timing of Raising Issues: It is based on the fact that the media sets priorities according to the issues raised, which are based on the impact of audience attitudes, especially at the time of elections.
- 1) **The Type of Medium Used:** That is, choosing the appropriate medium with the nature of issues or the advertisement plays a major role in influencing agenda-setting.(Abdelhamid, Mohamed,16)
 - 2) **Time Range:** Most of the media may have a short-term effect or a long-term effect because television has a long-term effect, unlike the press.

11. The Study Type and Methodology:

The Approach according to Madeleine Gravit's definition is "a set of mental processes through which a science tries to reach the desired facts." (Benbouza, Saleh, 17) The study will depend on the survey method using the questionnaire tool. This study belongs to descriptive studies because it is considered the most appropriate given its main objective of agenda-setting used by the press in raising issues and their implications in addressing the issue of food security and sustainable environment, and the extent of the Saudi public's awareness of this issue.(Jain Zua et al,18)

The Study Population and Sample:

The study targets students at the Faculty of Education at King Faisal University who are exposed to electronic newspapers. This study relies on a simple random sample of (200) male and female students in the Faculty of Education at different educational stages. The sample of the study is homogeneous and represents (14.8%) of the study population of (1350), and the percentage of the sample was extracted based on the following equation: $(N=PQ (Z)^2/E^2)$. The questionnaire was distributed electronically without prejudice to any category of the study sample.

All respondents were informed of the objectives and methodologies of the study, and they participated by choice without coercion, and the college agreed to conduct this study.

The selection of the study sample from the College of Education represents some reasons:

- 1) The Faculty of Education includes many academic levels to prepare highly qualified educators to work in all fields.
- 2) The faculty of education seeks to provide its students with a broad background on important societal, environmental, and food issues to contribute to educating future generations on these central issues.
- 3) Al-Ahsa Governorate is one of the pillars of the Kingdom, and the Al-Ahsa Oasis is one of the most prominent tourist destinations and the most famous natural palm oasis in the world.
- 4) All respondents were informed of the study objectives and methodologies, agreed to them, and participated voluntarily, and the college agreed to conduct the study.

12. Statistical Data Processing:

The researchers will use the "Statistical Package for the Social Sciences" program, known as (SPSS) for short to analyze the field study data through the current study in all tests and statistical treatments, for the hypotheses and correlations in accepting the results of statistical tests at a confidence level of 95% or more, that is, at a significance level of 0.05 or less. (Ballant, Julie, 19)

13. The Study's Limitations:

The study is limited to the role played by the electronic press in covering the issue of food security and environmental sustainability.

- 1) **Thematic Limitation:** The subject of the study is limited to identifying the role played by the electronic press on the issue of food security and environmental sustainability and its impact on society. (Al-Dulaimi, Muhammad, 20)
- 2) **Spatial Limitation:** It is determined by the male and female students at the Faculty of Education at King Faisal University in Al-Ahsa.
- 3) **Temporal Limitation:** It is determined by the academic year 1444-1443 AH. It is hoped that during this period, the study tool; the questionnaire will be applied to students of King Faisal University.

14. Questionnaire Arbitration:

The questionnaire was used to collect data. Its definition came as "a research method that aims at quantitative, objective and methodological description of the apparent content of the communication". (Berelson, B. & Gaudet H, 21) The validity and reliability of the questionnaire were tested by four arbitrators from university professors specialized in media and communication from various Arab universities "(Prof. Hassan Niazi, King Faisal University - Dr. Fouda Muhammad Ali Aisha, King Faisal University - Dr. Khaled Al-Farm, The former dean of Imam Muhammad bin Saud Islamic University, political media advisor and researcher in strategic affairs - Dr. Hanan Yusuf, Ain Shams University), through which each item was confirmed to belong to a certain personality trait, the reliability of the scale and the initial version were confirmed and the necessary modifications were made and then finally distributed to the original population.

