

## USING FISHBEIN MODEL TO MEASURE INDIVIDUAL'S ATTITUDES TOWARD ELECTRONIC COMMUNICATION MEANS

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### ABSTRACT

The study aims to use the Fishbein (1967) model in measuring individual's attitudes on sent messages through electronic communication means and their effect of these messages on individual attitudes. Many aspects included in this study are compatible with the study's model which is the characteristics, the evaluation aspect (importance), the belief, the effect, and the attitudes. In this study, there are four dimensions; a hypothesis for each dimension was constructed. A questionnaire was designed in accordance to the Fishbein model which included (78) questions divided into the study's dimensions, through which data was collected to be analysed, hypothesis tested, results obtained and conclusion.

The questionnaire was then evaluated by experts in fields of marketing and media in order to draft the final form. (155) answers were valid for statistical analysis. Many methods of statistical analysis were used like one sample T-test, and descriptive analysis. Adding, the special technique used in obtaining the results for the Fishbein model specifically and extra written models generally.

The results for the statistical analysis and the usage of the model explained that there was a difference in the evaluation of the importance of properties for the individuals in the study sample, at the same time the belief aspect makes available the properties in sent messages through electronic communication means, also different between individuals.

Also, individuals' attitudes on these messages were varied, as Facebook came first in the evaluation and attitude value, while the website mean came last in evaluation and attitude value. All hypotheses were accepted, although the attitude value for the website mean was less than the standard attitude value.

**KEYWORDS:** Attitude, E-communication Means, Evaluation Aspect, Belief Aspect, Messages

### INTRODUCTION

Electronic communication means are currently considered an important tool in the communication and connection process between individuals, which are increasingly being used at many levels to send different messages amongst individuals and different organizations. At the same time, the mounting role of sent messages through electronic communication means from the aspect of the number and the effect made form it the approach which organizations and individuals are trying to depend in the process of communication and connection.

Electronic communication method is one of the important elements in electronic marketing which use is growing by business organizations regardless of their kind, and the sent messages through any electronic communication mean changes an important centre in the success of the marketing strategy.

This study focuses on measuring individual's attitude towards the sent means through electronic communication means by using Fishbein model which is considered a base for all advanced models and properties which were the product of the work of many professionals like Fishbein 1967, Resenberg 1956, Bass&Talarzyh 1972, and Ajzen 1975, amongst others.

This study introduced many attitudes which are included in the sent messages through different electronic communication means for the determination of individuals assessment for these elements and their importance according to individuals, also the belief aspect involves these properties in sent messages through different electronic communication means which are accounted for in this study are Twitter, Websites, Facebook, Mobile Phones, and E-mail for the assessment of which of these and individual attitudes towards them and the sent messages, also the effect of each mean on individual attitudes.

The study is multidimensional and took into consideration the study model's vocabulary used with the addition of one conditioning related to the effect of the sent messages properties on the individuals' attitudes.

## RESEARCH QUESTIONS

Recently, the multi-media electronic communication, with it all various types, has been abounded. The increasing turnout in a wide range from the individuals to use the multi-media electronic communication, also, the current trends of the business organizations in using these means of communications in contacting the customers and try to affect their opinions through the messages that that been sent through the electronic communication. But, the multiplicity of the sent messages causes a jostle of all these sent messages, which may lead to baffle the customers with the type and the contents of these messages and the impact of these messages on the different attitudes, which may be measured by using the model of Fish be in (1967).

The problem of this study denounces the following questions:

- What is the opinion of customers about the sent messages through the different electronic communications?
- Is the contents of the messages has effects over the customers attitudes?
- Is it possible to determine the customers' attitudes towards the sent messages using Fishbein model?
- Are the customers attitudes affected by one type of the electronic communication more than the other types?
- Which type of the electronic communication has found to be more accepted by the customers?

## OBJECTIVE OF THE STUDY

The messages that sent through the electronic communication are considered to be a good promotional and effective tool over the attitudes of the customers due to the information that it contains. But there are no studies that clearly based on the attitudes of the customers towards these messages and their effect. Based on the brief introduction the main objectives of this study are:

- Understand the using of Fishbein model in determine the customers attitudes towards the messages sent through the multi-media electronic communication.
- Determine the customers' attitudes towards the sent messages by the business organizations.

