Factors Predicting Consumers' Assessment of Advertisements on Social Networking Sites

Hossam Deraz
School of Business and Engineering
Halmstad University – Sweden
Hossam.deraz@hh.se

Gabriel Baffour Awuah
School of Business and Engineering
Halmstad University – Sweden
gabriel.awuah@hh.se

Desalegn Abraha Gebrekidan
School of Technology and Society
Skövde University – Sweden
desalegn.abraha@his.se

ABSTRACT

Marketers act on social networking sites (SNSs) in order to be more efficient in merchandising their products and/or services. Even so, the scope of the published studies regarding the assessment of advertisements on social networking sites (SNAs) is limited. Consequently, the present study aimed to consider credibility and interactivity, in addition to information, entertainment and irritation values, as main factors for consumers' assessment of SNAs, as perceived by SNSs' users.

An analysis of empirical data helped to identify four main factors for assessing SNAs. These were: information value, entertainment value, credibility value and interactivity value. Irritation value was the only factor that had no significant effect on the assessment of SNAs. Furthermore, based on the beta coefficients, the information and entertainment values of SNAs, in conjunction with credibility and interactivity values, had different outcomes from previous studies. Consequently, the interactivity value was the strongest among the four predictors for assessing SNAs.

KEYWORDS

Advertisements' value, Online Ads Value, Social Networking Ads, Social Networking Sites.

1 INTRODUCTION

At the turn of this century, the use of electronic marketing (e-marketing) led to a revolution in business processes. It redefined the notion of consumers. The most important technology and business innovation that enabled this revolution was the extension of the Internet to the World Wide Web [1]. This increased the potential of e-marketing, creating additional value and enabling many firms to achieve their marketing objectives by using Internet media, websites (including third-party websites) and e-mail as marketing tools [2].

Recently, many firms who are under intense competition use social networking sites (SNSs) to advertise their new offers or to communicate with their fans [3]. This action creates a new form of social regulation between companies and consumers, as the SNSs offer an open market in which a large numbers of buyers and sellers can participate and interact [4]. Based on this, while browsing SNSs, there are many firms that seek to establish fans and followers, thereby helping them to develop an open-conversation platform with their consumers. This shows the crucial role of SNSs as a marketing and communication tool.

Simultaneously, the value of advertisements is one of the basic determinants of brand success [5]. It represents a core determinant in purchasing decisions and behavior towards advertisements (ads) [6]. According to this, and due to the roles of SNSs in marketing, researchers explored SNSs as marketing and advertising media [7], [8], [9], [10]. They considered mass customization, global access and proliferation as the main advantages of using SNSs as advertising platforms. For example, in the first quarter of 2015, Facebook had approximately 1.415 billion monthly active users around the world [11]. In addition, it had approximately 51,063 brands. Some of these brands had millions of fans, such as Coca-Cola, which had more than 89 million, and McDonald's, which had more than 56 million [12].

However, there is limited scope of published studies that assess SNAs. There are a small number of studies that have directly contributed to the assessment of SNAs [13], [14], [15]. Such studies use three main factors as predictors: information value, irritation value and entertainment value. Of these, information value was the most effective predictor for assessing SNAs.

Furthermore, credibility and interactivity values have been identified as factors that predict consumers' attitude towards online advertisements (ONAs) [16], [17], [18], [19], [20].

Based on the limited previous published studies, this paper aimed to extend the existing literature on SNAs by introducing interactivity and credibility as additional predictors for its assessment (in addition to the previously measured dimensions - information value, entertainment value and irritation value). Conditionally, the present study answered two main questions:

RQ1: What are the main factors for assessing SNAs, as perceived by SNSs' users?
RQ2: How do the factors of SNAs, in conjunction with each other, predict consumers' assessment of SNAs?

This paper is structured as follows: after the introduction, we present a literature review and thereafter, we discuss the theoretical concepts that led to the research hypotheses. This is followed by a methodology section, which contains descriptions of the research sample, variables and the dimensionality and reliability tests. Finally, after discussing the empirical findings, we examine the theoretical and empirical implications of this study.

2 LITERATURE REVIEW

2.1 Online Ads Value (OAV)

ONAs have a crucial effect on consumers' purchasing behavior. In agreement with the hierarchy-of-effects approach, ONAs function as cognitive factors in making the consumer aware of a specific product/service. They then act as affective factors by attracting and persuading consumers. Finally, they act as behavioral factors by moving consumers towards deciding to purchase [21]. This approach highlights the importance of ONAs as factors that predict consumers' purchasing intentions and enable a deeper and more current understanding of how online consumers perceive ONAs. .

[6] is one of the first bodies of research that contributed to the assessment of OAV. In this study, the researcher focused on the effects of online consumers' perceived value of ONAs. According to [6], the distinction between OAV and attitudes towards ONAs gave validity to consumers' responses by measuring the contribution of entertainment value, information value and irritation value. The results of this study were validated by [16]. Here, the results were extended to include credibility and consumer demographics for assessing OAV. Two years later, interactivity and consumers' motives were identified as additional dimensions that contribute to the attitudes towards ONAs [22].

