

Vol.20 No.56:330

# A Content Analysis of YouTube Video Comments about the Saudi Women's Driving

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# **Abstract**

Twitter and other social media platforms are well-liked all around the world. This study aimed to determine the public opinion on women driving in Saudi Arabia using YouTube. More precisely, the survey sought to determine if sentiments regarding permitting women to drive in Saudi Arabia have changed in response to pertinent events. The study is a quantitative analysis with the target population being YouTube users and their comments serving as opinions to be measured. Data collection was online, and research was done using NVivo after translation. The study's findings indicate that the comments were more emotional than moral and that more comments favoured women's right to drive. Despite the perceived influences against the driving policy, many statements showed climate of acceptance toward this issue in Saudi society.

**Keywords:** Saudi Arabia; Women; Social media; YouTube; Framing; Content Analysis

**Received:** 20-Aug-2022, Manuscript No. gmj-22-72527; **Editor assigned:** 23-Aug-2022, PreQC No. gmj-22-72527 (PQ); **Reviewed:** 26-Sep-2022, QC No. gmj-22-72527; **Revised:** 03-Oct-2022, Manuscript No. gmj-22-72527 (R); **Published:**19-Oct-2022,

DOI: 10.36648/1550-7521.20.56.330

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Citation: Alharethi M, Alqarni A, Alahmari A (2022) A Content Analysis of YouTube Video Comments about the Saudi Women's Driving. Global Media Journal, 20:56.

## Introduction

Twitter and other social media platforms are well-liked all around the world. Saudi Arabia is one of the nations with the greatest proportion of users with 91 percent of the total population using social media [1]. Additionally, Saudi Arabia generates 40% of all tweets in the Arab globe [1]. Whether or not women should drive in Saudi Arabia is one of the topics debated on social media sites like Twitter and YouTube. In Saudi Arabia, a nation that has experienced social and economic change with its new political system, this protracted issue has been more than just a regulatory one. Since the legalization of women driving, there has been a major ideology divide in in Saudi Arabia characterized by conservatives and liberalists. This study aimed to examine YouTube comments made concerning Saudi women drivers.

Due to the absence of polling data, measuring public opinion in Saudi Arabia can be difficult, leading to social media usage. In addition, Saudi culture, norms, and conventions make it challenging to grasp Saudi residents' socioeconomic problems using past studies based on other societies and languages. For instance, one could argue that there is an aspect of gender inequality across all countries but without narrowing down to the specific issues faced within certain situations and countries,

it is hard to carry out a general study to support these claims. By gathering and examining data from YouTube, a window into general opinion and the function of social media in Saudi Arabia is provided. More precisely, the survey seeks to determine if sentiments regarding permitting women to drive in Saudi Arabia have changed in response to pertinent events. This study can aid in investigating the connection between policy changes and the online expression of people's opinions. The creation of social behavior models appropriate for the Saudi Arabic culture may benefit from the findings of this study.

#### Literature Review

#### **Effect of Social Media Platforms on Social Issues**

Social media may affect people in various ways, including questioning accepted standards and incorporating opposing viewpoints. According to Borge-Holthoefer and colleagues (2015), Twitter can serve as a medium for contemporary protests. The authors tracked changes in public opinion in Egypt during the demonstrations using text analysis and network analysis. Magdy et al. (2016) made the case that social media may be used to forecast attitudes and postures to be expected in future. The authors distinguished between online communication that

shows personal opinion through attacking, blaming, protecting, or is neutral towards a certain social topic using twitter contact and network interactions. Their findings show that, given that people prefer to agree with like-minded individuals, it is feasible to forecast users' positions on a social problem on Twitter (homophily). Abokhodair and colleagues (2016) attempted to comprehend how internet users in Arab nations, particularly Qatar, felt about online privacy and it's worth.

They focused on how diverse perspectives on privacy might be influenced by digital surroundings by analysing tweets that used the word "privacy." Their findings demonstrated that consumers from Arab golf nations place high importance on privacy on religious grounds. Men also frequently use authoritarian rhetoric when discussing women's privacy because they associate it with their honor. Abokhodair and Viewer (2016) also covered the topic of privacy and social media usage in Qatar and Saudi Arabia, two countries in the Arab Gulf. Their findings demonstrated that privacy is a cultural norm fully embraced and valued rather than a personal preference. Related research conducted in 2017 by Al-Dawood and associates showed how social media and technology might aid in overcoming such cultural restraints. Existing documents and a public understanding of the discourse of contentious social and cultural topics in Saudi Arabia is still limited, which is why this study is relevant, even though several publications have addressed how people interact with societal concerns on social media.