- Understand the customers' evaluation of the messages properties and the different electronic communication.
- Determine the effect of the different multi-media electronic communication's messages over the customers attitudes.
- To figure out the most effective type of the multi-media electronic communication over the customers attitudes.

## THE STUDY MODEL

The model in this study depends on the components of the Fishbein model, which is one of the multifunctional models of the compensatory type. It is belonging to the linear over time; these models evaluate the individuals' attitudes toward something. The theoretical basic of these models Intended to composition and changing attitudes. Many models are found to be included in this group of models: Bass and Talarzayk (1972), Fishbein (1967), Rosenberg (1956), Fishbein and Ajzen (1975), Cohen and Houston (1971), Sheth (1970) and many others.

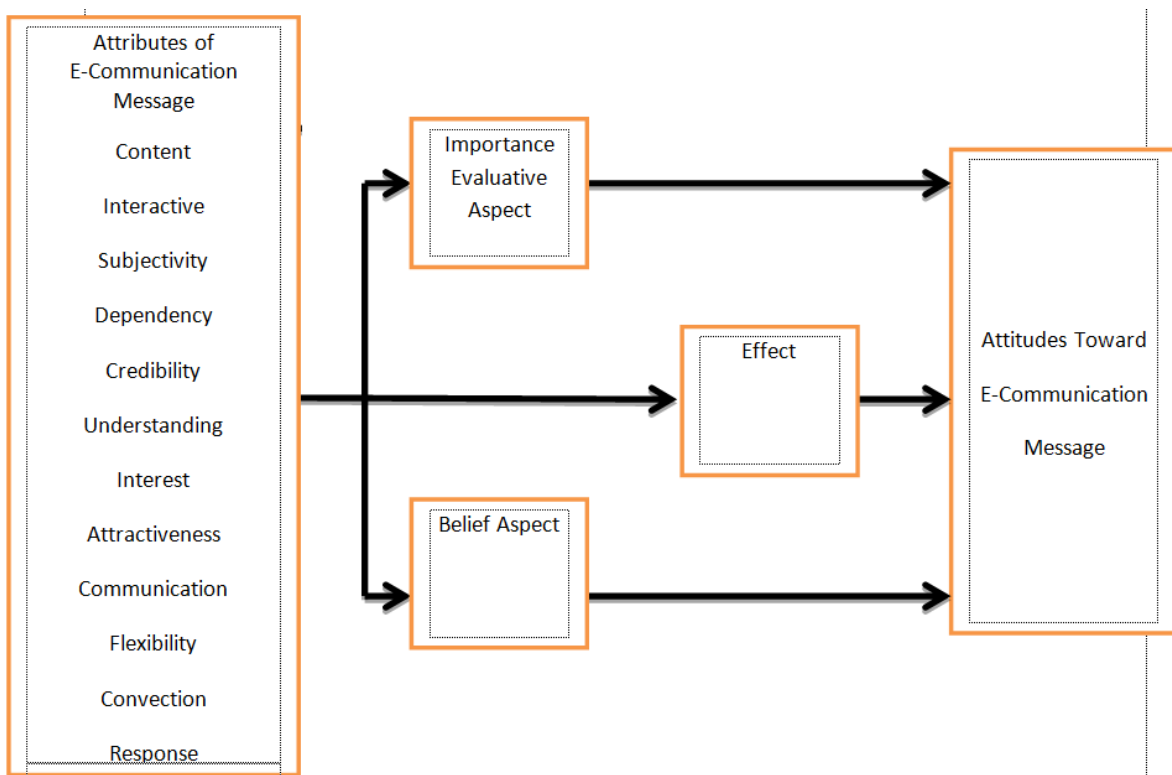


Figure 1: Study Model

## STUDY HYPOTHESES

In light of the study objectives and model, the study hypotheses are formulated as following:

- H1:** The evaluation of attribute importance is varied according to individuals.
- H2:** Providing the important by E-communication messages would be different according to individuals' beliefs.
- H3:** The individuals' have a positive attitude towards E-communication media.
- H4:** There is a positive effect of E-communication messages on individuals' attitudes.