2.2 The Assessment of SNAs

[13] attempted to compare the assessment of ads on SNSs and TV. The researchers of this study used the previous model [6], with its three main predictors: irritation value, entertainment value and information value. According to this study, information and entertainment values of SNAs played crucial roles in assessing SNAs, while the irritation value had no significant effect. Furthermore, [14] used the same model to assess SNAs, as perceived by Indian students. The results of this study confirmed that information and entertainment values were positively correlated to the value of SNAs, yet the irritation value had a negative effect on the consumers' assessment of SNAs.

Further studies have contributed to the value of SNAs (SNAV) in assessing consumers' attitudes towards them. [23] introduced credibility to information value, entertainment value and irritation value as the main

predictors for assessing consumers' attitudes towards SNAs. In this study, the values of information, entertainment, irritation and credibility were the main predictors for the consumers' attitudes towards SNAs, as perceived by South African university students.

In another study, while exploring the factors that predict consumers' attitudes towards SNAs, [24] indicated that the values of entertainment and information of SNAs predicted consumers' perception of the value of SNAs, from the perspectives of postgraduate management students in the USA.

Finally, while investigating Pakistani consumers' attitudes towards SNAs, [25] confirmed that information and entertainment values had a significant effect on assessing SNAs. However, [13] observed from their analysis that the model of [6] does not provide a good fit for the assessment of SNAs. Nevertheless, most of the identified research used the same model of [6] for assessing SNAs.

Accordingly, this study aimed to extend the credibility and the interactivity of SNAs as predicting variables, in addition to the values of information, entertainment and irritation, while determining consumers' assessment of SNAs.

3 THEORY AND HYPOTHESES

In keeping with the identified literature, the topic for the assessment of SNAs was investigated, based on three main dimensions: the information value, irritation value and entertainment value. Other research investigated the values of credibility and interactivity as factors for assessing attitudes towards ONAs. Based on this, the conceptual framework of this study was structured as illustrated in Figure (1), which is developed and discussed below.

Figure 1. The conceptual framework for the consumers' assessment of SNAs
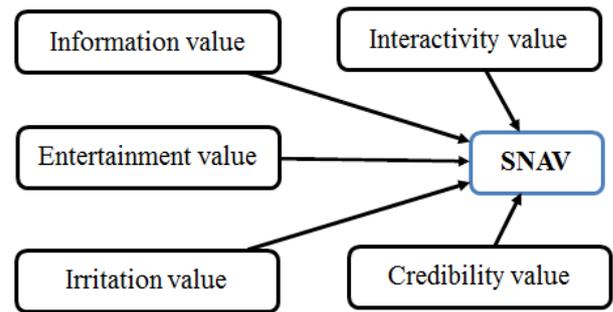
3.1 Information Value of SNAs

E-commerce delivers primary information advantages for online consumers. It also enables them to seek information they desire and ignore those that they do not need [26]. Further developments in e-commerce are significantly affecting the information-seeking behavior of online consumers [27]. This proves the importance of the information value of ads as one of the driving factors for the assessment of OAV in general.

The information value of ONAs represents the ability to effectively provide relevant information in the advertising context, as perceived by online consumers [28]. With this regard, while they were assessing OAV, researchers revealed the importance of the information value by ascertaining consumers' perceptions for the information value [6], [16], [22], [29], [30].

Likewise, the information value of SNAs has been identified as being positively correlated with consumers' assessment of SNAs [14], [23], [24], [25]. In the present study, to identify how the information value can predict consumers' assessment of SNAs, the information value of SNAs was tested, in conjunction with the values of credibility and interactivity, using the following hypothesis:

H_{01}: Information value has a positive effect on the assessment of SNAs, as perceived by SNS's users.

3.2 Entertainment Value of SNAs

The entertainment value of ONAs represents a degree of pleasure and involvement during the interaction with a specific advertisement [31]. Advertisers believe that the value of entertainment on ONAs increases the effectiveness of an advertisement's message and generates a positive attitude towards the brand [13], [32], [33]. Additionally, entertainment-oriented ads aim to keep consumers occupied in a way that is designed to encourage repeat visits [34].

Generally, OAV depends on the level of entertainment of the ONAs [6]. This is particularly noticeable with SNAs, where the entertainment value has been identified as an important factor in their assessment, as well as in the attitudes towards them [13], [14], [35]. Furthermore, SNSs' users seek enjoyment, relaxation and to pass time. This relates to the nature of SNSs as entertaining activity sites [24]. Based on these facts, in this study, the effect of the entertainment value on consumers' assessment of SNAs, in conjunction with credibility and interactivity values, was tested using the following hypothesis:

H_{02}: Entertainment value has a positive effect on the assessment of SNAs, as perceived by SNS's users.

3.3 Irritation Value of SNAs

With regard to ONAs, consumers' irritation value emerges when online consumers experience discomfort while watching an advertisement [14] or when they seem to be less likely to be persuaded by it. The consumers' feelings of irritation play a crucial role in their assessment of the ONAs [36]. This was one of the primary dimensions that had a negative effect on OAV, as perceived by online users [6]. The irritation value of ONAs includes descriptions such as confusing, annoying, irritating and deceptive [13]. Moreover, with regard to SNAs, it contributes to a loss of privacy [24].

