

# USING BASS AND TALARZAKY MODEL TO MEASURE THE ROLE OF SOCIAL MEDIA MEANS ON IRAQI WOMEN ATTITUDE TOWARD USING HERBAL COSMETIC

MAHMOUD JASIM AL-SAMYDAI<sup>1</sup>, DIMA DAJANI<sup>2</sup>, MAHA N. ABU HAJLEH<sup>3\*</sup>,  
ALI AL-SAMYDAI<sup>4</sup> and FATIMAH OTHMAN AKRAM<sup>5</sup>

<sup>1,2</sup>Department of Marketing, the Faculty of Business, Al-Zaytoonah University, Jordan.

<sup>3</sup>Department of Cosmetic Science, Pharmacological and Diagnostic Research Centre, Faculty of Allied Medical Sciences, Al-Ahliyya Amman University, Zip code (19328), Amman, Jordan.

\* Corresponding author Email: m.abuhajleh@ammanu.edu.jo

<sup>4</sup>Pharmacological and Diagnostic Research Centre, Faculty of Pharmacy, Al-Ahliyya Amman University, Zip code (19328), Amman, Jordan.

<sup>5</sup>Faculty of Educational Sciences Middle East University, Amman, Jordan.

## Abstract

The current study aims to identify the role of social media means on woman's attitudes toward using herbal cosmetics. The study uses the Bass and Talarzaky model in measuring women's attitudes on sent messages through social media means. An analytical description style was used to achieve this goal, as this method was appropriate for the nature of the study. A questionnaire was designed as a tool to collect data. The Study Population Consisted of women who used herbal cosmetics in Baghdad- Iraq. The Study sample consisted (350) women who received the paper questionnaire and (334) responses were returned and deemed suitable for analysis. The study showed that social media had a statically significant role in woman's attitudes towards herbal cosmetics. The Facebook showed the greatest effect on the cognitive dimension, whereas mobile phones showed the greatest on the behavioral dimension whereas Twitter showed the greatest effect on affective. Therefore, application of the Bass & Talarzaky model clarifies the ability of this model to measure the role of social media means on women's attitudes towards using herbal cosmetics.

**Keywords:** Herbal cosmetics, social media means, woman's attitudes, Bass model, Talarzaky model.

## 1. INTRODUCTION

Social media means the use of current tools in the connection process between individuals, which are increasingly being used at many levels to send different messages amongst individuals and different organizations. The Mounting role of sent messages through social media means from the aspect of the number, the role and the effect made from it, the approach which individuals and organizations are trying to depend on the process of connection and communication. Building a positive attitude is not an easy matter, the adopted strategies in marketing and communication must affect three dimensions of attitude. The cognitive, Affective, and Behavioral dimensions. This can be done only by providing accurate information, establishing credibility and maintaining continuous communication via social media means with women in a way that creates the best possible positive attitude and influences women's future behavior in choosing and trusting cosmetics products (Fanoberova A, Kuczkowska H, 2016).

Social media means is an important element in electronic communication, electronic marketing and digital marketing which growing among business organizations regardless of their kind. The sent message through any social media means changes the important center in the success of the marketing strategy. Previous studies have indicated that there is at least one social media account for every household in the world. These Findings clearly demonstrate how far these communication methods spread and how quickly society has accepted them, regardless of the cultural, social, religious, racial and ethnic difference among people (Fatima et al., 2013; Joshi, Pawar, 2015). Social media gathers people from different locations and countries under an umbrella called the internet (AL-Samydai A, 2018). There is an increasing demand for cosmetics for maintaining and enhancing human beauty, but cosmetic products may include a number of harmful toxins, which can produce several side effects. The interest in herbal cosmetics is the safety formulation, as the products are made from natural ingredients. Herbal cosmetics are formulated by using various permissible cosmetics ingredients to form the base in which one or more herbal is used (Joshi LS 2012). The present study's aim is to know the role of social media means on woman's health attitudes toward herbal cosmetics. This study focuses mainly on using the linear model of multi-attribute models by Bass and Talarzaky (1971) was adopted in the field of marketing by researchers (Al-Samydai, 1986, Al-samydai 2014, 2019).

## 2. MATERIALS AND METHODS

### 2.1 Study Design

This study was conducted in Baghdad- Iraq 2021. Google form surveys were used to investigate role of social media means (e.g Facebook, Website, Twitter, Mobile phone, Instagram) on women's attitudes toward using herbal cosmetics. An analytical description style was used to achieve this goal as this method was appropriate for the nature of the study. A questionnaire was designed as a tool to collect data. The study sample was a proper sample population (350) women who received the paper questionnaire and (334) responses were returned and deemed suitable for analysis.

