

*Original Article****The Role of Social Marketing in Community Health Improvement: A Mixed Approach***Ameneh Rezazadeh¹ Majid Fattahi^{2*} Rahman Ghaffari²

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Abstract

Background and Purpose: Social Marketing (SM) is a fitting strategy in world health which is aimed to ensure attitude correction in the community, laying the foundation for the behavioral changes resulting in health promotion in the community. The purpose of this research was to explain the role of social marketing in promoting community health.

Materials and Methods: This was an applied research conducted through a descriptive survey. For data gathering, a mixed quantitative/qualitative approach was adopted. The statistical population included the youth under 25 years old who smoked cigarettes in Mazandaran Province. Based on the Cochran formula, a sample consisting of 385 respondents was formed, and the individual members of it were selected using proportionate random sampling. The data on social marketing mix and normative system were collected using the questionnaires constructed by Pang and Kubacki (1) and Isoock et al. (2), respectively. The data on advertisement were collected using the questionnaire constructed by Dunn and Nisbett (3). Data analysis was performed in PLS Software using Structural Equation Modeling.

Result: The result indicated that the messenger's features influenced the user perception of social marketing and had a positive effect on the user normative system. Further, the results suggested that the user normative system affected their perception of social marketing.

Conclusion: It was concluded that marketing practitioners can manipulate consumer perception of social marketing by shaping ethical norms.

Keywords: social marketing mix; community health improvement; behavior change

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1. Introduction

Community health development is an important concept in social equalities (4) which is of high interest to governments and policymakers. Social marketing is an approach aimed to resolve health issues at individual, collective, and social levels. Social marketing, relative to other approaches, involves creation, development, and application of marketing theories and concepts that affect individuals, communities, structures, and societies to bring about positive social changes (2). Social marketing approach is a type of common strategy in world health with a general purpose of promoting awareness and correcting attitudes in the audience to pioneer behavior change and maintain health both in individual and society (5).

Social marketing is defined as the design, intervention and control of the programs to enhance acceptability of a social idea or practice in a target group (6). Social marketing is the application of commercial marketing technologies (techniques) for analysis, design, implementation, and evaluation of the designed programs for the purpose of influencing voluntary behavior of target audience resulting in the improvement of welfare level for individuals and their community (7). Richard K. Manoff in 1985, detailing the use of social marketing in the area of health, referred to it as “a systematic and organized approach to public health improvement and communication.” This Educational process by a combination of approaches to lifestyle change can help individuals, families and communities in conscious decision making on issues regarding achieving, retrieving and maintaining health (1).

The contemporary social marketing approach constitutes strategic

considerations and interventions at upstream (politics), midstream (services and societies), and downstream (individual) levels for achieving social welfare and community health. The upstream and midstream approaches are especially useful in places where downstream approaches have been long dominant, since this helps fill the gap arising from an excessive concentration on individual factors. For example, an effective upstream social marketing can successfully change the structural environment (8) in order to be able to facilitate behavior change in individuals and groups and improve individual, community and society health. The midstream social marketing suggests working with social partners and groups as social change activists/agents (9) and thereby promoting prosperity and health in society.

Considering the complexity of many of the social issues to which social marketing is applied (such as obesity, cigarette smoking, alcohol drinking, climatic changes, car accidents, pregnancy, AIDS, ...) and considering that these issues often involve multi-beneficiary social changes, much attention has been paid to the ways of influencing the condition for social change (10).

The component “behavior change” is referred to as the main element of social marketing definition, and organizations’ and governments’ inclination to create positive behavioral changes made them aware of social marketing. Social marketing is a concept which can be used everywhere in a community to reduce social harms, and still there are countless issues which can be studied in this area. Therefore, in the present study, we seek to examine the impact of advertising on social

marketing and thereby to measure the degree to which people's behavior changes in terms of community health improvement as a consequence.