In some research, the irritation value of SNAs has an insignificant effect on the assessment of SNAs [13], [37]. Other researchers have identified that the irritation value had a high negative correlation to consumers' perceptions of SNAV [14]. Based on this, it was important to include irritation as one of the main dimensions of assessing SNAs in the present study. The following hypothesis was used to identify the effect of the irritation value on the assessment of SNAs, in conjunction with the credibility and interactivity, as perceived by SNS's users:

H_{03}: Irritation value has a negative effect on the assessment of SNAs, as perceived by SNS's users.

3.4 Credibility Value of SNAs

Credibility towards ads represents the degree to which consumers perceive claims that are made about a brand in a specific advertisement to be truthful and believable [17]. According to cyber psychology studies, credibility is an essential dimension in the assessment of consumers' responses towards a specific online brand community [38], [39]. According to [16], credibility directly correlates to consumers' assessment of OAV. Based on this, many researchers have considered advertisement credibility to be a principal factor in assessing consumers' perceptions of OAV and their attitudes towards ONAs [17], [18], [20], [30].

The credibility value had no effect on consumers' assessment of Facebook ads, as perceived by Malaysian university students [15]. However, other researchers identified that credibility had a strong effect on consumers' assessment of ONAs [30], [37]. In keeping with these findings, in the present study, the credibility value of SNAs was considered as one of the main dimensions in the assessment of SNAs by testing the following hypothesis:

H_{04}: Credibility value has a positive effect on the assessment of SNAs, as perceived by SNS's users.

3.5 Interactivity Value of SNAs

From various perspectives, researchers have defined interactivity as the extent to which users can participate in modifying the messages they receive via ads [40] or as a means for individuals to effectively communicate with each other [41]. It shifts the ways in which online users perceive ONAs [42] and increases the opportunities to use SNSs to generate viral marketing [43]. In addition, the capacity of SNSs to manifest a new form of social regulation in the relationship between firms and consumers forms an open market in which a large number of buyers and sellers participate and interact [4]. This highlights the crucial role of the value of interactivity in the assessment of SNAs.

According to [16], the interactivity of ONAs predicted the consumers' assessment of OAV. This was confirmed by [15], in which the authors identified the interactivity value as a factor that can predict consumers' attitudes towards SNAs. Based on these facts, the interactivity value of SNAs was considered in this research to be one of the main factors for the assessment of SNAs by testing the following hypothesis:

H_{05}: Interactivity value has a positive effect on the assessment of SNAs, as perceived by SNS's users.

4 RESEARCH METHODS

In keeping with the purpose of this study, a quantitative approach was regarded as being the most appropriate one. It was guided by the functional or positivist paradigm [44]. To achieve validity of the collected data, the questionnaire was constructed based on the conceptual framework of the assessment of SNAs, as perceived by Facebook users, to measure what was supposed to be tested as recommended by [45].

Moreover, the present authors carried out a pilot study by distributing the questionnaire to 10 different students of master level at the Innovation and Entrepreneurship Department of Halmstad University, to solicit their feedback. Based on their feedback, the questionnaire was refined. According to [46], pilot testing should take place before using a questionnaire to collect data. In this case, this enabled the researcher to refine the questionnaire so that respondents had no difficulties answering the questions. This enabled the researchers to assess the questions' validity and the reliability of the collected data.

The data were collected by distributing the questionnaire to relevant Facebook users at Halmstad University. Although this sample was not representative of the Swedish consumer, students at a Swedish university were chosen as the research sample for two main reasons. It was the first time that young Swedish consumers' perceptions of SNAs had been researched - previous studies considered university students in the US, Pakistan and South Africa as the research samples. Furthermore, university students represent the most active users of SNSs: 72% of young adults between the ages of 18 and 29 years who are online use SNSs, making them the most frequent users [13].

The questionnaires were distributed using three different sampling techniques, as shown in Table (1). The main targets for the research were university students who had been using Facebook for at least two years. Of the 214 questionnaires that were collected, 13 were ignored. This was either because the respondents did not have Facebook accounts or they did not complete the questionnaire.

The following table represents the completed surveys that were collected and classified, according to the used sampling techniques.

Table 1. Collected surveys classified according to the used sampling techniques

Sampling Technique	Description	Distribution Channel	Collected Surveys
Convenience	Face-to-Face distribution	Halmstad University	129
Self-selection	Surveymonkey.com	Facebook	33
		E-mail invitation	8
		Web-link	14
Snowball	Through friends and colleagues	Halmstad University	17
Total Completed Surveys collected			**201**

4.1 Measures

The respondents provided answers regarding their perceptions of the variables for the assessment of SNAs, according to a 5-point Likert scale, as follows: Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4 and Strongly Agree = 5. The sources of the items of the six main dimensions of the conceptual framework of the study were based on their utility in previous research, as follows:

- Information value of SNSAs: items were borrowed and modified from the scales that were developed by [13], [24].
- Entertainment value: items were borrowed and modified from the scales that were developed by [13], [24], [31].
- Irritation value: items were borrowed and modified from the scales that were developed by [13], [24].
- Credibility value: items were borrowed and modified from the scales that were developed by [15], [19], [22].

