Solutions Journalism and Sustainable Development: News Coverage in Arab Websites 2024

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Abstract

This descriptive study aimed to identify the extent to which Arab news websites benefited from solutions journalism in news coverage of the issue of sustainable development during the first half of 2024, based on the methodology of content analysis and solutions journalism.

The research found that Arab websites were interested in news coverage of more than 25 sub-issues of sustainable development issues during this period, due to the interest in government policies in sustainability issues in both Egypt and the Emirates, which hosted two climate conferences for two consecutive years, the first Cop27 in Egypt and the second Cop28 in the Emirates.

The research revealed that the points of agreement between the Egyptian Al-Ahram website and the Emirati Al-Bayan website were more than the points of disagreement, whether in news coverage of sustainable development issues or in solutions journalism. The study also revealed an agreement between the two websites in arranging the priorities of the three areas of sustainable development studied by the research, which are (economic development, social development, climate issues, and the environment), but a difference emerged between them in the most important issue for each of them, as the Al-Ahram website was interested in the issue of climate change, while the Al-Bayan website was interested in the issue of energy.

The study recommended that Arab websites should focus on providing the possibility of audience interaction with news coverage of sustainable development issues that concern them.

Keywords: Sustainable development - solutions journalism - news coverage - Arab websites - Al-Ahram website - Al-Bayan website.

Introduction

Sustainable development issues are among the most prominent issues on the planet Earth, due to their significant impact on the lives of its inhabitants. Therefore, these issues have received global attention for more than 40 years, and the media has played a prominent role in introducing the public to them and shaping their awareness of them, with the aim of bringing about the desired change in people's behaviours.

Communication experts assume that the media plays a major role in leading change towards the sustainable development goals, so Guy Berger, Director of Freedom of Expression and Media Development at UNESCO, confirms that "the sustainable development goals cannot be achieved without the media." This was also confirmed by Mr. Kofi Annan, former Secretary-General of the United Nations, when he said that target 16.10 of the sustainable development goals on public access to information and fundamental freedoms cannot be achieved without independent media that can help achieve all sustainable development goals.

The media contributes to providing the news and information and enabling the discussions that people need to build prosperous societies. Accurate information enables people to participate in public life and make informed choices. This was also confirmed by António Guterres, the current Secretary-General of the United Nations, when he said that providing information from diverse sources is essential to achieving Goal 16 of the Sustainable Development Goals, which aims to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels. The media plays a crucial role in promoting behavioural changes among its audiences, disseminating information, and raising awareness.

Greenhouse gas emissions from unsustainable human activities such as burning fossil fuels and deforestation have made climate change one of the most significant global threats. Climate change has killed more than five million people worldwide annually (Zhao et al.,2021). In addition, the physical and health risks of climate change are escalating, highlighting the urgent need for climate mitigation and adaptation efforts. News media have been entrusted with the responsibility of publishing news stories to raise awareness and educate the public about the risks of climate change and the necessary actions (E. G. Nisbet et al.,2019).

Although research has widely examined the essential role of journalism in communicating sustainability and promoting understanding of environmental challenges in the past, the literature has shown that news media have,

in many cases, failed to communicate news about sustainable development and climate change policies and inspire people to take an active role in collective and solution-based policies (Robert A. Hackett,2017).This situation was since media coverage of climate change and sustainable development issues generally emphasized acute risks to various aspects of life and this bleak nature of climate news led to a greater number of audiences deliberately avoiding the news because it negatively affected their emotions, making them feel powerless to effect change (Theodora, L., & Persiana, A.,2022).

Therefore, science journalism scholars, including E. G. Nisbet, have emphasized the urgent need to integrate different public engagement measures and reframe the importance of sustainable development in a way that resonates with a wide range of audiences and enhances public engagement and understanding of these issues. (Zhao et al.,2019) found that one of the approaches to sustainable development news coverage in general is to present solutions within the news coverage. (E. G. Nisbet et al.,2019) also confirmed that solutions-focused approaches to sustainable development issues, including climate change, have received positive feedback from journalists and the public.

Solutions journalism advocates, including (Zhao et al.,2019), emphasize that focusing on solutions leads to changing the environment to a more positive one, which generates confidence in the ability of society to deal with various circumstances. Therefore, solutions journalism can reveal the real determinants and, through increasing knowledge sharing, to contribute to long-term solutions to problems. Solutions journalism does not focus on blame, which classifies societies and individuals who already suffer from many societal problems.

Considering the previous presentation, this study aims to examine sustainable development issues in two of the largest Arab websites, namely Al-Ahram of Egypt and Al-Bayan of the Emirates. The study relies on the solutions journalism approach, which is one of the types of constructive journalism that plays an important role in developing news coverage of sustainable development issues. This approach highlights the role of journalism in positive change regarding these issues, as the research reveals the extent to which the solutions journalism approach is used in producing and managing content through these Arab websites.

Literature Review

Despite the recent emergence of solutions journalism in 1998 by Benesch, S., it has witnessed a turnout in American and European academic circles, where this cognitive heritage can be classified into three categories: the first concerns the benefits of solutions journalism to society, the second studies the psychological effects of solutions journalism, and the third focuses on the positive effects of solutions journalism in increasing audience participation.

Regarding the first aspect of this research, which is related to the benefits of solutions journalism to society. (Their, K., & Namkoong, K. ,2023) opined that solutions journalism attempts to engage news consumers in the news stories it conveys to the public optimistically, as it focuses on solutions to provide new narratives for journalism practice and provides opportunities to communicate complex events to the public without frustration or, Therefore, solutions-focused media reports represent a tour of news coverage because they focus on the positives without ignoring the negatives when covering any of the societal problems; Therefore, the solution approach can help expand the scope of coverage that increases the participation of effective responses to societal problems, and makes the coverage move away from the traditional depressing narrative, which makes solutions journalism a crucial tool for preparing balanced news reports, and incorporating effective responses to the public.

Ellen Heinrichs (2021) has argued that constructive journalism is good for society, as well as for the media, as there is a tendency to avoid news that focuses on negative news events and to approach news that they feel is important. People also found that they consume constructive content for a relatively longer period and comment on it less negatively on social media. Similarly, there is growing evidence that constructive journalism has a positive impact on the income generated by this type of journalistic content in national and regional media outlets.

In recent years, solutions journalism has received increasing attention—from journalists and researchers—as a form of journalism that aims to balance out the negative news cycle, finds Lisa Urlbauer (2019). Several studies have found that solution-oriented stories affect audiences differently than traditional problem-focused stories. Results indicated that readers of solutions stories had increased positive affect, better attitudes toward the story and the proposed solution, and greater knowledge than those who read stories without solutions. There were no differences in effect between sol solutions' stories with and without visions, but solutions journalism did increase trust in the news media and civic engagement.

Delphine Ruaro (2018) found that solutions journalism has seen an increase in interest in recent years due to audiences and a decrease in journalists' interest in mainstream negative, problem-focused news. Journalists expected that solution-focused stories would positively influence readers' engagement with the news to mobilize them around societal problems. The results revealed that solutions journalism increased readers' positive affect, preference for similar stories, and attitudes toward the newspaper. These findings support the argument that solutions journalism has a positive impact on audience mood and newspaper brands.

Karen McIntyre& Kyser Lough (2018) conducted in-depth interviews with 14 journalists to better understand the position of solutions journalism and found that most journalists know what solutions are acceptable to report in the press, believe that these solutions are highly objective, and find that journalists change their thinking processes when reporting on news but largely maintain the same reporting habits. Finally, they view management as the biggest facilitator or barrier to their ability to adopt solutions journalism.

Karen MCINTYRE, Megan Sobel, (2017) aimed to identify the impact of the media in shaping public perceptions of social problems by comparing two journalistic approaches: shocking audiences and pushing them to action by publishing offensive news reports or inspiring them to action by publishing solution-based news reports. The study found that readers of solution reports felt more positive and were more likely to read similar stories about the issue. Therefore, it was suggested that news stories that focus on solutions may be somewhat more attractive than shocking and offensive stories.

These findings are consistent with a 2008 AP study that showed that young readers expressed a desire to "disconnect" from the media because of news experiences that led to high levels of stress and anxiety. Negative coverage often has the opposite effect—leaving people feeling helpless and overwhelmed by the enormity of the problems.(Bornstein, D., 2011).

A study conducted by the Annette Strauss Institute for Civic Life's Engaging News Project at the University of Texas. Curry, A., Hammonds, K. (2014) found that readers of newspaper articles about solutions felt "more informed and interested in the topic" than readers who read stories that did not address a current problem. Participants in the study read stories about one of three issues: the effects of traumatic events on schoolchildren in the United States, homelessness in urban centres in the United States, or inadequate clothing among the poor in India.

Regarding the second aspect related to the psychological effects of solutions journalism, a subsequent study showed that solutions journalism was found to promote personal empowerment (i.e., creating a greater sense of self-efficacy), interactive empowerment (i.e., enhancing critical awareness), and behavioural empowerment (i.e., encouraging community engagement and coping mechanisms) (Zhao et al., 2022).

Regarding the effect of solutions journalism on enhancing audience self-efficacy (i.e., belief in one's ability to effectively perform a given task or achieve a specific goal), Minjie, Li., (2021) found that individuals who read news stories that contained a solution element had higher self-efficacy. This increase in self-efficacy was reflected in the interviewees' belief that they could contribute to addressing the issue at hand.

Previous studies have also suggested that incorporating an effective solution to a social problem into news articles can reduce negative affect (such as nervousness, fear, discomfort, and sadness) and found that presenting solutions in a news report leads to more positive feelings (such as hope, happiness, and excitement) in the audience. Previous literature has shown that participants who read solution-oriented stories experienced more positive emotions and even increased levels of interest and optimism (McIntyre, 2019).

McIntyre (2019) also argues that while solutions journalism may help mitigate the negative effects of conflict news, it may not necessarily lead to action.

Wenzel et al (2018) found in their study of a sample of people from marginalized communities that those who read solutions-oriented reports were more likely to believe that these reports could help bring about change and solve problems in their community, even though they believed that solutions offered by journalism alone were not enough to combat prevailing problems.

These findings are consistent with other studies, including Gielan, Michelle, et al. (2017), which found that respondents who read news reports that included solutions reported greater self-efficacy and increased collective efficacy (i.e., the group's shared belief in their ability to accomplish a specific task or goal) compared to those who read reports that focused solely on defining the problem.

Despite the previous positive demonstration of the positive psychological effects of solutions journalism on audiences, limited research has found the opposite, including McIntyre, K. E. (2015), who found that solutions stories had no significant effect on self-efficacy among interviewees when it came to addressing social issues themselves.

