Research Article
Interplay of Mediating Factors in the Relationship between Greenwashed Labels and Consumers' Trust

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Abstract

Background and Objective: Greenwashing as a concept has lately appeared to attract the attention of several practitioners and scholars. This study aims to examine the effects of greenwashed labels on Lebanese consumers' trust, while accounting for the mediating role that personal, social and environmental factors play. **Materials and Methods:** An online questionnaire was addressed to a sample of 227 consumers aged between 19 and 24 years old, in order to investigate their opinion towards labels that feature particular green attributes on chocolate bars. This study adopts exploratory factor analysis and structural equation modeling for the analysis of data. **Results:** A negative association exists between greenwashed labels and consumers' trust. The presence of personal and environmental factors as mediators between greenwashed labels and consumers' trust does not indicate remarkable influence. Social factors alone are seen to play the mediating role that affects the relation of the relevant variables. **Conclusion:** The suspicious greenwashing practices of many corporations have today raised consumers' concerns. In general, many Lebanese consumers currently hold unfavorable perspectives towards products that feature unverified green claims on their labels. Corporations targeting the Lebanese market should therefore diminish their greenwashing activities and design truthful labels that generate trust among consumers.

Competing Interest: The authors have declared that no competing interest exists.

Data Availability: All relevant data are within the paper and its supporting information files.

INTRODUCTION

The essence of green marketing, which was originally introduced in the late 1980s[1], has massively re-emerged in recent years following the increase in consumers' environmental awareness and favoritism of green claims[2]. Efforts invested by corporations in this regard present many challenges related to their ability to properly respond to the increasing demand for green and environmentally friendly products in consideration of the particularities of ingredients and raw materials used, along with the necessary processing methods. A summary report on green washing in North America published by TerraChoice[3], shows that the total number of products with green assertions increased by an average of 79% in only two years, out of which roughly 98% had been green washed.

It is from this perspective that the concept of 'green washing' has lately appeared to attract the attention of several practitioners and scholars. Existing literature mainly relates green washing to social responsibility[4], law[5], understanding and behavior[6] and green trust while discussing the mediation roles of green perceived risk and green confusion[7]. However, the association between greenwashed labels and other factors affecting consumers' trust levels has not been thoroughly discussed in order to determine the degrees of influence of each of those factors. As is it generally recognized, a product label that presents green features can be perceived by consumers as an indicator of health, social and/or environmental value. While some corporations may rely on this trend in order to communicate specific green aspects of their products and brands, some others according to Ferrell *et al.*[8], have initiated a set of packaging strategies to mislead consumers via illusory benefits.

According to Patai[9], westernization is a spectacle that is seen to affect Lebanon and many of the Middle Eastern countries and Lebanon's noteworthy interacting role between the Middle East region and Western world reflects the uniqueness that such countries hold in approaching cultures[10]. Today, a wide range of local, regional and international products exist in the market to attract mainly young consumers who are surrounded by local traditions and modern lifestyles. According to current knowledge, no studies have been conducted in Lebanon to analyze the effects of greenwashed labels on consumers' trust or investigate the mediating role that personal, social and environmental factors may play in this regard. Given the aforementioned characteristics, what are the factors that are primarily seen to affect Lebanese consumers' levels of trust when associating them with greenwashing?

Outcomes of this study could be useful to practitioners and scholars related to the field of green and ethical marketing, mainly foods. Practitioners, primarily retailers, can benefit from this study in order to deliver consumers the guaranteed products and brands during their shopping experience. Consumers in turn can take advantage of the outcomes in order to gain better understandings related to green purchases, mainly of chocolate bars. From another side, this study would be beneficial to scholars who wish to increase knowledge related to green and ethical marketing and gain additional insights into the Lebanese context.

For the empirical part, an online questionnaire is addressed to a sample of Lebanese consumers in order to investigate their opinion towards labels that feature particular green attributes on chocolate bars. A report published by the Economic and Social Fund for Development[11], shows that the 19-24 years old age bracket is among those with the highest level of chocolate consumption in Lebanon with an approximate annual per capita consumption of 2 kg. Results reveal a negative association between the existence of greenwashed labels and consumers' trust. The presence of personal and environmental factors as mediators between greenwashed labels and consumers' trust does not indicate remarkable influence. Social factors alone are seen to play the mediating role that affects the relation of the relevant variables.

