Moderating Effect of Market Facilities and Sociocultural Proximity on the Attitude-Purchasing Behavior Relationship

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Abstract: The purpose of this research is to analyze the moderating effect of market facilities and socio-cultural proximity on the relationship between attitude and purchasing behavior of counterfeit drugs. The purchase of illicit drugs requires a better understanding of consumer behavior if the authorities are to effectively combat the development of this scourge. Data collected from 696 households in the cities of Maroua, Garoua and Ngaoundere were analyzed using SPSS, STATA and AMOS software. The results show that only market facilities moderate the effect of attitude on buying behavior. The fact that the seller can sell on credit, retail and without consultation moderates the effect of attitude on the purchase behavior of counterfeit drugs. However, the socio-cultural proximity between the seller and even the entourage does not significantly influence the consistency between attitude and behavior. To effectively fight against the purchase of counterfeit drugs, the facilities of the counterfeit drug market must be considered in the anti-counterfeiting strategy.

Keywords: Counterfeit drugs; attitude; purchasing behavior; perceived risk

JEL Classification: R30

1. Introduction

Consumer behavior, although never easy to understand, remains a vital factor in the development of corporate strategies. However, different models of consumer behavior have been developed and it appears that attitude is the variable that has received the most attention. This is why we have chosen to focus our efforts on understanding the influence of consumer attitudes towards a product on purchasing behavior. Authors give attitude a place that is likely to be more or less important in the explanatory models of behavior. However, the discrepancy often observed between attitude and behavior leads to an understanding of the conditions for a match between attitude and behavior. This article highlights the moderating role of market facilities and socio-cultural proximity on the attitude-behavior link.

The validity of the attitude-behavior relationship may depend on the conceptualization of attitude, either in terms of its components or the number of dimensions associated with it. When the attitude is considered as a unidimensional concept equal to the weighted sum of beliefs, the number of beliefs to be retained is debatable. Indeed, there are many beliefs about action, and it may be wise to keep only a part of them.

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It is then necessary to question the predictive character of the attitude thus obtained. Budd (1986) therefore suggests that only the salient beliefs should be included in Fishbein's (1967) model. A multidimensional attitude provides a better approximation of behavior than a unidimensional attitude (Norman, 1975). However, this last remark, if it seems to encourage the adoption of a multidimensional measure of attitude, must be balanced by the place to be given to its conative facet.

2. Literature Review

When the attitude is accepted as a unidimensional construct, the intention is then positioned as a variable explained by attitude and explaining behavior. However, this position as a mediating variable does not seem sufficiently clear insofar as the intention is often equated with behavior to simplify the measurement of the latter concept. This is even though Fishbein and Ajzen (1975) advocate the mediating role of intention. Thus, the works studying the attitude-behavior link:

- Measure the latter through behavioral intention (Fazio & Zanna, 1978a) or measure actual behavior without focusing on measuring intention (Bagozzi 1992; Budd, 1986).

At the same time, some research focuses more on the attitude itself but emphasizes the importance of intention. They take into account only the latter to explain its link with behavior.

It is important to emphasize that the different concepts studied are in no way implicitly confused. This confusion is explicit, through practical assimilation, or through the desire not to focus on their distinction. It was not until the 1980s, with the research of Bentler and Speckart (1979, 1981) or Bagozzi et al. (1990, 2012) that the place of intention was studied. That is to say, that intention is no longer omitted or included without particular interest within attitude models, but on the contrary, that the very problematic of the link between attitude and behavior focuses on its mediating role.

This latest research, which attempts to define an optimal conceptualization of attitude in its relation to behavior, helps to draw attention to the need for real reflection on the measurement of attitude. In the same way, the improvements presented in the attitude-behavior relationship encourage us to question the response to be brought to its modeling. The very difficulty of these projects will end up shifting the problem. It is a question of having under what conditions does attitude predict behavior. Hence the importance of moderating variables.

Several variables have been used in the literature as moderating variables in the relationship between attitude and consumer purchasing behavior. While situations were originally used to explain a consumer's choice between different behavioral alternatives (Belk, 1974), the evolution of research on situational variables has given them a disruptive role in the relationship between attitude and behavior (Belk, 1985). However, few studies have focused on demonstrating this role in actual behavior, mainly because of the difficulty of implementing situations alongside a behavioral measure.

It seems essential to try to integrate such variables into the relationship between attitudes towards purchasing and actual behavior, in parallel with the heterogeneity of consumers. Indeed, if intra-personal characteristics and attitudinal variables allow us to characterize consumers, situational variables intervene beyond that, as a channel of external disturbance.