15. Validity and reliability procedures for the study tool:

Firstly, Internal Consistency Validity: The internal consistency of the scale was calculated by calculating the correlation coefficient between each item score with the total score of the scale after excluding the value of this item from the total score. The resulting correlation coefficients values were significant at the level (0.01), indicating the consistency of the sub-items and the validity of their content in measuring what they were set to measure (Allam, Salah Al-Din, 22), and the following table illustrates this:

Table (1)

Spearman's Correlation Coefficients for Scale Validity

Items	Correlation Coefficients	Items	Correlation Coefficients
1	0,497746**	7	0,588243**
2	0,667513**	8	0,891357**
3	0,793380**	9	0,714913**
4	0,771342**	10	0,577744**
5	0,764157**	11	0,517024**
6	0,673493**	12	0,635385**

Secondly, Reliability: A pre-test was conducted on a sample of 20 individuals out of the total sample and then re-applied again to the same group after one week. Then, the researchers calculated the reliability coefficient between the respondents' scores in the first and second applications that is evident from the following table:

Table (2)

The reliability coefficient of the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society

The scale as a whole	Items No.	The reliability coefficient of the split half
	12	0.814

It is clear from the previous table that the value of the reliability coefficient for the scale as a whole (0.814), which is a statistically significant value, shows the validity of the scale as a tool for the study.

The results of verifying the study hypotheses:

The first hypothesis: There is a statistically significant difference between the mean scores of males and females on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society.

Table (3)

T-test results of differences' significance between the mean scores of males and females on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society according to gender difference

Gender	Number	Mean	Standard deviation	t- value	Degrees of freedom	Significance
Males	82	2.80	0.399	0.375	181	Not significant
Females	101	2.78	0.415			

The data in Table (3) indicate that the "T-test" results in the previous table indicate that there are no statistically significant differences between the mean scores of males and females on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society, so the "T-test" value was (0.375), which is a non-statistically significant value at any significance level. Thus, this hypothesis may prove incorrect, stating that: There is a statistically significant difference between the mean scores of males and females on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society.

The second hypothesis: There are statistically significant differences between the mean scores of the respondents on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society, according to the difference in qualification. The results of the study of (Al-Muhanna, Ahmed Saud, 23) have indicated results converging on this result.

Table (4)

One-way Analysis Of Variance (ANOVA) between the mean scores of the respondents on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society, according to the difference in qualification

Source of variance	Sum of squares (SS)	Degrees of freedom (Df)	Mean Squares (MS)	F- Value	Significance
Between groups	2,301	2	1,150	7.447	significant at the level (0,01)
Within groups	27,808	180	0,154		

Total	30,109	182	-		
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The data in Table (4) indicate that there are statistically significant differences between groups of respondents who represent different academic qualifications (diploma - bachelor - postgraduate studies) on their attitudes toward the role of electronic newspapers in introducing food security and sustainable development issues in society, so the F-value was (7,447) which is significant at the level of significance = 0.01. Thus, this hypothesis may prove correct, stating that: There are statistically significant differences between the mean scores of the respondents on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society, according to the difference in qualification. To find out the source and significance of the differences between the arithmetic mean of the respondents' groups, the Post Hoc test was used with Least Significance Difference.

Table (5)

The results of L.S.D analysis to find out the differences between groups in their attitudes toward the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society, according to the difference in qualification.

Groups	Diploma	Bachelor	Postgraduate Studies
Diploma	-	329,0**	0, 545**
Bachelor	329,0**	-	216 ,0*
Postgraduate Studies	0, 545**	216 ,0*	-

Table (5) shows the difference in the arithmetic mean of the groups that represent the direction of the "study sample", the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society, according to the difference in qualification. To identify the source of the variance of the differences between the arithmetic mean of the respondents' groups, the Post Hoc test was used with Least Significance Difference. It became clear that there is a difference between those holders of an intermediate qualification "diploma" and those holders of a bachelor's degree, with a difference between the two arithmetic means that amounted to (0,329 **) in favor of those with a bachelor's degree, which is a statistically significant difference at the 0.01 level. There is also a difference between holders of an intermediate qualification "diploma" and those with graduate studies, with a difference between the two arithmetic means, which amounted to (0,216 *) in favor of those with graduate studies, which is a statistically significant difference at the level of 0.05. There is also a difference between those with a bachelor's degree and those with graduate studies, with a difference between the two arithmetic means, which amounted to (0,545 **) in favor of those with graduate studies, which is a statistically significant difference at the 0.01 level. The results of Al-Muhanna's (23) study agree that there is a relationship between food security in the Kingdom and a group of the most important economic factors.