- Interactivity value: items were borrowed and modified from the scales that were developed by [22].
- SNSAV: items were borrowed and modified from the scales that were developed by [13].

Table 2. Dimensionality Test, Reliability Test and Descriptive Statistics

	Rotated Component Matrix						Means	SD
	VAL	INF	ENT	IRR	CRE	INT		
VAL01- Is Useful	0.687						2.368	0.902
VAL02- Is Valuable	0.681						2.418	0.886
INF01- Offers valuable information		0.601					2.791	0.978
INF02- Offers timely information		0.804					3.055	0.960
INF03- Offers updated information		0.839					3.299	1.054
ENT01- Entertains me			0.771				2.478	1.063
ENT02- Is enjoyable for me			0.824				2.413	1.031
ENT03- Excites me			0.873				2.164	0.926
ENT04- Pleases me			0.700				2.134	0.870
CRE01- Is trustworthy					0.875		2.353	0.900
CRE02- Is credible					0.805		2.408	0.907
CRE03- Is believable					0.866		2.481	0.939
INT01- Has a cognitive value						0.633	2.388	0.878
INT02- Facilitates two-way communication						0.689	2.682	1.095
INT03- Offers a vivid communication experience						0.733	2.667	0.971
IRR01- Deceives me				0.800			3.055	0.991
IRR02- Confuses me				0.833			2.901	1.010
IRR03- Irritates me				0.763			3.368	1.129
IRR04- Annoys me				0.780			3.264	1.151
α – Chronbach's Alpha	0.83	0.82	0.84	0.83	0.90	0.81		
Average of customers' assessments of the dimensions	2.39	3.05	2.30	3.15	2.42	2.58		

5 DATA ANALYSIS

5.1 Regression Analysis

The five identified predictors were used in a multiple regression analysis to identify the factors behind the consumers' assessment of SNAs. In addition, the multiple correlation coefficients (R), coefficients of determinations (R^2) and *F*-ration were examined to predict the goodness-of-fit for the following regression model:

$$Y_a = \beta^0 + \beta^1 X^1 + \beta^2 X^2 + \beta^3 X^3 + \beta^4 X^4 + \beta5X5 \quad (1)$$

where Y_a was the consumers' assessment of SNAs, β^0 the constant value, X^1 the information value, X^2 the entertainment value, X^3 the interactivity value, X^4 the credibility value, X5 the irritation value and β^1........ β^5 = the regression coefficients of factors 1-5.

Based on the regression analysis of testing the five main dimensions of assessing SNAs, the model without the irritation value provided the best regression model for the assessment of SNAs. The coefficients of determination (R^2) of the four independent variables on the consumers' assessment of SNAs was 0.481 at significant change p < 0.001, suggesting that approximately 48.1% of the variations in the respondents assessments on SNAs could be explained by the four extracted factors (information value, entertainment value, credibility value and interactivity value), as shown in Table (3). Meanwhile, the fifth model with irritation value was not significant as it had a high probability distributions value, p = 0.527 (high probability of error).

The value of *F*-ratio was 623.538 (significant = 0.000), which means that the results of the regression model by the four independent variables were not occurred by chance.

According to this result, the coefficients of the four-dimension model were tested to identify the effect of these predictors on the consumers' assessment of SNAs, as shown in Table (3).

Table 3. Results of the regression analysis of consumers' assessment of SNAs based on the perceived factors

Goodness of fit	R	Beta	Sig.	Collinearity Statistics	
				TOL	VIF
Multiple R	0.693a				
R square	0.481				
Adjusted R^2	0.470				
Standard error	0.6011				
F value	623.54				
Significant F	0.000				
Coefficients					
Constant		0.277			
Entertainment		0.261	0.000	0.577	1.732
Credibility		0.146	0.018	0.708	1.412
Interactivity		0.313	0.000	0.510	1.962
Information value		0.139	0.038	0.598	1.672

a. Predictors: (Constant), Irritation, Credibility, Interactivity, Entertainment, Information value.
b. Dependent Variable: SNAV

From the standard coefficients beta in Table (3), the four variables, after deleting the irritation value of SNAs, had positive significant coefficients with SNAs. The most coefficient predictor was the interactivity value, as its beta value was 0.313. At the second level, it was the entertainment value, with a beta value of 0.261. At the third level, it was the credibility value at 0.146 and finally, the information value, which was 0.139.

Moreover, the tolerance statistics of the predictors ranged between 0.510 and 0.708. According to [47], the tolerance statistics should be more than 0.2 to avoid high multi-collinearity. In addition, the variance inflation factor (VIF) of the predictors ranged between 1.412 and 1.962. To avoid any collinearity problems, this should be less than 10 [48]. Based on model four, the line regression of the research model for assessing the SNAs is in best fit, when x=0 at constant level 0.277 and to have the following construct equation (2):

$$SNAs = 0.277 + 0.133\ INF + 0.251\ ENT + 0.141\ CRE + 0.309\ INT \quad (2)$$

5.2 Hypotheses Text

According to the standardized coefficient from Table (3), the information value of SNAs, as perceived by the respondents, had the lowest beta coefficient on the consumers' assessment of SNAs. The beta coefficient of information value was 0.139 at a significant change $p < 0.05$. This suggests that approximately 13.9% of the variations on SNAs were counted by variations of the information value of SNAs. However, this significant coefficient result could reject the null hypothesis, H_0: Information value does not affect the assessment of SNAs, as perceived by SNS's users. This supports the first hypothesis:

H_{01}: Information value has a positive effect on consumers' assessment of SNAs, as perceived by SNS's users. (Supported).

