

# The impact of psychological operations techniques use in the dissemination of news regarding energy field

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## ABSTRACT

Nowadays, dissemination of news and information on various television channels has been grown in pace and significance compared to other media, yet the energy sector, and more specifically speaking oil, has always been of paramount importance. The main purpose of this study was to explore the effect of employing psychological operations techniques in dissemination of news in the field of energy. The present study is applied in terms of purpose and it is descriptive-survey in terms of nature. The research population of this study included journalists working on the field of energy from various news agencies along with students studying communications in Tehran. For sampling, Cochran formula was used, by which 148 people were selected. A 36-item researcher-made inventory was used to collect data. Before application, in a preliminary study, the face and content validity of the questionnaires were examined and confirmed by ten lecturers and experts in the aforementioned field. Cronbach's alpha was employed to evaluate the reliability of the instrument. The data of the study was analyzed using SPSS software in descriptive and inferential levels. At the descriptive level, the data was summarized using descriptive tables. As for the quantitative research data, frequency distribution tables were plotted, mean of variance and standard deviation were calculated, and a comparative study was undertaken at the descriptive level. In the inferential level, t-tests and chi-square tests were used. The results indicated that journalists believe that in the energy sector, distortion and testing are not employed to great extents in the dissemination of news, yet they believe that exaggeration is a technique frequently used in this field.

**Keywords:** news distortion technique, testing in news dissemination, psychological operations techniques.

## Introduction

The psychological operation is one of the familiar terms that today has come to prominence with broad applicability in political literature of the community, as one of its alternatively-used synonyms, Media War, has been greatly studied. In his famous book, *The Psychological War*, published in 1954, Berger also affiliates the nature of psychological warfare to economic or political goals; therefore, psychological warfare is not to be limited to military operations, but rather includes a

set of measures adopted by a country to influence and manipulate the beliefs and behaviors of states and nations for the sake of obtaining desirable results<sup>[1]</sup>. On the other hand, one of the means of psychological operations are mass media. Today, mass communication is one of the phenomena that has influenced and manipulated all aspects of human life. Researches on the effect of such phenomena on audiences indicate that mass media, especially TV, are among the significant and contributing factors affecting the way and quality of individual and collective life of people. According to most theoretical viewpoints, and especially those of Lazaresfeld's theory, the dominance of this instrument is to such extent that inspires and manipulates the most private human experiences, including deep emotions and feelings, by which they guide behavioral responses of individuals towards their goals and policies. Media provide many practical and useful information in releasing relevant news<sup>[2]</sup>.

One of such areas is the oil field. Energy (and specifically, oil) is one of the most influential factors in generating wealth and

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power in the current world. In spite of all the complexity it bears, including globalization, interdependence, the emphasis on relentless competition, and the use of relative advantages among others, the global economic is still highly dependent on oil and consequently its security, as it is still the very cornerstone of global economic development. On the other hand, energy is itself considered one of the pillars of power, since in today's world, development (which is energy-dependent) can generate power. Hence, energy is a strategic commodity whose security and safety are pivotal to international security and the global economy. Therefore, all news released in this scope may have vital effects on countries that are heavily dependent on it, such as Iran, and it is vital. Accordingly, in this research, the impact of psychological operations techniques in the dissemination of energy news is analyzed.

## Theoretical Background

### Media

Media are not reminiscent of mirrors, but rather those of floodlights. Media play a significant potential role in shaping perceptions and thoughts. Media are propagators of a dynamic personality and its befitting mental forms. They should be prioritized in the framework of a strategy and in line with the development perspective so as to preserve the current order and create a new world order, pay attention to capital accumulation, promote work and work ethics, pay attention to science-based organizations, and tend to the phenomenon of cultural transformation, through which we are able to create social diversity, and the results of which would be excellence of cultural development<sup>[3]</sup>.

One of the more important prophecies of the media is informing masses of social events. Essentially, media are born through news releases. TV, as a media itself, is not far from this assumption, as one of its most important duties is the dissemination of news, because news plays a major role in creating the political, social and economic awareness, a feature that is of the necessities for transforming the community towards the better<sup>[4]</sup>.

On the other hand, new technologies are means of transitioning from the traditional stages of generation and production of news to those that take into account the current pace of development, by which the process of reporting is accelerated. Therefore, the recent shift in message transmission systems and methods, which have utilized modern technologies, will allow for more favorable grounds in news broadcasting<sup>[5]</sup>.

