**Consumer Confusion Choosing Me-too Snack Packages: an Experimental Study**

Track: Marketing management

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# Consumer Confusion Choosing Me-too Snack Packages: an Experimental Study

**Abstract**

We hypothesize that a) the presence of a leading brand next to a me-too brand and b) the presence of the brand on the package prevents consumer confusion. This experimental design includes six categories of snacks (chocolate covered cake, cookies with a waffle surface, chocolate chip cookies, crackers, lollypops, and gummy candy); for each we estimate two logit models: one for the probability of behavioral confusion and another for the probability of cognitive confusion. Results support both hypotheses. Previous studies use cognitive rather than behavioral measures of confusion; we show that these are complementary measures. Results yield important practical implications.

**Introduction**

The me-too strategy is a controversial one because follower brands imitate characteristics of successful leading brands. The strategy of the flower brand is to launch a product for which the leading brand has build a relatively strong product demand along with consumer awareness of product benefits and characteristics. In turn, the leading brand will resist the strategy of the imitator brand by suing the brand that emulates the package design and product characterizes. Courts deal with imitation cases throughout all types of product categories, automobiles, fast food, packaged food, pharmaceuticals, and clothing, among others (Foxman, Berger, & Cole, 1992).

For society, the me-too strategy has its plus and down sides because it occurs in mature markets where there is a large demand for a well-known product (Sohn, 2008). On the plus side, the strategy benefits consumers because it limits a monopolistic position when different brands offer similar products. This creates variety for the consumer and keeps prices relatively low because there are no significant differences across brands. On the down side, the strategy may lead to consumer confusion because of the close resemblance of different brand packages. In terms of organizations, imitation may weaken organization incentive for innovation because firms learn that other firms may use their investment by imitating its successful products. Thus, imitation or innovation is an important organization decision in a competitive market, and it determines the growth strategy a firm decides (Fan, Gillan, & Yu, 2013; Iwai, 2000). In the long run, the me-too strategy may benefit society motivating a competitive environment. However, fair competition should benefit consumers and not harm them by creating consumer confusion (Foxman, Muehling, & Berger, 1990).

This paper analyses consumer confusion based on the use of the me-too strategy. We hypothesize that a) the presence of the leading brand at the point of purchase and b) the presence of the brand on the package prevents consumer confusion. The paper is organized as follows: on the literature review, we define the concept of consumer confusion because of the use of the me-too strategy arguing that this confusion is explained by the distinctiveness of the brands and the me-too standing next to the leading brand. On the method section, we explain our experiment and the product categories included in the study. Results support both hypothesis and the discussion section complements the analysis of when a me-too strategy may have positive, rather than negative, consequences for the consumer.

**Consumer confusion in a product decision making process**

Consumer confusion is the outcome of a wrong product decision because of a cognitive misunderstanding. The confusion means that the individual makes an error in inferential processing that leads to form an inaccurate belief about the attributes or performance of a lesser-known brand based on previous beliefs about a more familiar brand (Balabanis & Craven, 1997; Foxman, et al., 1992). Thus, consumer confusion may be explained by individual differences and contextual characterizes.

Individual differences include familiarity with a brand, category use, and attention during the moment of purchase. Previous studies demonstrate that brand familiarity favors consumer recognition of a brand message or even a design package having a large variety of options within a product category (Delgado-Ballester, Navarro, & Sicilia, 2012; Mogilner, Rudnick, & Iyengar, 2008).

Familiarity arises from consumer learning about a brand and a category because of its use, experience, and exposure to advertisement (Bianchi, 2003). Although, the use of the me-too strategy is based on the idea that consumers have a good understanding and are familiar with a product category through its leading brand, the strategy takes place mainly at the point of purchase. Therefore, consumer confusion would be more a contextual issue than an individual characteristic. To analyze effect of the me-too strategy in terms of consumer confusion, we argue that there are two important issues to be considered at the point of purchase: the positioning of a me-too next to a leading brand and the distinctiveness of a brand.

### The presence of a me-too brand

The strategy of a me-too product is to "stand" next to the leading brand at the point of purchase (Foxman, et al., 1990). From a consumer behavior perspective, it is a useful strategy because it facilitates consumers' decision-making process first by extending the product category and second by creating a more consistent category; these two facts work together to create consumers' better understanding of the brands within a category and reduce consumer confusion.

Imitation motivates competitiveness, which has a positive consequence in terms of number of brands available to the consumer (Sohn, 2008). A leading brand is the one positioned in a consumers' top of mind because it has been in the market for a longer time and has made a stronger investment in marketing activities. By having more options a consumer has the possibility of choosing among brands within a category. But the me-too brand is not just another option; it creates rivalry in terms of prices because it is just like the leading brand but has a lower price. The strategy of the me-too is to tell the consumer that there is another option just like the one they already know. Thus, the strategy works because there is a well-established category represented by an exemplar (leading) brand and there are consistent characteristics across brands within a product category. Categories of products are important because they help to organize products at the point of purchase but also, and more importantly in the consumers' mind.