The entertainment value, as shown in Table (3), had the second highest positive coefficient on the assessment of SNAs. The beta coefficient of the entertainment value was 0.261 at a significant change $p < 0.001$, which suggests that approximately 26.1% of the variations on SNAs were counted by variations of the entertainment value. This result rejects the null hypothesis, H_0: Entertainment value does not affect the assessment of SNAs, as perceived by SNS's users. This result could support the second hypothesis:

H_{02}: Entertainment value has a positive effect on the assessment of SNAs, as perceived by SNS's users. (Supported).

From the stepwise regression analysis, the irritation value, in conjunction with the information value, as well as the entertainment, interactivity and credibility values, was not significant to the consumers' assessment of SNAs. This was because the model with irritation had a significant change 0.001, with a high probability error ($p =$

0.527). This result might lead to a rejection of the third hypothesis:

H_{03}: Irritation value has a negative effect on the assessment of SNAs, as perceived by SNS's users. (Rejected).

From Table (3), the credibility value had a beta coefficient of 0.146 on the consumers' assessment of SNAs at a significant change $p < 0.02$. This result suggests that approximately 14.6% of the variations on SNAs were counted by variations on credibility value. This result might reject the null hypothesis, H_0: Credibility value does not affect the consumers' assessment of SNAs. This could support the fourth hypothesis:
H_{04}: Credibility value has a positive effect on the consumers' assessment of SNAs, as perceived by SNS's users. (Supported).

Finally, the beta value of the interactivity value had the highest coefficient on the consumers' assessment of SNAs. The interactivity value had a Beta coefficient 0.313 on assessing SNAs. This result suggests that approximately 31.3% of the variations on the assessment of SNAs were counted by the variations on the interactivity value. This result might reject the null hypothesis, H_0: The interactivity does not affect the consumers' assessment of SNAs, as perceived by SNS's users. This result could support the fifth hypothesis:

H_{05}: Interactivity value has a positive effect on the consumers' assessment of SNAs, as perceived by SNS's users. (Supported).

6 DISCUSSION AND REFLECTION

To develop knowledge and gain a better understanding of the dimensions that impact consumers' assessment of SNAs, in this study, the credibility value and interactivity value of SNAs were introduced as additional variables to those that were previously tested [13], [14], [15]. This helped to create a new model with four main dimensions that predicted the consumers' assessment of

SNAs: information value, entertainment value, credibility value and interactivity value. Moreover, based on the stepwise regression analysis, the irritation value of SNAs had no significant effect on the consumer assessment of SNAs. However, the following discussion reflected the main findings of this paper.

In this study, the first predicted dimension was the information value of SNAs. The indicators that were used to measure the information value had an average mean of 3.05 from the five-scale score. After irritation, this result was the second-highest mean. However, according to the effective size criteria [49], the information value of SNAs in this study had a medium effect. Furthermore, the lowest coefficient on the assessment of SNAs as its beta coefficient was 0.139. In previous studies, the information value had the highest coefficient for assessing SNAs [13], [14].

The second predicted dimension was the entertainment value of SNAs. The indicators that were used to measure the entertainment value had an average mean of 2.3 from the five-scale score, which was less than the middle score. This shows that the respondents perceived it as a low factor that needs more progress to develop. This result can confirm that SNAs can entertain and bring enjoyment to users of SNSs, but not to please and dazzle them, as indicated by [13], [30]. However, according to the effective size criteria [49], the entertainment value in this study had a strong effect on the assessment SNAs as its coefficient was 0.261. Its coefficient had the second highest effect on assessing SNAs, as perceived by the respondents.

The third predicted dimension was the irritation value of SNSAs. In this study, the irritation value of SNAs had the highest mean of 3.15 among other predictors. This was confirmed by a paired t-test, as the irritation value had a p value of 000 when compared to the other four variables. In previous studies, the irritation value had the highest mean among the information value and entertainment values. Furthermore, [13] argued that this situation occurred when the consumers seemed less likely to be persuaded by the ONAs. This feeling of irritation might be the reason behind the lower value of other categories of SNAs variables, as perceived by the respondents. However, in this study, the irritation value had no significant coefficient effect on the consumers' assessment of SNAs. This result might confirm the result of [13], as we identified that irritation had no significant coefficient with consumers' assessment of SNAs. This result contradicted [14], as the irritation value in that study was the highest negative predictor on the consumers' assessment of SNAs.