### 2.2 Study Model (The scale and Dimensions)

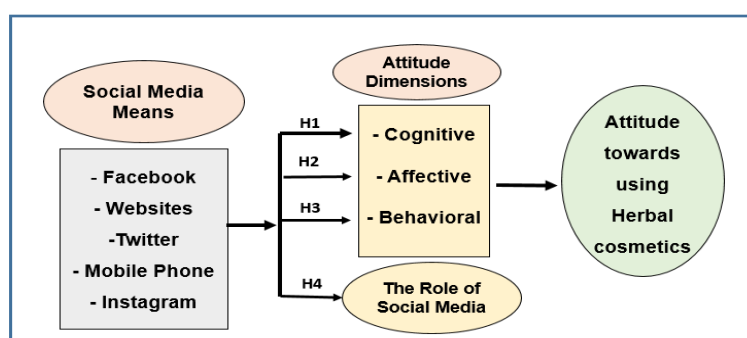
**Figure 1** represents the study model which shows the study research problem, objectives and hypotheses (Al-Samydai et al., 2019; AL-Samydai, 2020; Voramontri&Klieh, 2018). The hypothesis of this study is to investigate the impact of independent factors (role of social media means) on the dependent factor (women's attitudes toward using herbal cosmetics). This study focuses mainly on using the linear model of multi-attribute models, Bass and Talarzaky 1971). Likert scale (1-5) is used in this study and the phrases are used according to three classes:

1. **Importance:** very important, importance, neutral, unimportance, never important.
2. **Belief:** available, neutral, not available, never available.
3. **Role:** very touching, touching, neutral, non-touching, never touching.

In Addition, this study is divided into four dimensions according to the study's model:

1. **Dimension 1:** Cognitive
2. **Dimension 2:** Affective
3. **Dimension 3:** Behavioral
4. **Dimension 4:** The Role of social media means on the attitude of women towards using Herbal cosmetics in using the Bass & Talarzaky Model.

**Figure 1: Study model; the factors affecting the role of social media means on women's attitudes toward using herbal cosmetics.**



### 2.3 Hypotheses of study

**H<sub>1</sub>:** The role of social media means and importance of cognitive dimension varied according to women.

**H<sub>2</sub>:** The role of social media means and the importance of the affective dimension varied according to women.

**H<sub>3</sub>:** The role of social media means and the importance of the behavioral dimension varied according to women.

**H<sub>4</sub>:** There is a positive role of social media means on women's attitudes towards using herbal cosmetics.

### 2.4 Validity and Measurement of the Tool.

The researchers submitted the questionnaire to (12) referees of the university faculty member to verify it's validity –Cronbach's Alpha coefficient has been used with A value of cronbach's Alpha (  $\alpha = 82\%$  ) for all variable of study ,which is a good and suitable value for the purpose of the study higher than the accepted percentage of 0.60. The following table shows the result of this test in current study.

**Table 1: Reliability coefficient**

No. of case	Cronbach's Alpha	No. of item
334	0.82	22

### 3. LITERATURE REVIEW

Nowadays, there is an increasing demand for natural food, herbal medicine and herbal cosmetics worldwide (Fatima et al., 2013; Joshi and Pawar, 2015). There is an increasing demand for herbal cosmetics in maintaining human beauty, as products of homemade formula due to their skin friendliness and lack of side effects (AL-Samydai et al., (2020). Women's behavior shows sequences of physical, mental and emotional effect by humans in selecting, purchasing, using decisions and disposing of good services to satisfy their needs (Yousif 2012); AL-Samydai et al., 2019) focused on cosmetic usage habits and their effect on health-seeking behavior among Jordanian women. AL-Samydai et al., (2020) studied the impact of social media on consumers' health behavior towards choosing herbal cosmetics. It's well known today, that social media plays an important role in improving consumers satisfaction throughout the initial usage of information, search alternatives, evaluation, purchase decisions and changing consumer opinions and attitudes (Voramontri & Klieh, 2018); AL-Samydai & Yousif, (2019). So in depth understanding of the role or the impact of social media in using herbal cosmetics by women will help healthcare centers, pharmaceutical companies, and nonprofit organizations in increasing awareness of the importance of using herbal cosmetic instead of chemical ones, and to improve the health of women and reducing side effect that comes from organic cosmetic, so at the end we will raise awareness of the need to substantially reduce the economic losses caused by incorrect use. Attitude is an important concept, it is a research on marketing and information systems according to Fishbein & Ajzen (1975), that individuals' attitude is the belief at a specific moment, therefore, Fischbein's point of view as mentioned by Othman (1986) , AL-Samydai et al., (2013).