The third hypothesis: There are statistically significant differences between the mean scores of the respondents on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society according to the difference in age.

Table (6)

One-way Analysis Of Variance (ANOVA) between the mean scores of the respondents on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society

Source of variance	Sum of squares (SS)	Degrees of freedom (Df)	Mean Squares (MS)	F- Value	Significance
Between groups	1,239	2	0,620	3.863	significant at the level (0,05)
Within groups	28,870	180	0,160		

Total	30,109	182	-		
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According to the difference in age. The data in Table (6) indicate that there are statistically significant differences between groups of respondents who represent different ages (18: 23 years - 24: 29 years - 30: 35 years) on their attitudes toward the role of electronic newspapers in introducing food security and sustainable development issues in society, so the F-value was (3,863) which is significant at the level of significance = 0.05. Thus, this hypothesis may prove correct, stating that: There are statistically significant differences between the mean scores of the respondents on the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society according to the difference in age. To find out the source and significance of the differences between the arithmetic mean of the respondents' groups, the Post Hoc test was used with Least Significance Difference.

Table (7)

The results of L.S.D analysis to find out the differences between groups in their attitudes toward the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society, according to the difference in age.

Groups	18: 23 years	24: 29 years	30: 35 years
18: 23 years	-	0,038-	0,221-**
24: 29 years	0,038	-	0,183-
30: 35 years	0,221**	0,183	-

Table (7) shows the difference in the arithmetic mean of the groups that represent the direction of the "study sample", the role of Saudi electronic newspapers scale in introducing food security and sustainable development issues in society, according to the difference in age. To identify the source of the variance of the differences between the arithmetic mean of the respondents' groups, the Post Hoc test was used with Least Significance Difference. It became clear that there is a difference between the age group (18: 23 years) and the age group (30: 35 years), with a difference between the two arithmetic mean whose value amounted to (0,221 **) in favor of the age group (30: 35 years), which is a statistically significant difference at the level of 0.01.

The fourth hypothesis: There is a statistically significant correlational relationship between the intensity of respondents' exposure to electronic newspapers and their knowledge of food security issues and sustainable development in society. Astudy (Youssef, Berkan& Amina Ben Khaznaji, 24) went to results similar to this hypothesis.

Table (8)

Spearman's correlation coefficient between the intensity of respondents' exposure to electronic newspapers and their knowledge of food security issues and sustainable development in society

Variable	Exposure to Electronic Newspapers Scale		
	Number	Spearman value	Significance
their knowledge of food security issues and sustainable development in society	183	0.371	significant at the level (0,01)

The results of Table (8) indicate that by using the Spearman correlation coefficient, it was clear that there was a positive and statistically significant correlational relationship between the number of hours of respondents' follow-up to electronic newspapers and their knowledge of food security and sustainable development issues in the Saudi society, so the

Spearman's correlation coefficient was (0.371), which is a statistically significant difference at the level of 0.01. Thus, this hypothesis may prove correct, stating that: There is a statistically significant correlational relationship between the intensity of respondents' exposure to electronic newspapers and their knowledge of food security issues and sustainable development in society.

