Effectiveness of Promotional Efforts via Websites and Telegram Social Medium in Dadrass Atash Tochal Production Company

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Abstract: *Advertisements are an important communicative tool in the current competitive world and thus are hugely utilized by big companies to inform, persuade and remind customers of their products and services in order to attract and develop a larger customer base. Thus this research was conducted to capture the roles played by promotional efforts via company's website and Telegram social medium in Dadras Atash Tochal Company to attract customers. This research was based on survey method and questionnaire instrument in compliance with the steps of Dagmar model. The research statistical population included all Iran-based users and dealerships of Tochal extinguishers, the exact number of whom was not determined. However, 1200 of these individuals were identified by Tochal Company and then set as the research statistical population. Cronbach's alpha coefficient was used to examine the research reliability. Based on the results of Cochran test and Morgan Table, 291 users of Tochal fire extinguishers formed the sample and were examined purposively. Once the questionnaires were completed, the research data were analyzed at descriptive and inferential levels by using SPSS software. Considering the analyses, the findings and the results, it could be concluded that advertising via the company's website and Telegram social medium has successfully gone through all the steps of Dagmar model. In other words, there is a significant relationship between advertisements of Dadras Atash Tochal via its website and Telegram and the variables of Dagmar model.*
Keywords: *Effectiveness, Website and Telegram social medium, Dagmar four-step model*

I. Introduction

Advertisements are as a communicative tool in the current competitive world is hugely utilized by big companies to inform, persuade and remind customers of their products and services. Failure to utilize the media or improper recognition of the customers' demands will contribute to the failure of the company in the pursuit of its objectives. Timely and well-adjusted advertisements could help companies and organization explain their plans and policies to the public and benefit from their comments, suggestions and cooperation for advancing local and national projects. Therefore, in the profession of public relations and communication, advertisements are interpreted as employment of persuasion and encouragement techniques as well as proper and effective application of individual and public communication techniques (Roustaei, 2010).

Companies will get an edge over their rivals in the competitive nature of today's world if they manage to beat them to more customers. This is possible through appropriate presentation of their products and services to customers and attracting them through advertisements. Marketing has been highlighted in recent decades as a success factor. As a matter of fact, attracting and maintaining customers is more important than the sales. For this, advertisements for presentation of products and services, informing customers and offers of appropriate complete and correct information to them have been recruited for marketing and attracting the potential suitors (Roustaei et al, 2011).

The emergence of communication tools has drawn the audience to these tools. This has been the result of a suite of functions and roles created by communication tools. Advances in communication and information technologies have significantly contributed to human life that it is not possible now to ignore the radical changes engineered by these technologies in various individual and social fields of human life. In addition, these technologies have created a variety of themes such as entertainment and employment in a different environment as well as covering educational, promotional and recreational fields in such as way that a large portion of users spend their time surfing the virtual world to fulfill their various needs on the functions they expect from the media (Javadi Nia et al, 2012).

Advertising is an important dimension of marketing. Commercial advertising is identifying an economic entity and introduction of its products or services to consumption groups through inviting them to use the products. Considering this definition, commercial advertising could be viewed as an effective tool in persuading individuals to use the products or services of a given entity. Advertising is one of the five elements of promotional tools which are employed along promotion of sales, public relations, personal sales and direct marketing to communicate with the target audience (Rousta, 2004).

Every institution entering the field of advertising should be able to recover the advertising costs as well as achieving its ultimate target or attraction of more customers. As advertising is a costly operation for companies and institutions, is should be administered properly to secure long-term profits in proportion to the expenses made as well as the efficiency desired. However, the crisis of shortage of financial sources combined with the fierce competition between companies have made the companies sensitive about the advertising costs and consequently necessitated undertaking more research about the efficiency of advisement. Although it is difficult to measure the different effects of an advertising campaign, its results will be very helpful in planning and modification of promotional operations of every organization. The form and content of the messages, the media and communication channels employed and the time and conditions governing the advertisements could be modified after gauging the effects of advertisements made and their associations with the targets of the organizations to design and have more useful and effective promotional efforts than before (2011).