## LITERATURE REVIEW

### Attitude

Attitude has been defined in terms of an acquired behavioral disposition (Campbell, 1963), degree of positive evaluation, or “a mental and neural state of readiness exerting a dynamic influence upon” behavior (Allport, 1935). One widespread conceptualization of attitude is the tripartite model (Eagly&Chaiken, 1993). According to the tripartite model, an attitude is comprised of three correlated, but distinct include self-report measures of feeling about attitude objects and physiological measures such as blood pressure and heart rate. Cognitive measures may include beliefs about attitude objects and judged evaluative favorability toward attitude objects

Attitude is an important concept in research on marketing and information systems. Fishbein defined an attitude as a learned predisposition of human beings. Based on this predisposition, “an individual would respond to an object (or an idea) or a number of things (or opinions)”. Since researchers have been studying the subject for long time, there is a large body of literature dealing with consumer attitudes toward advertising in general and toward advertising on the Internet.

An attitude can be defined as a positive or negative evaluation of people, objects, event, activities, ideas, or just about anything in your environment (Zimbardo&Lieppe, 1991). In the opinion of Brain (1930), an attitude is “the relatively stable overt behavior of a person which affects his status”. “Attitudes which are different to a group are thus social attitudes or ‘values’ in the Thomsonian sense. The attitude is the status-fixing behavior. This differentiates it from habit and vegetative processes as such, and totally been emphasized. It is how one judges any person, situation or object.

North (1932) has defined attitude as “the totality of those states lead to or point toward some particular activity of the organism. The attitude is, therefore, the dynamic element in human behavior, the motive for activity”. For Lumley (1928) an attitude is “a susceptibility to certain kinds of stimuli and readiness to respond repeatedly in a given way - which are possible toward our world and the parts of it which impinge upon us”.

Mandy and Esther (2008) stated that the attitude is the mediator between belief and behavioral intention, and entertainment belief has the strongest effect on attitude. Nathan and Eleanor (2011) said that an attitude can be defined as an individual’s tendency to evaluate an object as positive or negative. Consumer researchers are mainly interested in attitude objects of two classes: products and services, including their functional properties (attributes), hedonic consequences (affect, utility, value), and their symbolic (brands, package designs, advertisements) and social representations (manufacturers, service staff, other consumers or users, reference groups. Reza et al (1971) suggested based on Rosenberg-Fishbein approach, that attitude toward a product is a function of the sum of perceived attributes (perceived instrumentality or strength of belief aspect) weighted as to their importance (value importance or evaluative aspect) possessed by that product.

Attitude is also an important construct for information systems research. For example, within the technology acceptance model that predicts the use of perceived ease of use, attitude, intention, and use. The relationships between attitude, intention, and behavior have been studied and confirmed in numerous studies. Kraus (1995) and OlsoandZanna (1993) both suggest that attitude, which are relatively permanent and stable evaluative summaries about an item, are an important construct for information systems research. For example, the technology acceptance model that predicts the use of perceived ease of use, attitude, intention, and use psychological construct because they have been found to influence and predict many behaviors.

North (1932) refers to the attitude as “the totality of behavior that leads to or point toward some particular activity of the organism”. The attitude is, therefore, the dynamic element in human behavior, the motive for activity”. Attitude has been defined in terms of an acquired behavioral disposition (Campbell, 1963), degree of positive or negative evaluation, or “a mental and neural state of readiness exerting a dynamic influence upon” behavior (Allport, 1935) One widespread

While (Solomon, 2008) refers an attitude in marketing terms is defined as a general evaluation of a product or service formed over time. An attitude satisfies a personal motive- and at the same time, affects the shopping and buying habits of consumers. An attitude in marketing terms is defined as a general evaluation of a product or service formed over time (Solomon, 2008). An attitude satisfies a personal motive- and at the same time, affects the shopping and buying habits of consumers. Lars (2012) defines consumer attitude simply as a composite of a consumer's beliefs, feelings, and behavioral intentions toward some object within the context of marketing. A consumer can hold negative or positive beliefs or feelings toward a product or service. A behavioral intention is defined by the consumer's belief or feeling with respect to the product or service (AlSamyda et al, 2014).

Breckler and Wiggins (1989) state that “The concept of attitude has evolved to refer to a person's mental and mental state of neediness”. Furthermore, Rosenberg (1956), Fishbein (1967), Wyer (1974) and McCuire (1968) Stated that “Individual's attitude toward any object is a function of this evaluation belief about that object”.