This study aims to explore the mediating role that personal, social and environmental factors play when associating greenwashed labels with consumers' trust. It also suggests a contemporary model related to Lebanese consumers that reinforces the outcomes of existing literature.

Addressing the related studies: The issue of global warming has turned the attention of many consumers towards sustainable products and production processes. This has led firms to initiate the development of their own eco-friendly products and respond to this ever-increasing market need. The report of the Brundtland Commission[12], originally defines the concept of sustainable development as the ability to meet the "needs of the present without compromising the ability of future generations to meet their own needs". Sustainable value-added products are therefore, according to Datta[13], the drivers towards an advanced green marketing mix that was initially introduced by Bradley[14], in order to measure the green performances of firms' products.

Green offerings are mainly spread over three labeling varieties[15]. While "Eco-labeling" is the first type, which involves an external authorized environmental entity producing the labeling through the use of a set of general varied available standards, "Eco-claims" is another type directly conducted by the producer whereby suggestive claims such as biodegradable and recyclable among many others are being made. Like the first type, the last one necessitates the existence of a third party to conduct the assessment based on particular "pre-set criteria" such as water discharges, energy use and so on.

Despite the growing level of environmental awareness that exists today among consumers, many remain unfamiliar with the importance of green and ecological products and their effects on their health, society and the environment. Added to them are the proportions of consumers who are not interested or willing to buy such products for varied personal and economic reasons. The study of Yates[16], went even further to suggest that some consumers have doubts about the reality and true existence of such green claims. Regardless of the existing trends and relatively increasing demand for such products, mainly food, the concept of greenwashing remains among the main factors that are seen to affect the buying decisions of consumers.

Emergence: Greenwashing refers to the deceitful and misleading green claims that a company communicates to consumers about the products it offers or activities it conducts[17]. Today, the unease about misleading or misrepresented eco-friendly practices is ongoing. Many organizations have been therefore able to promote themselves as green and eco-friendly agents due to the lack of awareness or bounded information that many consumers hold about the sustainable practices of those organizations[18]. The report published by TerraChoice[3], shows that for around 98% of 2219 products surveyed in North America, the producers were engaged in at least one of the greenwashing sins listed as follows:

- Limited sets of green attributes (i.e., not recognizing that proper environmental practices are of equal importance to a recyclable package)
- Vagueness and irrelevance of green claims (i.e., all natural and chlorofluorocarbon free)
- Contradictory (i.e., green insecticides) and unproven statements (i.e., no evidence for ratios claims of post-consumer reprocessed packages)

Greenwashing is seen to be conducted in several forms even though economics seems to be the primary driver in this regard. Some brands, for instance, may excessively promote their green features for emotional purposes, while some others may conduct this for economic drives and price increase strategies[19]. Delmas and Burbano[20], underlined four reasons behind the practice of greenwashing. The first reason is related to the types of products offered by the firm. In general, consumer products have greater tendencies to be greenwashed as consumers' environmental expectations in this regard are higher than for the other types. Another reason pertains to firms' profitability and ethical climate. In general, prompt profit claims and unethical managerial climates are real facilitators of such conduct. Fast identity change is the third cause as firms at this level find themselves incapable of directly following the new trends. Finally, poor internal communication is considered a vital source of greenwashing when it comes to deadlines backed up by weak coordination.

The current literature is therefore aligned to a large extent with the S-O-R "Stimulus-Organism-Response" model initially proposed by Woodworth[21]. The latter states that when exposed to marketing stimuli, consumers generate internal responses affected by several buyers' characteristics that finally determine their behaviors.

Greenwashing, consumers' trust and roles of mediators: Trust according to Morgan and Hunt[22], is defined as integrity and reliability that for Doney and Cannon[23], shows consumers' confidence in the brand. Consumers' trust regarding products making green claims has been seen to be affected by the issue of greenwashing[7]. In general, greenwashing and decrease in consumers' trust are seen to be mutually dependent due to the negative effects that greenwashing could have on consumers when it comes to word-of-mouth communication[24]. For them, greenwashing is an act that helps companies to escape from the fulfillment of their green promises.