Although production is not possible without marketing and launching advertisement campaign for selling the products, it should be noted that not every product could be sold in every market. Selling goods in different markets requires proper advertisement and awareness and knowledge of marketing. Fire extinguisher producers are not exceptions in this regard and have got involved in a stern competition in recent years. Dadras Atash Tochal as a fire extinguisher is one such company that is competing in the market for the customers with other companies such as Pishro, Baya Cylandr, Baran Mazand etc. As the rivals of this company have managed to get a share of the market via massive advertisement, this company intends to assess the efficiency of its advertising campaign to recover its customers and thus this research attempts to focus on the efficiency of advertisements made by this company on the behaviors of various customers via its website and Telegram social medium. This research was undertaken to assess the efficiency of advertisement through the steps of Dagmar model as a model for measuring the efficiency of advertising efforts. In addition, the efficiency of two advertisement media employed by this company will be compared.

II. Review of literature

2.1. Advertisements

Literally, advertising means the distribution of markers of an entity or introduction of something. Today, the word advertising is frequently interpreted as the process of influencing the minds in which goals are prioritized over the content. The goal is defined as impressing or influencing the minds, views, attitudes and the actions of the target audience. Commercial advertisement is based on tangible phenomena and only praises itself. Advertising must be exposed, understood, learnt, remembered and to be put in practice (Peratkanis et al, 2004).

Advertising represents non-personal offers of products, services and ideas via different carriers in exchange for payments from a given source. Advertising is one of the components of integrated marketing and plays the role of the linking agent to influence the audience in order to change their attitudes, motives, knowledge and behaviors (Rousta, Venoos and Ebrahimi, 2011).

Advertising makes changes in the knowledge, attitudes and behaviors of the audience. Informing, persuading, encouraging, reminding, cementing the relationships and expediting and promoting the exchanges are some of the various tasks of advertising. Assessing the effectiveness of advertising in each of these respects is a requirement for every organization that views advertising necessary for its life and development. Advertising is viewed as a tool of communication with the audience of an organization while organizations seek the highest effectiveness on customers with the least expenses. Professional marketing fails to strike the necessary efficiency without advertising. Thus it is stands to reason to term advertising as investment rather cost despite the relatively heavy expenses made for advertisements (Mohammadian, 2006).

Advertising is elsewhere defined as the dissemination and spread of a principle and the final intention through its increase, development and natural propagation under given temporal and spatial conditions or messages that capture the attention of the individuals and draw them to an idea, product or service via a variety of advertising tools (Kotler and Armstrong, 2008).

Radio, newspapers, magazines, city advertisements and internet are considered as important advertising media. Different media elicit different responses because of their idiosyncratic effects on the audience. The most important distinction that can be drawn between various media is to categorize them as broadcasting media (radio and TV) and print media (newspapers and magazines). Broadcasting media seems better for conveying symbols and images while print media are more suitable for presentation of accurate and detailed information. Thus it could be concluded that while TV could be more successful in creation of a certain mood or a positive feeling in the audience, print media are more suitable for presentation of accurate and detailed information (Mohammadian, 2007).

2.2- Types of Advertisements

Advertisements are put in two general categories of marketing and non-marketing media in terms of message transfer:

A. Marketing media: Media are channels of conveying messages to the audience. Messages in this process are affected by the means of communication. Senders must send their messages in form of a text (books and magazines), picture (movies and TV) or sound (radio). Qualitative aspects must be taken into account during message transfers and in fact what makes the media reliable (Wai G, 2003).

Marketing media are placed in three subcategories:

1. **Written media:** this category covers newspapers, magazines, back covers of the books, prospectus, street handouts and similar items.
2. **Audio media:** radio, loudspeakers (streets, shopping centers, fairs) and similar items.
3. **Audio-visual and electronic media:** These media are categorized as movies, phones, TVs and modern communication tools such as satellites, internet etc based on the technology involved. These media could be generally divided as one-way media such as TV and interactive media (two—way) such as phone (Ghouchani, 2013).

B. Non-marketing media: a type of marketing in which the media are not paid for advertisements. The expenses of this type of marketing are primarily allocated to giving bonuses, discount packages and gifts with funds independent from marketing media (Forooz Far, 2006).