The different approaches to the study of situational variables have their advantages and disadvantages when the situational problem focuses on the study of actual behavior. Indeed, the scenario approach allows us to highlight the differences in the choices made by the same consumer in different situations. The latter is then qualified as a "chameleon" consumer, his choice changing according to the situation.

The problem of the situational behaviorist current lies in explaining the differences between anticipated behavior and actual behavior. The situations that arise between the moment of measurement of the attitude and the behavior are then explanatory of the choice made (Belk, 1985). The gap between attitude and behavior is a fuzzy point that attracts our attention. We note that consumers do not always do what they recommend. There is a significant gap between consumers' intentions and their actual purchases. Thus, if the consumer says he is ready to pay more for a "suitable product" when the time comes to make the purchase, the environmental criterion is no longer the only one he considers.

3. Methodology

The scales used to measure the variable attitude towards counterfeit drugs as well as the one related to the purchase behavior for these types of products were adapted from the theory of reasoned action model of Ajzen and Fishbein (1975). Knowing that increasing the number of points in a given measurement scale results in an increase in the reliability of the study's findings, we, therefore, opted for the use of 5-point scales. The scales for our measures were therefore set from 1 "strongly disagree" to 5 "strongly agree".

Table 1. Scales for Measuring the Attitude Variable and Purchasing Behavior

variables	Items	Source
Attitude	I like to buy counterfeit drugs.	Adapted from:
	In general, I am interested in counterfeit drugs	
	I am against the fight against counterfeit drugs.	Cordel et al (1996)
	I don't see any problem with the storage of street drugs	
	I like to own counterfeit drugs.	Viot Le Roux Kremer (2014).
	I like counterfeit drugs	
	illicit drug markets are a good thing	
Buying behavior of counterfeit drugs	I usually buy counterfeit drugs	
	I can't stop buying drugs on the illicit market	
	I buy more drugs on the illicit market than in legal pharmacies	

Finally, regarding our moderator variables, they use a 5-level Likert-type scale from "strongly disagree" to "strongly agree". The items of this scale are adapted from the work of Ouattara (2010), Tom et al. (1998), and Albers-Miller (1999). They are presented in the following table:

Table 2. Scales for Measuring Moderating Variables

Variables	Items	Source
.	Non-payment of the consultation is a factor that motivates patients to be interested in buying drugs from the illicit market	Adapted from: Albers-Miller (1999)
	I usually go to the illicit market because the drugs are in regular supply.	
	I am motivated to buy counterfeit drugs because the seller can sell me on credit	Tom et al. (1998)
Market facilities	Buying a drug in an illicit market avoids me from paying a doctor's consultation	
	The ability to purchase drugs in retail stores without a prescription encourages the purchase of drugs on the illicit market	Ouattara(2010)
	I buy the drugs from the street because it gave me satisfaction	
Socio-cultural proximity	I am motivated to buy counterfeit drugs because I trust the seller	
	The purchase of counterfeit drugs can be influenced by the purchasing habits of those around him (his acquaintances)	
	I am motivated to buy counterfeit drugs because it is easier to talk to the seller	

Validation of the measurement models of the variables in the structural equation

We present the validity of the measurement model of buying behavior and the moderator variables of our conceptual model.

- Validation of the Model of Purchase Behavior Measurement

We used confirmatory analysis of buying behavior to test the reliability, validity and fit of the measurement model obtained below:
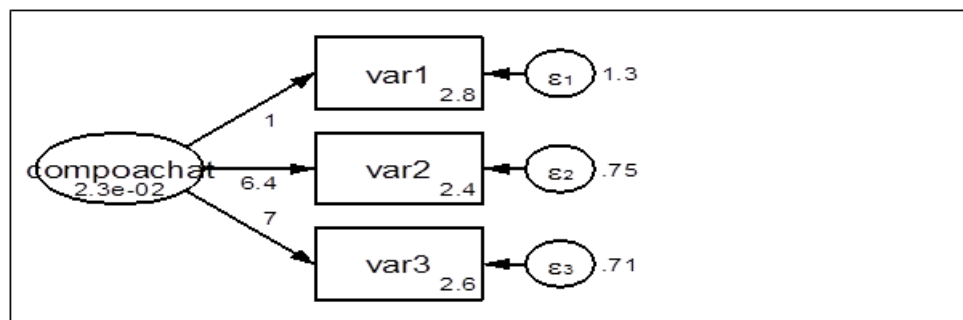

Figure 1. Measurement Model of Buying Behavior

The model shows that the consumer's buying behavior towards counterfeit drugs is formed by three dimensions namely Var1 (I usually buy counterfeit drugs) Var2 (I can't stop buying drugs on the illicit market) and Var3 (I buy more drugs on the illicit market than in legal pharmacies).