### Importance of News and Informing

Basically, mass media have been generated by news. The world's first newspaper has been published solely for the purpose of broadcasting news. For this reason, the term "news" is included in the terms used for meaning journal and publication. For example, in English, the term "newspaper" is

used for this purpose which is in fact reminiscent of the exclusive task of media in their original sense. Radio and TV are also largely devoted to dissemination and broadcasting of news. Television as a means of broadcasting news, is not comparable to other media due to its broad coverage and speed of dissemination, as today, the vast scope and domain of broadcasting news has gone far beyond geographical and political-social boundaries<sup>[6]</sup>.

Today's world is the world of communication. On an international level, all political, economic, and cultural relations between countries are fixed based on most recent and reliable information and news. Within a country, policies and actions of governments, people's opinions and reactions are expressed based on news and information regarding the relevant issues, and the relationship of people, authorities and government is established..

## Psychological Operations

In their research entitled "Psychological Warfare in the News Media: The Development and Validation of a Multidimensional Scale", Kohring and Mathais have used in-depth interview and factor analysis to provide a multidimensional and valid scale for measuring trust in news media for the first time. Their findings confirm the hypothesis that psychological warfare in news media can be considered a hierarchical factor. This hierarchy consists of four sequential factors: choosing topics, trusting in choosing events, trusting in the correctness of testimonials, and trusting in journalistic assessment<sup>[7]</sup>. The methods of psychological operations include:

- **Distortion**

One of the most common methods in news and press coverage is to alter the content of news through the manipulation of news. In distortion, there are three known phenomena: adjustment, embroidering and attraction. A news gradually gets brief and comprehensible and simpler in terms of quoting when it is conveyed from one person to another. During the successive transfer process, many of the main details of the news are adjusted, and the latest research shows that many of the details at the beginning of the transmission chain are severely eliminated. Every time a distorted news is broadcasted, though slowly, the amount of details is decreased. At the time the adjustment process is carried out, the news might get embroidered from elsewhere. The process of embroidering the news is based on the selective perception and preservation of the subject in mind as well as the quantitative overview of the underlying subject. Although the process of embroidering is performed like the process of adjustment every time the news is quoted, the elements that are relied on in the process may not remain the same. This attribute is more dependent on the composition of the society in which the news is broadcasted. In such a process, the elements that are more important in the viewpoint of the broadcaster are more embroidered<sup>[8]</sup>.

What causes some details to be eliminated while some others be highlighted? How can we express the fact that some parts are replaced by other components and thus manipulate the truth? The answer to these questions is found in the process of attraction, which is in fact the outcome of the attraction force of the audience' habits, tendencies and feelings. For example, when quoting and re-quoting a news, the process of attracting the main subject takes place, then the news elements are adjusted or coordinated in a manner that match the original motive of the news, yet this coordination is done in such a way that the news is eventually more coherent, logical and look. Predominantly, the attraction process is in line with the expected target of the broadcaster, while the perception and anamnesis of the issue is consistently done <sup>[8]</sup>. More importantly, the attraction process itself reflects shifts and distortions that in turn reflect the deeply rooted feelings of a person, as well as his/her status and orientation. Although in the analysis process, the processes of adjustment, embroidering and attraction are done separately, but these processes are not truly independent. They act coordinately and simultaneously. This coordinated action reflects a unique process that holds an individual character and leads to its characteristic distortion. This method is used more in political interviews and contents, as it is difficult to document in an interview, and the concepts can be easily manipulated. This method is most efficient in case the audience does not have the necessary access to the source of the news, such as when some news is published through the world's news agencies and newspapers globally, and thus the audience does not have any real access to the original documentations <sup>[9]</sup>.

### • Testing

In some cases, to assess the state of the society and the way in which the people of society behold a sensitive subject, or to receive feedback from the rulers or particular guilds and groups, a news is published, the response to which provides basis for further subjects. Advertising representatives try to receive feedbacks from a particular group of people, or even members of a whole community, by expressing an issue, based on which they can devise their own policies. Testing is in fact a recursive technique which takes a more limited community as sample, yet receives more feedback from the whole community. For example, in order to assess the perception of the nation of Iran on the relations with the United States, some news is broadcasted, the testing of which may or may not lead to more serious subjects on the matter. For example, they might test the level of religious sensitivities in the society or their adherence to the original principles of the community, the respected and beloved individuals of the society, or the views and policies of the rulers or the opposition towards a particular subject. This method is one of the more prevalent methods of psychological warfare. But it is also used today in propagandas and election runs. The use of public opinion in polls is an example of testing <sup>[10]</sup>.