2. Research methodology

This was an applied research conducted through a descriptive survey. For data gathering and analysis, a mixed quantitative/qualitative approach was

adopted. The quantitative data were collected from three questionnaires. The data on *social marketing mix* and *normative system* were collected using the questionnaires adopted by (6) and (2), respectively. In addition, the data related to advertisement were collected using the questionnaire developed by (3). The indicators and the number of items for each questionnaire are noted in the table below.

Table 1. The indicators and the items of the questionnaire

Variables	Indicators	No. items	Source
Social marketing mix	Effectiveness	2	Pang & Kubacki (2015)
	Ethicality	2	
	Exaggeration	2	
	Expensiveness	2	
Normative system	Ethical norms	2	Issock et al. (2020)
	Peer pressure	2	
	Peer support	2	
Advertisement	Source credibility	2	Dunn & Nisbett (2020)
	Celebrity endorsement	2	
	Homophily	2	

The data analysis was performed using structural equation modeling (SEM) aided by the PLS Software. The SEM technique is a special causal structure between a set of observed and unobservable (latent) constructs. In the present study, this method served to answer the research main question. The research statistical population included young people under 25

years who smoked cigarettes in Mazandaran Province. Of this population, based on the Cochran formula, a sample of 385 respondents was formed, the individual members of which were selected using proportionate random sampling.

Given the research background and the stated hypotheses, the research conceptual model is drawn as follows:

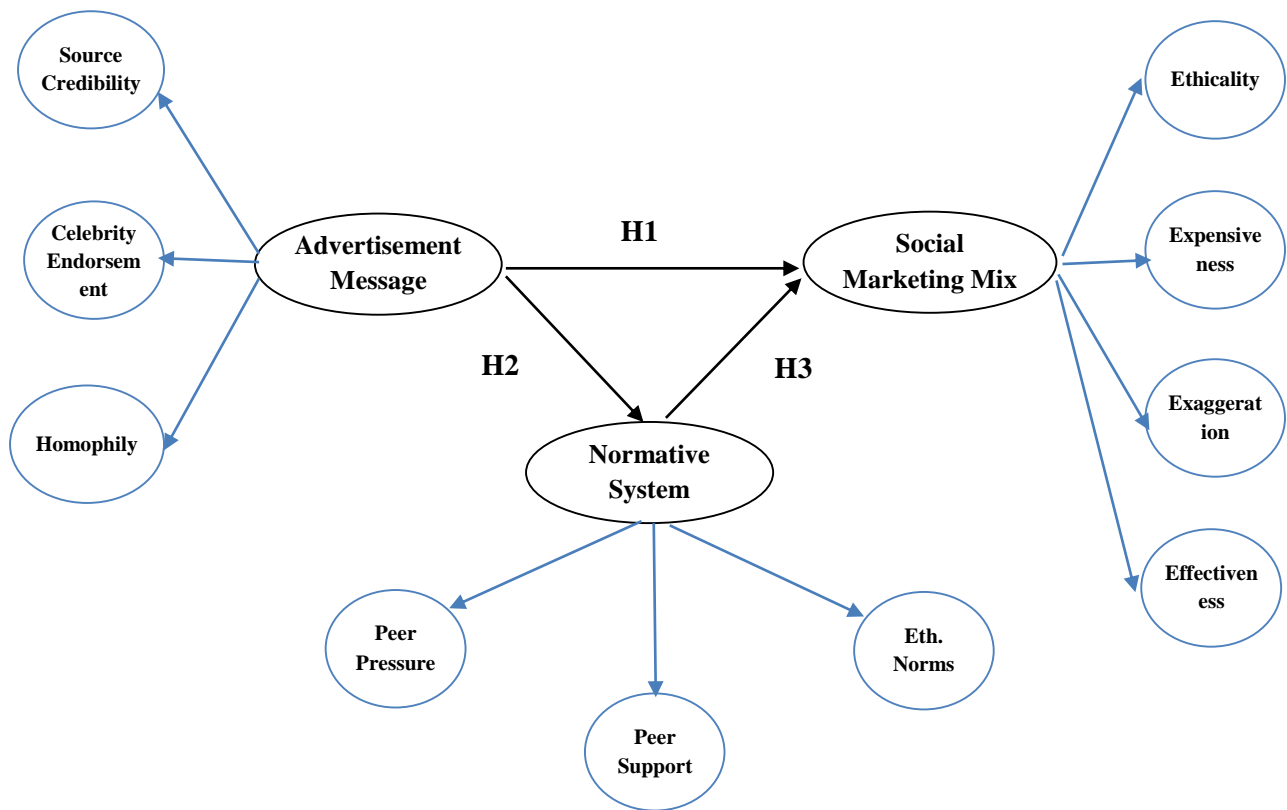


Figure 1. Research conceptual model

Thus, given this Research conceptual model, we assume that:

H1: Advertisement features have a significant effect on social marketing mix.

H2: Advertisement features have a significant effect on normative system.

H3: Normative system has a significant effect on social marketing mix.

H4: Normative system significantly mediates the relationship between Advertisement Message and Social marketing mix.

3. Result

To make sure of the data suitability, that is, if the correlation matrix, which serves as the basis of analysis, in society is not equal to zero, Bartlett's test was used. In other

words, using Bartlett's test, one can make sure of the sample adequacy. The obtained results in Table 2 indicate acceptability of the existing correlations between the data for the sampling adequacy. Hence, we can move on to the main analysis.

Table 2. The results of KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.795
Bartlett's Test of Sphericity	Approx. Chi-Square	3755.914
	Df	210
	Sig.	0.000

Given that KMO value is greater than 0.7 and Sig. value of Bartlett's test is smaller than 0.005 (Sig. < 0.05), it can be said that the data were adequate for conduction the analysis so s to satisfy the required condition. For testing the model fit, the measurement model, structural model and overall model fit were used. To test the

measurement model's reliability, factor load coefficients, Cronbach's alpha and composite reliability were examined. The threshold value for the factor load coefficients was 0.4. In the table below, all factor load coefficients are greater than 0.4, indicating adequacy of this criterion.

Table 3. Factor load coefficients

	CE Celebrity endorsement	EFF Effectiveness	ETH Ethicality	EXA Exaggeration	EXP Expensiveness	HO Homophile	MN Eth. Norms	PP Peer pressure	PS Peer support	SC Source credibility
CE1	0.906									
CE2	0.918									
EFF1		0.896								
EFF2		0.881								
ETH1			0.924							
ETH2			0.915							
EXA1				0.909						
EXA2				0.908						
EXP1					0.645					
EXP2					0.912					
HO1						0.904				
HO2						0.922				
MN1							0.889			
MN2							0.889			
PP1								0.925		
PP2								0.925		
PS1									0.899	
PS2									0.871	
SC1										0.936
SC2										0.942

According to the data analysis algorithm in PLS, after measuring factor loads of items, Cronbach's alpha and composite reliability were also calculated. The second criterion for testing the measurement models fit was

convergent validity that examines correlation of each construct with its items (indicators) the results of which are provided in the table below.

Table 4. Results of criteria Cronbach's alpha and CR for research latent variables

Latent variables	Indicator	Cronbach's alpha ($\alpha > 0.7$)	Composite reliability (CR > 0.7)	AVE (AVE > 0.5)
Advertisement Message	AM	0.794	0.797	0.522
Celebrity Endorsement	CE	0.798	0.908	0.832
Effectiveness	EFF	0.733	0.882	0.789
Ethicality	ETH	0.817	0.916	0.845
Exaggeration	EXA	0.789	0.905	0.826
Expensiveness	EXP	0.730	0.763	0.624
Homophily	HO	0.800	0.909	0.833
Moral Norms	MN	0.735	0.883	0.790
Peer Pressure	PP	0.830	0.922	0.855
Peer Support	PS	0.725	0.879	0.784
Source Credibility	SC	0.866	0.937	0.882
Social Marketing mix	SMM	0.891	0.915	0.581
Normative System	SN	0.727	0.918	0.537

Considering that the threshold value for Cronbach's alpha and composite reliability was set at 0.7, and according to the findings of the above table, the latent variables have taken on an adequate value, whereby the adequacy of the research reliability was confirmed.