Categorization is a cognitive mechanism that enables consumers to understand a product by placing it within an set of products, this physical and mental setting simplifies consumers' understanding about the product and decision making processes (Bloch & Richins, 1983; Kahneman, 2003). Categorization means that an individual has sufficient information to make comparisons, associating some products as a group and discriminating other products framing them as distinct groups. This association and discrimination depends on the capacity an individual has to recognize "like" objects; there is a

deliberate or automatic process that motivates individuals to compare attribute-by-attribute and identify an object as part of a category (J. B. Cohen & Basu, 1987). Thus, when brands within a category have similar designs, it will be easier for a consumer to recognize them as a category of products. Categorization occurs not only because of the similarities across brands within a category, but also because there is a leading brand that characterizes the type of product expected from a category. This is known as the exemplar brand or prototype (J. B. Cohen & Basu, 1987).

Because a me-too brand is compared to the leading brand, its evaluation and perceived similarity with the leader is context specific depending on the presence or absence of the leading brand. When the leading brand is absent, highly similar brands are evaluated more positively than when the leading brand is present (Van Horen & Pieters, 2012). Therefore the absence of the leading brand in a category helps me-too brands to have a more positive evaluation; the presence of the leading brand affects the reputation of highly similar brands probably because it alerts the consumer about the similarities. Thus, me-too brands strengthen the category as they create more options and more consistency of products within their category; at the same time consumers are able to differentiate them from the leading brand judging more strongly when the leading brand is present rather than absent. Therefore, the following hypothesis:

*H1: There is a lower probability of consumer confusion if a leading brand and a me-too brand are next to each other compared to having only the me-too brand.*

### Brand as a meaningful sign

The consequences of having a me-too product seem fairly positive for a consumer because this more options to the consumer and motivates a more consistent category of products, which facilitates consumers' decision making process. These are relatively positive outcomes as long as the consumer does not get confused during a purchase experience. A cue element to avoid confusion is the brand.

When making a purchase decision, experienced consumers should be able to recognize the type of product they are choosing and buying because they are aware of its functional and aesthetic characteristics. For excellence, the brand is the symbol that represents a product own by a company. The trademark is any element that becomes inherently distinctive of a brand; for example, words, letters, symbols, and pictures that are registered to be legally protected as elements that represent a brand (D. Cohen, 1986). It is important to protect these elements because they work to create a distinctive brand image. Distinctiveness means that a consumer is able to recognize and differentiate a brand from others in a product category; the more distinctive a brand is from others in the category, the greater its consumers' awareness about characteristics and name (Beebe, 2005). All the details that are combined to create a brand image are trademark cues that help costumers discriminate one brand from another, even though they are aware that me-too brands have similar characteristics (Miaoulis & D'Amato,

1978). Thus, clearly differentiated brand names help consumers' discriminative capacity (Arboleda & Alonso, 2010; Warlop, Ratneshwar, & Van Osselaer, 2005).

Brands have a special meaning to consumers, depending on their past experiences with the product and with marketing activities. Thus, the brand is a valuable sign when making a purchase decision in category that offers a large number of similar products; individuals avoid choosing among indistinguishable options (Mogilner, et al., 2008). Therefore, when choosing from lookalike product the brand becomes more important as a valuable sign that provides a meaningful difference. Thus, a memorable brand prevents consumer confusion (Foxman, et al., 1990). Likewise, at the point of purchase a clear and distinctive brand should prevent consumers to get confused between a me-too and the leading brand. Therefore, we hypothesize that:

*H2: The presence (vs absence) of a brand will reduce the probability of confusion.*

**Method**

This experiment builds on the idea that a me-too brand is evaluated at the point of purchase compared to an observed or recalled leading brand. We tested consumer confusion in a controlled laboratory environment with the number of brands by category of products was held constant. Participants in this experiment were randomly assigned to one of four conditions in the 2 (leader brand: absent vs present) x 2 (Brand on package: absent vs present) between-subject design.

*Participants*

A total of 200 students responded positively to a posted offering of participating in a marketing research study. The group of participants comprised approximately equal number of men (37%) and women (63%) who ranged in age from 18 to 36 years (mean=21,66; SD=2.91).

*Procedure*

A preliminary survey evaluated consumers' top of mind (TOM) of the leading brand of the six categories evaluated and if they were frequent consumers of the leading brand; additional categories complemented this survey with the purpose of deviating their attention from the evaluated products. TOM: participants named the brands of each category, the first brand is considered to be the one on their TOM; this variable was coded 1 if the leading brand is the one on their TOM (0=o.w). Next, consumers responded if they considered themselves as frequent consumers of each brand or not. Consumption of leading brand was coded as 1 (0=o.w). The following week, subjects were invited to the lab where they received a list with nine brands of snacks. The list mixed products that were evaluated with other products. Listed brands were the leading brands on each category. Product categories were: cake with chocolate cover, crackers, chocolate chip cookies, cookies of waffle surface, gummy candy, lollypops, potatoes chips, water, and iced tea. For each product category, se selected the

leading brands determining which was the pioneer brand on the category, had the highest market share, had a strong reputation, and had a distinctive name (Van Horen & Pieters; 2012).