Advertising is divided in two forms of *indirect* or *direct* considering the form and type of message dissemination or way of suggestion or administration and *commercial* or *political* based on its topic. The division is made to facilitate the capturing of the roles and functions of advertising and impossible to separate in practice. Direct advertising focuses on communicating through conveying transparent, clear and primarily immediate promotional messages. Indirect advertising, as the name suggests, is hidden and implicit and usually employed by predator and imperialist trusts and governments through accurate planning and designs and calculated strategies and solutions. Commercial advertising takes place via the application of promotional tools such as placing ads in the press, publication of prospectus and leaflets, catalogues, poster, advertising in radio, TV and movie theaters, roadside signposts, placing advertisements on public vehicles etc by producers of products and services to introduce the products to domestic and international customers in the best possible way (Mohammadian, 2007).

III. Research Methodology

This research used survey method as its methodology. The survey method is primarily employed in the research in which an individual is the analysis unit.

3.1. The Research Conceptual Model

Dagmar model was used in this research to assess the efficiency of the target company's advertisements. In 1961, Russel Cully presented an advertisement targeting model which came to be known as Dagmar model. Dagmar model is rooted in thus theme that the effects of communication form the basis for measuring the success or failure of advertisement programs (Hamidi Zadeh, 2013). This model offers a useful method to capture how advertisements function. To define goals and use them to assess the efficiency of advertisements, Dagmar model considers the communication aspect as the primary goal of the advertisements and the basis of success or failure of advertisement programs. In Dagmar model, an advertisement goal is a clear, measurable communication task.
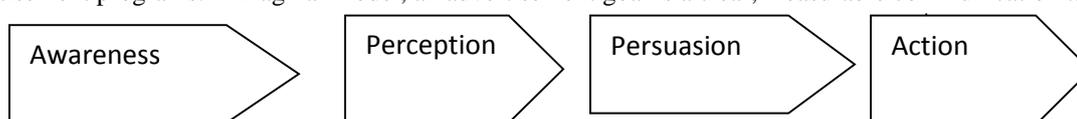

Figure 1. Dagmar Model

3.2. Research Hypotheses

The research hypotheses are as follows:

H1: Advertising via Telegram affects the awareness of the audience of Dadras Atash Tochal Company.

H2: Advertising via the company's website affects the awareness of the audience of Dadras Atash Tochal Company.

H3: Advertising via Telegram affects the perceptions of the audience of Dadras Atash Tochal Company.

H4: Advertising via the company's website affects the perceptions of the audience of Dadras Atash Tochal Company.

H5: Advertising via Telegram is effective in persuading the audience of Dadras Atash Tochal Company.

H6: Advertising via the company's website is effective in persuading the audience of Dadras Atash Tochal Company.

H7: Advertising via Telegram affects the purchase rates of the audience of Dadras Atash Tochal Company.

H8: Advertising via the company's website affects the purchase rates of the audience of Dadras Atash Tochal Company.

3.3. Research Variables

- **Dependent Variable:** Commercial advertising taking place in Dadras Atash Tochal Company is the dependent research variable.
- **Independent Variable:** Awareness, perception, persuasion and purchasing are independent variables which correspond with the research hypotheses
1. **Awareness:** informing customers about the brand
2. **Perception:** developing concept for the products and its applications for customers
3. **Persuasion:** creating a mental willingness in customers to purchase a product or service
4. **Action:** pushing the customer into completing the purchase
- **Main variables:** Advertising, awareness, perception, persuasion and purchase via Telegram and online advertisement on the company's website.

3.4. Data collection instruments

Questionnaires were employed for data collection purposes. Questionnaire is an instrument by which researchers receive the desired information from respondents by giving them written questions. The research questionnaire which used Liekert scale was designed by drawing on the suggestions and comments of experts of the field. In addition to individual characteristics, main variables of research which included advertising, awareness, perception, persuasion and purchase were addressed. Items of questionnaires were distributed base on the components of Dagmar model.

3.5. The reliability and validity of data collection instruments

The researcher was assured of the validity of the research measurement instrument after referring the instrument to experts of the fields and receiving their feedbacks. To measure the reliability (internal consistency) of the questionnaire, a pilot study was performed by distributing 30 questionnaires among the sample and then the reliability was evaluated by using alpha Cronbach and SPSS software. According to Field (2006), alpha Cronbach is common instrument for measuring the reliability with 0.7 as the minimum acceptance value for behavior research. Thus alpha Cronbach was used to examine the research reliability. Based on the results, alpha Cronbach values were larger than 0.7 for constructs and thus the data reliability were confirmed.

