Factors influencing responsible consumption in health crisis context: Moroccan case study

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Abstract: After the appearance of COVID-19 and its spread to the four corners of the globe, the decision to contain it has become more democratic in all countries, and the measures that go with it too. Citizens found themselves forced to anticipate and think carefully about their trips, which necessarily impacted their consuming way. The concept of responsible consumption has been discussed by several researchers, on economic, social, cultural and environmental aspects, but their interpretations are very rare or even untraceable in a context of pandemic, lockdown period and health and environmental crisis. A conceptual model was proposed in this study, exclusively devoted to the factors influencing responsible purchasing behavior in a situation of health and environmental crisis, by means of a quantitative study addressed to Moroccan Internet users, in order to see their motivations for using "home-shopping" in a context of health crisis and in a period of lockdown. The expected results have enabled us to understand the purchasing behavior of individuals, and thus be able to explain the predominant factors in pre-purchase decision making. Our article is divided into three parts. The first part is dedicated to the presentation of the existing literature, the second present the methodology and scientific tools used in our empirical. Then in a third and final part, we will present the results of our quantitative empirical study.

1 Introduction

The second quarter of 2020 was marked by an alert situation, health and environmental crisis followed by a lockdown period on different phases. Faced to this situation, people had to show responsibility and act accordingly.

Consumption is a daily act for everyone, during the lockdown period the citizens were brought in - as usual to consume, in order to meet their daily needs. The only difference is that they are forced to follow the regulations imposed for this situation.

The responsible consumption has been repeatedly studied in its many facets, but we have found no precedents for responsible behavior in times of pandemic, or health and environmental crisis.

Therefore, in this study we aim to explore all the factors that determine consumer behavior in general, whether it’s the discussed factors, or others that have been debated or that are timidly addressed.

The main objective of this research is to propose a global model that concentrates the explanatory variables of responsible consumption behavior in the context of a state of health and environmental crisis through a documentary study of previous research as well as a quantitative study.

To carry out this research work, the first part will address the key concepts of the determinants influencing responsible purchasing behavior; the work methodology and the scientific tool adopted will be detailed secondly; then the second part will be devoted to the analysis and discussion of the results; at the end, a conclusion in which we will express the future perspectives of this study.

2 Conceptual framework

Several studies have focused on the factors influencing individual consumption. From there, it seemed important to analyze these studies in order to subsequently be able to synthesize the multiple factors that exist in the process of responsible consumer behavior. This will allow us subsequently to propose a model adapted to the lockdown period condition and the pandemic situation.

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It has been several years since various studies have produced multiple theories and claims about responsible behavior. This research has presented the different probabilities or realities that have an impact on the action of responsible consumption.

The classification of consumer behavior has always been subject to the position of the researcher, who presented a different classification of the determinants of behavior compared to the existing ones. However, these determining factors remain similar in the different existing classifications. By way of illustration, according to Hawkins and Mothersbaugh (2010) behavior can be influenced primarily by education, lifestyle, personality perceptions and emotions, which have listed them as internal influence; or by demographic characteristics, values, social structure and influence groups that make up the external influence. Moreover, Landrevie & al. (2009) share the same determining factors which call them explanatory variables, and divide them into two major groups: socio-cultural explanatory variables (social and cultural) and psychological explanatory variables (motivations, attitude, personality).

After several readings, we found no study addressing the classification of responsible purchasing behaviors in a health crisis situation. From there, we decided to look for a classification based on a logical distribution according to the nature of the determining factors. To this end, we have chosen the classification of Ayoun (2017) as shown in figure 1, dealing with the factors influencing responsible purchasing behavior and more precisely green behavior, which we deemed the most suitable for our study, and according to which we will study the degree of influence of each determinant on responsible purchasing behavior in the COVID-19 era.

2.1 The cultural dimension

The experience of an individual has always been guided by the cultures that he imbued with. Because of their importance and their ancestries on decision-making consumption behaviors, cultural aspects have always been present in student research consumer behavior in the broad sense, and responsible behavior in the strict sense, but there has been no antecedents in relation to responsible behavior in a context of health and environmental crisis, hence the choice to include it in this study.

**Life Style:** Society is made up of several population groups, each of which is identified by its own characteristics, which control the way of life it leads. Landrevie & al (2009) defined lifestyle as the classification of a population drawn from a set of variables linked to the values, behaviors and opinions of individuals, and each class groups together individuals relatively close to others on the basis of its variables.