# Lifting Women's Driving Ban in Saudi Arabia

Women are allowed to drive in Saudi Arabia starting in June 2018, according to a royal order issued on September 26, 2017.

#### Why women driving matters

Media and Marketing: An international media and marketing circus resulted from the new law permitting women to drive. For instance, a full-page of Arab News was published with a wraparound cover illustration to honor the historic event, along with the straightforward instruction, "Ladies, start your engines." The famous layout "creates a happy and joyful cover image to honor that important day." The protagonist travels down an open Saudi road, searching for a brighter future [2, 3]. Crimson-tipped nails and vibrant red lips allude to a victory; Saudi women have attained in the battle to wear makeup and exhibit their individuality in public without fear of repercussions [3].

Automobile manufacturers used targeted advertising to mark the historic occasion in anticipation of a rise in sales as more women drive. For instance, Ford Motor Company conducted an advertisement campaign welcoming women to the driver's seat and used the recognizable image of a rear-view mirror that resembled a niqab to reach a new demographic [3]. The black abaya and niqab that are symbols of traditional Saudi attire are depicted in the image and there is a rear-view that shows the future. Nissan Motors, which holds a 6% share of the nation's car industry, also launched a "women drive" Twitter campaign, illustrating the new age with a Saudi license plate bearing the initials GRL and the year the prohibition was to be abolished (2018) [3] Global businesses were celebrating their own expected business success and women's rights, with vehicle sales growth

forecast to increase by 9% annually between 2018 and 2025.

The reader may understand from these illustrations why having women drive makes good commercial sense. This information clarifies one facet of the Crown Prince's Vision 2030 strategy: the sale of new cars boosts the Saudi economy [4]. With at least seven locations in Saudi Arabia and a substantial corporate presence throughout the Middle East, Gold's Gym (services were majorly rendered to women) Arabia aired the advertisement in the Figure below to observe women's right to drive (Figure 1).

# **Research Questions**

## **Emotional language**

Emotion in this study referred to the affective language used by speakers in ordinary talk. Affective language can be characterized as a 'generic term for linguistically expressed feelings, attitudes and relational dispositions of all types [5]. In this study, emotion incorporated positive as well as negative feelings. Positive feelings generally include delight and satisfaction, while negative feelings can envelop segments. Emotion is commonly displayed on social media. For instance, an ethnographic review uncovered that female Saudis used Facebook to broadcast their sentiments, feelings and political perspectives [6].

Hamdy and Gomaa (2012) gathered information from Facebook, Twitter, semi-official daily papers and free daily papers to analyse the framing of the Egyptian protests of January 2011. Four measurements were examined: 'the general way, in which the protests were framed, how the protests were defined, what causes were given for the protests, and what solutions were proposed for ending the crisis' (207). The human intrigue frame was the one most connected to this issue among Egyptians on social media. As indicated by Semetko and Valkenburg (2000), human intrigue alludes to a situation in which an individual customizes, emotionalizes or performs an issue to increase the enthusiasm of others. Individuals tended to use language that emotionalized an occasion to attract the general population's interest. This finding prompted the first research question of the present study:

Which linguistic components of emotion (e.g., positive and negative components) are expressed most frequently in comments related to the women's right to drive movement in the comments?

#### Religious or moral language

Religion is a major piece of the dialogue on any issue in Saudi



Arabia. Religious or moral principles are common elements of Saudi talk [7], especially encompassing contested issues, such as the right of women to drive. This is related to Islam as well as Islamo-liberal standards. According to Al-Saggaf et al. (2008), those standards are dynamic in cyberspace. They are additionally apparent in moulding socio-political talk in Saudi society [8, 9], In this way, it would be useful to analyse the religious or moral language used with respect to this issue.

Religious and moral language addresses the substance of a religious philosophy or presents an ethical solution (Semetko & Valkenburg 2000). There exists a need for research that analyses the religious substance in socio-political developments in Saudi Arabia, especially developments in women's rights. Almahmoud (2015) employed framing theory to conduct subjective research on Twitter to examine the edges connected by Saudi religious scholars and Saudi female with regard to the women's right to drive. Almahmoud found that religious scholars generally considered this issue an outside intrusion against the Saudi political framework and social morality. Almahmoud noticed that Saudi female used English to present the issue in a way that received local and worldwide attention. In addition, both religious scholars and Saudi female used earlier messages, such as legislative directions, to bolster their position. Finally, Saudis often confined the driving issue to a religious or moral setting by using language reflecting harm prevention, social corruption, sedition, conspiracy and evil. These findings prompted the second research question of the present study:

How frequently is religious or moral language used regarding the women's right to drive movement in the comments?