Given that the minimum standard value for average variance extracted (AVE) was set at 0.5, and according to the findings of the above table, the obtained AVE values for the latent variables were all greater than the

threshold 0.5 and were thus acceptable. Hence, the research convergent validity was confirmed.

To measure the model discriminant validity, Fornell-Larcker criterion was used, the results of which are presented in Table 5. Since the diagonal element (square root of AVE) for each latent variable was greater than the variable correlation with other latent variables, the model discriminant validity was also confirmed.

Table 5. Discriminant validity calculation

Indicator	CE	EFF	ETH	EXA	EXP	HO	MN	PP	PS	SC
CE	0.912									
EFF	0.375	0.889								
ETH	0.321	0.815	0.919							
EXA	0.446	0.649	0.572	0.909						
EXP	0.398	0.707	0.679	0.605	0.790					
HO	0.364	0.370	0.390	0.341	0.389	0.913				
MN	0.201	0.350	0.274	0.317	0.589	0.251	0.889			
PP	0.302	0.369	0.328	0.321	0.368	0.288	0.210	0.925		
PS	0.215	0.407	0.319	0.293	0.323	0.209	0.247	0.165	0.885	
SC	0.339	0.339	0.313	0.362	0.403	0.351	0.167	0.240	0.047	0.939

To test the structural model fit, R^2 coefficients were used. In a research, R^2 coefficients predict the model endogenous, latent (dependent) variables. R^2 measures the effect of an exogenous variable on an endogenous variable, in view of three criterion values of 0.19, 0.33, and 0.67

representing weak, moderate, and high fit levels, respectively. In table 6, R^2 value is calculated for the research endogenous constructs, which, compared to the three criterion values, indicate the structural model adequate fit.

Table 6. The obtained R^2 value for endogenous constructs

Latent variables	Indicator	R^2
Social Marketing Mix	SMM	0.445
Normative System	SN	0.101

Table 7. Community and R² values of research variables

Latent variables	Indicator	R ²	Community
Social marketing mix	SMM	0.455	0.339
Normative system	SN	0.102	0.328
Advertisement Message	AM		0.147
GOF		$\overline{R^2}$	$\overline{Community}$
0.2747		0.2785	0.271

To examine the model overall fit, Goodness of Fitness (GOF) measure was used for which the three values of 0.01, 0.25, and 0.36 represent weak, average, and strong GOF levels, respectively. Given the

obtained value for GOF (i.e. 0.2748), the model overall fit was confirmed. In this section, we perform the test of the research hypotheses in PLS Software.