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**Fig. 1.** Conceptual model of responsible purchasing behavior. Source: Personal elaboration
Demographic Aspects: Diamantopoulos & al (2003) studied 6 socio-demographic variables, including sex, age, education, marital status, number of children, social class and religion. The results state that the older we get the more educated we are and therefore the more likely we are to exhibit responsible purchasing behavior.

2.2 The social dimension

Some studies have addressed the social explanatory factors of responsible consumer behavior. Indeed, several researchers have been interested in studying the most common social factors in studies of consumer behavior and their influence on responsible behavior.

Social Value: Social values are defined according to two independent dimensions: the first dimension is openness to change against conservatism, distinguishing values that emphasize openness to new ideas; the second dimension is self-transcendence versus self-improvement, distinguishing values that are concerned with the interests of others, of society from nature, of the common good, such as altruism and collectivism. This dimension is of particular interest to us (Schwartz, 1992).

Social Status: Social status is commonly defined by the hierarchy of individuals into social classes resulting from social classification according to specific statutory factors such as wealth, prestige and power. At the same time, Eastman & al. (1999) state that consumption is not necessarily linked to social status, but also, the more the consumer seeks to belong to a specific social status, the more he undertakes specific consumption behaviors. Griskevicius & al. (2010), in the other hand, explained the importance of competition for social status in stimulating the motivations of responsible purchasing attitudes and intentions.

Social Influence: An individual's entourage, whether family, friends, or groups of affiliations, constitute a social influence that plays a determining role in the decision to consume. According to Lee (2008), social influence is the most powerful factor affecting responsible purchasing behavior. This is explained by the fact that the constitution of a social group by people sharing the same habits and the same convictions, with the ability to impose a responsible culture leading to a responsible purchasing behavior.

Social contagion: Gosling & al. (1996) explains the concept of "social contagion", applied to one or more individuals who reproduce the same behavior of a specific person considered as a model. This behavior becomes “trendy” or “trend”, as in fashion, or else viral like a virus. Although social contagion, is a trending factor in consumer behavior research, especially with the advent of digital marketing and the expansion of the business of digital influencers. It has still not been studied in the context of responsible behavior in general and environmental and health crisis more precisely. Hence its introduction into this research work.

2.3 The environmental dimension

Responsible purchasing is a commonly defined act, its main characteristics are to minimize environmental and societal impacts, and to promote good practices in terms of ethics and human rights. In this point, we have explained the key determining factors of the environmental dimension on responsible purchasing behavior.

Environmental Knowledge: According to Mostafa (2009), environmental knowledge has a considerable impact on the intention of consumers. Indeed, knowing the environment, how it works, the elements that can threaten it, the benefits it represents, allows consumers to be more attentive to the things that affect them, and to act accordingly.

Environmental awareness: Kollmuss & al. (2002) defined environmental consciousness by the fact of "knowing the impact of human behavior on the environment", this definition includes two components, a cognitive related to knowledge, and another affective related to perception. On the other hand, Ismail & Panni (2006) have shown that the more informed the consumer is about societal and environmental issues, the more he is engaged in prosocial and pro-environmental behavior.

Environmental Concern: According to Dunlap & Van Liere (1978), environmental concern is defined as an attitude that has indirect effects on behavior through behavioral intentions. In addition, Crosby et al. (1981), state that environmental concern is a strong stimulus for the attitude towards environmental conservation manifested by an individual's behavior.

Well-being and health: Despite the importance of this concept, researches on individual well-being and health concerns are rare, and those done in the context of responsible purchasing are even rarer. Among the few researches found, that of Suranyi-Unger Jr (1981), was particularly interesting to us, in which he situates individual well-being in relation to several criteria, such as social position, personal power, wealth, Maslow, spiritual or ideological and other achievements. Individual well-being and health constitute in economics a fundamental element of the discipline and more precisely the consumerist act.

2.4 The economic (commercial) dimension

There are many criteria examined in research related to consumer behavior. In our study of responsible purchasing behavior in the COVID-19 era, we were particularly interested in one criterion, which is individual income.

Individual Income: The salary or income that consumers receive has a distinct influence on their consumption behavior. Indeed, income is a positive indicator of responsible purchasing behavior (Kinnear & al. 1974).
3. Methodology of the empirical study

The objective of this survey is to know the factors affecting the responsible purchasing decision in a situation of health and environmental crisis, in particular the period of lockdown in the era of COVID-19. It’s understanding allowed us to rank the different factors already studied by several researchers from the most to the least influential in the context of our study. With this in mind, the questionnaire was designed and divided into 6 themes, and was administered in French.