### • Exaggeration

Exaggeration is a method in which one tries to prove a fact by overstating its details. Advertising experts use this method for specific events. Overrating the power and strength of one's country and understating the enemy's is an example of this technique. This method is especially effective, when the enemy is on the brink of failure or defeat, or in times of crisis and turmoil. At times, this method is used to attribute evil behaviors, tendencies and characters to one's enemy <sup>[11]</sup>.

## Research Methodology

The present study is applied in terms of purpose and is descriptive-survey in terms of nature. The population of this study included the journalists working on the field of energy from various news agencies along with students studying communications in Tehran. For sampling, Cochran formula was used, by which 148 people were selected. A 36-item researcher-made inventory was used to collect data. Before application, in a preliminary study, the face and content validity of the questionnaires were examined and confirmed by ten lecturers and experts in the aforementioned field. Cronbach's alpha was employed to evaluate the reliability of the instrument. The data of the study was analyzed using SPSS software in descriptive and inferential levels. At the descriptive level, the data was summarized using descriptive tables. As for the quantitative research data, frequency distribution tables were plotted, mean of variance and standard deviation were calculated, and a comparative study was undertaken at the descriptive level. In the inferential level, t-tests and chi-square tests were used.

**Table 1: Cronbach's alpha coefficient of the questionnaire**

No.	Element	alpha coefficient
1	Distortion	0.76
2	Testing	0.71
3	Exaggeration	0.77

## Research Questions

- Q1. From the point of view of energy journalists, how is distortion used to disseminate news in this area?  
 Q2. From the point of view of energy journalists, how is testing used to disseminate news in this area?  
 Q3. From the point of view of energy journalists, how is exaggeration used to disseminate news in this area?

## Findings

**Table 2: Descriptive Indicators of Distortion**

Parameter	Mean	Std.	Skewness	Kurtosis	Min score	Max score
Distortion	11.12	4.19	-0.11	0.45	9.00	16.00

According to Table (2), the mean value obtained for the distortion variable is 11.12. The lowest score was determined to be 9.00 while the highest score is 16.00. Skewness and kurtosis values indicate normal distribution.

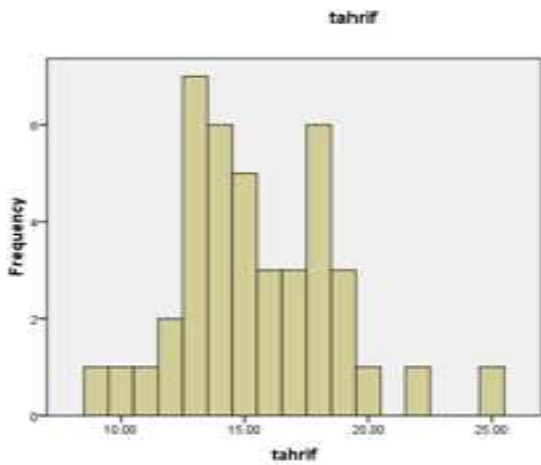


Figure 1: Distortion histogram

Table 3: Descriptive Indicators of Testing

Parameter	Mean	Std.	Skewness	Kurtosis	Min score	Max score
Testing	20.12	6.04	0.17	0.39	8.00	40.00

According to Table (3), the mean value obtained for the Testing variable is 20.12. The lowest score was determined to be 8.00 while the highest score is 40.00. Skewness and kurtosis values indicate normal distribution.

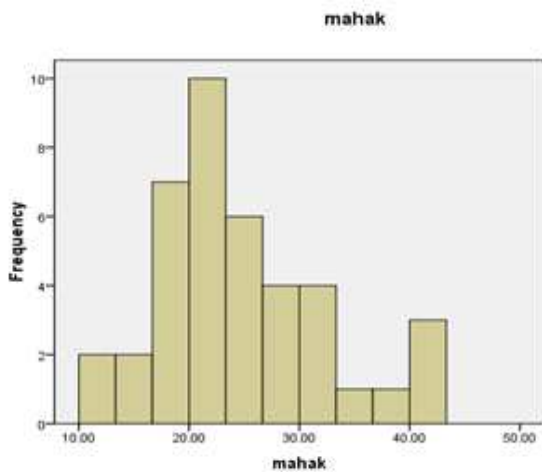


Figure 2: Testing histogram

Table 4: Descriptive Indicators of Exaggeration

Parameter	Mean	Std.	Skewness	Kurtosis	Min score	Max score
Testing	18.05	3.62	-0.11	0.38	12.00	20.00

According to Table (4), the mean value obtained for the Exaggeration variable is 18.05. The lowest score was

determined to be 12.00 while the highest score is 20.00. Skewness and kurtosis values indicate normal distribution.

