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The Role Of Color In The Attainment Of Customers' Intensive Buying Intention: An Exploratory Descriptive Case Study (S.O.R Model Application)

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Abstract:

This research work studied the influence of colors in groceries, as an atmospheric variable, on the customer's impulsive intention of buying. In the literature review, the researcher introduced the theoretical and methodological bases responding to this problematic situation. An experiment was made in the laboratory where 200 participants had visited a virtual grocery with 4 different color conditions (red, yellow, blue and green). Then they answered a questionnaire about the variables of this study. The results showed that colors influence the customer's impulsive intention of buying either directly or through affect as intermediary.

Key words: the color, the impulsive intention of buying, affect

الملخص:

الهدف من هذه المقالة هو دراسة تأثير اللون كمتغير بيئي لمتاجر المواد الغذائية على إثارة نية الشراء الاندفاعي عند المستهلكين، مع الاستتاد إلى الشعور كوسيط. من اجل معالجة هذه الإشكالية استندنا على مسح أدبي منهجي في دراسة المتغيرات محل الدراسة. أنجزنا تجربة داخل المخبر على 200 مختبر يزورون افتراضيا متجر للمواد الغذائية بأربعة شروط لونية مختلفة (الأحمر، الأصفر، الأزرق، الأخضر)، ثم يجيبون على أسئلة تتعلق بإشكالية البحث. النتائج أظهرت تأثيراللون في بروز نية الشراء الاندفاعي بطريقة مباشرة، أو غير مباشرة عن طريق الشعور كوسيط.

الكلمات المفتاحية: اللون، نية الشراء الاندفاعي، الشعور.

I. Introduction:

The phenomenon of consumption is becoming more complicated due to the numerousness of products, intensity of competition, the economic globalization and the lack of understanding of the customer's behavior. In opposition to what was explained by the New Classical Theory, the customer's behavior is no more static. As we are all customers, we are exposed to the impulsive buying and we may buy something that we may not need just at the moment of entering because we live in a non-sensational society where "commercial temptations continue (shop's color, new products, new prices, promotions, etc) and impulsion appear by all these means" (Lemoine, 2001, p25-31).

The appearance and increasing of new and various types of stores, groceries, supermarkets, luxury stores, etc lead to the increasing of the

impulsive buying amount and no person can resist these temptations existing in these shops. The impulsive buying becomes a clear concept due to these temptations and effects of the commercial environment on the customer who loses his censorship and steers easily to the impulsive buying.

Psychologists consider the impulsive buying behavior as non-functional, non-sensational and it exists for a short time. The customer is rarely able to resist the impulsion and to control him/herself under the temptations, this is not because of the persons' nature but because of marketing agents who encourage the impulsive buying through advertising, shops preparations, music, color, illumination, perfumes, product's color...etc.

The customer's sensational state is evoked when he/she is affected by sudden external circumstantial influence where the visual side, especially the view of colors, contributes to the creation of this sensational state or impulsion. (Divad and Urien, 2001, pp. 3-24) and (P.Ezzan, 2010, pp. 5-6) summarized in their literature review that "the customer lives in a world of colors". The color is in the heart of every product, every advertisement, and every sale spot. Color is a massive research domain because it affects the person physiologically, psychologically and cognitively, and it is one of the sensational and environmental compositions of the shop (Pellet, 2008, pp328-330) which affect the sensational state of the customer (Meharbien and Russell, 1974; Bitner, 1992; Donovan et Rossiter, 1982).

From this starting point, the researcher explains that impulsive buying is evoked due to the emotional and sensational state of the customer, and the latter appears when the customer meets an external motive (color). In this vein, (Rook, 1987, pp189-199) defines the impulsive buying as "a way of unplanned buying results when the customer confronts a positive feeling which is evoked when he/she meets an external motive". The works related to one variable of the sensational environment of the shop are rare, some researchers studied many variables of that environment at once (Ben Mimoun, 2007; Ettis, 2008) but this doesn't allow to understand the influence of each variable separately. Consequently, this research will focus on one variable which is 'color' and the following research question will be considered: what is the role of color in the attainment of the customers' impulsive buying intention?

II. Theoretical Part:

The aim of this topic is the discovery of the influence of color on customers' impulsive buying intention either directly or indirectly through affection as an intermediary. The framework of this study is based on a descriptive expository approach that this theoretical part brings. The researcher counts for the causality method that aims at establishing a

relationship between the reasons and outcomes of the phenomenon under study.