3.6. Statistical Population

The statistical population included the users of Dadras Atash Tochal fire extinguishers working in different organizations and companies or individuals working as the dealerships of the company for whom the questionnaires were forwarded.

3.7. Sampling method

The sampling method was purposive. In this method, researchers attempt to select a sample which represents the characteristics of the real society based on their judgments and expertise. Sampling was done purposively because the researcher and his supervisor concluded that the users with stronger backgrounds in Tochal Company would give more accurate and better documented answers to the questionnaires.

Krejcie and Morgan table as well as Cochran formula were employed for determining the sample size. Based on this table, a sample size of 291 individuals would be sufficient for a statistical population of 12000 individuals and thus 291 questionnaires were handed to the subjects. However, 270 questionnaires were completed and returned to the researcher. After completing a pilot study on a small portion of the statistical population (30 customers) and determining the standard deviation, the sample size was estimated by employing Cochran formula at a 5% error level and an accuracy of 1.5 of the sample size.

N=1200 P=0.5 q=0.5 z=1.96 d=0.05

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N}\left(\frac{z^2 pq}{d^2} - 1\right)} = \frac{384.16}{1 + \frac{1}{1200}(383.16)} = 291.18 \cong 291$$

N= Size of the society

n= Sample size

z= Value of the standard unit normal variable which is 1.96 at the confidence level of 95%.

p= Ratio of the characteristic that exists in the society. If this characteristic is not available, it could set at 0.5 where the variance is at its maximum.

q= The percent of the individuals which lack this characteristic, q=1-p

3.8. Data analysis

Once the questionnaires were completed, the items were coded and then the data were analyzed using SPSS software. At descriptive data analysis level, frequency tables, percentages, data charts (pie and column charts) and descriptive comparisons were used while at inferential data analysis level, Kolmogorov- Smirnov, t, Chi Square

and Friedman tests as well as path analysis were employed to see how the variables are related, examine the hypotheses, find significant relations, rejection or establishment of these relations and answer the research questions.

IV. Research Findings

4.1 Inferential tests

Most statistical tests are based on the normality of data distribution and thus they are run on this assumption that data distribution in a community or at the level of selected samples follows a normal procedure. Thus researchers must specify the distribution type of the variables before embarking upon any statistical analysis. This could be achieved through conducting Kolmogorov- Smirnov test.

In Kolmogorov- Smirnov test, null hypothesis is based on normal distribution of data while its counter-hypothesis follows a non-normal data distribution procedure. Considering the results and since the P value is larger than 0.05 in all variables, it could be concluded that the null hypothesis in not rejected, i.e. data follow a normal distribution pattern.

Considering the demographic features of the respondents, the relationships between the gender, age, education, the years the respondent have practiced this profession and the research variables should be investigated separately. Based on the analyses done on the tests of each feature, the following results have been obtained:

- Based on the results of an independent, two-sample t test for gender, it could be concluded that the gender did not have any effect on the efficiency of Dadras Atash Tochal Company's advertisements.
- Based on the results of one-way variance analysis test for age, it could be concluded that the age did not have any effect on the efficiency of Dadras Atash Tochal Company's advertisements in the eye of customers.
- Based on the results of one-way variance analysis test for education, it could be concluded that the education did not have any effect on the efficiency of Dadras Atash Tochal Company's advertisements in the eye of customers.
- Based on the results of one-way variance analysis test for the years spent in the job, it could be concluded that the education did not have any effect on the efficiency of Dadras Atash Tochal Company's advertisements in the eye of customers.

The aforementioned results point to the independence of demographic features and the status of respondents from the research variables.

3.9. Testing the Research Hypotheses

H1: Advertising via Telegram affects the awareness of the audience of Dadras Atash Tochal Company.