According to Fishbein and Ajzen (1975) the individual's attitude is the Belief at a specific moment, therefore, Fishbein's point of view as mentioned in Authman (1986) is:

- Belief is determined by the total beliefs.
- Changing the attitude must be due to change beliefs.

On the other hand, “The definition of attitude should consist of cognitive, affective, and cognitive components” (Ajzen, 2005). Moreover, attitude is defined as “Affect for against a psychological object” (Ajzen, 2006).

Eagly and Chaiken (1993) define attitude as “A psychological to evaluate an object with some degree of favor or disfavor” (AlSamyda et al, 2013).

The work of Rosenberg, Fishbein and others has strongly indicated that an individual's attitude towards any object is the function of his evaluation beliefs about that object (Reza & Douglas, 1971). Since attitude represents one of the important and basic stages of accepting something a product, News, media messages and specific ideas the properties of attitude in something is the rule of the models to measure the individual's attitude toward this thing. These models consider that the overall individual's attitude toward any available thing depends on what is presented by this thing including the different properties that may concern this individual. Thus, measuring this attitude is done on the multi-dimensional basis that determines how the individual assesses these properties, and therefore, the total ratings weighted value given for each property represents the individual's attitude toward this thing.

According to Fishbein and Ajzen (1975) the individuals' attitude is the belief at a specific moment, therefore Fishbein's point of view as mentioned by Authman (1986) and (Al samyda et al, 2013):

- Belief is the cause of the attitude
- Attitude is determined by the total beliefs

- Changing the attitude must be buy to change beliefs

According to Ajzen (2005), the definition of attitude should consist of cognitive, affective and cognitive components. These components form the mental element of the attitude (understanding what is observed, joining what is understood).

### **Belief**

The components of an attitude including belief and behavior are at odds and an individual may adjust one to match the other (Brink, 2008).

It should be noted that the hereditary variables may affect attitude but believes that they may do so indirectly. As with any type of heritability, to determine if a particular trait has basis in our gens, twin studies are used (Brandt & Wetherell, 2012).

Hogg and Vaughan (2005) stated that “An attitude is a relatively enduring organization of beliefs, feelings, and behavioral tendencies towards socially significant objects, groups’ event or symbols” (Saul Mcleod, 2009).

It is clear then that Attitude is: “The mediator between belief and behavioral intention, and entertainment belief has the strongest effect on attitude” (Mandy et al, 2008).

Finally, the definition introduced by Nathan and Eleanor (2011) is a simple and expressive one: “An attitude can be defined as an individual’s tendency to evaluate an object as positive or negative”.

This goes with what was mentioned by (Alsamydai & Rudaina, 2005), they defined attitude as preparing the individual to evaluate a specific issue positively or negatively (idea, product, service).

### **Important**

When the characteristic is important, it will have a high and expressive impact in selecting decision or the overall arranging of competing alternatives.

The concept of specific characteristic for the selecting decision has been introduced by Myers & Alpert (1968). They have stated that the attitude toward the specific characteristics that are taken into account by the individual’s preferences or in making decision are called the specific characteristics for making the selection decision. In order for the characteristics to be specific to make the selection decision and to be a basic standard, they should be essential and have the sufficient importance in this decision and should exist in the individual’s mind. Alsamydai and Rudaina (2005) have stated that it is important to pay attention that not all the important characteristics considered as an assertive and determinant standard for selection or purchasing decision, nevertheless, they should have an attribute, i.e. it should represent an element that differentiate between the alternatives (products).

### **Fishbein Model**

Fishbein (1967) model is classified within the linear multifunctional models of the compensatory type. This means that this model may be represented by a linear equation and it is follow the linear trend in adding the preferable system of individual towards anything (product, service, idea ... etc). Based on that the value and the level benefits towards any property are compatible with Alsamydai (2000):

- The possibility of compensate between the different levels of the properties. This mean the little satiated of poorly evaluated property can be compensating by higher satiation coupled with a high value of another property for the same thing or for its alternative.
- The levels of benefits related or coupled with different values of individual properties from each other.
- The alternative, which is chosen, is the alternative that has the highest value over all the conjugated values with different properties regardless the values that evaluated with low values for the same alternative.
- The chosen alternative is not necessarily has a high evaluation over all properties, only the poorly evaluated property, which can be compensating by another property with higher evaluation.