Early research on solutions journalism has examined its effects both in and out of the laboratory and has found that solutions journalism positively impacts psychological states, news-related outcomes, and behavioural intentions among audiences (Curry & Hammonds, 2014).

The third category of research focuses on the positive effects of solutions journalism on audience engagement, which goes beyond studying its psychological effects. Proponents of this research approach believe that news reports that address solutions can also positively affect "friend engagement." Thier defines engagement as the likelihood that readers will engage in other actions, such as sharing the news, searching for more information, reading more articles and reports, or discussing the topic with friends. (Thier, K., Abdenour, J., Walth, B., & Dahmen, N. S.,2021).

Some studies have shown promising results for the role of solutions journalism in motivating action. Curry, A., Hammonds, K. (2014) found that audiences exposed to news reports that included solutions were more likely to share the reports and expressed a stronger intention to participate in efforts to find a solution.

Minjie, Li., (2021) explored how solutions information in news stories elicited behavioural intentions to share the story with others, recommend it, or investigate the issue further, in addition to eliciting purchase intentions. Thier, K., Abdenour, J., Walth, B., & Dahmen, N. S. (2021) found that individuals who focus on solutions in reading news reports show higher levels of trust in the fairness, truthfulness, accuracy, and comprehensiveness of the reports, thus increasing their likelihood of continuing to read the same author or news source that uses a solutions journalism methodology.

Baden, D., McIntyre, K., & Homberg, F., (2019) also found that incorporating a solutions-focused approach elicited audiences to be more likely to engage in positive behaviours, such as environmental adoption, sustainable practices, and taking active steps to improve the world.

Aitamurto, T. & Varma, A. (2018) found that solutions-oriented approaches in journalism have gained momentum in recent years. In Europe and the United States, solutions journalism has emerged as a form of journalism that aims to create a positive social impact by informing people about issues and suggesting specific and effective ways to solve these issues.

McIntyre, K., & Sobel, M. (2017) conducted another experiment regarding solutions stories and found that consumers of solutions-based stories reported more positive affect and greater behavioural intentions to read similar stories. In the same vein, Curry, A., Stroud, N. J., & McGregor, S. (2016) found that in an experiment and two field tests, individuals who read solutions stories reported higher levels of self-efficacy and optimism and spent more time on the webpage than those who read topics covered by non-solutions journalism.

The results of the study (McIntyre, 2015) showed that solution-based stories made readers feel more positive affect and positive attitudes toward news reports and toward solving the problem than conflict-based reports. However, it should be noted that research on the effect of solutions journalism on motivating such actions has yielded inconsistent results. On the one hand, existing studies have found no significant effect of news reports that include solutions on audience perceptions of potential behaviours or actual behaviours.

The conclusion of this presentation makes us adopt what Ellen Heinrichs (2021) emphasized. After discovering that solutions journalism was of great importance in the German context and a special characteristic in basic industry issues, the researcher recommended that solutions journalism could be useful for other countries, contexts, and cultures. This is indeed what this study took, which benefited from this approach in its methodology, theoretical frame, and hypotheses proposal, in addition to designing a scale for analysing the content of Arabic websites.

Research question.

The countries of the Middle East and the Arab region are characterized by a diversity of natural resources, industrial production, environmental footprints, and economic diversity. The Middle East has diverse political and economic environments and is home to many oil and gas producers, such as the Gulf States, which have high-growth economies, while countries in the region are plagued by poverty and conflict, such as Iraq and Yemen. (Abdelhalim, K. ,2022).

Despite the region's general social and environmental vulnerability to climate change, it is exacerbated by the slow pace of climate change adaptation and mitigation measures. As a conflict-ridden region, this has led to climate change and sustainable development in the region being deprioritized in public discourse and news coverage across local media outlets. (Eskjær, M. F.,2017).

This is consistent with Dunwoody, S. (2014), who stated that science journalists in the Global South often rely on translated, information-based climate content that lacks critical analysis.

Therefore, if information is combined with solutions in the coverage of sustainable development and climate change issues, it can generate a larger audience and achieve more positive outcomes in terms of public interest, self-efficacy, and positive behavioural attitudes towards sustainable development issues. The media can play a new and indispensable role in achieving the United Nations Sustainable Development Goals by allowing for a broad and accurate understanding of human-nature interactions, monitoring the dynamics of social-environmental change, and investigating the co-construction of nature values. Thus, threats to access to data can be addressed, contributing to the media being a tool for opening a broad societal debate on sustainable development issues and for the public good. This can be done by adopting a solutions approach to covering sustainable environmental issues in newspapers.

The research problem focuses on analysing the news content of sustainable development issues on the Egyptian Al-Ahram website and the Emirati Al-Bayan website, relying on the solutions journalism approach, considering the unique capabilities provided by electronic websites. These characteristics help provide different news coverage than what is provided in printed newspapers. This different digital coverage can support sustainable development issues by taking advantage of the many features provided by the Internet, such as

multimedia-based presentation, audience interactivity and comments on the content, and suggesting innovative solutions to sustainable development problems, in addition to news websites benefiting from open sources on the Internet. Considering this presentation, the research question is: To what extent have Arab news websites benefited from the solutions journalism approach in news coverage related to sustainable development issues?

Importance:
• The importance of this research comes from the fact that it provides an accurate description of the applications of solutions journalism in the content of two of the largest Arab news websites in the context of covering sustainable development issues, especially since the scientific literature has confirmed that there is no abundance of solutions journalism research in the Middle East and North Africa. Rather, there is a lack of this research in Asia and Africa, in line with the results of previous research that found great interest in solutions journalism in North America and Europe. (McIntyre, K. E., & Lough, K., 2021).
• This research opens the way for Arab research applications and also suggests a new approach to covering social issues so that journalists focus on providing solutions and do not just merely transmit events, so that journalism can contribute to ending problems and contributing to the required social change in developing countries, especially since solutions journalism covers a wide range of topics ranging from climate change to public health, racism, equality, and economic mobility, especially since the issue of sustainable development has been one of the most important and widespread issues in recent times. Global interest in it is increasing, which makes there a need for organized media attention to it, and online media sites are one of the effective tools in informing, educating, and enhancing the public's understanding of sustainable development, especially since previous research has shown that traditional media have not succeeded sufficiently in empowering readers or motivating their support to work in a positive and effective direction regarding sustainable development.(Theodora, L., & Prestianta, A.,2022).
• The research draws the attention of journalists to the need to actively engage audiences in providing solutions to problems related to sustainable development, as the literature has confirmed that solutions journalism is a crucial tool for preparing balanced reports and integrating effective responses to the audience (Thier, K., & Namkoong, K. ,2023).
• The importance of this research also comes within the frame of what was called for by previous researchers in the field of solutions journalism, including (Ellen Heinrichs, 2021) who said "There is a great need to conduct research on solutions journalism by conducting systematic experiments that study local media and their specific conditions, thus complementing the research conducted so far mainly in the United States and Northern Europe.

Objectives:
The research seeks to achieve six objectives:
    Based on the above-mentioned literature, this research aims to achieve the following objectives:
1- Explore the prominent areas in news coverage of sustainable development issues in news websites, applying them to Egypt and the United Arab Emirates.
2- Identify the patterns of news websites' coverage of sustainable development issues of a heavy scientific nature.
3- Verify the extent to which the solutions journalism approach is integrated into the content related to sustainable development published in these local Arab news websites.
4- Evaluate the practices of news websites in enabling audience interactivity and engaging them in solutions related to sustainable development problems and social change events.
5- Test the differences between the Egyptian Al-Ahram website and the Emirati Al-Bayan website in the areas of development, coverage patterns, and the solutions journalism approach.
The researcher hopes that the results of this study will be able to provide quantitative and qualitative contributions to exploring the applications of the solutions approach by critically analysing the content of sustainable development, comparing how solutions journalism is applied in Egyptian and Emirati websites, and contributing to adopting a more enlightened and effective approach to preparing news reports on sustainable development that journalists can use in the future.

Questions:
The research seeks to answer four questions:
1.What are the areas of sustainable development that Arab news websites are interested in?
2.How do Arab news websites present sustainable development issues to the public?
3.How do Arab news websites employ the solutions journalism approach to sustainable development issues?
4. Are there differences between the Al-Ahram website and the Al-Bayan website in analysing the content of sustainable development issues from the perspective of the solutions journalism approach?

Hypotheses:

The research proposes 12 hypotheses that were built based on the solutions journalism approach:

H (1): There is a correlation between the order of interest in covering sustainable development issues on the Al-Ahram website and the order of interest in the same issues on the Al-Bayan website.

H (2): There are significant differences between the Al-Ahram website and the Al-Bayan website in the expected effects of adopting the proposed solutions in news coverage on the issue of sustainable development, due to the difference in the website that proposes these solutions.

H (3): There are significant differences between the Al-Ahram website and the Al-Bayan website in describing the proposed solutions in news coverage on the issue of sustainable development due to the difference on the website that proposes these solutions.

H (4): There are significant differences between the Al-Ahram website and the Al-Bayan website in the time frame of the proposed solutions in news coverage on the issue of sustainable development due to the difference on the website.

H (5): There are significant differences between the Al-Ahram website and the Al-Bayan website in the criteria for evaluating the proposed solutions in news coverage on the issue of sustainable development due to the difference on the website.

H (6): There are significant differences between Al-Ahram and Al-Bayan websites in the entities capable of solving sustainable development problems due to the difference on the website.

H (7): There are significant differences between Al-Ahram and Al-Bayan websites in the drawings and illustrations used in covering sustainable development issues due to the difference on the website.

H (8): There are significant differences between Al-Ahram and Al-Bayan websites in the sizes of news reports published by the two websites in covering sustainable development issues due to the difference on the website.

H (9): There are significant differences between Al-Ahram and Al-Bayan websites in the size of sentences used in covering sustainable development issues due to the difference on the website.

H (10): There are significant differences between Al-Ahram and Al-Bayan websites in the size of paragraphs used in covering sustainable development issues due to the difference in website.

H (11): There are significant differences in explaining the abbreviations used in covering sustainable development issues due to the difference on the website.

H (12): There are significant differences between Al-Ahram and Al-Bayan websites in the audience's interaction with content related to sustainable development issues due to the difference on the website.

The validity of hypothesis (1) is tested using Spearman's rank test, while hypotheses (2, 3, 6, 7, and 8) are tested using one-way Anova, and hypotheses (4, 5, 9, 10, 11, and 12) are tested using T-Test to measure the difference between Al-Ahram website and Al-Bayan website with regard to the variables of solutions journalism.