1. Belief is the cause of the attitude.
2. Attitude is determined by total beliefs.
3. The possibility of compensating for the different levels of the properties.
4. The Alternative, which is chosen as the highest value with overall conjugated values with different properties regardless of the values. Also, Mandy & Esther (2008) stated that attitude is the Mediation between belief and behavioral intention and entertainment belief has the strangest effect on attitude.

In addition, Nathan & Eleanor (2011) said that an attitude can be defined as an individual's tendency to evaluate an object as positive or negative. According to AL-Samydai et al., (2013), Attitude is also an important contrast for information systems research, while Solomon (2008) refers to an attitude in marketing terms that 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. 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 towards a product or service (AL-Samydai et al., (2014) Bass & Talarzaky's model has 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, services, person, idea ...etc) or the refusal of it. Subject

properties are considered as the basis in measuring attitude because it plays a basic role in the acceptance or rejection of the subject (AL-Samydai & Rudaina, 2013).

Flazio & 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 adopted the Fishbein model as work of Bass and Talarzaky (1971) in marketing. In 2013, AL-Samydai et al., used the Bass Talarzaky model, which is an adaptation of Fishbein in the field of communication, whereas their studies focus on the Arabic television channels and the effect of these channels on the prevalent events in the Middle –East. AL-Samydai et al., (2015) use Fishbein model to measure an individual's Attitude towards E-communication means. Ledbetter's, (2009) study how the attitudes affect the intention to computer–media communication and social network sites, while Dorji, (2007) study focused on the attitudes towards mass media. It has provided evidence that moderate exposure to television is likely to enhance people's environment and outlook. Al- Samydai et al., (2015) study focused on attitudes by the means of media performance. Ling (2010) study the determinants of customers towards advertising. Jothi et al (2011) study analysis of social network sites. AL-Samydai & Khasawneh (2013) study antecedent and consequences of electronic-Iraqi consumer behavior regarding Facebook advertising.

Equation (1) of Bass and Talarzaky model is:

$$A_J = \sum_{i=1}^n W_i B_{ij} \text{-----Equation (1)}$$

A<sub>J</sub> = Attitude towards the subject (product, service).

W<sub>i</sub> = Importance of the attitude.

B<sub>ij</sub> = Belief about the subject (product or service)

Possession of the attitude

N = Number (n) of attributes.

## 4. RESULTS AND DISCUSSION

### 4.1 The Result

By using descriptive analysis, where all media and all questions were determined within the three dimensions (Cognitive, Affective and Behavioral). In addition, concerning questions of the fourth hypothesis, it is found that all means' values higher than midpoint (3), as shown in Table 2.

**Table 2: The role of the social media means**

Dimension	Cognitive		Affective		Behavioral	
Media	Mean	T Value	Mean	T Value	Mean	T Value
Facebook	4.2	14.32	3.8	10.41	3.9	11.36
Website	3.4	4.65	3.3	4.22	3.1	3.43
Twitter	3.7	5.44	3.9	11.36	3.3	4.22
Mobile Phone	3.6	3.87	3.5	4.12	4.1	12.75
Instagram	3.1	2.91	2.3	1.56	2.9	2.68

**Table 2** presents the overall mean scores of all media related to dimensions of the attitude, which measures and evaluates the hypotheses ( $H_1$ ,  $H_2$ , and  $H_3$ ). Results were further validated by one same t-test revealed that overall mean differences for these dimensions ( $H_1$ ,  $H_2$ ,  $H_3$ ), as a whole, were statistically significant;  $N=0.00$  at  $Ns= 0.05$  with height for all three dimensions, in spite of the difference in mean values and in t-values. However, the concluded result is that there is a role for social media means on dimensions of attitude and consequently, on females' attitude towards the use of herbal (natural) cosmetics materials. Regarding Table 2, Facebook is playing an important and wide role in women's Cognitive dimension by providing information broadcasted by users that includes other women's experiences and benefits that may be obtained from using herbal cosmetic materials, especially from the safety side and with no side effects. Besides, it keeps the face blooming for it is free of chemical materials, its prices are relatively low, easy to gain ... etc. All these factors formulate a positive situation to build an attitude toward the use of these herbal cosmetic materials with a mean value = of 4.2 and a value of T value = 14.32. While its role is less in both dimensions Behavioral and Affective. Twitter media plays a large role on the affective side of women concerning excitable motivations presented for women as photos, videos, and written or verbal words, which explain the results of their usage of the herbal cosmetics materials. That will create desire and ability inside them and further, a positive attitude toward using these medical cosmetics materials. The mean of this media (Twitter), on the Affective dimension, is greater than other media with a mean = 3.9 and T value = 11.36. Mobile phone is a media of wide use by individuals, especially women, and has an important role in affecting Behavioral dimensions. It is a normal result for conversations among them, encouraging each other, presenting their experiences, and results of using herbal cosmetic materials and the attempt to influence their attitude in the same direction helps to formulate behavioral contentment and satisfaction that reflects on forming a positive attitude towards these materials. The mean value for mobile phone media against behavioral dimension equals (4.1) and T value = 12.75.