Based on the previous points, the benefit revels from each action taken by the decision maker will be restricted to a quantitative relation and the value of this quantitative relation are used to arrange the different alternatives, then all different principles will allow to arrange the alternatives in a descending trend. This means that the decision maker will have many levels of decisions that he should take one of them based on what alternative he had (AlSamydaï&Rudaina, 2005).

In the same time, Fishbein model is based on the theory of the creation and change of the attitude, and that the attitude plays a basic role in the acceptance of a topic (product, service, person, idea--- etc.) or the refusal of it. Subject properties is considered as the basis in measuring attitudes because it plays an important role in the acceptance or rejection of the subject (AlSamydaï&Rudaina, 2013) accordingly, measuring the attitude can be done on a multi- dimensional base, in which determines how does the individual evaluate the properties and then, evaluation results are to be processed in order to determine attitudes towards the study's subject. Fishbein model is classified as one of the compensatory models which suggest that the individual chooses the alternative that gets the highest appraisal for properties he is concerned about, and not on all the characteristics of the subject (AlSamydaï&Rudaina 2005).

Both (Fishbein&Ajzen, 1972; Olson &Zanna, 1993) indicated that the concept of attitude is categorized into a trio of affection, beliefs, and values and cognition. In the effective aspect, the term 'attitude'' shows the individual's

The equation of Fishbein model is:

$$A_j = \sum_i^n a_i * b_{ij}$$

Where,

$A_j$  = Attitude toward the object (product, service)

$A_i$  = Importance of the attribute

$b_{ij}$  = Belief about the product's possession of the attribute

$n$  = Number (n) of attributes

The current study will focus on the using of the Fishbein model (1967) for measuring the attitudes to determine the people attitudes towards the messages of the electronic communication and the impact of these messages on their attitudes. Many researchers and studies that take care of studying the attitudes and the effect of the behavioral intention and

attitudes, where it is found that there is a considerable overlapping between the attitudes and the behavioral intention of the person/customer, where knowing the attitudes of the customers towards something then it is possible to predict their subsequent behavior (AlSamyadai&Rudina, 2007). This theoretical basic of attitudes was studied by many researchers; such as: Osgood and Tannenbaum, (1955), Sheth and Talazyh (1970), Fishbein (1967), Rosenberg (1956), Ajzen (1985, 1991, 2001, 2002 and 2006), Cohen and Houston (1971) and Sheth (1970).

Flazio and Olson (2003) and many researchers mainly focus on studying the attitudes towards many subjects (products, services, ideas ...etc.). On the other hand, many researchers have adapted the Fishbein model as the work of Bass and Tolorzy (1971) in marketing. Add to that many studies that used the Fishbein model to study the attitudes such as: Wdong (1983), AlSamyadai (1986 and 1987) and Othman (1986), where they success in using and applying this model in studying many cases that related to products or services or ideas .

In 2013, AlSamyadai et al, used Bass and Talarzy (1971) model, which is the adaptation of Fishbein model (1967) in the field of communication, where their studies focus on the Arabic television channels and determine the effect of these channels over the prevalent events in the Middle East. Where Hofsted (1998) had studies the effect of attitudes in the organization culture and found out that communication and cooperation affect attitude greater than any other organization practice.

Ledbetterm (2009) had a study how the attitudes affect the intentions to communicated via computer-media communication and social networking sites, while Tshering`s (2009) study focused on the attitudes towards mass media. It has provided evidence that moderate exposure to Television is likely to enhance people environment and outlook, where Alazam and Al Kathy (2010) study focused on studying the attitudes by the means of media performance. This study revealed the attitude towards the performance media of Jordanian media in number of economic, social, political and security issue. Ling et al (2010) study the determinants of customers` attitude toward advertising. Jothi et al (2011) study analysis of the social networking sites. Also, Haghirian&and Madiberger (2005) study consumer attitude toward advertising via mobile devices. AlSamyadai and Khasawneh (2013) study antecedents and consequences of E-Jordanian consumer behavior regarding Facebook advertising.

AlSamyadai et al, (2014) had studied the customers` attitudes towards government-owned banks services especially in Iraq. The study showed that more positive attitudes were reported from the customers towards the private banks, due to the fact that the services of the private banks are better than the government-owned banks. Also, Fishbein model (1967) was used in this study.

The current study will focus on the customers` attitudes towards the messages sent by the multi-media electronic communication and determine the characteristics of the most important messages. Also, this study will focus on the impact of the multi-media electronic communication on the persons` attitudes.