Today, greenwashing presents a major ethical concern for some consumers who truly admire the existence of green products. For Cherry and Sneirson[25], customers are unfavorable towards creating long-term trust relationships with companies that conduct greenwashing activities. In their turn, Self *et al.*[26] affirmed the negative association between greenwashing and consumers' trust. Given that a large proportion of Lebanese consumers favor modernized traditional food, the reputation of such products among many others has been damaged by the unfortunate scandals that have occurred, such as the excessive pesticide deposits in certain products[27] and which can be undoubtedly related to negative consumers' trust. This guides us to present the hypothesis below:

- **Hypothesis 1:** The existence of greenwashed labels is negatively associated with consumers' trust

Several corporations consider greenwashing today an impediment for the development of their green marketing strategies. Horiuchi *et al.*[28], affirm that green marketing as a business practice is mainly influenced by greenwashing due to the skeptical effects that this latter is perceived to exercise on consumers. Nocella *et al.*[29] assert that consumers' trust is seen to be more positively correlated with food information communicated by public and private regulator and the impact of mislabeling goes beyond the product itself to affect the image of the region and sometimes the country in general. For Farouk *et al.*[30] accurate labeling is vital to ensure consumers' trust when it comes to factors related to health, cultural and/or religious considerations. Although the demand for organic products is increasing among Lebanese consumers, it is still considered relatively small[31]. Likewise, in many developing countries, national food safety practices in most cases do not follow international standards[32] and Lebanese food safety practices are governed by a set of outdated declarations[33]. Not to neglect the rising level of obesity among the Lebanese population[34], related to particular eating habits, which serve as indicators to a direct association between greenwashed labels and consumers' trust, regardless of the presence of personal factors as mediators since healthy consumption is not considered a main priority for many Lebanese. Based on the above, the following hypothesis is generated:

- **Hypothesis 2a:** The relation between greenwashed labels and consumers' trust is not affected by consumers' personal factors

Social claims shown on the labels of many food producers and retailers are positively linked to consumers' trust[35] .Yet, this latter can be also interrelated with the degree of concern that each consumer shows towards community welfare[36]. Social benefits of brands are not seen to be directly associated with the increase in Lebanese consumers' trust[37]. Yet, given that cultural factors continue to affect social practices of corporations[38], it is assumed that social factors are seen to serve as mediators between greenwashing and consumers' trust and therefore affect the direct relationship of these two variables. This leads us to propose the following hypothesis:

- **Hypothesis 2b:** The relation between greenwashed labels and consumers' trust is affected by consumers' social factors
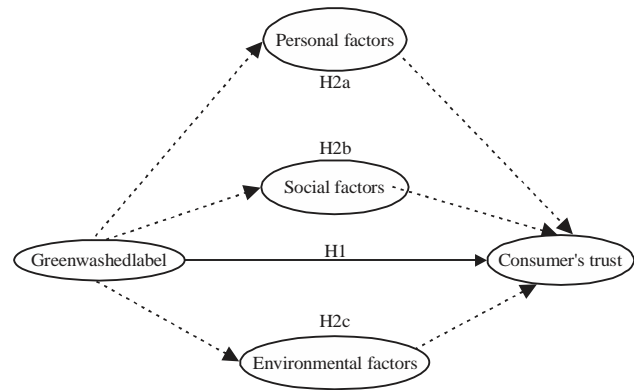

Fig. 1: Research framework

For Gillespie[39], misleading consumers by featuring environmentally friendly products' benefits that in fact do not exist is often connected to consumers' distrust. Similarly, Chen and Chang[7] argue that greenwash is negatively correlated with consumers' green trust in the context of environmental management. A study published by Leonidou *et al.*[40] on "greenness of environmental advertising claims" shows that unbiased and clear information about a product enhances consumers' trust and facilitates the elimination of any feeling of skepticism. For a country such as Lebanon, the perceived importance of the environmental issue is considered a key contributor to the exercise of green purchases[41]. The Lebanese population has always suffered from unfortunate environmental issues related to various types of natural resources. The continuing garbage crisis that the country has been suffering for more than 15 months[42] and the unfortunate 94th ranking related to environmental performance that Lebanon scored[43], somewhat match the outcomes of Lim *et al.*[6] which affirm that many consumers today have decided to ignore the fact that greenwashed products exist as they believe that their buying efforts will not make any positive difference to the existing environmental situation. The following hypothesis is accordingly proposed:

- **Hypothesis 2c:** The relation between greenwashed labels and consumers' trust is not affected by consumers' environmental factors

Figure 1 illustrates the research framework of the study.