#### **Tone**

To the researchers' knowledge, no official poll or study had shown the numbers of supporters and opponents of this issue, nor had any institutes indicated such numbers. Therefore, it was helpful to examine the comments in terms of each poster's apparent position on the issue (i.e., the tone of their comment), such as being in favour of, neutral toward, or opposed to women being allowed to drive. This factor led to the third research question:

What proportion of the comments concerning the women's right to drive issue is in favour of, neutral toward, or in opposition to the issue?

# Method

This study employed a quantitative content analysis, with online comments serving as the unit of analysis. The study examined the presence and influence of the linguistic attributes of these comments. Capturing comments within the micro-blogging environment in which a socio-political discussion takes place is crucial to our understanding of public discourse on this and many other topics [10].

For this project, the 'No Women, No Drive' YouTube song was selected for two reasons. First, the discussion of the issue is ongoing. In the past several years, Saudi women, have launched several campaigns on social media. Although it has been seven years since the song was released, the issue is still widely discussed on social media and people still comment on it today.

The second reason was the huge number of comments this song has received, more than 40,000, and more than 14 million views [11].

#### **Data Collection**

The data were analysed with NVivo, a software package designed to manage qualitative data. Data collection proceeded as follows. First, a new project was created in NVivo and all field notes were imported into it. These field notes included the raw data (the comments copied and pasted into Word documents), the description of the threads, and the researchers' comments. After that, the documents were read several times for the researchers to familiarize themselves with the data. Next, free nodes (i.e., nodes not organized or grouped) were created based on keywords in the field notes.

The nodes represented themes derived from the main ideas or purpose of the text or from a specific concept, pattern or trend that emerged from the data. Similar texts within the field notes were located and assigned to these nodes after thoroughly reading through the field notes and ensuring the text captured the theme that the node represented. The themes that emerged from the text were the same as the nodes in NVivo. Using the above process, 1,000 comments were collected. The data were exported from NVivo to an Excel file. To filter the data, all duplicate comments were excluded using the "remove duplicates" feature in Excel. After removing the duplicate comments, 668 remained. These comments did not include any pictures, videos, links or replay comments. Two columns were added for translation and coding [12].

#### **Data Translation**

This study employed a hybrid approach to translate the comments from Arabic into English. The researchers recruited two translators whose primary language was Arabic and who held degrees in English studies to post-edit the machine translation of Arabic comments into English. First, the translators used Google Translate for automatic translation of the data, comment by comment. Since Google Translate produced some errors, the translators revised any errors that occurred (see Table 1). Comments were excluded if they were not related to the topic; did not have a textual comment, such as comments consisting purely of emojis; or contained slang the translators did not understand (Table 1).

#### **Computer-Assisted Analysis**

Once the data were translated into English, the study employed two approaches to data analysis. The first was the manual method, which incorporated the process of translating and coding comments. The second was the computer-assisted

**Table 1.** Example of Comment Translation.

| Arabic comment          | نيقئاسلا نأل ةبعص ةيدوعسلا يف قدايقلا<br>نوروهتم.                     |
|-------------------------|---|
| Google Translate output | Leadership in Saudi Arabia is difficult because reckless drivers.     |
| Post-edited version     | Driving in Saudi Arabia is difficult because the drivers are reckless |

method through NVivo. This software allows users to classify, sort and arrange information; examine relationships in the data; and combine analysis with linking, shaping, searching and modelling. The software can be used to analyse comments for linguistic qualities objectively and systematically. Through this software, the analyst can test research questions or hypotheses, identify trends and cross-examine information in a multitude of ways using its search engine and query functions. Examples of trend words found in the comments are presented in (**Figure 2**).

#### **Variables**

**Emotional language** the researchers used NVivo to gather the top words identified as emotional language. Many words were incorporated into this category to learn about the general emotional process. Two components represented the emotion dimension. The first was positive emotion, containing such words as like, good and support. The second was negative emotion, containing such words as dislike, stupid and bad [13-17].

Religious or moral language Like emotional language, the researchers used NVivo to gather the top words identified as religious or moral language. They translated words that represented Saudi culture and the target issue, such as extremism (ددشت), disorder and forbidden [18-24].