Thus, the subject received the list, a shopping cart, and sopping instructions. We asked subjects o imagine this activity as an actual shopping experience in which they were purchasing one item of each of the listed brands by placing them in the cart. In the lab, consumers found a shelf with the items according to their treatment condition: leading brand present (vs absent) and brand present on the package (vs absent). Subjects in the leading brand condition had on the shelf the leading brand of each category next to the me-too brand; those who had an absent leading brand only had on the shelf the me-too brands of all product categories (i.e., present brand=1; not having a leading brand =0). Additionally, because of brand visibility, subjects chose items either with a present or an absent brand on the package (brand was coded present=1 brand; and absent=0). Subjects in the present-brand condition were able to observe the brand on the package; whereas, those who did not see the brands on the packages were in the absent-brand condition.

Confusion was assessed in two ways, through a behavioral/observable response and through a cognitive response. First, after subjects placed the items in the shopping cart, we determined if the choice was right or wrong by observing the brands in the cart. A right choice meant that brand in the cart was the leading brand (i.e., the one on the list). On the contrary, a wrong choice means that individuals have a behavioral confusion because the brand on the list was not the one they took from the self and decided to "purchase". Confusion was coded as 1 and a right decision was coded as 0.The second assessment of confusion consisted on asking subjects to name the brand they chose. If the brand they thought they had placed in the cart match the one they actually had is because they were aware of their purchase and did not have a mental confusion about brands (coded as 1); whereas, if the mentioned brand was not the one in the cart they were unaware of their decision, therefore mentally confused.

### *Model*

We estimate two logit models, the first one estimates the confusion's probability of an individual *i* and the second one estimates the probability of an individual *i* being aware of his or her confusion. The first model explains a behavioral confusion, whereas the second explains a cognitive confusion. For both models the probability of confusion is a function of two experimental variables (i.e., presence of the leader and presence of the brand on the package), two control variables related to consumers' familiarity with the leading brand (i.e., frequency of consumption of the leading brand and TOM of the leading brand), and two demographic control variables (i.e., age and gender). Formally,

$$P\left[y_i = 1 \middle| \mathbf{x}_i\right] = 1 - F\left(\beta^T \mathbf{x}_i^T\right)$$
$$P\left[y_i = 0 \middle| \mathbf{x}_i\right] = F\left(\beta^T \mathbf{x}_i^T\right)$$

where x$_i$ represents the vector of all explanatory variables for individual *i*, that is:

$$\mathbf{X}_i = [1 \quad Frq.Consum_i \quad TOM_i \quad Age_i \quad Gender_i \quad Leader\text{-}present_i \quad Brand\text{-}present_i]$$

On the other hand, F($\pi$ ) corresponds to a cumulative logistic probability function; that is:

.

$$F\left(z_i\right) = \frac{e^{-z_i}}{1+e^{-z_i}} = \Lambda\left(-z_i\right)$$

For the six snacks' categories (chocolate covered cake, cookies with a waffle surface, chocolate chip cookies, crackers, lollypops, and gummy candy) we estimate two logit models: one for behavioral confusion and another for the probability of cognitive confusion. In other words, 12 models are estimated. For all cases we found heteroskedasticity problems; these were corrected using a heteroskedasticity-consistent estimator for the variance-covariance matrix of Huber-White type for nonlinear models.

**Results**

Descriptive statistics show the total percentage of subjects who a) have the leading brand on their TOM, b) are frequent consumers of the leading brand, c) have a behavioral confusion choosing the wrong brand, and d) are aware of their confusion between category items (Table 1). Of the six categories, the leading brand on lollypops is the one with the highest TOM with a 97% of recall. This is followed by the chocolate covered cake leading brand with a 90% and cookies with a waffle surface with a 52% recall. TOM for the leading brand of chocolate chip cookies and crackers are on the high twenties (29% and 28% respectively). The lowest recall is for the gummy candy leading brand with only a 3.5%.

Results for the percentage of subjects that are frequent consumers of the leading brand for each category are somewhat parallel to the TOM results. An 80% of subjects are frequent consumers of the leading lollypop brand, followed by a 68% who are frequent consumers of the leading brand of chocolate covered cake; also 68% are frequent consumers of the leading brand of crackers. A 53% of subjects are frequent consumers of the leading brand of cookies with a waffle surface and a 35% of them are frequent consumers of the chocolate chip cookies leading brand. The lowest percentage is for the leading brand of gummy candy with a 29%.