## **METHODOLOGY**

### **Data Source**

This study has utilized two types of data sources necessary to implement this study:

- Secondary sources

Data and information obtained from reviewing the literature and researches, which were found related to the



development of the study model as well as to the attribute models to be applied.

- **Primary Sources**

The data necessary to develop the final questionnaire of the study, where two questions were raised, the first one is about the characteristics (attributes) that are important to the viewers, and the second one is about the E- Communication media messages that are tracked continuously by individuals and viewers. This questionnaire was randomly distributed to (37) individuals. Based on the results, the final questionnaire has been designed and then evaluated by many speculates who provided observations and suggestions for the final drafting, which included (72) questions distributed over four dimensions.

### **The Scale and Dimensions**

This study is based mainly on applying the linear model of multi attribute attitude models by Fishbein(1967), which was adapted in the field of marketing by many researchers: Bass and Talarzyk (1971 and 1972), Ndong (1983), AlSamaydai (1986), Othman,(1986), AlSamaydai at al, (2014).

Likert (scale (1 - 5) is used in this study, the phrases are used according to three classes:

- Importance: very important, important, neutral, unimportant never important.
- Rating (belief): very available, available, neutral, not available never available.
- Impact: very touching, touching moving, neutral non-touching, never touching.

In addition, this study is divided into four dimensions according to the study's model and the Fishbein model.

- **Dimension (1):** The Importance of Attributes.
- **Dimension (2):** Evaluation (Belief Aspect).
- **Dimension (3):** Attitude's Values.
- **Dimension (4):** The Effect of the Media Messages

### **Analyzing Method**

Several statistical techniques are used in this study including the descriptive analysis, frequency analysis, and one simple t-test, to test the acceptance or rejection of hypotheses as well as the technique used in applying Fishbein model.

## **RESULTS**

### **Test of Reliability**

The reliability coefficient of cronbach`s alpha is considered to be “acceptable” when is it about 70% or higher in most social science researches. The following table shows the result of this test in the current study which is 83%.

**Table 1: Reliability Coefficients**

No. of Cases	Cranbach`s Alpha	No of Items
155	83	77

### Application of Fishbein Model

The technique used to apply this model is based on works of AlSamydi (1986-1987), Othman (1986), and the common works between them (2000-2001-2003-2005-2013-2014) in order to facilitate the model application each characteristic has been given a symbol as shown below:

X1	→	Content
X2	→	Interactive
X3	→	Subjectivity
X4	→	Dependency
X5	→	Credibility
X6	→	Understanding
X7	→	Interest
X8	→	Attractiveness
X9	→	Communication
X10	→	Flexibility
X11	→	Convection
X12	→	Response

Dimension 1 (H1): Evaluation Aspect (attributes importance), ai

According to study sample, the first aspect of Fishbein Model is the evaluation aspects that represent the attributes importance. The descriptive analysis was used to determine the importance of each of the (12) attributes depending on their means. This dimension includes (12) questions (1-12). The results are as shown in table 2.

**Table 2: Attributes Importance**

Attributes	Mean	Rank
X1	4.21	3
X2	3.54	8
X3	3.79	6
X4	2.99	12
X5	4.25	1
X6	4.20	4
X7	4.23	2
X8	3.46	10
X9	3.49	9
X10	3.59	7
X11	3.83	5
X12	3.27	11

It is shown that the mean of all questions (except for the attribute No 4) are over the hypothetical mean (M) (midpoint) (3). It can be clearly seen from the above table that there is a variation in evaluating the attributes by individuals study sample and this indicates that hypothesis (H1) is accepted, thus, the evolution of attributes importance is varied according to individuals study sample through E-communication messages.

**Dimension (2) (H2):** Belief Aspect (Bij)

By using descriptive analysis to determine the mean for each attribute, it can be seen that:

**Twitter**

The audience beliefs toward this channel include 12 questions(13-24). The importance of each attribute based on its mean, the analytic results are presented in table 3.