Indeed, reliability is determined by calculating Jöreskog's Rhô (ρ) which gives a satisfactory value of 0.751. According to the work of Roussel et al (2002). This result obtained exceeds the threshold of 0.7 commonly accepted in empirical work.

Moreover, the validity of this component is obtained by calculating the Rhô of convergent validity. This coefficient indicates a satisfactory value of 0.540 which respects the empirical conditions recommended by Roussel et al (2002).

In addition, the CI, TLI and CFI indices converge towards 1. Finally, the RMR and RMSEA are lower than 0.1 and very close to 0. These indices are summarized as follows:

Table 3. Validation du Modèle de Mesure du Comportement d'achat

P=0.0000 ;	RMSEA= 0,086
	CI=0,889
	SRMR=0,081
Rhô of Jöreskog = 0,751	TLI= 0,891
Convergent validity rhô (pvc) = 0,540	CFI=0,904

Validation of the market facilities measurement model

The market facilities model is qualified by a good fit.

In addition, the CI, TLI, and CFI indices converge to 1. The RMSEA=0.079 SRMR=0.0718 are less than 0.1 and very close to 0. The model shows strong and significant contributions associated with each item. The results obtained allow us to conclude that this model is reliable and valid.
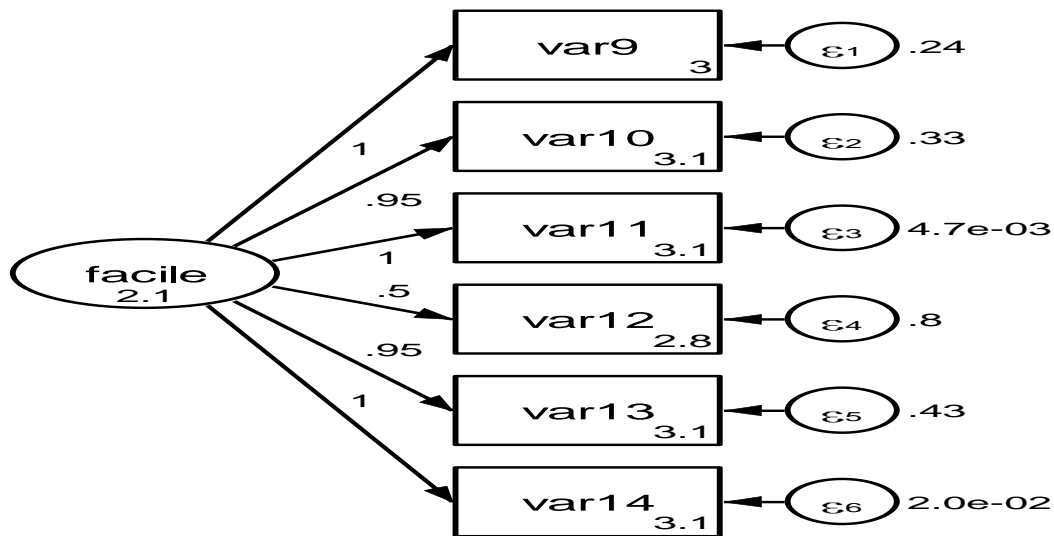

Figure 2. Model for Measuring Market Facilities

The CI, TLI, and CFI indices converge towards 1. The RMSEA=0.079 and SRMR=0.0718 are lower than 0.1 and very close to 0. The model shows strong and significant contributions associated with each item. The results obtained allow us to conclude that this model is reliable and valid.

Table 4. Validation of the Facility Model Measurement

P=0.0000 ;	RMSEA=0,079
	CI=0,858
	SRMR=0.0718
Rhô of Jöreskog = 0,974	TLI=0,843
Convergent validity rhô (pvc) = 0,862	CFI=0.913