The fourth predicted dimension was the credibility value. According to the collected data, the credibility value had an average mean of 2.42 from the five points. This might prove that the research sample of this study might have less experience with SNAs. According to [20], credibility is positively related to Internet users' experience, as well as their ability to collect information and to interact with the ONAs. In this study, the credibility value of SNAs had a moderately significant effect on the assessment of SNAs with a coefficient of 0.146, which was higher than the coefficient of information value. This result supports the fourth hypothesis and introduces the credibility value as a crucial variable in the assessment of SNAs. This contrasts what was identified by [16] - that credibility does not predict the consumers' assessment of SNAs.

In this study, the final predicted dimension was the interactivity value. From Table (2), the average mean of the interactivity indicators was 2.58, which shows that the respondents were more counted to interact with SNAs than to use it as a source of entertainment. This result was also confirmed by the paired t-test between the interactivity and the entertainment values, as p value = 0.000. According to Table (3), the interactivity value had the highest significant effect on the consumers' assessment of SNAs, with a coefficient beta 0.313. This result

supports the fifth hypothesis and presents interactivity as an important dimension for assessing SNAs.
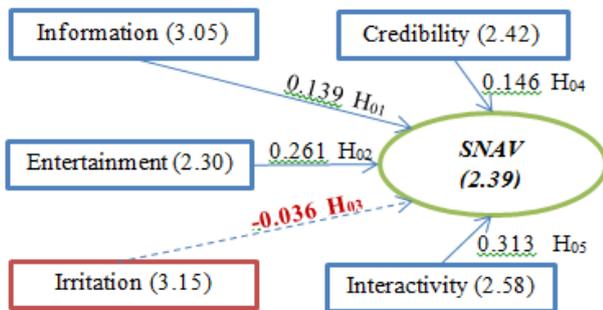
7 CONCLUSION

Figure 2. Factors of Assessing SNAs (average means and coefficients)

An analysis of the empirical data of this study helped to identify four main dimensions for assessing SNAs. These dimensions had positive effects on the consumers' assessment of SNAs. According to the strengths of their beta coefficient, these four dimensions are arranged in descending order, as follows: interactivity value (0.313), entertainment value (0.261), credibility value (0.146) and information value (0.139), as shown in Figure (2). According to the regression analysis, together, these four variables had the best R^2 (0.481) at a significant change = 0.000. Nearly 48.1% of the variations in SNAs were explained by this model.

As summarized in Figure (2), the findings of this study support the following hypotheses:

H_{01}: Information value has a positive effect on the assessment of SNAs, as perceived by SNS's users.
H_{02}: Entertainment value has a positive effect on the assessment of SNAs, as perceived by SNS's users.
H_{04}: Credibility value has a positive effect on the assessment of SNAs, as perceived by SNS's users.
H_{05}: Interactivity value has a positive effect on the assessment of SNAs, as perceived by SNS's users.

However, the findings of this study could not support the third hypothesis:
H_{03}: Irritation value has a strong negative effect on the assessment of SNAs, as perceived by SNS's users. (Rejected).

Finally, according to the hypotheses paired t-test of the empirical findings, based on the average means of the five predictors, the research sample of Swedish university students can be characterized as follows:

- The Swedish university students were more irritated by SNAs as they find such ads less credible.
- The Swedish university students were more information-oriented than interaction-orientated, and used SNAs less as an entertainment factor.

8 IMPLICATIONS AND FUTURE RESEARCH

8.1 Theoretical Implications

The findings of this study support some of the findings from previous research on the assessment of SNAs. However, some of the previous findings are not supported. This study supports the findings of [13] - that irritation value has no significant effect on assessing SNAs. Conversely, it does not support the view of [14], which argued that the irritation value of SNAs have a significant negative effect on consumers' assessment of SNAs.

With regard to the information value of SNAs, the previous studies [13], [14] found that it had the highest positive effect on assessing SNAs. However, the result of this study does not support such a finding, as the information value had the lowest positive coefficient, in conjunction with the credibility and the interactivity values. Moreover, the results of this study do not support the finding that the credibility value of SNAs, as perceived by the university students, does not affect the consumers' assessment of SNAs, as identified by [15].

Finally, this study succeeds in introducing ads' credibility and interactivity as crucial variables for the assessment of SNAs. It offers a new construct model for assessing SNAs, based on four main dimensions: information value, entertainment value, credibility value and entertainment value. Even in conjunction with credibility and interactivity, this study confirms the finding of [13] - that the irritation value of SNAs does not predict consumers' assessment of SNAs, as perceived by SNS's users.

8.2 Practical Implications

The research findings provide important evidence for online advertisers on SNS. Based on the research sample of Swedish university students, the findings of this study have to be considered when promoting or seeking to interact with this market segment. The online advertisers have to consider the fact that this market segment is more information-oriented than used for interaction and entertainment. In addition, this market segment is highly irritated by SNAs as they feel that SNAs are less credible.

The advertisers on SNSs need to identify the reasons behind the negative perceptions of the credibility value of SNAs. They also need to investigate how to increase the trustworthiness of SNAs and decrease their irritation value. At the same time, SNSs' systems need to have more effective procedures to control fake ads to encourage SNSs' users to interact more effectively with the SNAs.