The survey that we developed was structured to address the following themes:
- Theme 1: Personal position regarding compliance with containment standards
- Theme 2: Purchasing behavior before lockdown period
- Theme 3: Purchasing behavior during the lockdown period
- Theme 4: Motivations and influencing factors of home-shopping
- Theme 5: Purchasing behavior after lockdown period
- Theme 6: Profile of Brand Fans

For this last phase of the survey, the data collected is characterized by self-selection, since the respondents decided on their own initiative to respond to our survey published on social networks (see table1).

Being aware of the risks of self-selection bias, we proceeded by eliminating the various possible cases that could affect the reliability of the information.

Table 1. Summary of the methodological choices concerning the quantitative study - Source: Personal elaboration

| Collection methods | Questionnaire administered and published on digital platforms |
|--------------------|-------------------------------------------------------------|
| Data type          | Behavioral                                                 |
| Duration of administration of the questionnaire | From 15/06/2020 to 28/06/2020 |
| Duration of response to the questionnaire | 4 to 6 minutes |
| Bias               | Self-selection                                             |
| Sources            | - Facebook users                                           |
|                    | - Instagram users                                           |
|                    | - LinkedIn users                                            |
|                    | - WhatsApp users                                           |
| Number of objects studied | 674                                                          |
| Collection guide Datas | Theme 1: Personal position regarding compliance with containment standards |
|                    | - Theme 2: Purchasing behavior before lockdown period       |
|                    | - Theme 3: Purchasing behavior during the lockdown period   |
|                    | - Theme 4: Motivations and influencing factors of home-shopping |
|                    | - Theme 5: Purchasing behavior after lockdown period        |
|                    | - Theme 6: Profile of Brand Fans                           |

4. Analysis and discussion of the results

After processing and analyzing the data collected, we decided to present them according to the classifications presented beforehand, with the aim of confirming or affirming the existence of a direct impact on responsible purchasing behavior in a context of health crisis and environmental.

We carried out a rating system on the different motivations that were classified in our questionnaire. For classification purposes, we multiplied the number of responses assigned for each class and the coefficient assigned to each motivation. This way we have the sum of points awarded by all of the people surveyed, which demonstrates the importance of each criterion on all motivations.

It should be noted that the 647 people questioned are predominantly women, with 75.2%, the dominant age group is from 25 to 39 years old with 61.3%, 57.7% of our respondents have a bac+5 or more, and 40.5% are executives. With regard to marital status, there is an almost perfect balance, as 50.9% of respondents are single.

4.1 Cultural influence: demographic aspects

When putting together the questionnaire, it seemed important for us to ask a filter question in order to know the people who had done home shopping before the lockdown period, and those who used it.

After the confirm period and declaration of the alert state. In order to be able to discern between those who use it, according to the criterion of lifestyle by default, and those who will use it out of necessity, precaution or altruism.

From there, we were particularly interested in the group of people who resorted to home shopping after declaration of the lockdown period, in order to find out what are the demographic aspects that constitute the people who changed their behavior during this period.
Gender: Indeed, the results of our sample showed that in general and outside the lockdown period, it is women who use home shopping with 75.2% against 24.8. However, during the period of lockdown, women regained shares on the men’s side, reaching 85% against 15%. From this we can deduce that women are more likely to adopt responsible purchasing behavior in the context studied.

Age: By analyzing our responses, we found that the age factor plays a significant role in responsible behavior in our study setting, especially in relation to the age range (40 or over). Indeed, they were 15.1% to report shopping for home before the lockdown period, and the rate rose to 20.43 during the lockdown period. It shows that the older you are, the more likely you are to buy responsibly during a health and environmental crisis.

Marital status and kinship status: These two variables have shown that they do not have a clear impact on responsible purchasing action in a context of health and environmental crisis, given that the fact of having children or not is not one of the criteria that prompted our respondents to adopt responsible purchasing behavior during the lockdown period. In figures, 50.54% said they did not have children and used home shopping for the first time, compared with 49.64% of those who had children and used home shopping for the first time during the lockdown period. The same goes for marital status, a slight dominance for married people, as 53.76% of them go home shopping for the first time, against 46.24% for single people.