Solutions Journalism

Definition:

McIntyre, K., Lough, K., & Manzanares, K. 2018) defined solutions journalism as "a rigorous, persuasive, evidence-based approach to reporting on responses to social problems" and providing insight into their treatment and evaluation, using rational evidence to support their claims, and reporting on the limitations of the responses.

Loizzo, J., Watson, S. L., & Watson, W. R. (2018) also see solutions journalism as "a journalism that focuses on reporting solutions-based stories that encourage readers and viewers to participate in creating positive change." There, K. (2016) explained that solutions journalism expands beyond the traditional journalistic practice of criticism and goes towards providing comprehensive explorations of the cause of the problem, how solutions are offered, how these solutions can be effective, and to what extent these solutions can bring about change.

There, K. (2016) added that "solutions journalism reshapes traditional media approaches to informing the public about social problems by seeking to engage readers, provide a blueprint for change, and change the tone of public discourse." Powers, E. & Curry, A. (2019) assert that solutions journalism is "a report on how society responds to problems" and not "just letting journalists propose solutions to social problems." Solutions journalism aims to inform officials about problems by producing news reports "in the context of political decisions that can improve the situation."

Solutions journalism provides a comprehensive analysis of the problem, delving into its root causes. This includes rigorous, evidence-based coverage of the effective implementation of proposed solutions and the limitations of achieving proposed solutions. (Bansal, S., & Martin, C.,2015).

Furthermore, solutions journalism aims to provide a comprehensive view of social media and its representations of problems and responses to gain insights from those dealing with similar problems.

The Emergence of Solutions Journalism

As early as 1998, journalists noticed a new form of journalism emerging that was challenging the traditional methods of news media. Benesch, S. (1998), an American journalist and researcher, documented some of the early efforts at "solutions journalism" in her article in the Columbia Journalism Review. She stated that newspapers such as the Los Angeles Times, the New York Times, and the San Diego Union Tribune, as well as magazines such as The Nation, and radio programs such as ABC News, began to address all scary stories by emphasizing potential solutions to these societal problems to "correct the chronic flaw in journalism." Benesch, S. (1998) explained the flaw in media coverage that focuses on social problems and then leaves the solutions to other institutions.

Solutions journalism was first introduced into the literature when Davies, C. L. (1999) asserted that this approach "does not deny the value of news that explains negative things in society but rather offers some vision for how to fix them."

In 2013, the Solutions Journalism Network (SJN) was founded, an independent, non-profit organization that advocates for the growth of solutions journalism and calls for its effective integration into journalistic practices, linking the treatment of social problems with the provision of solutions. "And promoting meaningful social communication for change, solutions reporting is based on four pillars: responding to a social problem and providing insight into its treatment, using rational evidence, and disclosing limitations and challenges."

Characteristics

The characteristics of solutions journalism can be identified in the following points:

1- Delphine Ruaro's study (2018) confirmed that solutions journalism focuses on the readers' mood and increases their motivation to support the cause and appreciate the newspaper. Because commitment to solutions journalism implicitly means commitment to informing the public of both problems and potential solutions, solutions journalism encourages continuous dialogue.

2- Solutions journalism focuses on initiatives that seek to provide solutions to broader societal problems across a wide range of topics" (Aitamurto and Varma:2018)The solutions approach seeks to go beyond the superficial approach to topics and try to discover what works in solving the issues raised and analyse why and how the proposed solutions work - or do not work (Curry, A., Hammonds, K. (2014) Solutions journalists believe that there can be multiple paths to knowledge. Therefore, they have a commitment to publishing all points of view, with the possibility of more than one solution working.

3- Solutions journalism enables the reader to participate in societal dialogues and play a role beyond just thinking about the problems. (Lough, K., & McIntyre, K. ,2018).

4- Solutions journalism is informative, accurate, and objective in its reporting. (Bornstein, D.,2011). It depicts characters facing challenges, trying solutions, sometimes succeeding, and sometimes failing. When they fail, they try to find out what happened so that they do not repeat their mistakes. It must, we learn from our failures as much as we learn from our successes. (Solutions Journalism Network, 2014).

5- Solutions journalism is evidence-based, critical in nature and therefore does not propose quick and easy solutions, or ideas that give a passing nod to solving problems. Rather, solutions journalism involves "deep dives, critical assessments and compelling stories about the ideas, models, policies, organizations and people working to solve our toughest problems" (SJN: 2014).

6- Solutions journalism assumes that societies are in a constant state of transition. It rejects the idea that today's problems are rooted in and closely linked to our future. It believes that solutions are always within our reach. Therefore, solutions journalism looks to the future, and discusses ideas that have "the potential to evolve." This is to achieve sustainable development and solve current societal problems on a global level. In this approach, solutions journalism avoids blaming or libelling places or communities. (BORNSTEIN, 2011).

7- - Solutions journalism gives a voice to the most marginalized and encourages citizens to develop and provide "objective and systematic solutions using experts as citizen advisors".

8- Solutions journalism relies on two-way information flow and provides feedback loops for change to occur. Solutions journalism therefore moves from elite and institutional perspectives to mass perspectives and therefore relies on a range of contributors (social media users, television viewers, and print media readers), who largely operate outside the boundaries of the organization.

The Importance of Solutions Journalism

Solutions journalism motivates action to address societal problems. (Rice, G.,2021): Solutions journalism can also be a way to eliminate negative bias in traditional news and stimulate news engagement. (Wenzel, A., et al.,2018).

Research shows that audiences find solutions reporting trustworthy and informative, which increases their understanding of problems, and solutions journalism then enhances their desire to engage in civic life. (Lough K. & McIntyre K., 2021).

The Relationship Between Solutions Journalism and Other Journalism

McIntyre, K.,2019) sees solutions journalism as falling under the umbrella of constructive journalism. Constructive journalism is "an emerging form of journalism that involves applying positive psychology techniques to news work in an effort to produce more productive and engaging news stories while adhering to the core functions of journalism." (McIntyre, K., & Gyldensted, C.,2018) see constructive journalism as including solutions journalism, future journalism, peace journalism, and restorative journalism.

Loizzo, J., Watson, S. L., & Watson, W. R. (2018) compare solutions journalism to civic journalism and see their shared goal of promoting citizen engagement and prioritizing citizen agendas and non-elite sources. Solutions journalism differs from citizen journalism in that citizen journalists achieve the highest level of visibility when they publish commentary on crises and problems, while solutions journalists put their lens on solutions and serve as a conduit for these ideas.

Reveal Midberry & Dahmen, 2017). The relationship between solutions journalism and peace journalism, explaining that both genres challenge the traditional notion of conflict as a core news value. Wenzel, A., Gerson, D., Moreno, E., Son, M., & Morrison Hawkins, B. (2018) argue that solutions journalism and investigative reporting share the rigorous reporting mechanisms of delving into the problem and evaluating the effectiveness, strengths, and limitations of proposed responses.

While traditional forms of journalism focus on sensationalizing problems, solutions journalism helps clarify the nature of problems and inform readers about the range of responses to problems (Solutions Network, 2014). It differs from "positive news" reporting, which celebrates heroic acts and inspires rather than informs readers. Solutions journalism aims to address serious problems and achieve noticeable results that make a difference in people's lives, increasing optimism and a sense of self-efficacy because of participating in addressing the problem (Curry et al., 2016).

Proponents of solutions journalism also characterize this type of journalism as emphasizing its commitment to critical reporting while pursuing the basic goals of social development and as an emerging new genre. It consists of an honest account of the problem and solutions that are largely positive, and it moves away from soft news or civic journalism (Aitamurto & Varma, 2018).

Criticism of Solutions Journalism

1- Journalistic objectivity. Questions about the potential bias of solutions stories have come to the forefront of journalistic objectivity. Especially since media sociologists emphasize that objectivity may be difficult to achieve because journalists are part of society and, therefore, unable to rid themselves of their interpretations, perceptions, and biases that partially influence their coverage of news events, especially since Aitamurto, T. & Varma, A. (2018) revealed some cracks in the strict commitment to objectivity among some solutions journalists.

2- Another issue of particular concern is that solutions journalism is turning into promoting encouragement, as there is a fine line between positive journalism and solutions journalism, as the latter is based on real and high-quality solutions. Similarly, Davies, C. L. (1999) refuted criticisms that solutions journalism constitutes "good news" journalism or "happy ending" stories. Moreover, McIntyre, K. E. (2015) pointed out. Positive news stories are not solutions journalism because they lack significant societal impact. Solutions journalism advocates such as Grayson, R. (2021) have stressed that solutions journalism does not conflict with the basic ethical codes of journalism of objectivity and accuracy, but rather that adhering to the ethical codes of journalism and covering solutions is crucial to providing a holistic view of societal issues.

Methodology.

This research belongs to descriptive/analytical research, " Therefore,the research described the issues of sustainable development (environment and climate - sustainable social development - sustainable economic development). It relied on the content analysis methodology using the content survey method, which is one of the most appropriate methodological methods for descriptive studies, as it aims to record, analyze and interpret the phenomenon. The research employed it in surveying news reports directly related to the issue of sustainable development, in addition to comparing the news coverage on the Egyptian Al-Ahram website and the news coverage on the Emirati Al-Bayan website for sustainable development issues.

By relying on this methodology, the research will be able to critically examine news reports related to sustainable development. The research will also be able to compare how sustainable development is addressed and the level of adoption of solutions in it.

The research focuses on diverse samples that represent the regions of the Arab world, such as Egypt as a representative of North Africa and the Nile Valley and the United Arab Emirates as a representative of the Gulf region, given the interest of these countries and their pivotal roles in discussing sustainable development and representing the Arab region in all its parts.

This methodology, which draws on solutions journalism literature to analyse the content of news reports, will enable us to explore diverse media images of sustainable development and analyse visual and textual content, which is a useful tool for exploring how news websites disseminate sustainable development issues through a solutions approach.

Procedures:

The research topic and news coverage of the issue of sustainable development on Arab websites were based on the solutions journalism approach: The research took the Egyptian Al-Ahram website and the Emirati Al-Bayan website as a sample for the study during the period from January 1 to the end of June 2024, using the comprehensive survey method for all news reports about the study.

The research relied on the comprehensive inventory method for all reports and articles in which the framing of the issue of sustainable development is highlighted, and the criterion for selecting the topics of the analysis field was that the article be about any issue of sustainable development.