Null hypothesis and the counter hypothesis are expressed based on the following definitions:
Advertising via Telegram does not positively affect the awareness of the audience
$\qquad$ H0: $\mu \geq 3$
Advertising via Telegram positively affects the awareness of the audience
$\qquad$ H1: $\mu < 3$

To study the effects of advertisements via Telegram on the awareness of the audience, we conduct a one-way t test. First we examine the respective descriptive statistics in the table below

Table 1: The descriptive statistics of the variable of advertising via Telegram on awareness of the audience

	No	Mean	SD
Awareness of the audience via Telegram	270	3.9444	0.75566

As the table 1 suggests, the mean and the SD of this variable are 3. 9444 and 0. 75566, respectively. The mean is larger than the average level. Now we address t test statistics in the following table:

Table 2: The t test statistics of the variable of advertising via Telegram on awareness of the audience

One-way t test						
Test value= 3						
					Confidence level	
	T	DF	P- value	Mean difference	Lower limit	Upper limit
The effects on the awareness of the audience	20.537	269	0	0.9444	0.8539	1.0350

As t test statistic is 20.537 and p- is 0 (less than 0.05), the null hypothesis is rejected. In addition, the mean is 0.9444 more than the average level which means that Telegram significantly affects the awareness of the audience.

H2: Advertising via the company's website affects the awareness of the audience of Dadras Atash Tochal Company.

Null hypothesis and the counter hypothesis are expressed based on the following definitions:

Advertising via the company's website does not positively affect the awareness of the audience: H0: μ≥3

Advertising via the company's website positively affects the awareness of the audience: H1: μ <3

To study the effects of advertisements via the company's website on the awareness of the audience, we conduct a one-way t test. First we examine the respective descriptive statistics in the table below.

Table 3: The descriptive statistics of the variable of advertising via the company's website on awareness of the audience

	No	Mean	SD
Awareness of the audience via the company's website	270	3.90988	0.83482

As the table 2 suggests, the mean and the SD of this variable are 3. 90988 and 0. 83482, respectively. The mean is larger than the average level. Now we address t test statistics in the following table:

Table 4: The t test statistics of the variable of advertising via the company's website on awareness of the audience

One-way t test						
Test value= 3						
	T	DF	P- value	Mean difference	Confidence level	
					Lower limit	Upper limit
The effects on the awareness of the audience via the website	17. 909	269	0	0.90988	0.8098	1.0099

As t test statistic is 20.537 and p- is 0 (less than 0.05), the null hypothesis is rejected. In addition, the mean is 0.90988 more than the average level which means that the company's website significantly affects the awareness of the audience.

H3: Advertising via Telegram affects the perceptions of the audience of Dadras Atash Tochal Company.

Null hypothesis and the counter hypothesis are expressed based on the following definitions:

Advertising via Telegram does not positively affect the perceptions of the audience: H0: μ≥3

Advertising via Telegram positively affects the perceptions of the audience: H1: μ <3

To study the effects of advertisements via Telegram on the perceptions of the audience, we conduct a one-way t test. First we examine the respective descriptive statistics in the table below

Table 5: The descriptive statistics of the variable of advertising via Telegram on perceptions of the audience

	No	Mean	SD
The effects of Telegram on perceptions of the audience	270	3.81481	0.71460

As the table 5 suggests, the mean and the SD of this variable are 3. 81481 and 0. 5504, respectively. The mean is larger than the average level. Now we address t test statistics in the following table:

Table 6: The t test statistics of the variable of advertising via Telegram on perceptions of the audience

One-way t test						
Test value= 3						
					Confidence level	
	T	DF	P- value	Mean difference	Lower limit	Upper limit
The effects on the perceptions of the audience	18. 736	269	0	0.81481	0.7292	0.9004

As t test statistic is 18.736 and p- is 0 (less than 0.05), the null hypothesis is rejected. In addition, the mean is 0.81481 more than the average level which means that advertising via Telegram significantly affects the perceptions of the audience.

H4: Advertising via the company's website affects the perceptions of the audience of Dadras Atash Tochal Company.