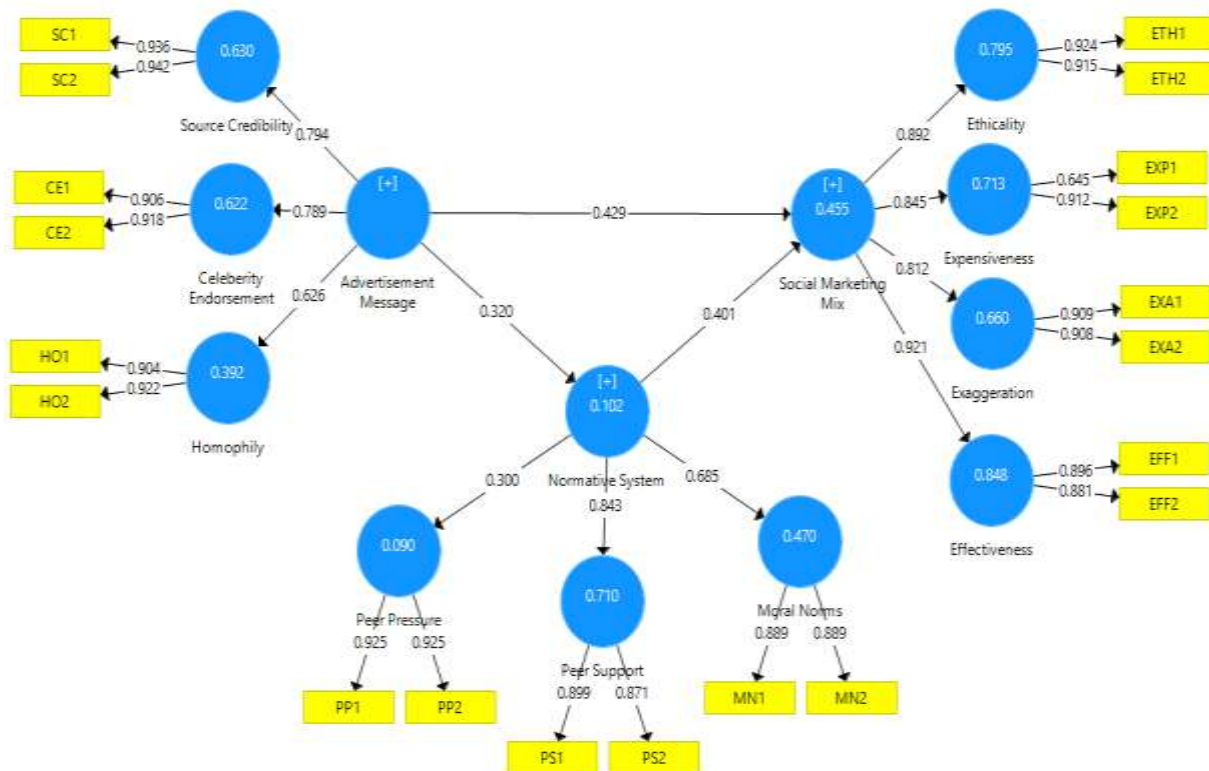


Figure 2. Research structural model along with factor load coefficients

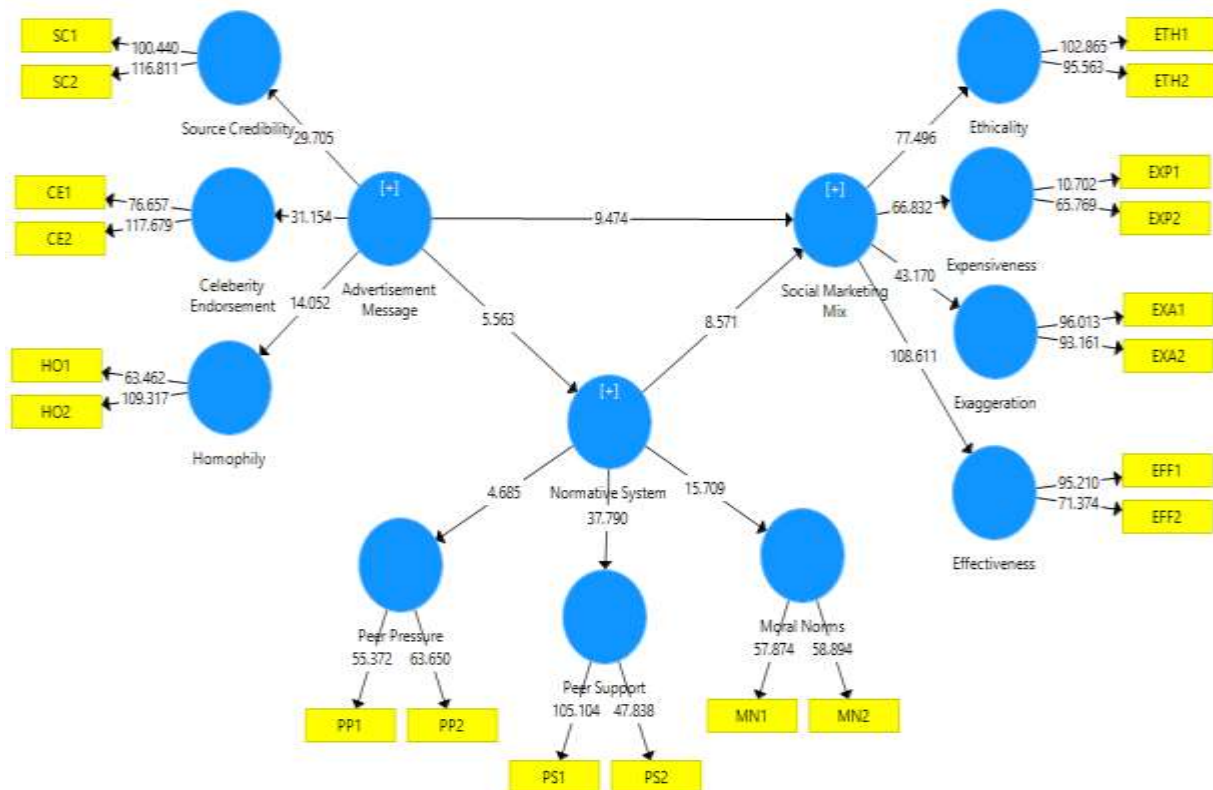


Figure 3. Research structural model with Sig. coefficients

Table 8. The results of direct relationships and Sig. values for research model hypotheses

Hypothesis	Path	β	T-Values	P-Values	Conclusion
First	AM \rightarrow SMM	0.429	9.474	0.000	Confirmed
Second	AM \rightarrow SN	0.320	5.563	0.000	Confirmed
Third	SN \rightarrow SMM	0.401	8.571	0.000	Confirmed
Fourth	AM \rightarrow SN \rightarrow SMM	0.128	4.619	0.000	Confirmed

Considering Figures 2 and 3 and Table 8, the following results were derived:

H1: Advertisement features have a significant effect on social marketing mix.

The standardized coefficient (path coefficient) for the two variables (advertisement and social marketing mix) was $\beta = 0.429$ with Sig value (t-value) of 9.474 ($t = 9.474$) which was greater than the standard of 1.96 in absolute terms, indicating that the effect was significant. Hence, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) was accepted, so it was concluded that advertisement had a positive and significant

effect on social marketing mix. As a result, the research first hypothesis was confirmed.

H2: Advertisement features have a significant effect on normative system.

The standardized coefficient (path coefficient) for the two variables (advertisement and normative system) was found to be 0.320 ($\beta = 0.320$) with Sig value (t-value) of 5.563 ($t = 5.563$) which was higher than the standard value 1.96 in absolute terms, indicating that this effect was significant. Hence, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) was accepted, which meant that advertisement had a positive and

