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# Retail salespeople's mimicry of customers: Effects on consumer behavior

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## ABSTRACT

Developing interpersonal bonds between employees and customers in selling contexts can increase sales and positive perceptions of the employees and the store. Recent studies have found that mimicking the verbal and nonverbal behavior of strangers enhanced their liking for the individual who mimicked them, and influenced helping behavior. An experiment was carried out in a retail setting where four sales clerks were instructed to mimic, or not, some of the verbal expressions and nonverbal behavior of the customers. On their way out, these customers were asked to evaluate the sales clerks and the store. Results showed that mimicry was associated with a higher sales rate, greater compliance to the sales clerk's suggestion during the selling process, and more positive evaluations of both the sales clerks and the store. It was found that these evaluations mediate the relationship between mimicry and customers' behavior. Experiment 2 confirmed the behavioral effect of mimicry when a baseline condition was introduced. These results seem to show that mimicry really helps managers to develop positive relationships between their sellers and their customers.

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#### 1. Introduction

# 1.1. Interpersonal bonds in employee-customer relationships

The interaction between store employees or service industry employees and their customers is considered an essential part of customers' assessments of service quality and their relationship with the store or the service provider (Bitner, 1990; Gwinner et al., 1998). The development of interpersonal bonds may be a way for a store to differentiate itself from others and to increase their sales, to raise customer loyalty and to create a positive word of mouth for their store. Thus, managers might consider ways they could facilitate the development of interpersonal bonds, including encouraging the development of friendships between employees and customers. Coulter and Coulter (2000) found that as perceived similarity between customers and service employees increased, customer trust also increased. Gremler et al. (2001) found that customer positive word of mouth increased when employees used interpersonal bonds in their relationships with the customers such as employee familiarity with customers, personal connection between employees and customers, or care displayed by employees.

Thus, it could be interesting for managers to encourage their employees to use social psychological procedures that facilitate positive interpersonal relationships in their own relationships with the customer. Several studies have found that some of these social psychology techniques facilitated interpersonal relationships and increased the positive perception of the individual who used such interpersonal bonds. Some of these studies have shown the efficiency of these interpersonal techniques in a selling context. For example, touch is considered as a factor that facilitates interpersonal relationships, familiarity and truth. Several studies have found that the tactile contact of a patron by a server in a restaurant or bar increases tipping (Crusco and Wetzel, 1984; Stephen and Zweigenhaft, 1986; Hornik, 1992b; Lynn et al., 1998; Ebesu Hubbard et al., 2003; Guéguen and Jacob, 2005). Touching potential customers can also lead to an increase in product sales rates, or a greater amount of money spent (Guéguen et al., 2007; Guéguen and Jacob, 2006; Hornik, 1992a; Kaufman and Mahoney, 1999; Smith et al., 1982). Further studies found that the professional qualities of the seller or the restaurant employee were evaluated more positively (Crusco and Wetzel, 1984; Hornik, 1992b; Stephen and Zweigenhaft, 1986; Wycoff and Holley, 1990; Erceau and Guéguen, 2007). It has also been found that employee tactile contact was associated with a more positive perception of the store (Hornik, 1992a) or the restaurant (Hornik, 1992b).

Tactile contact is not the sole technique that facilitates interpersonal relationships. Within the various social psychology procedures, one of them, the mimicry technique, could have some interest for managers and sellers to create a positive perception of the employees among the customers. Mimicry has long been studied by social psychologist. However, its behavioral effect and its effect on the perception of the mimicker are relatively recent

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and the influence of mimicry in a real selling context does not exist. The first objective of this paper was to test the effect of mimicry used by a salesperson on customer behavior and judgment in a real field setting. The second objective was to test the link between customer behavior toward a salesperson who mimicked him/her and the variation in judgment created by mimicking.

#### 1.2. Mimicry in social relationships

As the saying goes "Monkey see, monkey do". This "Chameleon effect" (Chartrand and Bargh, 1999) refers to the unconscious mimicry of postures, facial expressions, mannerisms and other verbal and nonverbal behaviors. Today, research on this paradigm has shown that mimicry has the power to influence social judgment and behavior toward the mimicker. Recent experimental studies conducted in field settings show that using mimicry could influence compliance towards a mimicker's request.