8.3 Future Research

The results of this study and those of previous studies [13], [14], [15] have some differences. Although they all assessed the perceptions of university students, the differences in their culture and experiences may have affected their results. Accordingly, more studies need to be conducted with participants from different cultural backgrounds and market segments from time to time to capture any change in the consumers' assessment of SNAs.

Additional studies may be geared towards confirming the correlations between the identified dimensions of this study and the attitudes towards SNAs. Moreover, as most of the identified studies regarding consumers' assessment of SNAs utilized quantitative approaches, qualitative studies may be needed to gain a deeper understanding of how SNSs' users interact with SNAs.

As identified by [50], the credibility value of ONAs was positively correlated to the Internet users' experience and their ability to collect information and interact with ads. Accordingly, more research is needed to identify how to improve the trustworthiness of SNAs and how to increase consumers' interactions with SNAs.

REFRENCES

[1] T. Ainscough, "The Internet for the rest of us: marketing on the World Wide Web", *Journal of Consumer Marketing 13(2),* pp. 36-47, 1996.

[2] D. Chaffey, F. Ellis-Chadwick ELLIS-CHADWICK, R. Mayer & K. Johsnton. *Internet Marketing: Strategy, Implementation and Practice*, 4Ed. izdanje. Prentice Hall, Essex, 2009.

[3] C. Jayawardena, A. Horsfield, J. Gellatly, P. Willie & A. Sovani, 'Marketing Canadian hotels in the future', *Worldwide Hospitality and Tourism Themes, 5(2),* pp. 205-218, 2013.

[4] Y. Kim, D. Sohn & S. M. Choi, "Cultural difference in motivations for using social network sites: A comparative study of American and Korean college students". *Computers in Human Behavior (27),* pp. 365-372, 2011.

[5] S. Okazaki & C. R. Taylor, "Social media and international advertising: theoretical challenges and future directions", *International Marketing Review, 30 (1),* pp. 56-71, 2013.

[6] R. H. Ducoffe, "How consumers assess the value of advertising". *Journal of Current Issues & Research in Advertising (17),* pp.1-18, 1995.

[7] P. Kazienko, N. Szozda, T. Filipowski & W. Blysz, "New business client acquisition using social networking sites". *Electronic Markets (23),* pp. 93-103, 2013.

[8] J. L. Hopkins, "Can Facebook be an effective mechanism for generating growth and value in small businesses?" *Journal of Systems and Information Technology, 14 (2),* pp. 131-141, 2012.

[9] H. Park & H. Cho, "Social network online communities: information sources for apparel shopping". *Journal of Consumer Marketing 29 (6),* pp. 400-411, 2012.

[10] L. Hansson, A. Wrangmo & K.S. Søilen, "Optimal ways for companies to use Facebook as a marketing channel". *Journal of Information, Communication and Ethics in Society, 11(2),* pp. 112-126, 2013.

[11] Statista.com, Facebook Statistics. Available att: http://www.statista.com/statistics/272014/glob al-social-networks-ranked-by-number-of-users/ [Accessed 02 April, 2015]

[12] Socialbakers.com, Brands on Facebook Statistics. Available att: Zttp://www.socialbakers.com/statistics/facebo ok/pages/total/brands/ [Accessed 02 April, 2015]

[13] K. Logan, L. F. Bright & H. Gangadharbatla GANGADHARBATLA, "Facebook versus television: advertising value perceptions among females". *Journal of Research in Interactive Marketing,* 6**,** pp.164-179. 2012.

[14] A. Saxena & U. Khanna SAXENA, "Advertising on Social Network Sites: A Structural Equation Modelling Approach". *Vision: The Journal of Business Perspective,* 17**,** pp.17-25, 2013.

[15] A. Yaakop, M.A. Marhana & O. Khatijah, "Like It or Not: Issue of Credibility in Facebook Advertising". *Asian Social Science,* 9, pp.154-163, 2013.

[16] L.K. Brackett & B.N. Carr, "Cyberspace advertising vs. other media: Consumer vs. mature student attitudes". *Journal of advertising research,* 41**,** pp. 23-32, 2001.

[17] G. Prendergast, P.Y. Liu & D.T. Poon, "A Hong Kong study of advertising credibility". *Journal of Consumer Marketing,* 26**,** pp. 320-329, 2009.

[18] N. Clewley, S.Y. Chen & X. Liu, "Evaluation of the credibility of internet shopping in the UK". *Online Information Review,* 33**,** pp. 805-826, 2009.

[19] S. Sun, & Y. Wang, "Familiarity, Beliefs, Attitudes, and Consumer Responses Toward Online Advertising in China and the United States". *Journal of Global Marketing,* 23**,** pp. 127-138, 2010.

[20] J. Breitsohl, M. Khammash & G.Griffiths, "E-business complaint management: perceptions and perspectives of online credibility". *Journal of Enterprise Information Management,* 23**,** pp. 653-660, 2010.

[21] D.W. Schuman and E. Thorson, *Internet advertising: theory and research*, L. Erlbaum Associates Inc. 2007.

[22] C. Wang, P. Zhang, R. Choi & M. D'eredita, "Understanding consumers attitude toward advertising". *AMCIS 2002 Proceedings***,** pp.1143-1148, 2002.