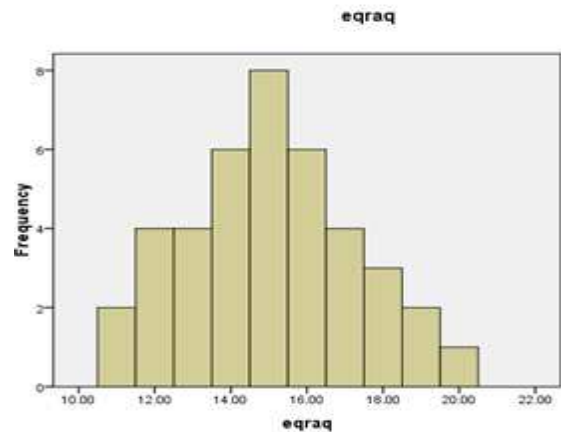


Figure 3: Exaggeration histogram

**Q1: From the point of view of energy journalists, how is distortion used to publish news in this area?**

Table 5: One-sample t-test

Groups	Experimental average	Theoretical average	Differences in mean	df	t	sig
Distortion technique	11.12	12	-0.87	137	-0.53	0.231

The mean experimental value obtained for distortion was 11.12, which is 0.87 lower than the theoretical mean, and this value is not significant at  $P \leq 0.05$  level. Therefore, the mean value obtained does not differ significantly from that of theoretical average, and thus according to energy journalists, the technique of distortion is not frequently used in disseminating of the news related to energy sector.

Table 6: One-sample chi-square test

Distortion	Very low	Low	Medium	High	Very high
Observed Frequency	37	44	32	19	6
Expected Frequency	27.6	27.6	27.6	27.6	27.6

$X^2: 9.3$  df: 4 sig: 0.309

The chi-square value obtained for distortion is 9.3, which is not significant at  $P \leq 0.05$  level. Therefore, the observed frequencies are only marginally different from the expected frequencies, and thus it can be said according to the reporters of the energy sector that the technique of distortion is not frequently used in disseminating of the news related to energy sector.

**Q2: From the point of view of energy journalists, how is testing used to publish news in this area?**

Table 7: One-sample t-test

Groups	Experimental average	Theoretical average	Differences in mean	df	t	sig
Testing	13.05	12	1.05	137	1.23	0.059

The mean experimental value obtained for testing was 13.05, which is 1.05 higher than the theoretical mean, and this value is not significant at  $P \leq 0.05$  level. Therefore, the mean value obtained does not differ significantly from that of theoretical average, and thus according to energy journalists, the technique of testing is not repeatedly used in disseminating of the news related to energy sector.

**Table 8: One-sample chi-square test**

Testing	Very low	Low	Medium	High	Very high
Observed Frequency	37	33	47	17	4
Expected Frequency	27.6	27.6	27.6	27.6	27.6

$X^2$ : 7.2 df: 4 sig: 0.03

The chi-square value obtained for testing was 7.2, which is not significant at  $P \leq 0.05$  level. Therefore, the observed frequencies are only marginally different from the expected frequencies, and thus it is safe to say that according to the reporters of the energy sector, the technique of testing is not regularly used in disseminating of the news related to energy sector.

**Q3: From the point of view of energy journalists, how is exaggeration technique is used to publish news in this area?**

**Table 9: One-sample t-test**

Groups	Experimental average	Theoretical average	Differences in mean	df	t	sig
Exaggeration	18.05	12	6.5	147	3.32	0.000

The mean experimental value obtained for exaggeration was 18.05, which is a staggering 6.5 higher than that theoretical mean, and thus it is significant at  $P \leq 0.01$  level. Therefore, the mean value obtained differs significantly from that of theoretical average, and thus according to energy journalists, the technique of exaggeration is continually used in disseminating of the news related to energy sector.

**Table 10: One-sample chi-square test**

Testing	Very low	Low	Medium	High	Very high
Observed Frequency	2	8	56	43	29
Expected Frequency	27.6	27.6	27.6	27.6	27.6

$X^2$ : 24.32 df: 4 sig: 0.000

The chi-square value obtained for exaggeration was 7.2, which is significant at  $P \leq 0.01$  level. Therefore, the observed frequencies are significantly different from the expected frequencies, and thus it can be concluded that according to the reporters of the energy sector, the technique of exaggeration is regularly used in disseminating of the news related to energy sector.