**Tone** This variable measured each comment's apparent tone regarding women's right to drive. That is, if the comment explicitly or implicitly indicated that women should be allowed to drive, the comment was considered to be in favour of the right of women to drive. Conversely, if the comment explicitly or implicitly indicated that women should not be allowed to drive [25, 26], the comment

was considered to be against the right of women to drive. If the comment was not explicitly or implicitly for or against the issue – or if the coder was not sure about the tone of the comment – the comment was coded as neutral (**Table 2**).

# **Results**

# **Emotional Language**

The first research question asked how frequently positive and negative emotions were expressed in comments about women's right to drive. Negative language appeared in 292 comments, which represented 43.7 per cent of the data. In contrast, positive language appeared in 210 comments, representing 31.4 per cent of the data [27-30].

## **Religious or Moral Language**

The second research question asked about the frequency of religious or moral language in the comments. The results demonstrated that religious or moral language was apparent in 193 comments, or 28.9 per cent of the data.

#### **Tone**

The third research question asked how frequently comments

Table 2. Examples of Comment Translation and Coding.

| Comment | ment Translation                                     |           |
|---------|--|-----------|
|         | Insulting my country is not going to change any laws | Opposed   |
|         | Very funny. Hopefully one day soon all women         | In favour |
|         | will be free and able to drive.                      |           |

| Word       | Length | Count | Weighted Percentage (%) | Similar Words                   |  |
|------------|--------|-------|-------------------------|---------------------------------|--|
| driving    | 7      | 171   | 3.18                    | drive, driving                  |  |
| women      | 5      | 134   | 2.49                    | women, womens                   |  |
| saudis     | 6      | 102   | 1.90                    | saudi, saudis                   |  |
| people     | 6      | 79    | 1.47                    | people, peoples                 |  |
| ike        | 4      | 73    | 1.36                    | like, liked, likes              |  |
| song       | 4      | 70    | 1.30                    | song, songs                     |  |
| ust        | 4      | 54    | 1.01                    | just                            |  |
| arabia     | 6      | 50    | 0.93                    | arabia, arabias                 |  |
| stupid     | 6      | 49    | 0.91                    | stupid, stupidity               |  |
| jet        | 3      | 46    | 0.86                    | get, gets, getting              |  |
| country    | 7      | 44    | 0.82                    | countries, country              |  |
| voman      | 5      | 43    | 0.80                    | woman                           |  |
| oke        | 4      | 42    | 0.78                    | joke, jokes, joking             |  |
| naking     | 6      | 41    | 0.76                    | make, makes, making             |  |
| ights      | 6      | 37    | 0.69                    | right, rights                   |  |
| one        | 3      | 35    | 0.65                    | one                             |  |
| ucking     | 7      | 35    | 0.65                    | fuck, fucked, fucking           |  |
| now        | 4      | 33    | 0.61                    | know, knowing, knows            |  |
| juy        | 3      | 32    | 0.60                    | guy, guys                       |  |
| unny       | 5      | 30    | 0.56                    | funny                           |  |
| sarcastic  | 9      | 30    | 0.56                    | sarcastic, sarcastically        |  |
| vant       | 4      | 30    | 0.56                    | want, wants                     |  |
| joing      | 5      | 30    | 0.56                    | go, going                       |  |
| cars       | 4      | 28    | 0.52                    | car, car', cars                 |  |
| good       | 4      | 28    | 0.52                    | good, goodness                  |  |
| understand | 10     | 28    | 0.52                    | understand, understanding       |  |
| way        | 3      | 27    | 0.50                    | way, ways                       |  |
| need       | 4      | 26    | 0.48                    | need, needed, needs             |  |
| arabs      | 5      | 26    | 0.48                    | arab, arabic, arabs             |  |
| ove        | 4      | 25    | 0.47                    | love, loved, lovely, loving     |  |
| men        | 3      | 25    | 0.47                    | men                             |  |
| arcasm     | 7      | 25    | 0.47                    | sarcasm                         |  |
| hink       | 5      | 23    | 0.43                    | think, thinking, thinks         |  |
| comment    | 7      | 23    | 0.43                    | comment, commentators, comments |  |
| nan        | 3      | 22    | 0.41                    | man, manly                      |  |
| even       | 4      | 22    | 0.41                    | even                            |  |
| really     | 6      | 21    | 0.39                    | really                          |  |
| slam       | 5      | 20    | 0.37                    | islam, islamic                  |  |

showed negative, neutral, or positive attitudes toward the issue of women driving in Saudi Arabia. The results demonstrated that 290 (43.4 per cent) of the comments were in favour of women's right to drive; 245 (36.67 per cent) were neutral, being neither for nor against the right to drive; and only 133 (19.9 per cent) of the comments were against women driving.