News articles were collected from media websites using keywords for the search, which are: (sustainable development / climate change). Arab news websites provide a basic search engine for keywords to retrieve articles. The built-in option to specify a time range, and the chronological order of articles on these platforms was utilized, allowing the sample to be retrieved. The Emirati news website and the Egyptian website also provided an advanced search engine, allowing articles to be searched using specific keywords and time ranges. This advanced search function thus simplified the data collection process for these websites, ensuring the selection of a more accurate and time-specific sample.

Time frame:

The time frame was chosen within a period of six months, starting from January 1, 2024, to June 30, 2024. The researcher took care that the period was related to typical coverage and not to intensive coverage of unusual international events such as Cop27 in Egypt or Cop28 in the Emirates, whose news coverage does not give a realistic picture of the usual coverage throughout the months of the year due to the special and intensive attention they received in the coverage.

According to Riffe et al. (2014), "this is a sufficient period for analysis" and evaluating the performance of the sites and their framing of sustainable development issues and testing the solution approach in the news reports they publish, especially since the research relied on the comprehensive inventory method in obtaining news content related to sustainable development. Stempel G. H. (1952) also said, when determining the appropriate sample size for research, that two weeks specified for a one-year time frame for daily newspapers can provide a broad representation of the newspaper's content. This result was also supported by Riffe et al. (1993), who also concluded that one week can adequately reflect the content of a six-month daily newspaper. Previous research, including Kim, H., Jang, S. M., Kim, S.-H., & Wan, A. (2018) has concluded that this method is more cost-effective, reliable, and unbiased than other sampling methods, including simple random sampling.

In the field of the Internet, the study of Joe Hester, Elizabeth Dougall (2007), on online news also revealed that the comprehensive survey or the built-in week method is a reliable and more efficient sampling method compared to the simple random sample. Previous research has supported this and indicated that the comprehensive survey or the built-in week will be more reliable if it continues for six months of daily print newspaper content, which is consistent with what Hester, J. B., & Dougall, E. (2007) recommended. To achieve a more representative sample of the original community when determining the sample in online news content analysis research.

To ensure the validity of the sample. More than one digital platform was consulted to search for reports related to sustainable development. Advanced searches were conducted on the websites of these newspapers, then searched with the same keywords on the Google search engine, while specifying the name of the newspaper and specifying the period, to ensure that no report related to the research topic was missed during the period.

Sample size.

The researcher obtained (110) news reports, of which Al-Ahram Online obtained (34) news reports, and Al-Bayan UAE website obtained (76) reports. All the reports subject to analysis were directly related to sustainable development issues, which the writer often focuses on in the main or subheadings of the report, and the pictures

and graphics are also expressive of the sustainable development issue being covered, which gives a real vision of how news coverage is in the context of solutions journalism. Therefore, the researcher excluded reports that mention sustainable development in passing or within other topics. The researcher also excluded reports that do not cover sustainable development primarily, or that use the development situation in some countries as evidence of the opinions they present, because such reports do not provide a real vision of how to frame sustainable development. The careful selection of news reports aims to test all variables of the solutions journalism approaches directly and accurately.

Unit of Analysis

The unit of analysis varies according to each question. The idea was the unit of analysis in analysing sustainable development issues, while the topics of solutions and the rest of the analysis categories were each according to their purpose, which was included in the coding guide that contained three main sections for coding: (issues - coverage style - solutions).

The coding process began by identifying information about news articles to collect basic data about each news report, including the link to the report and the news site (Egyptian or Emirati news sources), publication date, authenticity of the source (internal staff or news agencies), and its relevance to sustainable development.

After that, prominent topics related to sustainable development were identified, covering a wide range of topics, which fall under three main areas: environment and climate - social development - economic development, under which 17 sub-development issues were included.

Next, the news reports identified as "informative about sustainable development issues and solutions" were comprehensively analysed. The coding addressed the solution-oriented aspects of the news reports, and the type of solutions, whether short-term, long-term, and other categories of analysis, were also examined.

Furthermore, the purpose of the solution, as well as the effectiveness of the information, and the efficiency of the response were clearly defined. Finally, the analysis guide included the presentation of the solutions, as the analysis guide was a guiding principle for organizing the content analysis scale.

The initial step involved open coding to identify recurring themes in the websites of the study area instead of using pre-defined categories that may not reflect the content of the websites of the analysis area. Based on the criteria proposed by Owen, Jason E (1984), as well as Bantum, Erin O'Carroll, Owen, Jason E (2009), the themes were identified based on their frequency and strength. Repetition emphasizes the emergence of the same idea with differences, repetition involves the use of identical or nearly identical words to convey the same concept or meaning contained in the categories of analysis, and power refers to strong emphasis through verbal or non-verbal means. Sustainable development issues were then identified in three areas, under which 24 sub-issues were included:

First: (Environment and climate field: including climate change - water and warming - water pollution and clean water - desert environment).

Second: (Sustainable social development field: including: gender equality - poverty - hunger - unemployment - women and children - education - corruption - quality and development of education - right to education - continuing education - health education against epidemics and diseases - malnutrition - raising the level of health services - health insurance).

Third: (Sustainable economic development field: including: development projects - attracting investments - sustainable production - industry and innovation - optimal exploitation of resources - energy - other)

Then the scale became valid for analysis based on the research guide.

Why Egypt and the United Arab Emirates?

- The researcher found that there is a growing global interest in the contributions of the Arab region regarding issues of sustainable development and climate change, with a strong focus on solution-oriented approaches. The two countries were chosen to host the United Nations Climate Change Conference (COP27), which was held in Cairo on November 6, 2022, and the United Nations Climate Change Conference (COP28), which was held in the Emirates on November 30, 2023, respectively. After that, the conference left the Arab region, where the conference itself will be held in Baku, Azerbaijan. During the period from November 11 to 22, 2024.

- Egypt and the Emirates are among the Arab countries with the greatest interest in the effects of climate change and sustainable development, to the extent that each of them established an independent ministry specializing in development and sustainability, in addition to the regional roles that these two countries have recently played in the global climate change arena by hosting climate summits. In 2022 and 2023 respectively, these countries were at the forefront of climate discussions, making them focal points for international climate policy and shaping the global climate discourse.

- Through a quick survey of a sample of other Arab newspaper websites, including the website of the daily Al-Watan newspaper in Bahrain, Al-Sabah in Tunisia, Al-Qabas in Kuwait, and others, it was found that Al-Ahram and Al-Bayan newspapers are the newspapers most interested in sustainable development to the extent that each

of them has dedicated a permanent page on its website to sustainability. Therefore, it is useful for the researcher to have a density of news reports and solutions that these reports focus on for sustainable development problems, so that a deeper understanding of news coverage of these global issues with local impacts can be provided, which helped crystallize the study's goal by focusing on the Al-Ahram and Al-Bayan websites in order to shed light on the methods of electronic journalism regarding news coverage of sustainable development, and thus contribute to a broader understanding of how electronic journalism plays its role in solving sustainable development problems and the issue of global climate change.

- There were other journalistic and technical reasons that prompted the researcher to detail these two websites, namely the possibility of accessing them via the Internet, in addition to the fact that it contains a navigation and search service, and the possibility of obtaining copies of the texts of the reports published on the two websites, where news can be collected and analysed. The two websites are also affiliated with major Arab newspapers, and therefore these websites are characterized by richness according to the POWER LAW, which assumes that the strong will be strong in cyberspace and the digital services it provides. Finally, they are Arab newspapers with a position and interest in sustainable development issues, as each one allocates a fixed page for development issues. Therefore, obtaining reports published on these websites related to sustainable development is available to the researcher so that they can be analysed.

Coding

A coding guide was also developed containing procedural definitions and coding methods used in this research. The guide relied on two levels in coding. The first: deals with the topic as an integrated unit where a complete report can be classified into one idea such as categories (type of coverage). The second: the study used a partial coding method based on the idea unit where the article contains several subcategories, such as the category of the issue, or solutions or the report objective, etc.)

Tool

The content analysis scale that was designed based on the solutions journalism approach was a tool for analysing news reports and collecting data from Arab websites: The scale contained the following main categories:

1- - Content (Sustainable development areas)

2- Methods of presenting sustainable development issues (coverage patterns - linguistic structure - presentation methods)

3- Solutions journalism (time frame for solutions - effects resulting from adopting the proposed solutions - entities responsible for solutions - solution evaluation - solution evaluation criteria)

4- Audience interaction.

The coding system in the content analysis was based on giving codes to all study variables, where the three alternatives that fall under the development fields variable were coded as follows: environment and climate, which was coded with the number (1), sustainable social development, which was coded with the number (2), and sustainable industrial development, which was coded with the number (3). As for the second variable, which is solutions in terms of time, the alternatives that fall under it were coded as follows: long-term solutions, which were coded with the number (1), short-term solutions, which were coded with the number (2), as well as the variable of the effects of the solutions, the alternatives were coded as follows: alleviating the problem, which was coded with the number (1), the second alternative, which is ending the problem, which was coded with the number (2), and the third alternative, which is adapting to the problem, which was coded with the number (3), and so on for the rest of the study variables so that they can be easily entered into the SPSS program to conduct statistical analysis and test hypotheses.

Validity and reliability:

The validity procedures consisted of presenting the analysis form to three academic professors specializing in media at the University of Bahrain and the American University of Bahrain to verify the validity of the scale (·). Their observations were made to confirm the firm's ability to measure the objectives for which it was developed, and the form became valid for analysing news reports about sustainable development. As for the stability of the scale, the Holsti equation was used to calculate the number of categories that the analysts agreed upon on the total categories. The number of main categories was 25 categories. The stability was calculated between two analysts, and they agreed on (24) of them and differed on one category. Therefore, the initial agreement between (the first researcher and the second researcher = 96%), which is a high degree of stability. The square root value of the analysts' stability scale reached (9.74). It was found that the difference was due to their lack of unified understanding of the category (the resulting effect). The wording of the sub-category in the analysis scale and the analysis guide was modified, so that the same meaning would be understood by each researcher. The wording of the category became (the effects that result from adopting the proposed solution in the report). The scale became

suitable for use in analysing the content of websites, as it passed the required validity and stability to ensure the availability of a high degree of scientific neutrality and objectivity.

Statistical analysis:

The researcher entered the data into the computer using SPSS to conduct the analysis and test the hypotheses. The researcher also used the (One-way Anova) test and (T-Test) to measure the differences between the two sites in addition to the "Spearman" test for ranks.

Variables:

Independent variable: (website), main dependent variables: (issues - coverage - solution patterns - interaction. etc.).