## Discussion and Conclusion

### The First Question

The results showed that the journalists in the energy sector do not use the technique of distortion in disseminating and broadcasting the energy news. One of the most common methods in broadcasting and disseminating news is to alter the content of news through the manipulation of news. In distortion, there are three known phenomena: adjustment, embroidering and attraction. The news of an event gets brief and comprehensible and simpler in terms of quoting when it is conveyed from one person to another. During the successive transfer process, many of the main details of the news become adjusted, and the latest research shows that many of the details at the beginning of the transmission chain are severely eliminated. Every time a distorted news is quoted, through slowly, the amount of details is decreased. At the same time as the adjustment process is carried out, the news might get embroidered from elsewhere. The process of embroidering the news is based on the selective perception and preservation of the subject in mind as well as the quantitative overview of the underlying subject. Although the process of embroidering is performed like the process of adjustment every time the news is quoted, the elements that are relied on in the process may not remain the same. This attribute is more dependent on the composition of the society in which the news is broadcasted. In such a process, the elements that are more important in the viewpoint of the broadcaster are more embroidered. Predominantly, the attraction process is in line with the expected target of the broadcaster, while the perception and anamnesis of the issue is consistently done. More importantly, the attraction process itself reflects shifts and distortions that in turn reflect the deeply rooted feelings of a person, as well as his/her status and orientation. Although in the analysis process, the processes of adjustment, embroidering and attraction are done separately, these processes are not truly independent. They act coordinately and simultaneously. This coordinated action reflects a unique process that holds an individual character and leads to its characteristic distortion. This method is most efficient in case the audience does not have the necessary access to the source of the news, such as when some news is released through the world's news agencies and newspapers globally, and thus the audience does not have any real access to the original documentations. However, according to the results of the present study, energy journalists believe that the technique of distortion is not widely used in the dissemination of energy news. Hence, it can be acknowledged that adjustment, embroidering and attraction in the dissemination of energy news is less evident, and distortion is employed less than what was expected. Therefore, the dissemination of news on the field of energy is not such as to make it simpler and more readily transmitted from one person to another, and therefore not many of the details at the beginning of the transmission chain are eliminated. Nasrollahi and Soltanipour (2011), Pouranvari (2013), Hasani-Rostamabadi (2013), Rajabi (2011), Taherian (2013), Dairdari et al. (2013), Guy (2009), Shoemaker and Cohen (2006),

Douglas and Pearls (2004) have also conducted research on the release of news <sup>[12-20]</sup>.

### The Second Question

Based on the finding of the study, in the journalists' viewpoint, the testing technique is not used in dissemination of the news related to energy sector. To assess the state of the society and the way in which the people of society behold a sensitive subject, or to receive feedback from the rulers or particular guilds and groups, a news is released, the response to which provides basis for further subjects. Advertising representatives try to receive feedbacks from a particular group of people, or even members of a whole community, by expressing an issue, based on which they can devise their own policies. Testing is in fact a recursive technique which takes a more limited community as sample, yet receives more feedback from the whole community. Based on the findings of this study, this technique is not largely used. More precisely, the dissemination of news in this area is not generally intended to assess the public opinion about the field of oil or to receive feedback from the rulers or specifics group and guilds. And in case of use, it is carried out rarely and less than expected. The results of this research are consistent with those of Nasrollahi and Soltanipour (2011), Pouranvari (2013), Hasani-Rostamabadi (1392), Rajabi (2011), Taherian (2013), Dairdari et al. (2013), Guy (2009), Shoemaker and Cohen (2006), and Douglas and Pearls (2004) <sup>[12-20]</sup>.

### The Third Question

Based on the findings of the present study, the journalists in the field of energy use the exaggeration technique in dissemination of the news in this field.

Nasrollahi and Soltanpoor (2011), Pouanvary (2013), Hosni Rostam Abadi (2013), Rajabi (2011), Taherian (2013), Dirdary et al. (2013), Guy (2009), Shoemaker and Cohen (2006), Douglas and Pearls (2004) have conducted research on disseminating news <sup>[12-20]</sup>.

In general, propaganda agents use this method to disseminate the exaggerated content, as they try to overrate the unimportant content. They are also capable of expressing highly important information in a manner, time, place and position that far downgrades its significance. Exaggeration is in general a method used to prove a fact. Advertising experts use this method for specific events and information.

According to the report's findings, journalists believe that news agencies in the field of energy use this method to disseminate the exaggerated news. News agencies in this area tend to express the contents with low importance in an overrated way than what it actually holds, and on the other hand, exploit highly important information in a manner, time, place and position that far downgrades its significance. Therefore, news agencies exaggerate the issues related to the energy field, and make an attempt to prove its reality.

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