1. COLOR AS A MAIN EXPOSITORY VARIABLE

The atmosphere is a marketing tool, which is used as the number of competitors on the market increases. More exactly, the action of the physical environment of the store can constitute a means of attracting new customers and of developing the loyalty of former customers (Pellet and Lemoine, 2003, pp. 8-9).

The visual dimension is particularly important for our subject as pertains to the impact of variables such as sight. In this case, color has evident importance. This study suggests that color serves largely to clarify and inform the consumer; therefore, sound is not a focus of this research. Indeed, 80% of the information memorized by an individual comes from the visual sense, and other forms of perception of the environment are heavily influenced by sight (Mattelart, 1996).

Color contains three principal components (Trouvé 1999 cité Pellet, 2009, p2):

☐ **The hue** (or chromatic tonality), which is the attribute of the visual sensation defined according to the colors denominations such as blue, green, red;

☐ **The saturation**, which provides the proportion of chromatically pure color contained into the total sensation;

☐ **The brightness**, which corresponds to the component according to which a surface illuminated by a source seems to emit more or less light.

To this day, the effects of the three-color components in the offline environment are of paramount importance, (Bellizzi and Hite, 1992; Dunn, 1992; Drugeon-Lichtlé, 1996; Pantin- Sohier, 2004) chose hue as the main variable in their experiments and showed that brightness and saturation should be taken into consideration when conducting experiments about color. As Valdez (1993), Drugeon-Lichtlé (2002), Camgöz et al (2002) and Gorn et al (2004) show about the brightness component of color, an experiment involving color should compare hue and brightness rather than warm and cold colors when trying to figure out what consumers recall and what spurs them to buy.

2. The general framework of the research

Generally speaking, colors affect consumer behavior in compliance with Mehrabian and Russell's psycho environmental model, the SOR model (Stimulus Organism Response) (Mehrabian and Russell, 1974). Even within colors themselves, Dunn (1992), Drugeon Lichtlé (1996) and Pantin-Sohier (2004) chose hue as the main variable. They also showed in their experiments that brightness and saturation should be take into consideration when conducting experiments about color. As Valdez (1993), Drugeon-Lichtlé

(2002), Camgöz and alli (2002), Gorn and alli (2004) demonstrated regarding the brightness component of color, it seems more pertinent to compare hue and brightness than to compare warm and cold colors when trying to ascertain what consumers recall and what spurs them to buy. Indeed, in everyday life, there is no trigger helping consumers to recall the content of an e-commerce website they visited or to compare it with another offer. The feeling of aggressiveness experienced by consumers when visiting an e-commerce website – partly due to the use of rather bright colors – does not result in a more effective retention of information, nor to a stronger buying intention (Figure 1).

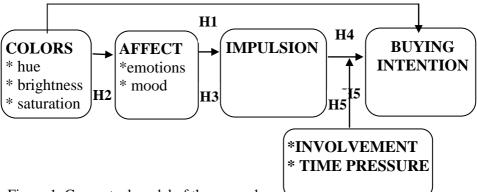


Figure 1: Conceptual model of the research

3. Buying intention

Additionally, the tendency to make the impulse purchase is interposed by situational influences as well as the shopper's past experiences (Rook and Fisher, 1995, pp 305-313). Impulse buying is closely tied to reflexes or responses stemming from external or environmental stimuli as well as internal stimuli (Young and Faber, 2000, p179-185). The action or reaction to stimuli processed affectively.

Intention is activated by a desire or a need (Darpy, 1997) and desire is viewed as an active process (O'Shaughnessy, 1992). Although buying intention is more than a mere desire, it is not a promise to buy (O'Shaughnessy, 1992); it is the outcome of a cognitively handled desire. According to (Darpy, 1997), echoing the studies of (O'Shaughnessy, 1992), (Howard, 1994) and (Belk, 1985, pp1-35) "Intention results from a desire or a need handled on the cognitive level and leading to purchase planification".