MATERIALS AND METHODS

Data collection: A quantitative approach was adopted in order to obtain the targeted responses from Lebanese consumers who have experience of chocolate bar purchase

and consumption. A pre-test was initially conducted with seven researchers at the Holy Spirit University of Kaslik, Lebanon (USEK) in order to assess the content and feasibility of the questions and propose the necessary adjustments.

Using non-probability convenience sampling, 30 participant consumers who hold identical characteristics to the targeted population were afterwards invited to take part in the pilot study and complete the questionnaire. The latter sample size was aligned with the outcomes of Johanson and Brooks[44], which suggest 30 participants who represented the population as a minimum equitable number for a pilot study. The final version was released after completion of this pilot study, which made the content validity of the questionnaire justifiable.

A descriptive, cross-sectional research design was conducted in order collect the data related to the study. A non-probability, convenience sampling technique was used over a sample size of 773 undergraduate students at USEK aged between 19 and 24 years old using Qualtrics Survey. Published by the Economic and Social Fund for Development[11], the report showed that the 19-24 years old age category was considered among the highest with regard to level of chocolate consumption in Lebanon and that "bars" were the most common type of chocolate consumed. Respondents were granted a 2 week period to complete the online questionnaire during the month of October, 2016.

Out of the 773 consumers who received the invitation to take part in the data collection, 227 responded and properly completed the questionnaire, which indicate an effective final response rate of nearly 30%.

Ethical consideration: A detailed consent form was presented at the beginning of the questionnaire so that participants would form a clear idea about the purpose of the study and criteria of participation.

Measurement of variables: A five-point Likert scale was used to measure the variables pertaining to this study. In addition to the general questions that aim to measure the "personal factors", "social factors" and "environmental factors" of consumers, participants were asked to answer particular questions related to "greenwashing" and "consumers' trust" after being exposed to specially designed chocolate bar label (photo) that purposely includes greenwashed features.

The following sub-sections explain how the variables were measured for the empirical investigation:

Greenwashed label: The measurement of the greenwashed label (GreenW) was adapted from the scales of Laufer[45] and Chen and Chang[7], using five items and these were also slightly

adjusted upon the recommendation of the seven scholars during the pre-test: (1) The green claims shown on this chocolate bar label were misleading, (2) The chocolate bar label overstated its green claims, (3) The green claims shown on this chocolate bar label were vague, (4) The chocolate bar label features unjustifiable green claims and (5) The chocolate bar label masked critical information, making its features more impressive than they truly were.

Consumers' trust: Consumers' trust (Ctrust) was measured based on Chen[46] and Voon *et al.*[47] scales using five items and these were also slightly adjusted upon the recommendation of the seven scholars during the pre-test: (1) I trust the "Gluten free" nutritional claim shown on this chocolate bar label, (2) I trust the "GMO free" nutritional claim shown on this chocolate bar label, (3) I consider the overall quality of this chocolate bar trustworthy, (4) I trust the "8% profits donated" green claim shown on this chocolate bar label and (5) I trust the "sustainably sourced" green claim shown on this chocolate bar label.

Personal factors: Personal Factors (PersonalF) that mainly encompass health and attitudinal aspects were measured based on Voon *et al.*[47] scales using six items and these were also slightly adjusted upon the recommendation of the seven scholars during the pre-test: (1) I care a lot about trans-fat, cholesterol and/or sugar levels available in any chocolate bar that I want to consume, (2) I do not consume any chocolate bar that contains chemical additives, regardless of the quantity consumed, (3) The nutrition facts of any chocolate bar that I consume are essential for my health, regardless of the quantity consumed, (4) In general, the ingredients mentioned on any chocolate bar label are indicators of its quality, (5) I mainly buy chocolate bars that look tasty based on the ingredients mentioned on the label and (6) I strongly take into consideration the brand name of the chocolate bar when buying it.