#### 1.3. Mimicry: an automatic behavior

It has been found that posture and mannerisms are routinely mimicked in social interaction (Bernieri, 1988; LaFrance, 1982). Giles and Powesland (1975) found that people mimic the accents of their counterparts. Speech rate (Webb, 1972) and speech rhythms (Cappella and Panalp, 1981) are also mimicked unconsciously by human beings in their social interactions. The contagious effect of laughter has been found in several studies (Bush et al., 1989; Provine, 1992) and many experiments have found that the use of canned laughter causes an audience, in return, to laugh longer, more often, and to rate the humorous material as funnier (Cialdini, 2011). Chartrand and Bargh (1999) showed that participants were more likely to touch their own face when they interacted with a face-touching confederate who was a stranger, than when they interacted with a foot-shaking confederate. In the same way, the reverse effect was found when the confederate shook his or her foot: the participants were more likely to shake their own feet than to touch their own face. When confederates were instructed to smoke in a bar-laboratory, it was found that participants imitated this smoking behavior (Harakeh et al., 2007). Quigley and Collins (1999) found that alcohol consumption is influenced by our counterpart in social interaction and the type of drink selected, the drinking rate, and the volume of beverage for each sip is imitated. However, these later studies found that people were not conscious that they mimicked the behavior of their counterparts.

## 1.4. Mimicry increases positive evaluation of the mimicker

Research has also found that mimicry is associated with a more positive evaluation of the mimicker. Chartrand and Bargh (1999. study 2) engaged participants in a task with a confederate who was instructed to either mimic the mannerism of the participant, or to exhibit neutral, nondescript mannerisms. Participants who were mimicked by the confederate subsequently reported a higher mean of liking for the confederate, and described their interaction with him/her as smoother and more harmonious than those who were not mimicked. This result is congruent with previous work by Maurer and Tindall (1983), who found that when a counselor mimicked a client's arm and leg position, this mimicry enhanced the client's perception of the counselor's level of empathy compared to when the counselor did not mimic the client. Interacting in an immersive virtual reality with an embodied artificial agent mimicking our own behavior is sufficient to influence the agent's rating. In a recent experiment by Bailenson and Yee (2005), a virtual agent verbally presented a persuasive argument (a message advocating a campus security policy) to a participant. In half of the cases, the virtual agent mimicked the participant's head movements with a 4-s delay; for another group of participants, the agent mimicked the prerecorded movements of another participant. After the interaction, the participant indicated his/her agreement with the message delivered by the agent and gave his/her impression of the agent. It was found that the mimicking virtual agent was more persuasive, and received more positive trait ratings than non-mimickers.

## 1.5. Mimicking someone to create affiliation and rapport

Rapport and affiliation are also associated with mimicry. LaFrance (1979) conducted a longitudinal design survey to explore the relation between a measure of nonverbal synchrony and selfreport indications of rapport with college students. She found that posture sharing between the instructor and the students was positively related to rapport. For this author, postural mimicry may be influential in establishing rapport. This link between affiliation and rapport has recently been demonstrated by Lakin and Chartrand (2003). In their experiment, participants performed a first task in which they were exposed to a priming procedure using words related, or not, with the concept of affiliation (friend, partner, etc.). In a second unrelated task on memory, participants watched a videotape of a female confederate who was touching her face. During this second task, it was found that the participants who were primed with the unconscious concept of affiliation mimicked more favorably the confederate displayed on the video tape than when no affiliation priming was used. This seems to show that affiliation and mimicry are related. This effect was recently confirmed by two studies by Yabar et al. (2006), who found that participants mimicked more favorably the nonverbal behavior of members of their in-group than members of their out-group. Once again, the link between mimicry and the desire for affiliation was attested. The same effect can be found in closer interaction. In a recent study (Guéguen et al., 2007) an experiment was carried out during real sessions of speed-dating, in order to test the behavioral effect of mimicry in a courtship context. The young women confederates who interacted with men during such sessions were instructed to mimic some of the men's verbal expressions and nonverbal behavior, or only verbal expressions, or nonverbal behavior alone, or no mimicry. Data showed that men evaluated more positively both the dating interaction and the women confederates when the latter mimicked them. At the end of the dating session, men expressed a greater desire to meet again the women-confederates who had mimicked them than the same women-confederate when they had not.