4. Affect as a mediating variable

Review of the literature shows that there is some confusion between the terms "Affective reactions", "affect", "emotions", "mood"... because of their polysemic character. Indeed, the word "affect" or "affective reaction" is often

used in related but not synonymous senses; it might equally mean emotions, moods, feelings, impulses, attitudes, preferences and evaluations. (Derbaix and Pham, 1989, pp71-87) synthesized these various concepts and proposed a typology of affect in seven categories: "shock emotion" (the most affective of all reactions), "feeling", "mood", "temperament", "preference", "attitude", "appreciation" (the most cognitive of these reactions). Faced with numerous definitions, many authors prefer to make a descriptive analysis instead of giving a precise definition (Derbaix, 1996). Affect is holistic is supposed to manifest itself in a bipolar way ("it's attractive" – "it's revolting", "I love it" – "I hate it"). Experiencing it is inevitable, supposedly often in combination with somatic manifestations. An affective reaction is hard to verbalize and such appreciation is much more clear-cut than cognitive judgment (Lichtle, 2008). Emotions are short-lived but extremely intense. Their cause is often apparent and their cognitive content is obvious (joy, sadness, anger, fear, disgust). Their most obvious features are brevity and intensity. While emotions imply some kind of awareness of the information about the background and consequences of actions, moods refer to affective states of mindless likely to reach our consciousness. Moreover, they last longer than emotions but are less intense (Forgeas, 1999, p591-612). According to Odom and Sholtz (2004), different colors tend to incur different moods. Studies have demonstrated the association of colors and mood by using diverse methods such as the objective impressions (printings), the clinical observations, the introspection and the experimental investigations (Wexner, 1954, p432-436). (Chebat and Morrin, 2006, p189-196) measured the effects of cold vs. warm colors of a mall decoration on consumers. They showed that these were more guided by affective mechanism such as mood, of by other cognitive states, such as the evaluation of the mall environment quality. We believe that same mechanisms can exist in an online context.

Browsing activity, mediated by affective state, has been shown to relate to impulsive buying tendencies of mall shoppers (Beatty and Ferrell, 1998, p169-191). The increased occurrence of impulse buying due to consumer's desire to either change or prolongs a mood or emotional state has been evidenced in the findings of other researchers as well (Gardener and Rook, 1988; Rook, 1987; Rook and Gardener, 1993). For some Shoppers, the mood may be the most important psychological consideration leading o impulse buying (Dittmar et al., 1996).

The importance of affect I this process is in keeping with the literature on the effect of mood on impulse buying. (Rook and Gardner, 1993, p1-28) found 85 percent of their survey respondents indicated a positive mood would be more conducive to impulse buying than a negative mood. Affect or mood has been identified as variable that strongly influences a number of actions including impulse-purchasing (Rook, 1987; Rook and Gardner, 1993). His

psychological literature suggests that when one is in a good mood (experiencing positive affect), one is more likely to engage in approach behavior than avoidance behavior (Beatty and Ferrell, 1998). In an observational study, (Weinberg ad Gottwald, 1982, p43-57) found that impulse buyers exhibited a greater feeling of amusement, delight, enthusiasm, and joy. (Donovan and Rossiter, 1982) found that pleasure was positively associated with a likelihood of overspending in the shopping environment.

5. Impulsive buying and Impulsion

Impulse purchases are akin to unplanned purchasing behaviors. Impulse purchases generally emanate from purchase scenarios that feature higher emotional activation, less cognitive control, and largely reactive behavior (Weinberg and Gottwald, 1982). Impulse purchases also tend to be more emotionalized than no purchasers (Zhng, 2007, p79-89).

Impulse buying is a pervasive aspect of consumers' behaviors and a focal point for considerable marketing activity (Rook, 1987). In one study, impulsive purchase, ape-rationalized as unplanned purchases were found to represent between 27% and 62% of all department store purchases (Bellenger and Hirschman, 1978, p15-18). (Rook, 1987) defined impulse buying as when "a consumer experiences a sudden, often powerful and persistent urge to buy something immediately". Impulse buying is a sudden and immediate purchase with no pre-shopping intentions either to by the specific product category or fulfills a specific buying task. The behavior occurs after experiencing an urge to buy and it tends to be spontaneous and without a lot of reflection (it is "impulsive") (Beatty and Ferrell, 1998).

Consumers who are more susceptible to emotions or affective states have been found likely to experience an irresistible urge to buy (Rook, 1987; Dholakia, 2000; Young and Faber, 2000).

The second individual difference variable, impulse buying tendency (IBT), addresses the differential proclivity of individual to bay on impulse (Rook, 1987). The literature supports the idea that individuals do differ on this variable (Rook and Fisher 1995; Weun, Jones and Beatty, 1998). IBT has been viewed as a sub-trait of the general impulsivity construct, which was defined by (Gerbing et al, 1987, p 357) as "a tendency to respond quickly to a given stimulus, without deliberation and evaluation of consequence". Again, we note the literature does not distinguish the action and the urge. Thus, we define IBT as both the tendencies (1) to experience spontaneous and sudden urges to make on-the-spot purchases and (2) to act on these felt urges with little deliberation or evaluation of consequence.