Level of study and profession: Concerning the level of study and the socio-professional category which are closely linked, we have noticed that the more we advance in the level of study and therefore in particular we have a more distinguished socio-professional position, the more we are likely to resort to home shopping, which in our study is considered responsible purchasing behavior. In figure, 61% of people who resorted to home shopping during the lockdown period are people with a baccalaureate + 5 or more. With a percentage of 41.93 made up of senior executives, engineers or professors.

4.2 Influence with a social dimension

The social dimension is the one with the most influence on purchasing behavior in general. By attributing the different factors to this dimension, we want to demonstrate whether it has the same degree of importance in a context of health and environmental crisis.

Social status: We asked those surveyed to assign a classification to the motivation of social valuation as a criterion influencing home-shopping during the lockdown period. 24% ranked it first, seeing it as a major factor. However, it was ranked 6th in the general ranking attributed on the basis of ratings of the motivations presented.

Social influence: 18% of those respondents said that they did home shopping mainly because relatives use the same service. However, in all of the criteria presented it was ranked 7th on the scale of influence on responsible purchasing behavior in the COVID-19 era.

Social contagion: This criterion was ranked in 8th and last position, since it had the highest number of lower ratings with 26% of people judging that the model of social contagion in the person of influencers is the criterion least influential in their home shopping buying decisions in the period studied.

4.3 Influence with an environmental dimension

The environmental dimension is dealt with within the framework of responsible purchasing behavior, sustainable and green development. The issue has not arisen so far in the context of the health and environmental crisis. By including the 2 phase elements of this class, we want to get to determine to what extent these motivations can influence buying behavior in the context of lockdown period.

Environmental awareness: Environmental and health awareness, so as not to participate in the spread of the virus was ranked in 2nd position considered a very important criterion out of the 8 criteria presented, with 37% judging it as the main criterion for using home shopping, by giving it 1st place.

Environmental concern: The environmental concern, with an interest into setting a good example for its environment was classified as the 3rd element most affecting the decision to buy in home shopping.

4.4 Influence with a dimension of well-being and health

As we have argued in the theoretical framework, well-being and health has always been shyly addressed in the context of responsible consumption, yet consumers are becoming increasingly concerned about their health and well-being. In our study, we wanted to prove that health in the first place and well-being in the second place are the main motivational criteria that have a strong impact on responsible behaviors during a health and environmental crisis.

Well-being: They were 30% to classify that the facilitation of everyday life is the main cause which pushed them to do home shopping. Yet this criterion was ranked 4th in the general classification of motivations for buying home-shopping during the lockdown period.
Health: 50% of people surveyed answered that the main reason for their use at home shopping was to protect themselves from the virus and for fear of contamination. With this attribution, this criterion was ranked first, considered as the most influential element among the 8 motivations that we put forward in our questionnaire.

4.5 Economic influence: Individual income

Purchasing power and the ability to bear additional expenses are also criteria that should not be overlooked in making responsible purchasing decisions during a period of health and environmental crisis. In fact, 19% of those respondents gave first place to these criteria, considering it as the main factors that helped them decide on the decision to buy home-shopping. This criterion was ranked 5th out of all the criteria presented.

The results of the count were quite revealing and confirmed some of our hypotheses. And finally they allowed us to build a model -as shown in figure 2-, synthesizing the factors affecting the responsible purchasing decision in a state of health and environmental crisis, from the most influential to the least influential. Although some elements turned out to have little influence, we made sure to include them in our model, since consumption behavior is not explained solely by a single factor, but by a set of factors, various regardless of their dimensions.

After analysis, the survival instinct took precedence over other motivations for responsible purchasing behavior illustrated in our context by compliance with containment regulations and the use of home shopping. Then, environmental awareness emerged as a central concern of the majority of those surveyed, demonstrating the degree of civility and altruism that individuals can have in the context studied.

5 Conclusion

The aim of this study was to propose a conceptual model of consumer behavior in a health and environmental crisis situation in a pandemic context. To do this, we took an exploratory reading of previous research in the area of responsible drinking behavior, which we found most suited to our context. Then, by means of a quantitative study, we tried to classify and select the purchasing motivations that can influence the responsible purchasing decision in a situation of health and environmental crisis.

This study was done for the sake of understanding an existing phenomenon and exclusively so far, since we have never experienced a state of health and environmental crisis before. It could constitute a first material to further...
study consumer behavior in the same context and on several levels.

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