Operational definitions:

- Websites: Al-Ahram Egyptian newspaper website - Al-Bayan Emirati newspaper website

Research sections: The research report is divided into three parts in addition to the methodological introduction: First: Results of the analysis of the content of the websites, second: Hypothesis tests, and third: Discussing the results, conclusion, study limits, recommendations, and references.

First: Results of the analysis: In it, the results of the simple analysis are presented for all analysis categories by using a comparative methodology between websites for all variables by calculating ratios and frequencies.

Question 1: **What are the areas of sustainable development that news websites in Arab newspapers are interested in?**

To answer this question, the researcher quantitatively counts the repetitions of the three basic areas of sustainable development, which are (environment and climate - social development - economic development).

Table (1) Areas of sustainable development in Arab websites

Sustainable Development Issues	Al-Bayan		Al-Ahram	
Environment and Climate	6.7	4	27.5	11
Social Development	33.3	20	32.5	13
Economic Development	56.7	34	35	16
Other	3.3	2	0	0
Total	%100	60	%100	40

The results showed a convergence in interest in sustainable development issues, as these sites gave primary attention to the issue of sustainable economic development, with Al Bayan paying attention to it at a rate of 56.7% compared to 35% for Al-Ahram, followed by sustainable social development at a rate of 33.3% for Al Bayan, and 32.5% for Al-Ahram, and finally environmental and climate issues, in which Al-Ahram website received a rate of 27.5% compared to Al Bayan, which received 6.7%. Therefore, the sub-issues of most interest were also similar in the two sites, although their ranking differed. These sub-issues were the areas.
 of interest: energy, climate change, education, development projects, industry, innovation, and hunger.

Question 2: How do Arab news websites present sustainable development issues to the public?

To answer this question, several sub-ideas will be addressed: the nature of news coverage and the linguistic structures used, then the simplicity or difficulty of the terms used, then the size of sentences, the size of paragraphs, the size of reports, and finally the elements of presenting content related to sustainable development:

1- News coverage patterns

Table (2): Coverage patterns in sustainable development issues

website	Coverage style		
	Total	focused on personal experiences	neutral
Al-Ahram	34	0	34
	100.0%	0.0%	100.0%
Al-Bayan	76	2	74
	100.0%	2.6%	97.4%
Total	110	2	108
	100.0%	1.8%	98.2%

Arab news websites were interested in a neutral style of news coverage that focused primarily on the event at a rate of 98.2% compared to coverage that focused on personal experiences within news reports at a rate of 1.8%. Al-Ahram website was interested in 100% abstract coverage, while the percentage of this style on the Emirate Al-Bayan website was 97.4%. Therefore, these websites prefer the simple and abstract styles to a greater extent than the complex styles and the styles of personal experiences when covering sustainable development issues.

2- Building sentences and paragraphs

Table (3): Building sentences and paragraphs in sustainable development issues

website	Abbreviations			Paragraph size			Sentence size		
	Total	Not explained	Explained	Total	Long	Short	Total	Long	Short
Al-Ahram	34	0	34	34	8	26	34	20	14
	100.0%	0.0%	100.0%	100.0%	23.5%	76.5%	100.0%	58.8%	41.2%
Al-Bayan	76	6	70	76	0	76	76	0	76
	100.0%	7.9%	92.1%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%
Total	110	6	104	110	8	102	110	20	90
	100.0%	5.5%	94.5%	100.0%	7.3%	92.7%	100.0%	18.2%	81.8%

Long sentences with more than 10 words, at a rate of 58.8%, compared to short sentences with a few words reaching the results, indicate a difference in sentence size between Al-Ahram and Al-Bayan websites, as the former used a maximum of 10 words at a rate of 41.2%. While Al-Bayan website preferred to rely entirely on short sentences at a rate of 100%.

Arab websites preferred to use short paragraphs in writing sustainable development reports, as Al-Ahram website used short paragraphs at a rate of 76.5%, compared to long paragraphs with more than 10 lines at a rate of 23.5%, as the size of some of these long paragraphs reached 14 lines, the size of a computer screen, and the number of words in each paragraph was 215 words. As for Al-Bayan website, it preferred to use short paragraphs in all reports it published covering sustainable development. 3- Abbreviations

As for abbreviations related to the names of organizations and others, news coverage on all websites was characterized by following a method that explained the details of the words of these abbreviations. The abbreviations were explained on the Al-Ahram website by 100% compared to 92.1% on the Al-Bayan website. Examples in which the abbreviations were not explained include (COP 28) and (UNEP) in addition to some specialized terms in environmental affairs and sustainable development issues (see: Al-Bayan, May 21, 2024).

4- Terms and concepts

Table (4): Explanation of terms in sustainable development issues

website	Terms			
	Clear	Ambiguous	Both	Total
Al-Ahram	26	8	0	34
	76.5%	23.5%	0.0%	100.0%
Al-Bayan	68	6	2	76
	89.5%	7.9%	2.6%	100.0%
Total	94	14	2	110
	85.5%	12.7%	1.8%	100.0%

The terms were mostly clear in the news websites, where the percentage of clear terms in Al-Ahram website reached 76.5%, the percentage rose in Al-Bayan website to 89.5% in addition to 2.8%, while the ambiguous terms reached 23.5% in Al-Ahram website compared to 7.9% in Al-Bayan website, Examples of this include mentioning the name of the agency (Bloomberg) without the reader knowing the identity of this agency or any information about it that could remove the ambiguity about it. The terms were mostly clear on the news websites, where the percentage of clear terms in Al-Ahram website reached 76.5%, the percentage rose in Al-Bayan website to 89.5% in addition to 2.8%, while the ambiguous terms reached 23.5% in Al-Ahram website compared to 7.9% in Al-Bayan website, Examples of this include mentioning the name of the agency

(Bloomberg) without the reader knowing the identity of this agency or any information about it that could remove the ambiguity about it.

5- Presenting the content:
Place of photo and graphics on the page

Table (5): How to present the content.

website	Place of photos and graphics on the page			photos and graphics			Report Size			
	Total	Inappropriate	Appropriate	Total	photos	Graphics	Total	Inadequate Brief	Brief	Very detailed
Al-Ahram	34	2	32	34	22	12	34	0	18	16
	100%	5.9%	94.1%	100.0%	64.7%	35.3%	100.0%	0.0%	52.9%	47.1%
Al-Bayan	76	0	76	76	72	4	76	4	24	48
	100%	0.0%	100.0%	100.0%	94.7%	5.3%	100.0%	5.3%	31.6%	63.2%
Total	110	2	108	110	94	16	110	4	42	64
	100%	1.8%	98.2%	100%	85.5%	14.5%	100.0%	3.6%	38.2%	58.2%

5/1 Report size: The results showed a difference between the sites regarding the size of the reports, as Al-Ahram website preferred the brief and comprehensive size by 52.9% compared to 47.1% obtained by the extended presentation method in the number of words in the report, which reached 1440 words in some topics, while Al-Bayan website used the large and comprehensive size by 63.2%, then the brief and comprehensive size by 31.6%.

5/2 photos and graphics: The websites relied mainly on photo and graphs, whether photos of people or photos of development topics, and therefore Al-Ahram website was interested in publishing photographs by 64.7%, which increased to 94.7% in Al-Bayan website, while the lowest percentage was for graphics, which reached 35.3% in Al-Ahram and 5.3% in Al-Bayan. However, the important observation here is that these Arab sites did not benefit much from the tools provided by technology to display digital content in sustainable development. These sites did not use infographics, video clips, multimedia, podcasts, or other tools provided by technology for digital media, which indicates that the methods of presenting sustainable development issues on sites are weak and lack the use of technology in presentation, this topic needs more attention from these sites, especially since these sites are owned by major press institutions in the Middle East.

5/3 Place of photos and graphics on the page: The results indicated that these sites placed illustrative elements, whether photographs or graphics, in their appropriate places within the news report, as they always preferred to place these images between the title and the body of the news report, which is an appropriate place that links the title and the image that reflects meanings related to the event. Therefore, the site placed the images in their appropriate places at a rate of 94.1% on the Al-Ahram website and at a rate of 100% in Al-Bayan.

Question3: How do news sites employ the approach of solutions journalism in sustainable development issues?
To answer this question, the research focused on six sub-variables that were built based on the solutions journalism approach: the time frame of the proposed solutions, the criteria for evaluating solutions, the effects resulting from adopting the proposed solutions, identifying the parties capable of solving the problems, and finally the pattern of audience interaction with news sites on sustainable development issues. The analysis shows the results of these variables:

Table (6) Criteria for evaluating, influencing solutions and the time limit.

website	Solution impacts			Evaluation criteria			Time limit		
	Total	Problem Reducing	Problem-Solving	Total	Personal Impressions	Approved Measures	Total	Long Term	Short Term
Al-Ahram	34	30	4	34	21	13	34	10	24
	100.0%	88.2%	11.8%	100.0%	61.8%	38.2%	100.0%	29.4%	70.6%
Al-Bayan	76	68	8	76	45	31	76	26	50
	100.0%	89.5%	10.5%	100.0%	59.2%	40.8%	100.0%	34.2%	65.8%
Total	110	98	12	110	66	44	110	36	74
	100.0%	89.1%	10.9%	100.0%	60.0%	40.0%	100.0%	32.7%	67.3%

1- Time limit of solutions:

The results revealed that Arab websites preferred short-term solutions at a higher rate of 67.3%, while long-term solutions received 32.7%. Al-Ahram website preferred short-term solutions at a rate of 70.6% compared to 29.4% for long-term solutions, while Al-Bayan website preferred short-term solutions at a rate of 65% compared to 34.2% for long-term solutions. Arab websites were interested in quick and short-term solutions so that Arab citizens could quickly see their positive effects on their daily lives.

2- Solution evaluation criteria

The journalist's personal impressions were the main measure for evaluating the solutions presented in news reports at a rate of 60%, while journalists relied on internationally and regionally approved standards or the results of specialized studies at a rate of 40%.

Al-Ahram website was more inclined to rely on journalists' personal impressions in judging the success or failure of these solutions at a rate of 61.8%, while Al-Ahram website journalists relied on the approved standards at a rate of 38.2%.

Al Bayan website followed the same scale, as journalists relied on their personal impressions to evaluate the success or failure of solutions to a greater extent than they relied on internationally approved standards, so personal impressions accounted for 59.2% while their reliance on regionally or internationally approved standards accounted for 40.8%.

3- Impacts Resulting from Solutions

The results revealed that Arab websites saw in their coverage of sustainable development issues that the proposed solutions would only alleviate the severity of sustainable development problems, as this opinion was received by 89.1%, while Arab websites saw that these solutions would end the problems and challenges by 10.9%.