- 6. The weak involvement, time pressure and demographic factors as alterative variables:
- 6.1-Demographic factors as alterative variables:

Differences between shoppers are of great interest to an industry that is actively seeking methods by which they can better target consumers. As such, gender poses a timely avenue of investigation. Women's behavior is generally thought as being more emotionally and psychologically rooted than men, suggesting that they are more susceptible to impulse purchasing. Additionally, it has been argued that women, because of their propensity to shop more than men in general, make more impulsive purchases (Dittmar et al., 1996, p187-206). However, other researchers have suggested that, if the number of purchases held constant, men and women have the same degree of susceptibility to impulse purchases (Kollat and Willett, 1967, p21-31). Recent research shows that men aged 18-34 shop considerably more than older men every retail channel (Marks, 2002, p12), and that men aged 16-24 are more openly shopping for health and beauty aids than in past years (Global cosmetic industry. 2002), possibly Indicating a future trend towards less stereotypical shopping behavior. Historically, Women have found to be more likely to shop for aesthetic products. While men are more likely to shop for functional products (Dittmar et al, 1996; Rook and Hoche, 1985, p3-27), leading to the determination that women will purchase different types of products on impulse compared with men as well as engage more strongly I more affective impulse buying than men.

6.2- The weak involvement as alterative variable

Furthermore, the weak involvement: there has been a great disagreement among researchers in finding a unified definition to involvement due to its existence in various domains and to the different aims to each researcher. However, there is somehow a general definition used in recent research stating that "involvement is a non-determined state of excitement or motivation or interest created by external variables (circumstance, product, communication, etc) and also by internal ones, this generates specific behaviors, some forms of product searching, information processing and decision making" (Rothshild, 1984, p216-217). As opposed to the permanent involvement (strong), there is the weak involvement (circumstantial) which is considered as a temporary customer's course towards the product (Ouzaka, 2001, p5-7). It evoked by two main factors, the specific characteristics of the product (color, shape, price, etc.) and the socio-psychological connection between buying and consuming the product (the presence of people besides the customer...).

6.3- Time pressure as alterative variable

Last but not least, Time pressure: customers give paramount importance to time and they prefer any system or service that economize their time (Berry, 1979, pp. 58-69; Marmorstein and Fiche, 1992, pp 52-61; pellet, 2008). The phase that leads from buying impulsion to the action of buying impulsion itself may take time (Giraud, 2002, pp. 273-276). Also (Antebian, 2002)

stated that time is very important to the customer and it is measured by him/her. In the same context, (Park et al., 1989, pp. 422-433) find out that time pressure affect the customer is buying, and Giraud (2003) found the same result.

III. Practical part:

A lab experiment was conducted with 200 participants in order to test the proposed hypotheses. A virtual grocery was especially designed for the experiment in the lab. The researcher chose this method because of many points: reduction of prices that increase impulsive buying hypothesis, the interaction between colors and the attendance of customers. All these factors increase the affect side of customers rather than the cognitive side. Each respondent visited the virtual grocery with a specific colorific condition that was randomly select among the four-color screens prepared for the experiment, explained in the next section. A balanced distribution of the colorful screens among all respondents was ensured. Later, the respondents were asked to complete a questionnaire with questions about impulsive buying intention, mood state, affect, involvement and time pressure. Demographic data were also collect. 200 valid responses were used for the analysis, with each color condition being visited by 50 respondents.

The research used the experiment in the lab in order to check the validity of the hypotheses since this allow him to control and manipulate the variables that he aims to explain (Dubois, 1990). Studying color as the main expositor variable allows the researcher to control three points (Pelet, 2008):

- The control of the screen show, and the calibration of colors in order to control them carefully.
- Checking whether the participants have got a good color perception, and checking their good intention in proceeding the experiment
- The dominant color of the virtual grocery and the lightness of the environment can be controlled, this allows the researcher to put the participants in the context he wants. Hence, the results will have more credibility and emulation to reality.

1- Experiment design

Four colorful conditions have experimented on four different groups in a virtual grocery using a show screen; each group contains fifty participants randomly chosen. Based on the previous research in this field (Drugeon-Lichtle, 1998; Lichtle, 2002; Roullet, 2004; pellet, 2008) the researcher chose four main colors:

- ✓ 'Red' a warm color with a long wavelength.
- ✓ 'Yellow' a warm color with an average wavelength.
- ✓ 'Blue' and 'green' cold colors with a short wavelength.