Null hypothesis and the counter hypothesis are expressed based on the following definitions:

Advertising via the company's website does not positively affect the perceptions of the audience: H0: μ≥3

Advertising via the company's website positively affects the perceptions of the audience: H1: μ <3

To study the effects of advertisements via the company's website on the perceptions of the audience, we conduct a one-way t test. First we examine the respective descriptive statistics in the table below

Table 7: The descriptive statistics of the variable of advertising via the company's website on perceptions of the audience

	No	Mean	SD
The effects of Telegram on perceptions of the audience	270	3.89333	0.76845

As the table 7 suggests, the mean and the SD of this variable are 3. 8933 and 0. 76845, respectively. The mean is larger than the average level. Now we address t test statistics in the following table:

Table 8: The t test statistics of the variable of advertising via the company's website on perceptions of the audience

One-way t test						
Test value= 3						
	T	DF	P- value	Mean difference	Confidence level	
					Lower limit	Upper limit
The effects on the perceptions of the audience	19. 102	269	0	0.89333	0.8013	0.9854

As t test statistic is 19.102 and p- is 0 (less than 0.05), the null hypothesis is rejected. In addition, the mean is 0.8933 more than the average level which means that advertising via the company's website significantly affects the perceptions of the audience.

H5: Advertising via Telegram is effective in persuading the audience of Dadras Atash Tochal Company.

Null hypothesis and the counter hypothesis are expressed based on the following definitions:

Advertising via Telegram does not positively affect the persuasion of the audience: H0: $\mu \geq 3$

Advertising via Telegram positively affects the persuasion of the audience: H1: $\mu < 3$

To study the effects of advertisements via Telegram on the persuasion of the audience, we conduct a one-way t test. First we examine the respective descriptive statistics in the table below

Table 9: The descriptive statistics of the variable of advertising via Telegram on persuasion of the audience

	No	Mean	SD
The effects of Telegram on persuasion of the audience	270	3.35926	0.84435

As the table 9 suggests, the mean and the SD of this variable are 3. 35926 and 0. 84435, respectively. The mean is larger than the average level. Now we address t test statistics in the following table:

Table 10: The t test statistics of the variable of advertising via Telegram on persuasion of the audience

One-way t test						
Test value= 3						
					Confidence level	
	T	DF	P- value	Mean difference	Lower limit	Upper limit
The effects on the perceptions of the audience	6. 991	269	0	0. 35926	0.2581	0.4604

As t test statistic is 6.991 and p- is 0 (less than 0.05), the null hypothesis is rejected. In addition, the mean is 0.3593 more than the average level which means that advertising via Telegram significantly affects the persuasion of the audience.

H6: Advertising via the company's website is effective in persuading the audience of Dadras Atash Tochal Company.

Null hypothesis and the counter hypothesis are expressed based on the following definitions:

Advertising via the company's website does not positively affect the persuasion of the audience: H0: $\mu \geq 3$

Advertising via the company's website positively affects the persuasion of the audience: H1: $\mu < 3$

To study the effects of advertisements via the company's website on the persuasion of the audience, we conduct a one-way t test. First we examine the respective descriptive statistics in the table below

Table 11: The descriptive statistics of the variable of advertising via the company's website on persuasion of the audience

	No	Mean	SD

The effects of Telegram on perceptions of the audience	270	3.58025	1.03389

As the table 11 suggests, the mean and the SD of this variable are 3. 58025 and 1.034, respectively. The mean is larger than the average level. Now we address t test statistics in the following table:

Table 12: The t test statistics of the variable of advertising via the company's website on persuasion of the audience

One-way t test						
Test value= 3						
	T	DF	P- value	Mean difference	Confidence level	
					Lower limit	Upper limit
The effects on the persuasion of the audience	9. 222	269	0	0.58025	0.4564	0.7041

As t test statistic is 9.222 and p- is 0 (less than 0.05), the null hypothesis is rejected. In addition, the mean is 0.58025 more than the average level which means that advertising via the company's website significantly affects the persuasion of the audience.

H7: Advertising via Telegram affects the purchase rates of the audience of Dadras Atash Tochal Company.