Next, without taking into account the experimental manipulations, the highest confusion is for cookies with waffle surface and gummy candy categories. After choosing a waffle surface cookie, a 53% of the subjects pick the wrong brand; 24% of these are aware of their decision and the other 86% are not. A total of 56% of the subjects are aware of the brand they pick. For the gummy candy category, a 40% of the subjects choose the wrong item, of those, 13% are aware of their wrong decision and 87% do not know which brand they pick. A total of 63% of the subjects are aware of the gummy candy brand they choose.

For all other categories, about one fourth of the sample chose the wrong item. Confusion for chocolate chip cookies was 28%; from these, an 8% of the subjects are aware of their wrong decision and 92% are not (total awareness for the sample is 64%). Confusion for crackers is 26%; a 24% of these subjects are aware of their mistake whereas 76% are not aware of their mistake (total awareness for the sample is 72%). Consistently with the level of familiarity observed for chocolate covered cake and lollypops, these categories have the lowest probability of confusion and the highest decision awareness. Results for chocolate covered cake show that 25% of the sample picks the wrong item; 13% are aware of this decision whereas the other 87% are not (total awareness is 87%). For lollypops, 20% of the subjects made a wrong decision, of those who made a wrong decision 6% are aware and 64% are not (total awareness is 82%).Because this is an experimental study, descriptive results cannot be interpreted alone but considering the two manipulations: presence (vs absence) of the leading brand and presence (vs absence) of the brand on the package. Next, the logit models predict consumer probability taking into account these manipulations, consumers' familiarity, and demographics.

**Table 1. Descriptive statistics**

|  | Mean | S.D. |  | Mean | S.D. |
|---|---|---|---|---|---|
| **Chocolate covered cake** |  |  | **Crackers** |  |  |
| TOM | 0,899 | 0,302 | TOM | 0,281 | 0,451 |
| Frequent consumer | 0,680 | 0,468 | Frequent consumer | 0,675 | 0,470 |
| Confusion | 0,245 | 0,431 | Confusion | 0,255 | 0,437 |
| Decision awareness | 0,865 | 0,343 | Decision awareness | 0,715 | 0,453 |
| **Cookies with a waffle surface** |  |  | **Lollypops** |  |  |
| TOM | 0,525 | 0,501 | TOM | 0,970 | 0,171 |
| Frequent consumer | 0,530 | 0,500 | Frequent consumer | 0,790 | 0,408 |
| Confusion | 0,530 | 0,500 | Confusion | 0,200 | 0,401 |
| Decision awareness | 0,555 | 0,498 | Decision awareness | 0,815 | 0,389 |
| **Chocolate chip cookies** |  |  | **Gummy candy** |  |  |
| TOM | 0,293 | 0,456 | TOM | 0,035 | 0,184 |
| Frequent consumer | 0,345 | 0,477 | Frequent consumer | 0,285 | 0,453 |
| Confusion | 0,275 | 0,448 | Confusion | 0,395 | 0,490 |
| Decision awareness | 0,635 | 0,483 | Decision awareness | 0,630 | 0,484 |

We run six logit models explaining subjects' probability of making a wrong decision. This is a behavioral confusion because individuals' actions (e.g., placing the wrong brand in the cart) reveal his or her confusion. Results are summarized on table 2, models 1 through 6. This set of models consistently support hypothesis 1 and provide a strong but partial support of hypothesis 2. For all categories of snacks, subjects on the leader-present condition had a lower probability of confusion compared to subjects on the leader-absent condition showing that there is a lower probability of consumer confusion if a leading-brand and a me-too brand are next to each other compared to having only the me-too brand (H1: $p < 0,05$).

Moreover, the presence of the brand is also an important cue to avoid consumer confusion for most categories except for lollypops (H2). Models 1 thought 4, and model 6 predict a lower probability of confusion for subjects who are on the brand-present condition compared to those who are on the brand absent-condition. This means that the presence (vs absence) of a brand will reduce the probability of confusion. This is not the case for lollypops, for this product manipulating the brand (by hiding it) does not significantly predicts consumers' confusion, although results reveal an expected negative sign.