# **Discussion and Conclusion**

The Internet can empower people by increasing their sense of security, personal freedom, awareness, knowledge and influence [31]. The Internet makes the networked structure of society more visible while empowering individuals who use social media [32], this effect is particularly positive for women [33].

Problems such as these, which communication researchers have not analysed in detail, indicate how social media can be a stage for socio-political talk, especially in countries with otherwise limited opportunities for public expression. The attributes of the language individuals use while talking about social and political issues are important to understand how public discourse can be formed. However, the linguistic attributes of social media texts and their role in shaping public discourse have not been adequately examined. In addition, research on how individuals

react to the semantic attributes of messages on social media, especially YouTube, has been limited [34].

The study concluded that emotional language was expressed more often than moral language. This contradicted Almahmoud's (2015) finding that religious and moral language was included in the discussion of women's right to drive. There are several possible explanations for this finding in the present study. First, the issue is not necessarily a religious topic. Second, Almahmoud's (2015) review mainly looked at the tweets of religious men, which increased the probability of religious language in her review. Third, the method used in recent research does not adequately identify religious and moral language. Fourth, the sample examined in this study had only 668 comments, meaning over 39,000 comments were not included [35].

Finally, the results suggested there were substantially more comments in favour of the right of women to drive than against. Despite the religious mainstream's influence on social media [36] and its general opposition to women driving, the large number of statements supporting women's right to drive might have reflected a climate of acceptance toward this issue in Saudi society [37-41].

# References

- Abokhodair N, Vieweg S (2016) Privacy & social media in the context of the Arab Gulf. In Proceedings of the ACM conference on designing interactive systems. 672-683.
- 2 Abokhodair N, Abbar S, Vieweg S, Mejova Y (2016) Privacy and Twitter in Qatar: traditional values in the digital world. In Proceedings of the 8th ACM Conference on Web Science 66-77.
- 3 Addawood A, Alshamrani A, Alqahtani A, Diesner J, Broniatowski D (2018) Women's is driving in Saudi Arabia-analysing the discussion of a controversial topic on Twitter.
- 4 International Conference on Social Computing (2018) Behavioural-Cultural Modeling, and Prediction and Behavior Representation in Modeling and Simulation BRiMS.
- 5 Alahmed Anas (2014) The Potential of Political Changes in the Information Age: The Political Challenges Sphere of Saudi Arabia through Citizen Activism', in A. M. Solo (ed), Handbook of Research on Political Activism in the Information Age, Hershey. Global 37-59.
- 6 Alamri H E A (2017) Legitimization strategies: the case of women driving in Saudi Arabia Doctoral dissertation. Newcastle University.
- 7 Al-Bshir M (2006) Political communication in the media and its impact on Saudi society Ph.D. thesis, Riyadh: King Saud University.
- 8 Al-Dawood A, Abokhodair N, mimouni H, Yarosh S (2017) Against Marrying a Stranger Marital Matchmaking Technologies in Saudi Arabia. DIS '17 Proceedings of the 2017 Conference on Designing Interactive Systems 1013-1024.
- 9 Alharethi Manasar (2016) Using Instagram for shopping in Saudi Arabia MA thesis, Jonesboro Arkansas State University.

- 10 Alhargan, Raed Abdulaziz (2012) Saudi Arabia: Civil rights and local actors Middle East Policy 19:126-139.
- 11 Al-Hazzaa, Abdulaziz Mohammed (1993) Scenario projections for women in Saudi Arabia: Their changing status, educational and employment opportunities by the year 2010 Ph.D. thesis, Minneapolis: University of Minnesota.
- 12 Almahmoud Jehan (2015) Framing on Twitter: How Saudi Arabians inter textually frame the Women2Drive campaign', MA thesis, Washington, DC: Georgetown University.
- 13 Alothman, Abdulaziz (2013) A survey of social media users in Saudi Arabia to explore the roles, motivations, and expectations toward using social media for social and political purposes MA thesis Jonesboro: Arkansas State University.
- 14 Alqarni Ahmad (2015) the role of social media in Arab revolution. J Sci Technol 5:609-611.
- 15 Al-Saggaf, Yeslam (2011) Saudi females on Facebook: An ethnographic study. Int J Emerg Technol 9: 1-19.
- 16 Al-Saggaf, Yeslam, Himma, Kenneth and Kharabsheh, Radwan (2008) Political online communities in Saudi Arabia: The major players Journal of Information. J Inf Commun Ethics Soc 6:127-140.
- 17 Alshaya, Mohammad (2005) A sociological study of the attitude of Saudi students in the United
- 18 States toward women's roles in Saudi Arabia. Thesis, Manhattan, KS: Kansas State University.
- 19 Amos, Deborah (2013) Saudi women go for a spin in latest challenge to driving ban', NPR, 24 Accessed.
- 20 Bayat Asef (2010) Life as Politics How Ordinary People Change the Middle East, Stanford, CA: Stanford University Press.