**The media means which have less effect and role on the three dimensions are:**

A website with mean values (3.4), (3.3), and (3.1) on the three dimensions respectively. We find that Instagram media is the less effective role, with mean values, on the three dimensions, (3.1), (2.3), and (2.9) respectively. Results are reasonable, for the two media means (Website, Instagram), women are less using them compared with other media means, because they are familiar with, and get used to other media means that are most popular among people,



especially women. From previous results, it is clear that social media means play an important role in creating a positive attitude towards the usage of herbal cosmetic materials. From the above results, it is obvious that the hypotheses ( $H_1$ ,  $H_2$ ,  $H_3$ ) were proved because all values of T value for all media means and all three dimensions are greater than the tabular value of T value, which equals 1.96

### Attitudes' Values

Bass and Talarzaky model are used for testing  $H_4$  hypotheses by abstracting the Attitudes' values. Table 3 showed the values of the attitudes for all social media means and comparing this with the standard value which is (96). It was investigated that attitudes' values are different for each media mean. Nevertheless, all media means have attitudes' values greater than the standard value except Instagram media where the value is (87) with difference equals (-9) and after it website media with value (92) and difference (-4). However, all other media have values greater than the standard attitude value. Based on that, the hypothesis ( $H_4$ ) was proved using Bass and Talrazakey model, which shows that there is a positive role of social media means on women attitudes for using herbal cosmetics materials.

**Table 3: Attitudes' Values**

Social Media Means	Attitudes' values (A <sub>j</sub> )	Standard Values (A <sub>j</sub> )	Difference	Rank
Facebook	124	96	28	1
Website	92	96	-4	4
Twitter	108	96	12	3
Mobile Phone	114	96	18	2
Instagram	87	96	-9	5

### 4.2 Discussions

The objective of this study is to know the role of social media means towards women's attitudes in using herbal cosmetics materials by using Bass and Talarzaky's model. The study's dimensions of Attitude, Cognitive, Affective and Behavioral were defined based on the study model and dimensions specified to the role in order to reach study objectives. Results show that Facebook is of a larger role than others based on attitude value (124) and deviation is (+28), which is the largest value among all social media means and this result is in harmony with the study of Alsamydai et al., (2020) declared that Facebook had an effect greater than other social media means in choosing herbal cosmetics materials. Meanwhile, this study explained that the role of the Mobile phone in attitude value (114) came in the second rank concerning its role in women's attitude toward using herbal cosmetics materials. After that comes Twitter with an attitude value (108), in the third rank, and this is a minor difference from the study by Al-Samydai et al., (2020) and the study of Šniepienė G, Jonuševičienė J, (2019) that indicated the effect of social media means on the behavior of herbal cosmetics materials selection. Study results consist and coincide with the study (Al Samyda, 2015) that concentrated on electronic communication media, and its effect on individuals' attitudes. There are many applications with forms and patterns that have many properties, particularly the linear (additional or

supplementary ones), in different fields to measure individuals' attitudes or consumer attitudes towards many things; like studies (Othman, 1986; 1983); Al Samydai, 2014, 2019).

## 5. CONCLUSIONS

This current study explained that each mean, of social media, had a different role in attitude dimensions. Facebook had a larger role in the cognitive dimension for attitude with a mean value (4.2), while twitter's role in the affective dimension was larger than other means with a mean value (3.9). On the other hand, the Mobile phone had a greater role than other means in the behavioral dimension with a mean value (of 4.1) and the reason behind it is that communication through this media is the most popular among people and women's dialogues contribute in persuading process, also steering intention and desire for using these herbal cosmetics materials. Using Bass and Talarzaky model, clarifies the ability of this to measure and specify the role of social media means on women's attitudes towards using herbal cosmetics.

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### Conflict of Interests

The authors declare that they have no conflict of interest.

### Author Contributions

All authors made substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; took part in drafting the article or revising it critically for important intellectual content; agreed to submit to the current journal; and agree to be accountable for all aspects of the work.

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