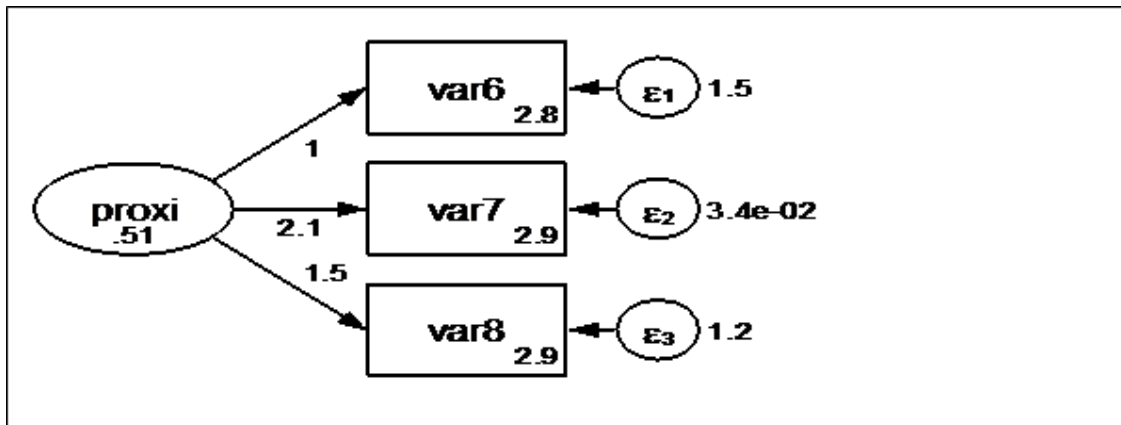- Validation of the model for measuring socio-cultural proximity

Figure 3. Model for Measuring Socio-Cultural Proximity

The CI, TLI and CFI indices converge towards 1. The RMSEA=0.079 SRMR=0.0718 are less than 0.1 and very close to 0. The model shows strong and significant contributions associated with each item. The results obtained allow us to conclude that this model is reliable and valid.

Table 5. Validation of the Proximity Measurement Model

P=0.0000 ;	RMSEA= 0,796
	CI=0,796
	SRMR=0,084
Rhô of Jöreskog = 0,862	TLI=0,878
Convergent validity rhô (pvc) = 0,678	CFI=0,903

After validating the model, we proceed to the hypothesis test concerning the results of the regression (of the model). We are only interested in the interaction of social proximity and attitude on purchasing behavior on the one hand and the interaction of market ease and attitude on purchasing behavior on the other.

Validation of the overall model

The causal model of our research presents a good fit. Indeed, the absolute incremental parsimony indices are shown in (the table below) satisfy the empirical conditions generally advocated in previous research.

The table below presents the fit indices of the model.

Table 6. Model Fitting Indices

Indexes	Values
RMSEA	0,046
CFI	0,985
TLI	0,813
AGFI	0,860
GFI	0,935
Chi-deux (p =0,000)	43,123

In the table above, we can see that the fit indices of the model are globally acceptable. In the context of this work, we admit the fit indices of the measurement model of the situational variables between attitude and purchasing behavior. It appears that the model is globally significant at the 1% threshold (prob chi2=0.0000). We can therefore conclude that the model is globally adjusted.

4. Results and Discussions

The results are presented in Table 7.

Table 7. Results of the Estimates of the Moderating Role of Market Facilities and Socio-Cultural Proximity on the Relationship between Attitude and Behavior

	Estimate	S.E.	C.R.	P
compo <..XZ1	0,004	0,007	0,509	0,611
compo <..XZ2	0,006***	0,002	2,778	0,005

From this figure, the indices are globally good. Concerning the results of the regression (of the model) we are only interested in the interaction namely compo <..XZ1 and compo <..XZ2 is mentioned in the previous table. It is found that facilitates has a moderating effect on the relationship between buying attitude and buying behavior at the 1% threshold (P=0.005). This result is consistent with Bressoud (2008) who demonstrated that situational variables moderate the effect of attitude on purchase behavior (intention). Thus, hypothesis H3 is verified

Furthermore, we also note that proximity (XZ1) does not moderate the relationship between attitude and purchasing behavior (P=0.611) with a coef=0.004. The H4 hypothesis is therefore not verified.

These results are very relevant and add to the literature on moderating variables of the attitude-behavior relationship. Ben (2018) was able to demonstrate that price sensitivity moderates the attitude-behavior relationship, While Bressoud (2008) in turn demonstrated that situational variables moderate the effect of attitude on buying behavior.

5. Conclusion

In this paper, we have chosen to test the moderating role of the variables socio-cultural proximity and market facilities on the attitude-behavior relationship. It appears that only market facilities moderate the effect of attitude on buying behavior. The fact that the seller can sell on credit, retail, and without consultation moderates the effect of attitude on counterfeit drug buying behavior. However, the socio-cultural proximity between the seller and even the entourage does not significantly influence the consistency between attitude and behavior. To effectively combat the purchase of counterfeit medicines, the facilities of the counterfeit medicine market must be considered in the anti-counterfeiting strategy.

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