**Table 2. Logit model: Explaining consumer behavioral confusion (wrong action)**

| | Model 1. Chocolate covered cake | | | | Model 2. Cookies with a waffle surface | | | | Model 3. Chocolate chip cookies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | β est. | St.Err. | z value | Pr(>\|z\|) | β est. | St.Err. | z value | Pr(>\|z\|) | β est. | St.Err. | z value | Pr(>\|z\|) |
| Intercept | 0,27 | 2,41 | 0,11 | 0,91 | 1,17 | 1,29 | 0,91 | 0,36 | -1,00 | 1,39 | -0,72 | 0,47 |
| Frq.Consumer | -1,06 | 0,54 | -1,96 | 0,05 ** | -0,56 | 0,36 | -1,54 | 0,12 | 0,05 | 0,49 | 0,10 | 0,92 |
| TOM | 0,64 | 0,82 | 0,78 | 0,44 | 0,16 | 0,35 | 0,44 | 0,66 | -0,31 | 0,51 | -0,62 | 0,53 |
| Age | -0,01 | 0,12 | -0,06 | 0,95 | 0,01 | 0,06 | 0,19 | 0,85 | 0,08 | 0,06 | 1,32 | 0,19 |
| Gender | 1,10 | 0,52 | 2,13 | 0,03 ** | 0,55 | 0,38 | 1,46 | 0,14 | 0,11 | 0,41 | 0,26 | 0,80 |
| Leader-present | -4,81 | 1,19 | -4,05 | 0,00 *** | -0,72 | 0,36 | -1,98 | 0,05 ** | -2,11 | 0,47 | -4,45 | 0,00 *** |
| Brand | -0,92 | 0,50 | -1,85 | 0,05 ** | -1,78 | 0,36 | -4,94 | 0,00 *** | -2,22 | 0,48 | -4,60 | 0,00 *** |
| Wald Test (HC) (Chisq) | 26,45 | | | | 30,30 | | | | 33,68 | | | |
| D.F. | 6 | | | | 6 | | | | 6 | | | |
| Pr(>Chisq) | 0,00 *** | | | | 0,00 *** | | | | 0,00 *** | | | |
| n | 188 | | | | 181 | | | | 198 | | | |
| LRI | 0,45 | | | | 0,24 | | | | 0,27 | | | |
| Loglikelihood | -60,79 | | | | -105,31 | | | | -86,33 | | | |
| AIC | 135,58 | | | | 224,62 | | | | 186,66 | | | |

| | Model 4. Crackers | | | | Model 5. Lollypops | | | | Model 6. Gummy candy | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | β est. | St.Err. | z value | Pr(>\|z\|) | β est. | St.Err. | z value | Pr(>\|z\|) | β est. | St.Err. | z value | Pr(>\|z\|) |
| Intercept | -1,47 | 2,04 | -0,72 | 0,47 | -5,27 | 2,28 | -2,32 | 0,02 ** | -2,58 | 1,38 | -1,88 | 0,06 |
| Frq.Consumer | -0,30 | 0,55 | -0,55 | 0,58 | -0,32 | 0,53 | -0,60 | 0,55 | 0,88 | 0,49 | 1,78 | 0,07 |
| TOM | -0,26 | 0,53 | -0,50 | 0,62 | 1,88 | 1,36 | 1,39 | 0,17 | -15,42 | 2,63 | -5,87 | 0,00 *** |
| Age | 0,12 | 0,10 | 1,28 | 0,20 | 0,14 | 0,09 | 1,51 | 0,13 | 0,01 | 0,06 | 0,16 | 0,87 |
| Gender | 0,45 | 0,51 | 0,89 | 0,38 | 1,00 | 0,44 | 2,26 | 0,02 ** | -0,05 | 0,49 | -0,10 | 0,92 |
| Leader-present | -4,05 | 0,69 | -5,87 | 0,00 *** | -2,62 | 0,61 | -4,26 | 0,00 *** | 4,83 | 0,75 | 6,43 | 0,00 *** |
| Brand | -2,35 | 0,51 | -4,64 | 0,00 *** | -0,69 | 0,44 | -1,59 | 0,11 | -2,59 | 0,64 | -4,05 | 0,00 *** |
| Wald Test (HC) (Chisq) | 48,90 | | | | 31,55 | | | | 89,67 | | | |
| D.F. | 6 | | | | 6 | | | | 6 | | | |
| Pr(>Chisq) | 0,00 *** | | | | 0,00 *** | | | | 0,00 *** | | | |
| n | 199 | | | | 200 | | | | 200 | | | |
| LRI | 0,42 | | | | 0,22 | | | | 0,52 | | | |
| Loglikelihood | -65,50 | | | | -78,40 | | | | -64,65 | | | |
| AIC | 145,01 | | | | 170,80 | | | | 143,30 | | | |

z values computed using a heteroskedasticity-consistent estimator for the variance-covariance matrix of the Huber-White type.*** p<0,001; ** p < 0,005.

Consumers' familiarity, through frequent consumption and TOM (recall), is not a consistent predictor of consumers' confusion. Subjects who consider themselves frequent consumers of the leading brand of chocolate covered

cake have a lower probability of making a wrong decision compared to those who are not frequent consumers ($p < 0,05$).

Subjects who have a good recall of the leading brand of gummy candy, have a lower probability of being confused compared to those who do not have the brand as their TOM ($p < 0,001$). For all other categories, frequency of consumption and TOM are not significant explanatory variables. Concerning demographic control variables, age does not play a significant role as an explanatory variable. Gender is a significant variable on the chocolate covered cake and lollypops models; men have a higher probability of making a wrong decision compared to women ($p < 0,05$).

The following six logit models explain the probability of consumer awareness about choosing the wrong brand. We also call this idea cognitive confusion because the individual does or does not know which brand he or she chose. Table 3 shows that this set of logit models, except for the gummy candy model, support hypothesis 1 and hypothesis 2.