[23] D.L. Van Der Waldt, T.M. Rebello & W.J. Brown, "Attitudes of young cosumers towards SMS advertising". *African Jounal of Business Management 3(9)*, pp. 444-452, 2009.

[24] D. Taylor, J. Lewin & D. Strutton, "Friends, Fans, and Followers: Do Ads Work on Social Networks? How Gender and Age Shape Receptivity". *Journal of Advertising Research,* pp.258-275, March, 2011.

[25] I. MIR, "Consumer Attitudinal Insights about Social Media Advertising: A South Asian Perspective". *The Romanian Economic Journal***,** pp. 265-288, September 2012.

[26] M. Gordon, & M. De Lima-Turner, "Conusmer attitudes towards internet advertising: A social contract perspective". *International Marketing Review*, 14 (5), pp. 362-375, 1997.

[27] G. Kulkarni, T. Ratchford & P. Kannan, 2012, "The Impact of Online and Offline Information Sources on Automobile Choice Behavior". *Journal of Interactive Marketing* 26, pp. 167–175, 2012.

[28] C. Blanco, M. Blasco & I. Azorin, "Entertainment and information value as precursory factors of successful mobile advertising messages". *Communications of the IBIMA***,** pp. 1-11, 2010.

[29] A. Schlosser, S. Shavitt & A. Kanfer, "Survey of Internet users' attitudes toward

Internet advertising". *Journal of Interactive Marketing,* 13**,** pp. 34-54, 1999.

[30] Y. Wang, S. Sun, W. Lei & M. Toncar, "Examining beliefs and attitudes toward online advertising among Chinese consumers". *Direct Marketing: An International Journal,* 3**,** pp. 52-66. 2009.

[31] D. Hoffman & T. Novak, "Marketing in hypermedia computer-mediated environments: conceptual foundations". *The Journal of Marketing***,** pp. 50-68. 1996.

[32] S. Mackenzie & R. Lutz, "An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context". *The Journal of Marketing***,** pp. 48-65, 1989.

[33] S. Shavitt, P. Lowrey & J. Haefner, "*Public attitudes toward advertising: more favorable than you might think".* Journal of Advertising Research, 38(4), pp. 7-22, 1998.

[34] S. Dann & S. Dann. *E-marketing: theory and application*, Palgrave Macmillan, Houndmills, 2011.

[35] Z. Hadija, S. Barnes & N. Hair, "Why we ignore social networking advertising". *Qualitative Market Research: An International Journal,* 15**,** pp. 19-32, 2012.

[36] S. Rodgers & E. Thorson, "The interactive advertising model: How users perceive and process online ads". *Journal of interactive advertising,* 1**,** pp. 41-60, 2000.

[37] K.I. Zernigah, & K. Sohail, "Consumers' attitude towards viral marketing in Pakistan". *Management & Marketing 7(4),* pp. 645-662, 2012.

[38] J. Lee, D. Park & I. Han, "The different effects of online consumer reviews on consumers' purchase intentions depending on trust in online shopping malls: An advertising perspective". *Internet Research,* 21**,** pp.187-206. 2011

[39] P. Chatterjee, "Drivers of new product recommending and referral behaviour on social network sites". *International Journal of Advertising (30)***,** pp. 77-101, 2011.

[40] J. Steuwer, "Defining virtual reality: Dimensions determining telepresence". *Journal of communication,* 42**,** pp. 73-93. 1992.

[41] L. Ha, & E. James, "Interactivity reexamined: A baseline analysis of early business web sites". *Journal of Broadcasting & Electronic Media,* 42**,** pp. 457-474. 1998.

[42] Z. Hadija, *"Perceptions of Advertising in Online Social Networks".* The Rochester Institute of Technology Department of Communication College of Liberal Arts, 2008.

[43] R. Miller & N. Lammas, "Social media and its implications for viral marketing". *Asia Pacific Public Relations Journal,* 11**,** pp.1-9, 2010.

[44] C. Cassell & G. Symon "Qualitative research in work contexts". *Qualitative methods in organizational research: A practical guide***,** pp. 1-13, 1994.

[45] D. McBurney & T. White, *"Research methods, 8Ed.",* Cengage Learning, Library if Congress, Belmot, 2009.

[46] M. Saunders, P. Lewis & A. Thornhill, *"Research Methods for business student* 5th Ed". FT Essex: Prentice Hall, 2009.

[47] S. Menard, *"Applied Logistic Regression Analysis: Sage University Series on Quantitative Application in the Social Science".* Thousand Oaks, CA: Sage. 1995.

[48] M.R. O'Brien, "A caution regarding rules of thumb for variance inflation factors". *Quality & Quality*, 41, pp. 673-690. 2007.

[49] J. Cohen, "Statistical power analysis". *Current directions in psychological science,* 1**,** 1992, pp. 98-101.

[50] M. Morimoto & S. Chang, "Consumers' Attitudes Toward Unsolicited Commercial E-mail and Postal Direct Mail Marketing Methods". *J ournal of Interactive Advertising (7),* 2006, pp.1-11.