16. The Study Results:

- 1) **(Political topics)** came at the first place of the most important topics that respondents are interested in following up to Saudi electronic newspapers, with a percentage of (32%) of the total study sample. It was followed by (environmental topics) in the second place, with a percentage of (22%) of the total study sample, then (sports topics) came in the third place, with a percentage of (18%). (Economic topics) came in the fourth place, with a percentage of (17.5%) of the total study sample, but (Food security topics) came in the fifth place, with a percentage of (16.5%), followed by (entertainment topics) in the sixth place with a percentage of (2.5%) of the total study sample. Finally, (cultural topics) ranked seventh, with a percentage of (2.0%) of the total study sample.
- 2) **(Providing news with photos and videos)** ranked first among the reasons for respondents' follow-up to Saudi electronic newspapers, with a percentage of (42.0%) of the total study sample. (Identifying the Kingdom's efforts to achieve food security for citizens and preserve the environment) ranked second, with a percentage of (37%), followed by third-place (Identifying the Kingdom's Vision 2030 in the food security and environment field), with a percentage of (33%). (Helping me understand food security and environmental issues) came in fourth place, with a percentage of (31.2%), then (I got used to it) in fifth place with a percentage of (26.5%), then (Reading the various press coverage of environmental issues and how to preserve them) ranked sixth with a percentage of (25.5%). In the seventh and last place came the reason (helping me prioritize issues and events related to Saudi affairs), with a percentage of (18%).
- 3) **(Al-Riyadh newspaper)** came in first place for the electronic newspapers used by the respondents, with a percentage of (24%). (Sabq newspaper) came in the second place, with a percentage of (23%), followed in third place (Ajel newspaper), with a percentage of (19%). in the fourth place came (Okaz newspaper), with a percentage of (16%), then (Asharq Al-Awsat newspaper) in the fifth place with a percentage of (13.5%), and in the sixth and last place came the newspaper **(Alyaum newspaper)** with a percentage of (4.5%).
- 4) The respondents believe that Saudi electronic newspapers are (Somewhat Interested) in issues of food security and sustainable development, with a percentage of (58%). In the second place, the respondents see the Saudi electronic newspapers (interested) with a percentage of (33.5%), and the percentage of those who believe that they are (Not Interested) came in the third and last place with a percentage of (8.5%).
- 5) The respondents believe that the method (focusing on the Kingdom's efforts in the field and addressing the topic through the regional and international dimension) is at the forefront of the methods used by Saudi electronic newspapers in addressing issues of food security and environmental sustainability, with a percentage of (58.5%). In the second place, the method (focusing on the efforts of the Kingdom of Saudi Arabia in this field) came with a percentage of (34.4%), then the method (dealing with the topic through the regional and international dimension) came in the third and last place with a percentage of (7.1%).
- 6) The respondents believe that the Saudi electronic newspapers (somewhat helped them) in understanding food security and environmental sustainability issues and topics, with a percentage of (63.4%). In the second place, the percentage of respondents who believe that electronic newspapers (helped them so much) in understanding food security and environmental sustainability issues and topics came to a percentage of (24,6%). Then, the percentage of (not help them) in the third and last place (12%).
- 7) **(The News)** came at the forefront of the editorial arts preferred by the respondents in following up on topics and issues of food security and sustainable development in the Saudi electronic newspapers, the study sample, with a percentage of (65.6%). In the second place, (The Report) art came with a percentage of (38.8%), then (The Article) art came with a percentage of (32.8%). In the fourth and last place, (Investigation) art came with a percentage of (32.2%).
- 8) The method **(Giving examples and citations)** came at the forefront of the methods of Saudi electronic newspapers in addressing topics and issues of food security and sustainable development, with a percentage of (55.7%). In the second place, the method (Explanation style) came with a percentage of (50.8%). Then, the method (showing the responsibility of the state and the government) came with a percentage of (48.6%). In the fourth and last place, the method (showing individual responsibility) came with a percentage of (33.9%).

17. Recommendations:

- The need to pay attention to developing electronic newspapers for their role in educating the public about various

issues, by making full use of multimedia such as pictures and videos and developing press material in a way that encourages the public to turn to it.

- Expansion of short news arts that concisely convey information due to the lack number of the public reading long topics.
- Expanding the use of social networking sites to communicate with the public by those in charge of electronic newspapers.
- It is necessary to look at the Saudi public desire to participate in the field of sustainable development and the environment preservation practically by investing efforts, whether at the official level in the state or the societal level.