Social factors: The measurement of social factors (SocialF) that primarily cover social behavioral aspects related to society refer to Rizkallah[48] scales using five items and these were also slightly adjusted upon the recommendation of the seven scholars during the pre-test: (1) Looking into the ways a chocolate bar company deals with all its stakeholders is important to me, (2) I always investigate the social practices of companies including chocolate producers before buying their brands, (3) I have convinced some of my relatives and friends to stop buying food products and/or chocolate bars that do not reveal social practices, (4) I favor chocolate brands that are associated with charitable activities and societal causes and

(5) I consider myself a socially responsible consumer since all purchases I make including chocolate bars reflect this perspective.

Environmental factors: Finally, the environmental factors (EnvF) that principally accommodate aspects related to environment and animal welfare were measured using the scales of Roberts and Bacon[49] and Voon *et al.*[47] using five items and these were also slightly adjusted upon the recommendation of the seven scholars during the pre-test: (1) I am greatly concerned about the damage currently being done to animal life and plants by pollution, (2) I always try to avoid buying chocolate bars whose packages are harmful to the environment, (3) Worrying about environmental issues is worthless since being among those few people concerned about environmental issues does not make any difference, (4) I have convinced some of my relatives and friends to stop buying food products and/or chocolate bars that are harmful to the environment and (5) I care greatly about the environmental issues that many members of my society are facing today.

Statistical analysis: Quantitative analysis was based on two complementary techniques: (1) Exploratory factor analysis (EFA) using SPSS® 23 and (2) Structural equation modeling (SEM) using Amos™ 23. Technique 1 is used to measure sampling adequacy and extract the five latent factors, namely "greenwashed label", "consumers' trust", "personal factors", "social factors" and "environmental factors". Technique 2 f theory is used to assess the relationships between the factors as stated within the hypotheses. Both techniques are based on the maximum likelihood estimation (MLE). It is important to mention that statistical significance of the results is taken at probability levels 0.05 and 0.1.

RESULTS

Results from exploratory factor analysis: EFA is applied on the 26 items with oblique rotation (promax). Sampling adequacy is verified by the Kaiser-Meyer-Olkin statistic, KMO = 0.783. Bartlett's test of sphericity indicates that the inter-item correlation matrix is not an identity matrix, $\chi^2(171) = 1499.175$, $p < 0.05$. After analysis, five components have eigenvalues over Kaiser's criterion of 1 and explain combined 48.618% of the variance. The reliabilities of these five latent factors are measured by Cronbach's α coefficient. Table 1 reports the factor loadings after rotation and the Cronbach's α coefficient for each of the five factors.

Table 1: Items loadings (λ) and the constructs cronbach's α coefficients

Factors	Item	λ	Cronbach's α
Greenwashed label	GreenW1	0.814	0.833
	GreenW2	0.756	
	GreenW3	0.714	
	GreenW4	0.653	
	GreenW5	0.578	
Consumers' trust	CTrust1	0.833	0.840
	CTrust2	0.802	
	CTrust3	0.740	
	CTrust4	0.584	
	CTrust5	0.558	
Personal factors	PersonalF1	0.727	0.647
	PersonalF2	0.622	
	PersonalF3	0.321	
Social factors	SocialF1	0.933	0.724
	SocialF2	0.569	
	SocialF3	0.499	
Environmental factors	EnvF1	0.643	0.646
	EnvF2	0.638	
	EnvF3	0.475	

"Greenwashed label", "consumers' trust" and "social factors" have good reliability, all Cronbach's α greater than 0.7. Besides, "environmental factors" and "personal factors" have satisfactory reliabilities, all Cronbach's α slightly less than 0.7. After extraction, only 19 items out of pristine 26 have loadings above 0.3, hence these are kept while other items are discarded. The grand average for all items loadings is 0.656 indicating a plausible correlation between items and constructs.

Results from structural equation modeling: The goodness of fit of the structural model can be assessed by the goodness of fit index (GFI = 0.898), the comparative fit index (CFI = 0.918), the root mean square error of approximation (RMSEA = 0.059) coefficients are reported in Table 2. The latter table shows that only "greenwashed label" and "social factors" have significant path coefficients with $p < 0.05$ and $p < 0.1$. The former path coefficient indicates that when "greenwashed label" goes up by one standard deviation, "consumers' trust" goes down by 0.533 to standard deviation. Such findings suggest a negative association between "greenwashed label" and "consumers' trust" as stated in H1.