Null hypothesis and the counter hypothesis are expressed based on the following definitions:

Advertising via Telegram does not positively affect the purchase rates of the audience: H0: $\mu \geq 3$
Advertising via Telegram positively affects the purchase rates of the audience: H1: $\mu < 3$

To study the effects of advertisements via Telegram on the purchase rates of the audience, we conduct a one-way t test. First we examine the respective descriptive statistics in the table below

Table 13: The descriptive statistics of the variable of advertising via Telegram on purchase rates of the audience

	No	Mean	SD
The effects of Telegram on purchase rates of the audience	270	2.9852	0.91445

As the table 9 suggests, the mean and the SD of this variable are 2. 9852 and 0. 91445, respectively. The mean is larger than the average level. Now we address t test statistics in the following table:

Table 14: The t test statistics of the variable of advertising via Telegram on persuasion of the audience

One-way t test						
Test value= 3						
	T	DF	P- value	Mean difference	Confidence level	
					Lower limit	Upper limit
The effects on the persuasion of the audience	-0. 266	269	0.790	-0. 01481	-0.1244	0.948

As t test statistic is 6.991 and p- is 0.790 (larger than 0.05), the null hypothesis is not rejected which means that advertising via Telegram does not significantly affect the persuasion of the audience.

H8: Advertising via the company's website affects the purchase rates of the audience of Dadras Atash Tochal Company.

Null hypothesis and the counter hypothesis are expressed based on the following definitions:

Advertising via the company's website does not positively affect the purchase rates of the audience: H0: $\mu \geq 3$
Advertising via the company's website positively affects the purchase rates of the audience: H1: $\mu < 3$

To study the effects of advertisements via the company's website on the purchase rates of the audience, we conduct a one-way t test. First we examine the respective descriptive statistics in the table below

Table 15: The descriptive statistics of the variable of advertising via the company's website on purchase rates of the audience

	No	Mean	SD
The effects of the company's website on purchase rates of the audience	270	3.55741	0.83790

As the table 15 suggests, the mean and the SD of this variable are 3. 55741 and 0. 83790, respectively. The mean is larger than the average level. Now we address t test statistics in the following table:

Table 16: The t test statistics of the variable of advertising via the company's website on persuasion of the audience

One-way t test

Test value= 3						
	T	DF	P- value	Mean difference	Confidence level	
					Lower limit	Upper limit
The effects on the persuasion of the audience	10. 931	269	0	0.55741	0.4570	0.6578

As t test statistic is 6.991 and p- is 0 (less than 0.05), the null hypothesis is rejected which means that advertising via the company's website significantly affects the persuasion of the audience.

3.10. Ranking and comparing the advertisement tools
We administered Friedman's test to examine and compare the efficiency of different advertising tools, the results of which are presented in table 17.

Table 17. Friedman Test Statistics

Test Statistics	
No	270
Friedman Test Statistics	82.41
DF	2
P- Value	0

Table 18 displays the means or rankings for each dimension of advertisement tools:

Rankings	
	Means of Ranking
Website	2.45
Telegram	1.81

Table 19: Ranking the advertisement tools based on the means

	Mean	SD	Variance
Website	3.7352	0.67046	0.450
Telegram	3.5259	0.62294	0.388

As the table suggests, the company's website has the highest efficiency with a ranking mean of 2.45.

V. Discussion and Conclusion
This research attempted to measure the effectiveness of the advertisements made by Dadras Atash Tochal via its website and Telegram social medium in from March 2016 to October of the same year and identify the most important factor in enhancing the efficiency of such advertisements. For this, after completing library and documentary studies, a Liekert type questionnaire was designed with an alpha Cronbach of 0.914 and then submitted to the statistical sample (n=291) to be completed. Out of 290 questionnaires, 270 questionnaires were returned and subsequently analyzed. Considering the analyses done, the findings and also the results, it could be concluded that advertising via the company's website and Telegram social medium has successfully gone through all the steps of Dagmar model. Now we address the result of analyzing the hypotheses:

H1: Advertising via Telegram affects the awareness of the audience of Dadras Atash Tochal Company.
The results indicated that the mean and the SD of creating awareness in the audience via Telegram were 3.94 and 0.75, respectively. As the respective table suggests, points given by 0.85 of Tochal customers to the awareness variable were smaller than the average level of 3 while points given by 1.035 of the customers were larger than the average level. Therefore it could be concluded that advertisements of Tochal Company via Telegram were effective on the awareness of the audience.

H2: Advertising via the company's website affects the awareness of the audience of Dadras Atash Tochal Company.
The results indicated that the mean and the SD of creating awareness in the audience via the company's website were 3.904 and 0.83, respectively. As the respective table suggests, points given by 0.80 of Tochal customers to the awareness variable were smaller than the average level of 3 while points given by 1.009 of the customers were larger than the average level. Therefore it could be concluded that advertisements of Tochal Company via the company's website were effective on the awareness of the audience.