**Table 3. Logit Model: Explaining consumer cognitive confusion (consumer awareness)**

| | Model 1. Chocolate covered cake | | | | Model 2. Cookies with a waffle surface | | | | Model 3. Chocolate chip cookies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | β est. | St.Err. | z value | Pr(>\|z\|) | β est. | St.Err. | z value | Pr(>\|z\|) | β est. | St.Err. | z value | Pr(>\|z\|) |
| Intercept | 0,15 | 3,30 | 0,05 | 0,96 | 1,03 | 1,53 | 0,68 | 0,50 | 1,38 | 1,20 | 1,15 | 0,25 |
| Frq.Consumer | 2,24 | 0,83 | 2,70 | 0,01 *** | -0,34 | 0,38 | -0,90 | 0,37 | 0,88 | 0,45 | 1,94 | 0,05 ** |
| TOM | -0,97 | 1,27 | -0,76 | 0,44 | -0,71 | 0,39 | -1,82 | 0,07 | -0,40 | 0,45 | -0,89 | 0,37 |
| Age | -0,02 | 0,16 | -0,10 | 0,92 | -0,06 | 0,07 | -0,90 | 0,37 | -0,09 | 0,05 | -1,74 | 0,08 |
| Gender | -1,07 | 0,76 | -1,41 | 0,16 | -0,53 | 0,38 | -1,40 | 0,16 | -0,05 | 0,36 | -0,14 | 0,89 |
| Leader-present | 21,21 | 0,73 | 29,14 | 0,00 *** | 0,77 | 0,38 | 2,04 | 0,04 ** | 0,69 | 0,36 | 1,92 | 0,05 ** |
| Brand | 20,81 | 0,62 | 33,58 | 0,00 *** | 2,17 | 0,39 | 5,53 | 0,00 *** | 1,64 | 0,37 | 4,43 | 0,00 *** |
| Wald Test (HC) (Chisq) | 2329,53 | | | | 37,45 | | | | 29,90 | | | |
| D.F. | 6 | | | | 6 | | | | 6 | | | |
| Pr(>Chisq) | 0,00 | *** | | | 0,00 | *** | | | 0,00 | *** | | |
| n | 188 | | | | 181 | | | | 198 | | | |
| LRI | 0,65 | | | | 0,31 | | | | 0,17 | | | |
| Loglikelihood | -27,31 | | | | -95,23 | | | | -109,22 | | | |
| AIC | 68,62 | | | | 204,45 | | | | 232,44 | | | |

| | Model 4. Crackers | | | | Model 5. Lollypops | | | | Model 6. Gummy candy | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | β est. | St.Err. | z value | Pr(>\|z\|) | β est. | St.Err. | z value | Pr(>\|z\|) | β est. | St.Err. | z value | Pr(>\|z\|) |
| Intercept | 0,33 | 1,53 | 0,22 | 0,83 | 2,27 | 2,18 | 1,04 | 0,30 | 3,65 | 1,30 | 2,80 | 0,01 *** |
| Frq.Consumer | 0,08 | 0,45 | 0,17 | 0,87 | -0,44 | 0,57 | -0,77 | 0,44 | 0,27 | 0,41 | 0,65 | 0,51 |
| TOM | 0,56 | 0,43 | 1,29 | 0,20 | -0,88 | 1,75 | -0,50 | 0,62 | 15,28 | 1,22 | 12,56 | 0,00 *** |
| Age | -0,05 | 0,07 | -0,78 | 0,44 | -0,01 | 0,11 | -0,11 | 0,91 | -0,08 | 0,06 | -1,44 | 0,15 |
| Gender | -0,77 | 0,42 | -1,83 | 0,07 | -0,93 | 0,44 | -2,09 | 0,04 ** | -0,32 | 0,37 | -0,87 | 0,39 |
| Leader-present | 2,56 | 0,52 | 4,90 | 0,00 *** | 1,33 | 0,48 | 2,75 | 0,01 *** | -2,21 | 0,39 | -5,70 | 0,00 *** |
| Brand | 2,20 | 0,47 | 4,64 | 0,00 *** | 1,40 | 0,45 | 3,10 | 0,00 *** | -0,03 | 0,37 | -0,09 | 0,93 |
| Wald Test (HC) (Chisq) | 41,91 | | | | 29,83 | | | | 210,71 | | | |
| D.F. | 6 | | | | 6 | | | | 6 | | | |
| Pr(>Chisq) | 0,00 | *** | | | 0,00 | *** | | | 0,00 | *** | | |
| n | 199 | | | | 200 | | | | 200 | | | |
| LRI | 0,32 | | | | 0,16 | | | | 0,23 | | | |
| Loglikelihood | -81,03 | | | | -80,47 | | | | -101,93 | | | |
| AIC | 176,07 | | | | 174,94 | | | | 217,87 | | | |

z values computed using a heteroskedasticity-consistent estimator for the variance-covariance matrix of the Huber-White type. *** $p < 0,001$; ** $p < 0,005$.