The results indicate a great convergence between Arab websites in evaluating the impacts resulting from these solutions. Al-Ahram website saw that these solutions reduce the severity of the problems by 88.2%, while it saw that the solutions will end these problems permanently by 10.8%. Al-Bayan website was near to these percentages, as it saw that these solutions reduce the severity of the problems by 89.5%, compared to a percentage of 10.5%, in which Al-Bayan website confirms that these solutions can end the problems of sustainable development permanently.

Table (7) Description of the solutions and the entities capable of solving the problems.

website	Who can solve the problem?				Solution Description			
	Total	International Organizations	Government	Citizen	Total	Minor solution	Unsuccessful	Successful
Al-Ahram	38	4	34	0	34	0	4	30
	%100	18.5	81.5	0	100.0%	0.0%	11.8%	88.2%
Al-Bayan	100	28	70	2	76	2	4	70
	%100	28	70	2	100.0%	2.6%	5.3%	92.1%
Total	138	32	104	2	110	0	8	100
	%100	32	104	2	100.0%	0.0%	7.3%	90.9%

4- Description of solutions:

There was a great similarity between Al-Ahram website and Al-Bayan website in describing the proposed solutions to sustainable development problems, as Al-Ahram website described the solutions as successful by 88.2%, and the website described these solutions as unsuccessful by 11.8%, and Al-Bayan website saw the solutions as successful by 92.1% and unsuccessful solutions by 92.1%.

In conclusion, Arab websites describe most of the proposed solutions in the issue of sustainable development as positive and successful solutions to confront the problems of sustainable development in the Arab world.

Table (7) also shows that Arab websites believe that government policies can solve the problems of sustainable development in the Arab world at a greater rate than any other parties, and therefore they obtained a rate of 81.5%, followed by regional and international institutions, while these websites and personal initiatives only gave a limited rate of 2%.

Although all sites gave priority to government agencies in solving these development problems, there is a clear disparity in the percentage of interest in these agencies between the Al-Ahram site, which gave government policies 81.5% and international institutions 18.5%, while the percentage of government policies decreased in the Al-Bayan site to 70% and the percentage of reliance on international institutions to contribute to solving sustainable development problems increased, as its interest in the participation of international institutions in solutions reached 28%, in addition to the site's interest in individual initiatives by 2%.

5- interaction

Table (8) interaction

website	interaction		
	Total	Non-interact.	Interact
Al-Ahram	34	34	0
	100.0%	100.0%	0.0%
Al-Bayan	76	74	2
	100.0%	97.4%	2.6%
Total	110	108	2
	100.0%	98.2%	1.8%

The study revealed that the public did not interact with the Arab websites in the content they published related to sustainable development issues during the study period. The reason for this is that the websites did not care about providing the public with the opportunity to provide opinions or write any comments on news reports related to sustainable development issues. Therefore, the research did not monitor any form of public interaction, whether participation, comments, likes or views, except for a percentage that did not exceed 2.6% of the total published on the Al Bayan website, which mentioned monitoring the number of visitors to the Emirati "Sustainable Future Portal" website, which published some topics related to sustainable development, including a press interview with the head of the Abu Dhabi Environment Network under the title "Green Jobs" and Al Bayan newspaper republished it on its website. Therefore, the website was unable to know the public's reactions to what was published, and this percentage attributed to the Al Bayan newspaper website is the website's monitoring of the number of visitors.

The news reports published on the study sites were one-way from the sender to the recipient, and the sites did not seek to benefit from the characteristics of digital media that provided many alternatives that can be used to identify the audience's reaction, so the audience's participation in content production was not achieved, and the sites did not care about the audience's interactivity and involvement in developing solutions to sustainable development problems, but rather the proposal of solutions was limited to journalists and experts away from the audience.

Therefore, the sites need to know the audience's reactions to what is published regarding the issue of sustainable development, its causes and the proposed solutions, and the sites must provide a public discussion in the digital space, in which public opinion and readers contribute by expressing their opinions on sustainable development issues and proposing appropriate solutions for their local environment.

Second: Hypothesis tests
H(1):There is a correlation between the order of interest in covering sustainable development issues on the Al-Ahram website and the order of interest in the same issues on the Al-Bayan website.

The researcher verifies the validity of this hypothesis by conducting the Spearman test to rank the sustainable development issues that the website focused on in its news coverage and ranking the same issues on the Emirati

Al Bayan website. The results showed that there was no correlation between the ranks of the issues, as the correlation strength was weak at 0.024 at a significance of 0.925, which means that the hypothesis was not proven valid. Despite the two websites' interest in the same areas of sustainable development issues, which are (environment and climate - social development - sustainable economic development), the priorities of the sub-issues differed between the two websites. These results are consistent with what was revealed by the simple analysis mentioned previously in the first part of this study, which revealed that the issue of climate and climate change received first priority on the Al-Ahram website, while the issue of energy received first priority on the Al Bayan website, which the website's interest rate approached one-third of what the website published, followed by the issue of optimal exploitation of natural resources, which confirms the rejection of the hypothesis for not being proven valid.

H(2):There are significant differences between Al-Ahram and Al-Bayan websites in the expected effects of adopting the proposed solutions in news coverage on the issue of sustainable development due to the difference in the website that proposes these solutions.

Measuring the differences between Al-Ahram and Al-Bayan websites in the expected effects of adopting the proposed solutions in news coverage requires conducting a One-way Anova analysis to find out the differences in effects between the two websites. The results were as follows:

Table (9) for analyzing the variance in the expected effects of adopting solutions.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.589	1	1.589	4.175	.043
Within Groups	41.102	108	.381		
Total	42.691	109			

The results of the previous table reveal the existence of a significant difference between the Al-Ahram website and the Al-Bayan website with regard to the expected effects of adopting the proposed solutions in news coverage, as the value of (F) was (4.175) with a significance of (.043), which is significant at a significance level of less than (.05), and therefore there are significant differences between the two websites with regard to the expected effects of adopting the proposed solutions, which indicates the validity of this hypothesis.

H (3): There are significant differences between Al-Ahram and Al-Bayan websites in describing the proposed solutions in news coverage on the issue of sustainable development due to the difference in the website that proposes these solutions.

Measuring the differences between the two websites (Al-Ahram and Al-Bayan) in describing the proposed solutions in news coverage requires conducting a one-way Anova to determine the extent of the variance in describing the proposed solutions. The results were as follows:

Table (10) Analysis of variance in describing the proposed solutions.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.004	1	.004	.026	.871
Within Groups	14.687	108	.136		
Total	14.691	109			

The results of the previous table reveal that there are no significant differences between Al-Ahram website and Al-Bayan website regarding the description of the proposed solutions to sustainable development problems, as the value of (F) was (.026) with a significance of (.871), which is significant at a significance level of less than (.05), and therefore there are no significant differences between the two websites regarding the description of the proposed solutions to sustainable development problems, as the prevailing trend in the websites was that they were positive solutions, which means that this hypothesis is not proven.

H (4): There are significant differences between Al-Ahram website and Al-Bayan website in the time limit of the proposed solutions in the news coverage of the issue of sustainable development due to the difference in the website.

Measuring the differences between the Al-Ahram website and the Al-Bayan website in preferences for the appropriate time limit for solving sustainable development problems in Arab countries requires conducting a T-Test to determine the extent of variation in preferences for the appropriate time limit for solving sustainable development problems. The results were as follows:

Table (11) for analyzing variation in the time limit for proposed solutions.

website	N	t	df	Mean Difference	Mean	Std. Deviation	Sig.
Al-Ahram	34	-.492	108	-.04799	1.2941	.46250	.624
Al-Bayan	76	-.498	65.439	-.04799	1.3421	.47757	

The results of the (T-Test) revealed that there were no significant differences between the Al-Ahram website and the Al-Bayan website regarding describing the proposed solutions to sustainable development problems in Arab websites, as the significance was (.624), which is significant at a significance level of less than (.05). Therefore, there are no significant differences between the two websites regarding the time frame for the proposed solutions, as the prevailing trend in the websites focused on proposing quick, short-term solutions. Therefore, the results indicate that this hypothesis is not proven.

H (5): There are significant differences between Al-Ahram and Al-Bayan websites in the criteria for evaluating proposed solutions in news coverage on the issue of sustainable development due to the difference in the website.

Measuring the differences between Al-Ahram and Al-Bayan websites in the criteria for evaluating proposed solutions on the issue of sustainable development requires conducting a (T-Test) test to determine the extent of variation in the criteria for evaluating proposed solutions to solve sustainable development problems. The results were as follows:

Table (12) for analyzing variation in the criteria for evaluating proposed solutions.

website	N	t	df	Mean Difference	Mean	Std. Deviation	Sig.
Al-Ahram	34	-2.462	108	-.23994	1.4706	.50664	.015
Al-Bayan	76	-2.365	57.964	-.23994	1.7105	.45653	

The results of (T-Test) show that there are significant differences between the "Al-Ahram" website and the "Al-Bayan" website in the criteria for evaluating the proposed solutions to sustainable development problems in Arab websites, as the significance was (.015), which is significant at a significance level less than (.05), and therefore there are significant differences between the two websites, and therefore the results indicate the validity of this hypothesis.

H (6): There are significant differences between the Al-Ahram website and the Al-Bayan website in the organizations capable of solving sustainable development problems due to the difference in the website.

Measuring the differences between Al-Ahram and Al-Bayan websites in relation to the organizations capable of solving sustainable development problems requires conducting (One Way ANOVA test) to determine the extent of the difference between the two websites in relation to the organizations capable of solving sustainable development problems. The results were as follows: Table (13) for analyzing the variance in organizations capable of solving sustainable development problems.

Table (13) for analysing the variance in organizations capable of solving problems.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	640.667	1	640.667	.842	.411
Within Groups	3045.333	4	761.333		
Total	3686,000	5			

Measuring the differences between Al-Ahram and Al-Bayan websites in terms of the entities capable of solving sustainable development problems requires conducting (One Way ANOVA test) to determine the extent of the difference between the two websites in terms of the organizations capable of solving sustainable development problems. The results were as follows: Table (13) The results of the previous table show that the value of (F) is (.842), and the significance is (.411). Therefore, the results indicate that the hypothesis suggesting a difference between Al-Ahram and Al-Bayan websites in terms of the organizations capable of solving sustainable development problems is not proven.

The two websites were interested in the solutions proposed by official figures and organizations in their countries. Then, the websites turned to international organizations, considering that these organizations are the ones capable of contributing to solving sustainable development problems in the countries in which these news websites are issued. Therefore, there is no difference between the two websites in the organizations capable of

solving the problem, and thus the hypothesis is not proven. Analysis of variance in organizations capable of solving sustainable development problems

H (7): There are significant differences between Al-Ahram website and Al-Bayan website in the graphics and illustrations used in covering sustainable development issues due to the difference on the website.