H3: Advertising via Telegram affects the perceptions of the audience of Dadras Atash Tochal Company.
The results indicated that the mean and the SD of perceptions of the audience via Telegram were 3.81 and 0.71, respectively. As the respective table suggests, points given by 0.72 of Tochal customers to the perception variable were smaller than the average level of 3 while points given by 0.9004 of the customers were larger than the average

level. Therefore it could be concluded that advertisements of Tochal Company via Telegram were effective on the perception of the audience.

H4: Advertising via the company's website affects the perceptions of the audience of Dadras Atash Tochal Company.
The results indicated that the mean and the SD of perceptions of the audience via the company's website were 3.81 and 0.71, respectively. As the respective table suggests, points given by 0.72 of Tochal customers to the perception variable were smaller than the average level of 3 while points given by 0.9004 of the customers were larger than the average level. Therefore it could be concluded that advertisements of Tochal Company via Telegram were effective on the perception of the audience.

H5: Advertising via Telegram is effective in persuading the audience of Dadras Atash Tochal Company.
The results indicated that the mean and the SD of persuading the audience via Telegram were 3.35 and 0.84, respectively. As the respective table suggests, points given by 0.25 of Tochal customers to the persuasion variable were smaller than the average level of 3 while points given by 0.46 of the customers were larger than the average level. Therefore it could be concluded that advertisements of Tochal Company via Telegram were effective on the persuading the audience.

H6: Advertising via the company's website is effective in persuading the audience of Dadras Atash Tochal Company.
The results indicated that the mean and the SD of persuading the audience via the company's website were 3.58 and 1.033, respectively. As the respective table suggests, points given by 0.45 of Tochal customers to the persuasion variable were smaller than the average level of 3 while points given by 0.70 of the customers were larger than the average level. Therefore it could be concluded that advertisements of Tochal Company via Telegram were effective on the persuading the audience.

H7: Advertising via Telegram affects the purchase rates of the audience of Dadras Atash Tochal Company.
The results indicated that the mean and the SD of purchase rates of the audience via Telegram were 2.98 and 0.91, respectively. As the respective table suggests, points given by -0.12 of Tochal customers to the purchase rate variable were smaller than the average level of 3 while points given by 0.094 of the customers were larger than the average level. Therefore it could be concluded that advertisements of Tochal Company via Telegram were effective on the purchase rates the audience.

H8: Advertising via the company's website affects the purchase rates of the audience of Dadras Atash Tochal Company.
The results indicated that the mean and the SD of purchase rates the audience via the company's website were 3.58 and 1.033, respectively. As the respective table suggests, points given by 0.45 of Tochal customers to the purchase rate variable were smaller than the average level of 3 while points given by 0.70 of the customers were larger than the average level. Therefore it could be concluded that advertisements of Tochal Company via Telegram were effective on the purchase rates of the audience.

Based on the research findings, Dadras Atash Tochal Company has been successful to some extent in informing the audience about its innovating activities via dissemination of advertising messages and as a result has played an important role in development of entrepreneurship in the society. Therefore, it could be suggested that the variables of Dagmar model are positively associated with each other.

Value-creating advertisements of Tochal Company have managed to have significant effects on the perceptions, persuasion and the purchase decision of the audience by drawing on the results of the present research. Tochal customers remember the advertisement messages of this company to some extent and described these messages as inspiring and comprehensible. These customers showed belief in honesty of the messages and became inclined to the products of this company after developing a positive attitude toward the products, even without seeking the counseling of others. However, the advertisements of Tochal Company were no distinct from other producers of fire extinguishers in Iran which should be taken into account by decision-makers of the company. The advertisements have not been the only success factor of the company and other factors such as the quality of the products, the availability of the products and post-sales services have as well contributed to this success. The services and products offered match the promotional messages to some extent, customers feel satisfied about the products and recommend the products to others in some cases.

Considering the rankings of advertisement tools obtained after administering Friedman test, the company's website had the highest efficiency with a mean ranking of 2.45 which plays an important role in identifying the product and the trademark of the company. Thus, this company could use internet to spread more

information about its products and services with less expenses. This could help the company identify its products and take steps in creation of positive attitudes in customers.

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