Models 1 through 5 reveal that the presence of the leading brand on the self is positively related to consumers' awareness, supporting H1. Therefore, when the leading brand is next to the me-too brand consumers have a lower probability of being cognitively confused; they have a higher probability of expressing correctly their decision ($p < 0,05$). Consistently, when a me-too brand stands alone on the self there is a higher probability of expressing a cognitive confusion; subjects have a higher probability of not being aware of the brand they bought. Results for models 1 through 5 also provide support for hypothesis 2. Subjects in the brand-present condition have a higher probability of being aware of the brand they pick compared to those in the brand-absent condition ($p < 0,01$). In other words, when the brand is not on the package subjects have a higher probability of being cognitively confused, compared to subjects who do observe the brand on the package.

Frequency of consumption is a significant predictor on two of the six logit models. Subjects who are frequent consumers of the leading brand of chocolate covered cake and chocolate chip cookies have a lower probability of confusion compared to those who are not frequent consumers. These frequent consumers have a higher probability of being aware of the band they chose. Demographic variables are not significantly related to consumer cognitive confusion.

Results for the sixth model are opposite to what is expected. The gummy candy model shows that subjects who were exposed to the leading brand next to the me-too brand were less aware of the decision they made, therefore there was a higher probability of cognitive confusion in the leader-present condition compared to the leader-absent condition (H1: $p < 0,01$). The presence vs absence of the brand on the package has no significant effect on consumers' awareness (H2: $p > 0,1$). However, TOM plays an important role on this model; subjects who recall the leading brand have a higher probability of being aware of the brand they pick compared to those who do have the leading brand on their TOM. That is, there is a comparatively lower probability of cognitive confusion when subjects have a good recall of the leading brand ($p < 0,01$).

**Discussion**

Because consumer familiarity is created thanks to consumer experience and exposure to the brand (Delgado-Ballester, et al., 2012; Mogilner, et al., 2008), we can observe that the two control variables included in the study, TOM and being a frequent consumer, are showing that the set of categories and brands included in the study are not entirely homogeneous and represent different levels of consumer familiarity. From the observed results we may assume that lollypops and chocolate covered cake are categories with a high-level of consumer familiarity. Cookies with a waffle surface, chocolate chip cookies, and crackers are categories with a mid-level of familiarity. Lastly, subjects are comparatively less familiar with gummy candy, this could be considered for our sample a low-level familiarity brand. The descriptive analysis provides some evidence of consumer confusion across categories depending on familiarity and recall; categories with higher levels of

familiarity and recall also have lower levels of confusion. Interestingly this effect is not consistent throughout the models because the experimental variables result to be better predictors as the logit models show.

Legal requirements place an emphasis on brands distinctiveness as the main product characteristic that prevents consumers' confusion (Beebe, 2005; D. Cohen, 1991; Warlop, et al., 2005). This study supports this idea confirming that the presence of the brand prevents consumers' confusion and motivates consumers' awareness about his or her purchase. These results confirm that individuals are capable of discriminating two similar packages based on their brand (Arboleda & Alonso, 2010; Miaoulis & D'Amato, 1978; Warlop, et al., 2005).

Branding is an important variable on consumer confusion because brands that are negatively affected for this reason are legally protected and it is possible to demand for changes on the me-too brand. Unlike other studies, this experiment introduces a contextual measure: the presence of the me-too brand next to the leading brand.

The strategy of a me-too brand is to communicate consumers that its characteristics are just like those of the leading brand (Van Horen & Pieters, 2012). In practice, what a me-too does is to have a similar package design and stand next to the leading brand at the point of purchase (Balabanis & Craven, 1997; Foxman, et al., 1992; Loken, Ross, & Hinkle, 1986). However, this study shows that the me-too seems to taking the credit of the leading brand when the former is not available, inducing consumers to take this option instead. On the opposite scenario, the me-too strategy seems to work better off for consumers, in terms of a lower probability of confusion, when the leading brand is next to the me-too brand on the self. For better or for worst, having both brands on the shelf (leader and me-too) is a context specific condition depending on distribution and availability; brands are not required to be present at the point of purchase. What is important about this finding is that the strategy is working on the expected direction because consumers are choosing the right product as long as this is available. However, consumers have a higher probability of making a wrong decision when the me-too is by it self on the self. The presence of the brand and the presence of the leader are to complementary variables that explain consumer confusion because one is an intrinsic characteristic (branding) and the other is a context specific condition (availability). Moreover, the effect of these two predictors surpasses the effect of brand familiarity (i.e., recall and frequency of consumption).