significant effect on the normative system. As a result, the research second hypothesis was confirmed.

H3: Normative system has a significant effect on social marketing mix.

The standardized coefficient (path coefficient) for the two variables (normative system and social marketing mix) was documented to be 0.320 ($\beta = 0.320$) with A Sig value (t-value) of 8.571 ($t = 8.571$) which was higher than the standard value 1.96 in absolute terms, indicating that this effect was significant. Hence, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) was accepted. This suggested that the normative system had a positive and significant effect on social marketing mix. As a result, the research third hypothesis was confirmed and, thus, maintained.

H4: Normative system significantly mediates the relationship between

Advertisement Message and Social marketing mix.

The standardized coefficient (Indirect Effects) for the Three variables (Advertisement Message, Normative System, and social marketing mix) was seen to be $\beta = 0.128$ with Sig value (t-value) of 4.619 ($t = 4.619$) which was greater than the standard of 1.96 in absolute terms, indicating that the Indirect Effects was significant. Hence, the null hypothesis (H_0) was rejected, and the alternative hypothesis (H_1) was accepted, and it was concluded that normative system significantly mediated the relationship between Advertisement Message and Social marketing mix. As a result, the research Fourth hypothesis was confirmed. Considering the above tables and the effects of the coefficients in mediating states in Table 9, it can be stated.