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References:

- [1] Khader, Mohammed Ibrahim, Communication Skills, *Dar Al Jundi for Publishing & Distribution- Al-Quds.*, 150, (2013).
- [2] Massoud, Taha, Environmental culture is an imperative toward environmental sustainability, Zayan Ashour University, Djelfa, Algeria, *Scientific Horizons Journal.*, 5 (2),12-23, (2019).
- [3] Al-Muhanna, Ahmed Saud, Economic Policies to Achieving Food Security in the Kingdom of Saudi Arabia, *Journal of Economic, Administrative and Legal Sciences*, 3 (13),22-24, (2017).
- [4] Sbabha, Safaa Sobh, Naseem Faris Ibrahim, The Change in the Strategy Used to Achieve Food Security in the Kingdom of Saudi Arabia, *Journal of Al-Quds open university for research and studies*,56-67, (2016).
- [5] Youssef, Berkan, Amina Ben Khaznaji, The Role of Maghreb Economic Integration in Achieving Food Security in the Central Maghreb Countries: A Prospective Analytical Study, *Economics Researcher's Journal*, Bordj Bou Arreridj, Algeria,34-35, (2014).
- [6] Al-Toukhi, Mona Muhammad, Saudi University Students' Dependence on Electronic Newspapers for the Kingdom Vision 2030, Cairo University, *The Scientific Journal of Journalism Research*, 15, 56-59, (2018).
- [7] Amin, Reda Abdel Wajid, *Electronic Press*, Dar Al-Fajr for Publishing & Distribution, ed.1, Cairo, 27, (2007).
- [8] Metwally, Amal Saad, *Introduction to the Press*, Dar Al-Esraa Library, ed.1, Cairo, 29, (2003)
- [9] Salman, Muhammad, *The problem of food security in the Syrian Arab Republic and the prospects for its solution*, Syria, Damascus, Dar Al-Fikr, ed.1, 155, (2001)
- [10] Al-Kharman, Bakr Abdullah, *Mechanisms for Achieving Environmental Sustainability in the Prophetic Sunnah*, The Fifteenth International Conference of Jil Research Center on Environmental Protection Mechanisms on December 26 and 27, Tripoli, Lebanon, Jil Research Center, 199, (2017)
- [11] Combs, E. Mc, Donald Shaw. L, “The Evolution of Agenda Setting Research: Twenty-Five Years in Marketplace of Ideas”, *Journal of Communication*, 43 (2), 58, (1993).
- [12] Nowak, Ewa, Agenda-setting theory and the new media, *Public opinion quarterly* 36 (2), 513, (1972).
- [13] Mcquail, Denis, Agenda-setting Theory, *Public opinion quarterly* 36 (2), 513, (1972).
- [14] Hamada, Bassiouni Ibrahim, *Media, and Politics: A Study in Agenda-Setting*, Nahdat El-Shorouk Bookstore, Cairo, 257, (1996).
- [15] Hassan, Emad Makkawi, Laila El-Sayed: *Communication and its Contemporary Theories*, Aldar almasriah, Cairo, 293, (2006).
- [16] Abdel Hamid, Mohamed, *Media Theories and Influence Trends*, ed.1, alam books, Cairo, 24, (1998).
- [17] Benbouza, Saleh, *Media Research Methods: Different Classifications and Some Controversial Issues*, University of Algiers - Institute of Media and Communication Sciences, 35, (1995).
- [18] Jain Zua et al, Public Issue Priority Formation: Media Agenda Setting, Social Interaction, *Journal of Communication*, Vol.43, No.1, (2003).

- [19] Ballant, Julie, *Statistical analysis using SPSS*, Translated by: Al-Khaled Al-Amri, Dar Al-Farouk for Cultural Investments, Amman, p. 18, (2015).
- [20] Al-Dulaimi, Muhammad, *Communication Theories in the Twenty-first Century*, Al-Yazuri Scientific House for Publication and Distribution, 254, (2016).
- [21] Berelson, B. & Gaudet H, *The People's Choice: How the Voter Makes up His Mind in a Presidential Campaign*, Columbia University Press, New York, (1948).
- [22] Allam, Salah Al-Din, *Educational and psychological measurement, and evaluation: Its basics, applications and contemporary trends*, Cairo, Dar Al-Fi,35-44, (2010).
- [23] Al-Muhanna, Ahmed Saud, Economic Policies to Achieving Food Security in the Kingdom of Saudi Arabia, Journal of Economic, Administrative and Legal Sciences, *National Research Center Gaza*, 3 (13), (2017).
- [24] Youssef, Berkan & Amina Ben Khaznaji, The Role of Maghreb Economic Integration in Achieving Food Security in the Central Maghreb Countries, *Economics Researcher's Journal* ,1-1,17-19, (2014)