**Table 3: Attributes Availability in Twitter**

Attributes	Mean	Rank
X1	3.43	2
X2	2.98	9
X3	3.15	4
X4	3.08	8
X5	3.09	7
X6	3.20	3
X7	3.11	6
X8	3.44	1
X9	2.90	11
X10	2.92	10
X11	3.15	5
X12	2.85	12

**Websites**

The audience beliefs toward the websites include 12 questions (25-36). Descriptive analysis was used to determine the importance of each of the 12 attributes based on its mean; the analytic results are shown in table 4

**Table 4: Attributes Availability in Website**

Attributes	Mean	Rank
X1	3.50	1
X2	3.05	5
X3	3.43	2
X4	3.02	9
X5	3.05	6
X6	3.33	3
X7	2.82	12
X8	3.04	7
X9	2.94	11
X10	2.95	10
X11	3.02	8
X12	3.15	4

**Facebook**

The audience beliefs toward the Facebook include 12 questions (37-48). Descriptive analysis was used to determine the importance of each of the 12 attributes based on its mean; the analytic results are presented in table 5

**Table 5: Attributes availability in Facebook**

Attributes	Mean	Rank
X1	4.02	1
X2	3.42	9
X3	3.62	4
X4	3.43	8
X5	3.24	12
X6	3.65	3
X7	3.50	6
X8	3.88	2
X9	3.60	5
X10	3.40	11
X11	3.49	7
X12	3.41	10

**Mobile Phones**

The audience beliefs toward the Mobile Phones include 12 questions (49-60). Descriptive analysis was used to determine the importance of each of the 12 attributes based on its mean; the analytic results are shown in table 6

**Table 6: Attributes Availability in Mobile Phone**

Attributes	Mean	Rank
X1	3.41	4
X2	3.81	2
X3	3.38	5
X4	3.34	6
X5	3.15	11
X6	3.12	12
X7	4.01	1
X8	3.29	9
X9	3.20	10
X10	3.32	7
X11	3.30	8
X12	3.44	3

**E-Mail**

The audience beliefs toward the E-mail include 12 questions (61-72). Descriptive analysis was used to determine the importance of each of the 12 attributes based on its mean; the analytic results are shown in table 7

**Table 7: Attributes Availability in E-mail**

Attributes	Mean	Rank
X1	3.43	2
X2	3.98	1
X3	3.15	6
X4	3.18	5
X5	3.01	9
X6	3.20	4
X7	3.11	8
X8	3.34	3
X9	3.00	10
X10	2.92	12
X11	3.15	7
X12	2.95	11

It can be clearly seen in the above tables that there is a variation in individuals belief the attributes, and this indicates that hypothesis (H2) is accepted.

### **Dimension 3 (H3): Attitude's Values (A<sub>j</sub>)**

This dimension (table 2) is concerned with the values of evaluation aspects (importance), and tables (3, 4, 5, 6, 7) are concerned with beliefs in attributes availability. To extract attitude values (A<sub>j</sub>) for each media channel and to explore the positivity or negativity of each attitude, we will depend on extracting the value of standard (108). Based on midpoint (3), thus the (A<sub>j</sub>), the standard value is equal to (108). Where the media attitude value is above the normative value is positive and the value that is below the normative value is negative as shown in table 8.

**Table 8: Attitude Value**

Media	Attitude Value (A <sub>j</sub> )	Standard Value (A <sub>j</sub> )	Difference	Rank
Twitter	105	108	-3	5
Websites	116	108	+8	4
Facebook	141	108	+35	1
Mobile Phone	127	108	+19	2
Email	121	108	+13	3

### **Dimension 4 (H4): The Effect of the Media Messages**

The current research findings for the fourth dimension (table 9) reveal that the respondents indicate a weak response towards the effect of the media messages on the individuals' attitude.

Table 9 presents the overall mean score of respondents, which measures this dimension (H4). The results were further validated by one same t-test that revealed that the overall mean difference for this dimension (H4). As a whole was statistically significant  $N=0.000$  at  $Ns = 0.05$  with high t. value  $t=8.48$  which is higher than the t table  $t=4.37$ . As a result the hypothesis (H4) is accepted. There is positive effect of media messages on individual attitude.

**Table 9: The Effect of the Media Messages**

Test Value = 3 Dimension 4 (H4)				
The effect of the media message	Mean	SD	T. Value	Sig
Twitter	3.01	.220	2.66	.000
Websites	3.23	.410	4.42	.000
Facebook	4.31	1.48	16.42	.000
Mobile Phone	4.01	1.20	12.8	.000
Email	3.42	.620	6.13	.000
The fourth dimension (H4)	3.56	.480	8.48	.000

## **DISCUSSIONS AND CONCLUSIONS**

This study aims towards using the Fishbein 1967 model to specify customers' attitudes from sent messages through electronic communication means and the effect of these messages on these individuals. The study's dimensions were defined based on the model to be studied and the dimension specific to the effect to reach the goals of this study.