Table 9. The effects of coefficients in mediating state

	Variable		
	A	B	C
Beta coefficients	0.320	0.401	0.429
Sig level	0.000	0.000	0.000
Indirect effect		Direct effect	Total effect
a*b		C	(a*b) + c
0.128		0.429	0.557

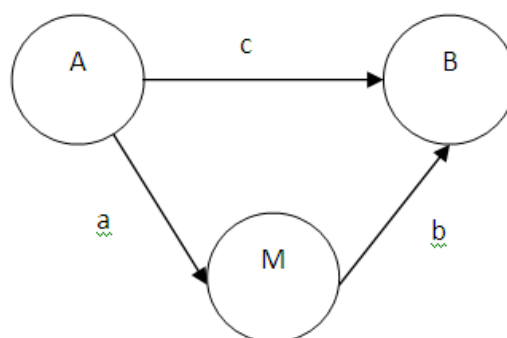


Figure 4. Mediating states

According to Subell Theory, three states appear:

1. The state in which c is not significant, but A and B are significant, that is, M fully mediates.
2. The state in which c is significant, but both A and B are not significant, that is, M is not mediator.
3. The state in which c is significant, and also A and B are significant, that is, M partially mediates.

Now, considering the beta coefficients and the significance level in the relationship between the three variables, the third state applied. Thus, H_0 was rejected and the alternative hypothesis was maintained. That is to say, normative system partially mediated the relationship between Advertisement Message and Social marketing mix, hence the fourth hypothesis was accepted.

4. Discussion

The test result for the first hypothesis indicated that advertisement had a positive and significant impact on social marketing mix. This finding was consistent with the results obtained by (5) suggesting that the elements present in advertisement, such as the celebrity gender and credibility of the advertisement disseminator, influence the effectiveness of social marketing advertisement. This finding was also in line with the results found by (15) who showed that advertisement characteristics, such as celebrity endorsement, had an impact on consumer behavior and behavioral intentions. Further, the result on the test of the second hypothesis indicated that advertising had a positive and significant effect on the normative system. Similar results were found by (16) suggesting that advertisement, especially on social

networks, had an impact on subjective and informational norms.

Lastly, the result on the test of the third hypothesis indicated that the normative system had a positive and significant effect on social marketing mix. This finding was in line with the research results in (16-18). Wang et al. (16) conducted an empirical study based on the norm activation model to examine the effect of social marketing in the area of consumer extravagant behavior. A little earlier, Sorkun investigated the effect of social marketing in relation to waste recycling behavior in the context of social marketing and made similar inferences (17).

The results of the first hypothesis showed that advertisement characteristics were of influence on the respondent perception of social marketing mix. Therefore, marketers were expected to get better results if they made more use of celebrities in their advertising campaigns to influence people's perception by social marketing. In other words, in social marketing campaigns, advertisements need the endorsement of the celebrity in order to enhance its effectiveness. On the other hand, the results suggested that the source credibility was an important factor for influencing people's perception. Those celebrities (famous individuals) should be used in such campaigns that in view of the target audience are highly credible. Further, it should be noted that in the choice of a celebrity, the homophily aspect needs to be taken into consideration as much as possible. For this purpose, we should do our best to choose those individuals in whom our target audience sees a likeness. Social marketing was born in the 1970s as an independent scientific field in its own right. Philip Kotler and Gerald Zaltman were the

two famous thinkers and authorities of marketing who introduced this new scientific branch. They believed that the assumptions and concepts of commercial marketing could be used for selling human beliefs, ideas, attitudes, and behaviors (1). Social marketing makes use of the commercial marketing principles and techniques to convey beliefs, attitudes and behaviors to society, and the health area was well aware of such movement and began to apply this view to the healthcare delivery system, especially in health education programs. Familiarity of healthcare experts and practitioners with social marketing concepts and their increasing skill are promising for promotion of community health (11). The use of psychological response to social marketing messages helps our understanding of selecting the most effective speakers for social marketing activities (5). Gebreselassie and Bougie (12) studied enhancing advertising effectiveness with regard to social issues in less developed countries employing advertising diversity and repetition strategies in the context of communication about social topics and issues. Their results showed that for many social issues, diversity strategy, in terms of reminding, was more effective than repetition strategy in advertising. Also, Lambe et al. (13) suggested that positive type of advertising and health campaigns have significant effect on sales of environment friendly products.