2- Measurement Tools

2.1- Emotion measurement:

(Mehrabian and Russel, 1974) confirm that all affection responses can be described from three dimensions: 'Arousal' which reflects the amount of interest and motivation of the person, 'Pleasure' which reflects joy and happiness of the person, and 'dominance' which is related to the ability or inability to control self under the influence of motives or environment. In order to measure emotions related to color in this research, the researcher will use the PAD measure (Pleasure, Arousal, Dominance) because it is the most commonly used in this type of research and it is the top measure in terms of sincerity and stability (Gorn-Allii, 2004; Roullet, 2004; Pellet, 2009).

2.2- Mood measurement

Emotions related to colors are recognized either positively or negatively depending on the personal experience of the individual with the color (Boyatzy-Varghese, 1993), and the variety of colors leads to different moods between individuals (Odom-Sholtz, 2004), so the various emotions resulting from the influence of colors will be due to the different moods (Pellet, 2008). In order to measure the influence of color on customers' mood, the researcher will use the BMIS measure (Brief Mood Introspection Scale) developed by Mayer and Gaschke (1988).

2.3-Impulsion measurement

The researcher will use the measure framed by (Jeon and Piron, 1990, cited in Sermet 1999) which is based on four items.

2.4-Involvement measurement

The 'P.I.A' measure (Strazzieri, 1994) will be used to measure customers' involvement. This measure has got three components: 'Pertinence' which shows the degree of correspondence between the customer and the product, 'Interest' which means the intensity of the relationship between the person and the subsistent under-involvement, 'Attraction' which refers to the degree of emotional intensity of the person with the product. This measure had a good internal conjunction and a high degree of stability (Cristau and Strazzieri, 1996; Leroux and Chandon and Strazzieri, 1997).

2.5-Time pressure measurement

The researcher will use the measure of (Beatty and Ferrell, 1998) in order to measure time pressure on the customers.

3- Results Analysis

We follow both the General Linear Model (GLM) to test the effect of the colors of the show screen on mood and buying intention and variance analysis (ANOVA) to analyze empirical data to test the significance of the links between variables and the validity of the scales.

3.1 The direct relationship between color and impulsive buying intention:

The results of the linear model showed that the color of the grocery had a direct weak influence on impulsive buying intention with a declension equation of:

$$(Y = 2.657 + 0.121X)$$

The results of ANOVA revealed a moral influence of color on impulsive buying intention, because the value (P) was 0.01 that is less than the critical value on the level 5%. Hence, the hypothesis is valid (Table 1).

	Df	F	P-value
Regression	1	11.025	0.01
Residual	198		
Total	199		

Table 1: The influence of color on impulsive buying intention

3.2-The study of the impact of affect as intermediary:

The GLM results confirmed that the color of the grocery has a direct influence on affect with a declension equation (Y = 2.657 + 0.121X). The ANOVA results showed the morale influence of the four colors on the emotion, because the value (P) was limited at (0.01). In addition, ANOVA results showed the morale influence of the four colors on the mood since the value (P) was limited at (0.01). Thus, the hypothesis of color influence on the affect is valid.

As explained before in the theoretical part, we summarized the affect into two variables (emotion and mood). The linear model results showed the positive moral influence of emotion and mood on the rise of customers' impulsive buying with two declension equations as follow: (Y = 2.700 + 0.417X) and (Y = 1.246 + 0.563X). Furthermore, ANOVA results revealed the mutual moral influence of emotion and mood (affect) on the rise of impulsion, because the value (P) was 0.02 that is less than the critical value on the level 5%. Thus, the hypothesis is valid (Table 2).

The influence of color the affect			
	Df	F	P-value
Regression	3	3.99	0.00
Residual	196		
Total	199		
The influence of affect on impulsion			

Emotion	46	2.423	0.00
Mood	18	3.644	0.00
Emotion*Mood	40	2.059	0.02

Table 2: The impact of affect as intermediary

3.4-The study of the effect of impulsion on impulsive buying intention:

The linear model results found out the existence of a massive moral influence between impulsion and buying intention with a declension equation of:

$$(Y = 4.112 + 0.652X)$$

The more impulsion is tense, the more there is an increasing probability of impulsive buying, so the hypothesis is valid (Table 3).