Measuring the differences between Al-Ahram website and Al-Bayan website in the graphics and illustrations used in covering sustainable development issues in Arab websites requires conducting a one-way Anova analysis to determine the extent of variation in the use of graphics and illustrations. The results were as follows:

Table (14) for analysis of variation in graphics and photos

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.119	1	2.119	19.803	.000
Within Groups	11.554	108	.107		
Total	13.673	109			

The results of the previous table reveal the existence of significant differences between the two sites in the drawings and illustrations used in sustainable development issues, as the value of (F) was (19.803) with a significance of (.000), which is significant at a significance level less than (.05). Therefore, this hypothesis is proven to be valid.

H(8): There are significant differences between Al-Ahram and Al-Bayan websites in the sizes of news reports published by the two sites in covering sustainable development issues due to the difference on the website.

Measuring the differences between Al-Ahram and Al-Bayan websites in the sizes of news reports used in covering sustainable development issues on Arab electronic sites requires conducting an analysis of variance (one-way Anova) to determine the extent of the variance in the sizes of news reports, and the results were as follows:

Table (15) for analyzing the variance in the sizes of news reports.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.276	1	.276	.851	.358
Within Groups	34.997	108	.324		
Total	35.273	109			

The results of the previous table reveal that there are no significant differences between Al-Ahram website and Al-Bayan website in the sizes of news reports used in sustainable development issues, as the value of (F) was (.851) with a significance of (.358), which is significant at a significance level of less than (.05). Therefore, this hypothesis is rejected, as the websites relied on large sizes mostly in writing news reports related to sustainable development issues.

H(9): There are significant differences between the Al-Ahram website and the Al-Bayan website in the size of sentences used in covering sustainable development issues due to the difference on the website.

Measuring the differences between Al-Ahram website and Al-Bayan website in the size of sentences used in covering sustainable development issues on Arab websites requires conducting a T-Test analysis to determine the extent of variation in sentence size. The results were as follows: Table (16) for analyzing variation in sentence size.

Table (16) for analysis of variance in sentence size

website	N	t	df	Mean Difference	Mean	Std. Deviation	Sig.
Al-Ahram	34	10.325	108	.58824	1.5882	.49955	.000
Al-Bayan	76	6.866	33.000	.58824	1.0000	.00000	

The results of the previous table reveal the existence of significant differences between Al-Ahram website and Al-Bayan website in the size of sentences used in news reports, as the significance was (.000) which is significant at a significance level less than (.05). Therefore, the hypothesis is proven to be valid.

H(10) There are significant differences between Al-Ahram website and Al-Bayan website in the size of paragraphs used in covering sustainable development issues due to the difference on the website.

Measuring the differences between Al-Ahram website and Al-Bayan website in the size of paragraphs used in covering sustainable development issues requires conducting a T-Test analysis of variance to determine the extent of variation in paragraph size, and the results were as follows:

Table (17) for analysis of variance in paragraph size

website	N	t	df	Mean Difference	Mean	Std. Deviation	Sig.
Al-Ahram	34	4.455	108	.29412	1.2941	.57889	.000
Al-Bayan	76	2.963	33.000	.29412	1.0000	.00000	

The results of the previous table reveal the existence of significant differences between Al-Ahram website and Al-Bayan website in the size of paragraphs used in news reports, as the average in Al-Ahram was (1.2941) and the average in Al-Bayan was (1.0000) and the significance was (.000), which is significant at a significance level less than (.05). Therefore, this hypothesis is proven correct.

H (11) There are significant differences between Al-Ahram website and Al-Bayan website in explaining the abbreviations used in covering sustainable development issues due to the difference on the website.

Measuring the differences between Al-Ahram website and Al-Bayan website in explaining the abbreviations and terms used in covering sustainable development issues requires conducting a T-Test analysis to determine the extent of the variance in explaining the abbreviations, and the results were as follows:

Table (18) for analyzing the variance in explaining the abbreviations.

website	N	t	df	Mean Difference	Mean	Std. Deviation	Sig.
Al-Ahram	34	-1.692	108	-.07895	1.0000	.00000	.000
Al-Bayan	76	-2.535	75.000	-.07895	1.0789	.27145	

The results of the T-Test reveal that there are significant differences between the Al-Ahram website and the Al-Bayan website in explaining the abbreviations used in news reports on sustainable development issues, as the average in Al-Ahram was (1.0000) and the average in Al-Bayan was (1.0789) and the significance was (.000), which is significant at a significance level of less than (.05), so this hypothesis is proven.

H (12): There are significant differences between the Al-Ahram website and the Al-Bayan website in the audience's interaction with content related to sustainable development issues due to the difference on the website.

Measuring the differences between the Al-Ahram website and the Al-Bayan website in the audience's interaction with the websites in the audience's interaction with Arab websites on sustainable development issues requires a T-Test to determine the extent of the variance in the audience's interaction, and the results were as shown in the following table:

Table (19) to analyze the variance in the audience's interaction.

website	N	t	df	Mean Difference	Mean	Std. Deviation	Sig.
Al-Ahram	34	.950	108	.02632	2.0000	.00000	.053
Al-Bayan	76	1.424	75.000	.02632	1.9737	.16114	

The results of the (T-Test) revealed that there were no significant differences between the Al-Ahram website and the Al-Bayan website in the audience's interaction with content related to sustainable development issues, as the significance was (.053), and this value is significant at a significance level less than (.05). Therefore, there are no significant differences between the two websites regarding the audience's interaction with news reports, as these websites do not allow the audience to interact with the content published related to sustainable development issues during the study period, and therefore this hypothesis was not proven correct.

Discussion

The research found that there is a convergence between the two sites in the order of interest in sustainable development areas, as economic development came first, then social development, and finally the environment and climate change.

These results are consistent with what Ranjula Bali Swain, (2017) found: that it is better for developing countries to focus on economic and social development in the short term, even if environmental policies are still important for achieving sustainable development. The similarity of interest between the two sites in sustainable

development areas can be explained by what Sylvia Meier-Kajbic, Director of Multilateral Development Cooperation at the Austrian Ministry of Foreign Affairs, said: "Universality is one of the major features of the Sustainable Development Goals. The Sustainable Development Goals set an agenda for the universe, as well as emphasizing their applicability to every human being."

The third-place ranking of climate change after economic and social development can also be explained by Zamith, R., Pinto, J., & Villar, M. E. (2012),finding that climate change coverage in developing countries tends to be limited and inadequate. These findings are also consistent with Nassanga, G. L. (2013) who found that climate change coverage in developing and low-income countries is inadequate. He found that climate change stories are given low priority in Ugandan newsrooms as they are seen as unattractive and unsellable, leaving North America and Europe to dominate climate change research. Nassanga et al. (2016) in another study, explained the lack of climate change coverage in developing country media, attributing this to a severe lack of climate knowledge among journalists working in developing countries, leading to inadequate reporting on the scientific basis of climate science and the risks associated with it.

While there was greater interest in sustainable economic and social development, this can be explained by the increased interest of the official political leaderships in the two countries in sustainability issues, which resulted in Egypt hosting COP27 and the UAE hosting COP28 on their lands, the difference emerged in the sub-issues that received different priorities at each site, as Al-Ahram was particularly interested in the issue of climate change, while Al-Bayan was interested in the issue of energy. However, what is noticeable is the interest of the two sites in sustainable development issues, as the two sites allocated a fixed part in the basic design of the sites related to sustainable development. In this part, the site gave priority to sustainable issues of a local nature, which is consistent with what was reached by (2017: Ranjula Bali Swain), as each country is expected to develop its own national or regional plans.

News coverage of sustainable development issues was characterized by relying on simple coverage based on narrating the bare facts of events more than its interest in complex coverage or that which focuses on the individual experiences.

In line with the study of Atanasova, D., (2022), which saw that "solutions journalism" can provide a means for journalists to address the procedures for solving environmental problems and the risks associated with them. The research found that Arab websites were interested in writing reports that provide solutions that can contribute to addressing sustainable development problems, but these websites preferred to provide quick, short-term solutions more than long-term strategic solutions, so that Arab citizens can quickly see their positive effects on their daily lives. These results are consistent with what was reached by (2017: Ranjula Bali Swain), who found that it is better for developing countries to focus on their economic and social policies in the short term, even if environmental policies are still important for achieving sustainable development.

The Arab websites relied more on the personal impressions of the report writers in evaluating the success or failure of the proposed solutions, while they relied less on internationally adopted standards in evaluating the success of these development projects. The news coverage highlighted that the proposed solutions would alleviate the severity of sustainable development problems to a greater extent than that these solutions would end these problems. The websites mostly described these solutions as positive and successful.

The two websites agreed that the parties capable of solving sustainable development problems are official organizations and government policies, followed by international organizations and then citizens. These results are consistent with what Sylvia Meier-Kajbic emphasized: the responsibility of officials in each country, as well as civil society and companies, in the process of implementing the sustainable development goals.

The websites focused on traditional sources of information. such as official officials and experts, whom they saw as the entities capable of proposing solutions to sustainable development problems, while the public received only 2%, which means that the public opinion was not given the opportunity to present different opinions and ideas or suggest solutions other than those presented by officials and experts.

Therefore, these websites did not benefit from what the supporters of the solutions journalism approach urged, which is the necessity of benefiting from open sources on the Internet such as social media or others, which can represent a real enrichment for websites in obtaining information, ideas and solutions presented by the audience of these sources, and what they are characterized by in terms of opportunities for open innovation as a result of the expansion of the base of contributors to these solutions, which helps the Al-Ahram website and the Al-Bayan website to achieve more diversity in information sources and not to limit themselves to official sources and experts.

The results also revealed that the websites depend on photographs as a means of illustrating the issues of sustainable development without taking advantage of the methods of presenting digital content provided by technology, such as infographics, video clips, multimedia, podcasts, or other techniques that can distinguish these websites from printed media.

The most striking result was the lack of interest of Arab websites in the audience's interaction with the issues published regarding sustainable development, as the percentage of audience interaction with sustainable

development issues reached 2% and was exclusively present on the Al Bayan website. Therefore, the results of this study urge Arab websites to increase their interest in audience participation and knowing their reactions to the issues published in sustainable development in order to open a public discussion in which public opinion participates in order to express opinions and suggest various solutions to sustainable development issues so that the audience participates effectively in creating content and not a passive recipient of what the websites publish. The result of this is the existence of creative and innovative solutions or solutions that have been tried before or solutions related to the real reality of the audience and not the solutions that experts and officials imagine.