The latter path coefficient indicates that when "social factors" go up by one standard deviation, "consumers' trust" goes down by 0.191 to standard deviation. Also, when "greenwashed label" goes up by one standard deviation, "social factors" go up by 0.152 to standard deviation. These findings might infer a plausible mediation of "social factors" to the relationship between "greenwashed label" and "consumers' trust". Nevertheless, the standardized path coefficients are estimated taking into account "personal",

"social" and "environmental" factors. Results of the complete model are shown in Fig. 2. The mediation of the latter three factors as well as H2a, H2b and H2c can be evaluated through direct and indirect effects as reported in Table 3. The direct association between "greenwashed label" and "consumers' trust" is negative with a significant standardized path coefficient of -0.546 in concomitance with H1.

Although it slightly changes to -0.533 with all three mediators taken into account, the indirect effect's-p value of 0.562 (>0.05) indicates no significant effect of all three

mediators over the association between "greenwashed label" and "consumers' trust". Moreover, the mediations of that relationship with "social factors" induce a significant change with indirect effect's p-0.1, by which the standardized coefficient increases from -0.546 to -0.525. This finding is in line with H2b. "Personal" and "environmental" factors induce no significant changes to the standardized path coefficients with indirect effect's p-values all greater than 0.05. This finding is also in line with hypotheses H2a and H2c.

Table 2: SEM Results for estimated standardized path coefficients and their significance

Independent variables	Dependent variables	Standardized path coefficient
Greenwashed label	Personal factors	0.074 (0.393)
Greenwashed label	Social factors	0.152 (0.062)**
Greenwashed label	Environmental factors	0.143 (0.105)
Greenwashed label	Consumers' trust	-0.533*
Personal factors	Consumers' trust	0.025 (0.743)
Social factors	Consumers' trust	-0.191 (0.011)
Environmental factors	Consumers' trust	0.125 (0.112)

*p<0.05, **p<0.1

Table 3: SEM results for the direct and indirect effects of mediators with standardized path coefficients and exact significance

Hypothesis	Relationship	Direct effect without mediator	Direct effect with mediator	Indirect Effect p-value
H1	Greenwashed label → Consumers' trust	-0.546*	-0.533*	0.562
H2a	Greenwashed label → Personal factors → Consumers' trust	-0.546*	-0.545*	0.557
H2b	Greenwashed label → Social factors → Consumers' trust	-0.546*	-0.525*	0.055**
H2c	Greenwashed label → Environmental factors → Consumers' trust	-0.546*	-0.553*	0.125