	Df	F	P-value
Regression	1	5.63	0.00
Residual	198		
Total	199		

Table 3: The influence of impulsion on impulsive buying intention

3.5-The study of the effect of alterative variables:

In order to study the alterative variables, the researcher accounted for the approach put forward by (Darpy cite, Pellet, 2008,p:340) in studying the influence of the alterative variable 'Z' on the relationship between the variables X and Y which reflects:

- X influencing Y.
- Z influencing Y.
- The mutual influence of X and Z on Y.

3.5.1-The weak involvement as alterative variable

The results confirmed that the weak involvement influenced directly the impulsive buying intention because the value (P) was 0.00 that is less than the critical value on the level 5%. However, as being alterative variable, the weak involvement did not influence the relationship between the impulsion and the impulsive buying intention because the value (P) was 0.86 that is more than the critical value on the level 5%. Thus, the hypothesis is not valid (Table 4).

	Df	F	P-value
Impulsion	82	1.860	0.00
Weak involvement	34	1.710	0.00
Impulsion* Weak involvement	20	1.650	0.86

Table 4: The weak involvement as alterative variable

3.5.2-Time pressure as alterative variable

The ANOVA results revealed that time pressure influence the relationship between impulsion and impulsive buying intention because the value (P) was 0.02 which is less than the critical value on the level 5%, so the hypothesis is valid (Table 5).

	Df	F	P-value
Impulsion	12	1.18	0.00
Time pressure	22	1.96	0.00
Impulsion* Time pressure	54	1.30	0.02

Table 5: The Time pressure as alterative variable

3.5.3-Demographic factors as alterative variables

The data showed that there is no influence of gender or family status on the relationship between impulsion and impulsive buying intention because the value (P) was 0.18 which is more than the critical value on the level 5%. Hence, the hypothesis is not valid (Table 6).

	Df	F	P-value
Impulsion	12	0.666	0.78
Demographic factors	2	0.24	0.43
Impulsion* Demographic factors	0	-	0.18

Table 6: The demographic factors as alterative variable

Conclusion

This research work aimed at studying the possibility of the existence of causality relationship between the interior color environments of shops and customers' impulsive buying intention. Previous results showed the influence of warm colors in the provocation of customers' behavior more than the cold colors (Bellizzi and Hite, 1992). Besides that, the researcher took into consideration one intermediary variable which is 'affection' with both its compositions 'emotion and mood'. The adjusted variables in the research were the weak involvement towards products, time pressure and individual demographic factors. This research results showed that:

• The influence of color directly on the impulsive buying intention especially warm colors (red). This means that the waves length have an effective role in provoking customers, similarly to the previous results (Crowley, 1993; Roullet, 2004).

- The influence of the variable of the affection as an intermediary among the expositor variable, the rise of impulsion and customers' impulsive buying intention. This result is similar to the ones of Giraud (2002) and Bessouh (2012).
- The direct influence between impulsion and impulsive buying intention.
- The weak involvement towards products inside the shop under color influence affect directly the impulsive buying intention and it is not considered as a modifier variable on the standing relationship between impulsion and impulsive buying intention. This result was in opposition to the one of Pelet (2008) who confirmed that the involvement is a modifier variable.
- Time pressure is considered as a modifier variable for the effect of impulsion on impulsive buying intention.
- Demographic variables (gender) have no direct influence, not even a modifier between impulsion and impulsive buying intention, as opposed to Roullet (2004) who confirmed that women are more influenced by the emotions resulting from the effect of color on their buying behaviors.

Despite the important results reached in this study, there were some constraints and limitations such as:

- The principle of making the experiment based on colorific motive inside a lab: This cannot allow the respondents to live the experience as in the real environment even if they respond well in the lab.
- The nature of the motive used: the researcher took into consideration three factors to color, but 'hue' is the only factor that has been manipulated while 'brightness' was limited at 80% and 'saturation' was limited at 40%. This might decrease the effect of the colorific variable on the other subordinate variables (affect, impulsive buying intention), so it is recommended that 'brightness' and 'saturation' should be manipulated in the future experiments.
- The interaction between colors themselves was neglected; each colorific condition was experimented separately. Hence, the mutual effect between colors inside the shop and their impact on customers' behavior should be studied.
- In this study, color was considered as the only expositor variable affecting customers' behavior, this doesn't deny the existence of other variables which were neglected in this research such as 'the crowd, music, the influence of sales-persons, etc'.

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