This approach increases the public's integration into sustainable development issues and increases their knowledge of them, especially since previous studies (such as Abdul Wajid, Al-Aidi, Breik, and Abdul Azim) all concluded that the Arab public's knowledge of sustainable development issues is still at average levels, and that ambiguity still surrounds many of its issues despite the emergence of the issue of sustainability more than 40 years ago. Therefore, this study urges taking advantage of all forms of interactivity provided by digital means that may contribute to increasing the public's knowledge of sustainable development issues.

The results of the hypothesis tests showed that despite the similarity of the Egyptian Al-Ahram website and the Emirati Al-Bayan website in arranging the priorities of the three areas of sustainable development (economic, social, and environmental climate), the "Spearman" coefficient showed that there is no correlation between the ranks of the sub-issues related to sustainable development in the two websites, because each website gave priority to the sustainable development issues that the country to which the website belongs is concerned, as the issue of climate change received the first priority in Al-Ahram in the sub-issues, while Al-Bayan focused on the issue of energy as the most priority issue, and these results are consistent with what was reached by (Rahman, 2010) who found that local coverage of sustainable development and climate change is often driven by political events such as the COP summits, which involve the participation of senior political figures.

However, the media often ignores other climate events. While the results of our study differ from the results of the study by Nasanja et al. (2016) for the Egyptian and Ethiopian cases, which found that the issue of extreme poverty often takes precedence over the issue of the climate change crisis, as the press focuses primarily on addressing the basic needs of citizens, and this priority is exacerbated by the interaction between political sensitivities and editorial priorities surrounding climate change. This can perhaps be explained by the time span between the Nasanga study conducted in 2016 and our study conducted in 2024, following the significant increase in interest in climate issues, especially after the Climate Change Conference in Egypt 2023 and in the Emirates 2024, which coincided with the decline in the water level of the Nile River, as Egyptian press coverage attributed the decline in the water level to two reasons: the first: the construction of the Grand Ethiopian Dam and the second: global climate change. In addition, the issue of poverty is not a priority issue in the UAE, which belongs to one of the richest countries in the region.

The results revealed significant differences between the two sites in a few variables related to news coverage patterns: the variable of sentence size, the variable of paragraph size, and the variable of explaining and clarifying abbreviations and specialized terms in sustainable development. Therefore, André Martinuzzi, President of the Institute for Sustainability Management and Associate Professor at the University of Vienna, stressed the need to deal with the ambiguity associated with sustainable development by linking institutional, regional, and national data.

The results also showed significant differences between the two sites in some variables related to the solution journalism approach, such as: the variable of expected effects from adopting solutions and the variable of solution evaluation criteria. These differences between the two sites can be explained by what Robert Picciotto, a member of the Board of Directors of the European Evaluation Association and former Director General of the Independent Evaluation Group at the World Bank, concluded: "Only about 30% of the sustainable development goals are clear - and at least half of them do not have specific, measurable and implementable goals. The sustainable development goals are complex and ambitious, and therefore controversial, but they are not doomed to failure. Therefore, these hypotheses regarding the existence of differences between the two sites were accepted.

There were also no significant differences between the two sites in the variable of the parties capable of solving problems, as well as the variable of describing the proposed solutions to the problems, as the sites described these solutions as positive. These results are consistent with what Nassanga, G., et al. 2016 concluded that using a solution-oriented frame to prepare reports on climate change, for example, can arouse feelings of hope instead of perpetuating feelings of despair and pessimism. These results are also consistent with the study of Their, K., & Namkoong, K. (2023) who explained the importance of solutions-led approaches in communicating effectively about climate change without arousing feelings of despair or diminishing the motivation to take collective action to mitigate its effects.

Finally, the results indicated that there were no differences between the two sites in some variables related to news coverage patterns, namely: explanatory tools, the variable of report size, and finally the variable of audience interaction with news content. The study revealed the limited interest of both sites in audience

interaction with what is published regarding sustainable development. Therefore, our results agree with what Sebastian Krätzig (2014) reached, who emphasized the importance of using interactive web tools to improve communication regarding sustainable development and that audience participation contributes to understanding citizens' positions and perceptions of sustainability.

Conclusion

This descriptive research relied on the content analysis methodology, and aimed to identify the extent to which two Arab news websites, namely Al-Ahram of Egypt and Al-Bayan of the Emirates, benefited from the s solutions' journalism approach in news coverage of sustainable development issues during the first half of 2024, in line with the research question of this study, which is: Are there differences in news coverage between Al-Ahram and Al-Bayan websites regarding sustainable development issues from the perspective of the solutions journalism approach?

The research succeeded in answering this question by measuring the differences between the two sites using the T-Test and the One-way Anova test, in addition to the Spearman test to measure the ranks of sustainable development fields in the two sites. The research found that the Arab sites were interested in many sustainable development issues, which reached more than 25 sub-issues, due to the interest of government policies in sustainability issues in both Egypt and the Emirates, which hosted two climate conferences for two consecutive years, the first Cop27 in Egypt and the second Cop28 in the Emirates.

The research revealed that the points of agreement between Al-Ahram and Al-Bayan websites were more than the points of disagreement, whether in news coverage of sustainable development issues or in solutions journalism. Therefore, the study revealed an agreement between the two websites in arranging the priorities of the three areas of sustainable development studied by the research (economic, social, and climate-environmental), but a difference emerged between them in the most important priority issue for each of them, as Al-Ahram website focused on the issue of climate change, while Al-Bayan website focused on the issue of energy.

The results also showed that there were no significant differences between the two sites in several solutions journalism variables, namely: the variable of the parties capable of solving problems, the variable of describing the proposed solutions to the problems, which the site described as more successful than unsuccessful. Finally, the variable of audience interaction with news reports related to sustainable development revealed limited audience interaction with the two sites regarding what is published about sustainable development. There were also no differences in some variables of news coverage patterns, namely: the variable of explanatory tools, and the variable of the size of the news report. Therefore, the hypotheses that assume the existence of differences between the two sites were rejected.

The research revealed the existence of significant differences between the two sites in one of the variables related to solutions journalism, which is the variable of expected effects from adopting the proposed solutions. The research also revealed the existence of significant differences in some variables of news coverage patterns, which are: the variable of the size of sentences used in writing reports, the variable of the size of paragraphs, and the variable of the sites' interest in explaining abbreviations. Therefore, the hypotheses that assume the existence of differences between the two sites were accepted.

Research Limitations

This study does not claim to be scientifically comprehensive by studying all aspects of the solutions journalism approach through studying the audience and content, but it is credited with seeking to analyze the content of two of the most interested Arab websites in sustainable development, as Egypt and the Emirates were the first to host COP27 and COP28, the first in Egypt in 2022 and the second in the Emirates in 2023. This study is also credited with being one of the first studies in the Arab region to study the solutions journalism approach as a theoretical frame that analyzes through news coverage of sustainable development issues in the two sites. For the study to achieve this, it required the researcher to delve into the available Western studies that were interested in solutions journalism and published in global databases such as Scopus, Sciencedirect, ProQuest, and others, so that the researcher could obtain solutions journalism studies from them. analyses news coverage

This new global entry, which appeared in 2010 and is new to research in Arab academic schools, offers an additional advantage and represents a scientific addition that opens the way for Arab researchers specializing in media. It also provides researchers in the Western school with a view of the status of two of the largest Arab news websites that are issued by two well-established daily newspapers: the first is the Egyptian Al-Ahram, the first issue of which was issued on August 5, 1876, and the second is the Emirati Al-Bayan, which was issued in May 1980.

The research faced a challenge in how to form the sample, the period, and how to obtain the reports that are analyzed. The researcher believed that it is best for the study's objectives to choose a normal period away from peak times when interest in development or climate issues is high and affected by political or economic factors,

such as the period of holding the Conference of the Parties in the two countries, because this period may affect the neutrality of the results.

Future research

The research directs the attention of Arab researchers to conduct future research that makes solutions journalism a part of their research interests. Among the proposed research:
• Conducting research on the conscious interaction of the Arab public with solutions journalism, especially in the issue of sustainable development, as it is one of the modern issues in the Arab context.
• Comparative research can be conducted between Western and Arab media in solution journalism. The results of this research can be useful in developing Arab news coverage.
• Research can be conducted that discusses Arab journalists' perceptions of solutions journalism, the mechanisms for applying it in their coverage of local issues, and how it impacts
 their thinking and habits in producing news.
• Examining the challenges facing solutions journalism in the Arab context, and the extent to which the editorial board influences journalists' adoption of solutions journalism.
• Examining the role of solutions journalism in crisis management in the Arab region.

Recommendations

- The results revealed that Arab websites do not care about the public's reactions to the published news reports on sustainable development. They also revealed that the websites addressed the public as being capable of solving sustainable development problems by a percentage that did not exceed 2% and gave priority to figures, official bodies, and then international organizations. Here we find that these websites have closed an important window, which is the window of the public, that can provide them with many solutions to sustainable development issues.

   Therefore, the research recommends that Arab websites provide an opportunity for public opinion, whether in the form of comments, participation, or other reactions, whether directly or by benefiting from open sources available on the Internet. This recommendation is supported by what Curry, A., Hammonds, K. (2014) found: that readers of newspaper articles related to solutions felt that they were "more informed and interested in the topic" than readers who read topics that were not concerned with solutions to an immediate issue.
- The results showed that the websites relied almost exclusively on the photographic image as a means of displaying and explaining the news material, and therefore the study recommends that these websites should benefit from the methods of presenting digital content provided by technology, such as infographics, video clips, multimedia, podcasts, or other digital techniques that contribute to enriching the content related to sustainable development.
- It also recommends paying attention to the simple style, short sentences, short paragraphs, simple and easy language, and explaining environmental and climate terms when writing reports related to sustainable development, environmental issues, and climate change, so that they suit the media audience.
- The study recommends that Arab researchers produce more studies that use the solutions journalism approach as a theoretical frame, given its importance in developing news coverage of societal issues and problems. Whether it is studying the audience or analyzing media content.
- The study recommends that Arab journalists benefit from the solutions journalism approach in all their news coverage of social issues, especially those specializing in sustainable development issues, as it is not enough to present problems; rather, it is necessary to present practical solutions to end these problems.
- The study recommends the need to create interactive links with the websites of ministries and agencies concerned with sustainable development, whether local, regional, or international organizations, so that the audience is exposed to these websites to the largest possible amount of information about sustainable development.

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