The study mentioned sent messages through most commonly known electronic communication means used by these individuals which are Twitter, websites, Facebook, mobile phones, and E-mail and these means have been evaluated by (12) characteristics identified according to the final design of the questionnaire.

According to Fishbein 1967 model, which is considered one of the basic models for the multiple dimensions models which is based on its content and attitude change. This study focuses on knowing individuals attitudes on sent messages through electronic communication means and their effect on their attitudes.

The study model includes four dimensions: the first dimension was the evaluation (importance) includes the attribute of the sent messages through electronic communication means; the second dimension is the belief dimension in how far these properties are available in the electronic communication; the third dimension measures individuals attitudes towards these messages; the fourth dimension focuses on the effect of these messages on individuals attitudes. Four hypotheses were established for every dimension and many analytical methods were used: descriptive analysis for data analysis means calculation for the (12) attributes that meet (ai) according to the Fishbein model.

It has been also used to extract the belief (Bij). In the availability of these attributes in (ai) and (Bij) were then used to extract the attributes values. One sample T-test has been then used to measure the effect of these messages and electronic communication means on individuals' attitudes.

The evaluation of the attributes importance (evaluation aspect) was varied. The evaluation of all attributes was positive (higher than the midpoint (3) except the attributes no. 4 (dependency). Where (the interest) takes the first rank with (4.27) mean followed by credibility with (4.25) mean. This result (credibility) is in accordance with the study of AlSamaydai & Khasawneh (2013).

The aspect of belief in what is provided by each media messages from important attributes where Facebook evaluated positively for all the attributes, the highest one was content of messages with (4.02) mean value while the lowest one was credibility with (3.42) mean value.

Meanwhile, the evaluation of mobile phones messaging in all aspects was positive with the highest evaluation being in the interest attribute with the (4.01) mean value and the lowest evaluation was for the understanding attribute with (3.21) mean value. E-mailing method was positively evaluated in all aspects except two of the aspects which are response with (2.75) mean value and flexibility with (2.92) mean value. Messaging through websites was negatively evaluated in three aspects which are the interests with (2.82) mean value, communications with (2.94) mean value, and flexibility with 2.95 mean value.

Messaging through Twitter had negative evaluation in all four aspects: interactive aspects with (2.98) mean value, communications with 2.90 mean value, flexibility with (2.93) mean value, and finally response with (2.85) mean value.

It is noted from the aspects evaluation of messaging amongst different means that six aspects were not negatively evaluated which are content subjectivity, dependency, understanding, attractiveness, and conviction.

By using the Fishbein model to measure the attitudes, the results showed that all values of messaging attitudes were higher than the attitude value of the measure (Standard value) (108) except Twitter method which had (105) attitudes value which is lower than (108) position value. Meanwhile, the Facebook method had the highest position value of (141) with a deviation of (+33), and following it the mobile phone with the value of (127) with a deviation of (+19), following it

the Email method with the value of (127) and a deviation of (+13), and last comes the website method with the value of (116) and a deviation of (+8).

The application of the Fishbein model clarifies the ability of this model to measure and specify individuals attitudes and their preference, and this result is compatible with a lot of applications.

The use of this subject by many subjects and studies like Alsamydai et al 2013; Alsamydai et al 2014; NDOG, 1983; Bass&Talarzk, 1972; Othman 1986, among others.

In respect to the effect of sent messages through electronic communication means, one sample T-test analysis method was used, in which the T value for all communication means was (8.48) which is higher than the tabled value (3.29), which means that these messages through these communication means are of effect over individuals positions. Although there is a difference in t-value for each communication mean and the Facebook mean has the highest value of (16.42) while the t-value of Twitter was the lowest with (2.66) which is also the lower than the tabled t-value.

Finally, this study clarified that there is a difference in individuals attitudes in the subject of sent messages through electronic communication means and that there is a difference in the importance of aspects of messages and their effect on individuals and their attitudes, leading to the fact that this study can be considered as an important attempt amongst many to study sent messages through electronic communication means.

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