*p<0.05, **p<0.1

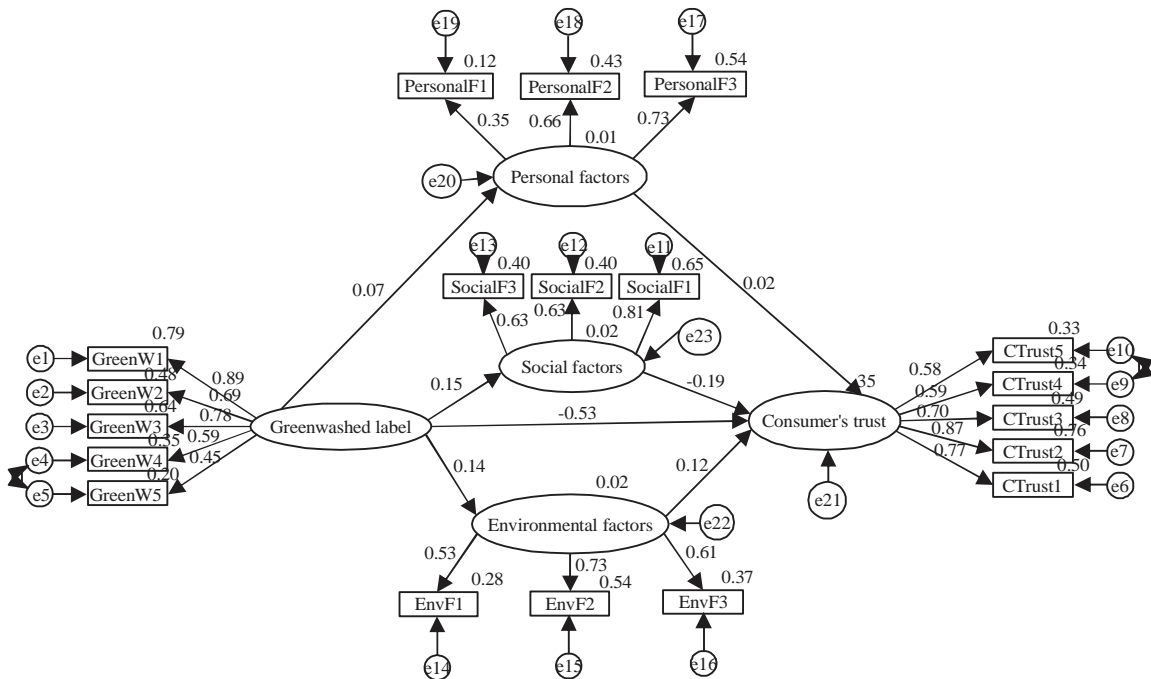Fig. 2: Outcomes of the complete model

DISCUSSION

This study proves the negative association between Lebanese consumers' trust and the presence of greenwashed labels. This is aligned with the outcomes of Chen and Chang[7], whose research was conducted over a sample size of 252 Taiwanese participants. Likewise, such results reinforce the affirmation of Self *et al.*[26] in this regard. On a related note, results show the insignificant effects of the personal and environmental factors that act as mediators over the association between greenwashed labels and consumers' trust. Social factors alone are seen to play an effective mediating role. The latter indirectly opposes the outcomes of Ramadan and Abosag[37].

This interpretation can be made because many Lebanese consumers in general and the young in particular consider their eating habits as being of minor importance. The concept of health is not being properly considered by a large proportion of the population and this can be linked to the outcomes of Nasreddine *et al.*[34] that uncovered an alarming rise in obesity among the Lebanese population and highlighted the importance of developing nutritional strategies that contribute to the decrease of the obesity level in the country. This can be also related to the outcomes of Harris *et al.*[50] summarized by the role of media in promoting unhealthy food consumption.

When it comes to social considerations, their mediating effect is justified by the collectivistic culture of the country. Duguleana and Popovici[51], assert that the behavior of Lebanese is influenced by the traditions and consumption routines of family, friends and the community. Adding to this is the sociocultural influence that media imposes[52] and consequential globalization impacts on young generations[53], which certainly affects their positioning in fluctuating between the Eastern and Western worlds.

As for environmental considerations, the unfortunate events that Lebanon has faced throughout the years and relatively low awareness and lack of care in the culture spread among a large proportion of the Lebanese population, is considered a significant indicator and confirmation of the outcomes. This is aligned with the results of the third State and Trends of the Lebanese Environment report[54].

CONCLUSIONS AND FUTURE RECOMMENDATIONS

The presence of greenwashing has recently increased despite the efforts which governments and several organizations have invested in this regard. The suspicious practices conducted by multiple corporations have today significantly raised consumers' concerns. In general, many Lebanese consumers currently hold unfavorable perspectives towards products that feature unverified green claims on their labels. Despite its existence for almost three decades, the concept of greenwashing is still considered among the most important emerging topics in social sciences and relatively contemporary and fundamental for a country like Lebanon. The noteworthy role that social media recently played in this regard has prompted the approval of the new consumer protection law published by the Ministry of Economy and Trade.

The current empirical research only focused on chocolate bars and the 19-24 years old age category for the collection of data. Future researches could focus on the practice of other purchases such as traditional food and different age categories. Besides, future studies could extend the scope of such research and conduct a comparative analysis with another Arab world country also affected by the Western world and compare and contrast the generated outcomes.

SIGNIFICANCE STATEMENTS

This study explores the relationship between greenwashed chocolate bar label and Lebanese consumers' trust. It also provides empirical evidence concerning the mediating role that personal, social and environmental factors play in this regard. Besides, it contributes to the development of knowledge especially for scholars who wish gain further understanding related to green and ethical marketing in Lebanon. Generated outcomes add value to the existing literature and suggests a contemporary model that classifies the factors affecting trust levels. This study helps researchers to uncover the critical areas of greenwashing mainly new factors affecting consumers' trust levels that many researchers have not explored. Practitioners can benefit from this study in order to deliver consumers the anticipated products and brands. Consumers in turn can take advantage of the outcomes in order to gain better understandings related to green purchases.

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