- 21 Borge-Holthoefer J, Magdy W, Darwish K, Weber I (2015) Content and network dynamics behind Egyptian political polarization on Twitter. In Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing 700-711.
- 22 Castells Manuel (2012) Networks of Outrage and Hope: Social Movements in the Internet Age, Cambridge, UK: Polity Press.
- 23 Cooper P (2018) Saudi Arabian Women (Now) Driving Cars and Sales Statista.
- 24 Doumato, Eleanor Abdella (1989) Arabian women: Religion, work, and cultural ideology in the Arabian Peninsula from the nineteenth century through the age of Abd al-Aziz, Ph.D. thesis, New York: Columbia University.
- 25 Faqihi M H (2015) the climate of public opinion in the digital age: Exploring the impact of social media on freedom of expression and political activeness in Saudi Arabia', Ph.D. thesis, Jonesboro: Arkansas State University.
- 26 Hamdy, Naila Gomaa, Ehab (2012) Framing the Egyptian uprising in Arabic language newspapers and social media. J Commun 62: 195-211.
- 27 Jamjoom M, Smith-Spark L (2013) Saudi Arabia women defy authorities over the female driving ban. CNN, October 27.
- 28 Jarbou R (2018) Know your enemy: the Saudi women are driving campaign from flyers and faxes to Youtube and hash tags. Feminist Media Studies 18:321-325.
- 29 Jones, Sophia (2013) No Woman, No Drive: Behind the viral video The Daily Beast, 28 October.
- 30 Kryk-Kastovsky, Barbara (1997) Surprise, and Surprise the Iconicity-Conventionality Scale of Emotions in S. Niemeier and R. Dirven (eds) The Language of Emotions: Conceptualization, Expression, and Theoretical Foundation. Amsterdam John Benjamins 155-169.
- 31 Lacroix Stephane (2004) Between Islamists and liberals: Saudi Arabia's new "Islamo-liberal" reformists. Middle East J 58:345-65.

- 32 Magdy W, Darwish K, Abokhodair N, Rahimi A, Baldwin T et al. (2016) isisisnotislam or deportallmuslims? Predicting unspoken views. In Proceedings of the 8th ACM Conference on Web Science 95-106.
- 33 Mahmud S (2018) Arab News Dons Wraparound Cover to Celebrate Saudi Women Drivers The Arabian Marketer.
- 34 Makharesh A (2018) Arab citizen's perceptions of the investigative journalism. Arkansas State University.
- 35 Pan, Po-Lin, Alharethi, Manasar, Bhandari Manu (2019) Using Instagram as online shopping channel: Key predictors of consumers purchase involvement on Instagram in Saudi Arabia. The J Soc Med Society 8:63-83.
- 36 Pharaon Nora Alarifi (2004) Saudi women and the Muslim state in the twenty-first century', Sex Roles. 51:349-66.
- 37 Rainie, Lee and Smith, Aaron (2012) Social Networking Sites and Politics, Washington, DC: Pew Internet & American Life Project.
- 38 Reddick, Christopher, Aikins, Stephen (2012) Web 2.0 Technologies and Democratic Governance: Political, Policy and Management Implications. New York: Springer Science & Business Media.
- 39 Sahly, Abdulsamad (2016) Examining presence and influence of linguistic characteristics in the Twitter discourse surrounding the women's right to drive movement in Saudi Arabia', MA thesis, Orlando: University of Central Florida.
- 40 Semetko, Holli and Valkenburg Patti (2000) Framing European politics: A content analysis of press and television news. J Commun 50:93-109.
- 41 Wheeler D L (2020) Saudi women driving change? Rebranding, resistance, and the kingdom of change. The J Midl East and Africa 11:87-109.
- 42 Yamani Mai (2000) Changed Identities: The Challenge of the New Generation in Saudi Arabia London RRIA.