In addition, the results on the test of the second hypothesis showed that advertising features had a positive and significant effect on the consumer normative system. Marketing practitioners using the features expressed in advertisement messages can influence the normative system of their

audience and give meaning to the desired behavior as a subculture for them. Therefore, marketing practitioners by emphasizing on the celebrity credibility and the homophily quality can affect the ethical norms of their target audience. Moreover, with this strategy, they will be able to influence the peers of their audience as well. In other words, peer support and peer pressure in a normative system bring about changes in consumer attitude to ethical norms. In social marketing, gaining profit and personal interests are not considered a top priority. In other words, social marketing is not only about satisfying a community's needs and wishes through the process of exchange and trading, but also about influencing people's actions and behavior in the community (14). The use of advertising in social marketing is a kind of social and management process through which individuals and groups can satisfy their needs and wishes by producing and creating products and values and exchanging them with others. Social marketing is a new scientific field that tries, using commercial marketing techniques, to realize social and religious goals and objectives (1). The social marketing principles and techniques are more used by those entities that are at the forefront of promoting public health, preventing and reducing social harms, protecting the environment, and alleviating poverty. Of course, in many cases, the title of social marketing is not employed. Yet, many international organizations, such as UNESCO and World Health Organization, are engaged in social marketing. In most cases, the institutions implementing social marketing programs are government agencies. Non-governmental organizations (NGOs), and non-profit and charity foundations, too, are engaged in the

promotion of desired social behaviors as far as the extent of their mission allows them (14). The research indicated a significant difference between the audience normative system and their perception of advertisement. The research also indicated that the message source credibility and homophily (the person's feeling of being similar to another person) had a significant role in effectiveness of social marketing messages (5).

Finally, the results on the third hypothesis indicated that the consumer normative system had an effect on the respondent perception of social marketing mix. Therefore, marketing practitioners can by shaping the ethical norms manipulate consumer perception of social marketing. In addition, the nature of social marketing is so that individuals pay special attention to the views of their peers. Thus, marketing practitioners may also by influencing the peers of their target audience and through the strategies of peer pressure and peer support create a condition to improve consumer perception of social marketing. The component 'behavior change' is considered as the main element of social marketing, and the interest shown by organizations and governments in creating positive behavioral changes created an early awareness in them regarding social marketing. In fact, for influencing people, in addition to social marketing, there are two other methods, namely education and legislation, both of which are good and necessary but not sufficient. Since all the behavioral changes could not be realized by these two methods alone, social marketing programs were used in the form of social marketing mix as the supplement to the other two methods (2). Issock et al. examined the effects of normative factors on household's saving in the field of social

marketing (2). They showed that ethical norms, peer support, and peer pressure had significant effect on social marketing messages. All the theoretical studies support the idea that social marketing has a positive effect on the target behavior change and helps behavior prediction. The health improvement interventions within the framework of social marketing showed some merits, while qualitative studies were on the way trying to identify the audience needs and motivations for adopting the aimed behavior. Social marketing seeks to influence social and human behaviors. Its emphasis is rather on influencing people's actions and behavior en masse, beyond satisfying their needs and wishes. In fact, the organizations and governments' willingness to create positive behavioral changes was the main reason which drove them to the use the social marketing techniques for dealing with some important health issues. The social marketing approach is a process that makes use of the commercial marketing principles and techniques to create, convey, and express the values aiming to influence the actions and behaviors of the target audience, which is both in the interest of community and the target audience.

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Conflicts of Interest

The authors declared no conflicts of interests.

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