This study also makes an important contribution on the dependent variable: consumer confusion. Previous studies used cognitive or emotional responses to evaluate consumers' confusion (Mitchell & Walsh, 2005). An example of a cognitive measure of confusion is asking the individual to determine if they bought the product they intended to buy; this is done verbally by describing the product, naming the brand, or by asking the individual to point out at an image of the product (Balabanis & Craven, 1997; Foxman, et al., 1992). A second example of how consumer confusion is measured is through subjects' failure to describe various characteristics of the product (Turnbull, Leek, & Ying, 2000). A third example

is asking subject to rate how similar are the brands and how difficult is to differentiate one form the other (Mitchell & Walsh, 2005).  This study not only uses a cognitive measure for consumer confusion, asking consumers to name the brand they chose, but also uses a behavioral measure.

This behavioral measure consist on observing consumers' item selection and registering if this was the one he was supposed to chose of not. Observing consumers' decision is a good measure because it is an objective approach and avoids consumers' biased response. When consumers are asked about the brand or product they were supposed to buy, their response might be confounded with brand recall. The negative side of the consumer confusion behavioral approach is that an individual might decide to choose a "wrong" product on purpose. That is, the individual is instructed to buy product a, but he decides to buy "b" not because he is confused but because he decides he might as well get "b" since it is just like "a." Thus, the observation would show that the consumer was confused, but this is not true since he consciously made this decision.

However, results for this study are consistent though the behavioral and cognitive approaches; in fact, for most models both approaches complement each other. Thus, the behavioral confusion should be analyzed along with consumers' cognitive awareness of their decision. Interestingly, results are different for the category with the best results on familiarity (lollypops) and for the category with the worst results on familiarity (gummy candy). The model for lollypops shows that there is a higher probability of behavioral confusion when the leading brand is absent, but the presence or absence of the brand from the package does not have an effect on confusion (Table 2, model 5).  Therefore, observing consumers' choice might be a biased measure when individuals are highly familiar with brands of the category because they might be able to differentiate minor differences between items with or without the presence of the brand. This brand awareness is not an observable outcome.

Moreover, cognitive confusion results for the gummy candy model are opposite to what is expected (Table 3, model 6). One of the experimental variables is a significant predictor the other is not, but both variables have a negative sign, contrary to what was expected. These odd results could be explained by consumers' poor familiarity with the category. Descriptive results show this is the category with the lowest measures of familiarity. Therefore, asking subjects about brand awareness might be a biased question because individuals do not have a good brand recall or recognition. In other words, the consumer awareness measure is not appropriate when we are dealing with a low-familiarity type of brand. These tow opposed categories and results confirm that both measures of consumer confusion are important and complementary.

**Practical implications**

Results should encourage managers and policy makers to think about the consequences of using a me-too strategy. Consistent with previous studies and with trademark protections, the presence of the brand is an important package attribute

to prevent consumers' confusion. However, this study analyses one of the most important actions that take place during the implementation of a me-too strategy: having the imitating brand right next to the leading brand at the point of purchase. We find that this is not a harmful action in terms of consumer confusion because in general terms individuals are able to differentiate the leading brand from the me-too brand. What could be harmful is not having the leading brand and letting the me-too brand stand alone at the point of purchase. But this is not a worrisome finding concerning consumers' vulnerability because, compered to the leading brand, me-too products have a smaller and weaker distribution; additionally their strategy is to be where the leader is, not to expand the market.

From the view point of society, consequences of a me-too strategy benefits consumers in terms of the variety and quantity of products available to the consumer (Sohn, 2008). This is consistent with the idea that imitation is an accurate strategy for mature markets with an important and stable consumer demand and products with well-known attributes (Braguinsky, Gabdrakhmanov, & Ohyama; 2007). Therefore, consumers, oranizations, and policy makers, could feel more comprtable with the imitation strategy taking place on mature well develped marets because individuals' familiarity with brands, particlarly with the leading brand, pervents them from making a mistake during their purchase. More concern should be placed when imitation takes place on youngh categories, that do not have an exemplar leading brand or consistent characteristics that reinforce consumers' cateogrization process. On this study, opposite levels of familiarity were represted by looloypops and gummy candy. The loolypops leading brand has been on the local market since 1970. Contrary, the gummy candy leading brand was introduced to the local market in 2002. These categories reveal opposite results in terms of consumer confusion, expresing the importance of consumers familiarty with the category.

**Limitations and future research**

In many cases the leading brand of a product category becomes the name of the category (Miaoulis, & D'Amato; 1978). A common example of this issue is Kleenex, a brand commonly used to describe any tissue. However, this study does not consider generalization and it is possible that when we asked individuals about the product they chose they are the leading band they have in mind because is the name they have for the category. Generalization is a complex concept because it means that the leader becomes a generic name. However, studies in consumer confusion do not usually deal with this fact because it has an inherent contradiction. Consumers know what they are buying, but if they want to ask for the me-too brand or any brand that is not the leader, they do not use the proper name. In terms of the leading brand, it is not clear to what extent becoming the generic name for the category is a positive or negative outcome for the brand.

Regarding the method, this experimental study should be complemented with a field study were the consumer deals with a less stable environment that usually has time constrains on the decision making process.

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