## 1.6. Behavioral effects of mimicry

If mimicry is associated with a greater liking for the mimickers and a greater feeling of affiliation, several studies have found that mimicry leads to enhance pro-social behavior toward the mimickers. Van Baaren et al. (2003) found in two experiments that mimicking the verbal behavior of customers in a restaurant increased the amount of the tips. In their first experiment, a waitress was instructed to mimic the verbal behavior of half of her customers by literally repeating their order. It was found that the waitress received significantly larger tips when she mimicked the patrons than when she did not. In a second experiment, it was found that compared to a baseline condition, mimicry was associated with a higher rate of tipping customers, and also with larger tips. Spontaneous helping behavior is also affected by mimicry. Van Baaren et al. (2004) mimicked the posture (position of the arms, of the legs, etc.) of half of the participants in a task in which they were

asked to evaluate various advertisements. The experimenter, who was seated in front of the participant, mimicked, or not, the participant's posture. When the task was concluded, the experimenter "accidentally" dropped six pens on the floor. It was found that participants in the mimicry condition picked up the pens more often (100%) than participants in the non-mimicry condition (33%). Behavioral mimicry can also facilitate the outcome of negotiations. In a recent study by Maddux et al. (2008) it was found that mimicry facilitated a negotiator's ability to uncover underlying compatible interests, and also increased the likelihood of closing a deal in a negotiation where a prima facie solution was not possible.

All above, these studies show that mimicry seems to enhance social relationships. For Lakin et al. (2003), the relationship between mimicry and liking or pro-social behavior could be explained in terms of human evolution. For these authors, mimicry may serve to foster relationships with others. This behavior could serve as a "social glue", binding people together and creating harmonious relationships.

#### 1.7. Objective and hypothesizes

The purpose of our experiment was to explore the role of mimicry in a selling context, with a relationship between a patron and a seller in which the seller was instructed to mimic, or not, a patron. Firstly, in this context, the behavior evaluated was compliance to the seller's commercial suggestion, and this behavior was not altruistic as in previous experiments measuring behavioral data. Secondly, in this context, it is also possible to measure the customer's perception of the mimicker and the store, and then to study the relationship between the evaluation data and the behavioral data. Because mimicry was associated with a greater desire of affiliation, with rapport and a positive perception of the mimicker, as well as with persuasion and a higher level of compliance toward the mimicker's request, we hypothesized that sales clerks who mimicked customers during their interaction would be evaluated more favorably by these customers, and that the sales clerks' suggestions would be more favorably received. It was also hypothesized that the store would be more favorably evaluated in the experimental conditions involving mimicry.

## 2. Experiment 1

## 2.1. Method

## 2.1.1. Setting

The experiment was conducted in a department store offering a wide range of products such as domestic electrical appliances, TV, Video, Hifi, computers, and CDs. The experiment took place in the section where MP3-players were sold. In this section, the shelving was over 8 m long and more than 80 MP3-Players were displayed. All the goods on show were for sale. The prices range was comprised between  $15 \in (20\$)$  and  $580 \in (700\$)$ . A MP3 player is a product frequently offered as a gift (birthday, Christmas, etc.), and a lot of customers, particularly people aged 40 or over were requesting the sales clerks' help to make a choice. This effect was reinforced by the wide range of products displayed in this section.

# 2.1.2. Participants and sellers

The participants were 58 males and 74 females (ranging in age from 40 to 70), shopping alone, who solicited a sales clerk in the MP3 section for his help in choosing a model. The data of three participants were removed because they refused to respond to the survey conducted as they came out of the store. The experiment involved four sales clerks (4 young men aged 22–28), with a good sales experience (more than 12 months) with this type of product.

As we previously used the same employees to conduct further experiments on the lure technique (Guéguen and Jacob, 2008) or the tactile contact technique (Guéguen and Jacob, 2008), precautions were taken in the later studies to select sales clerks with the same level of physical attractiveness. A separate sample of 21 women and 19 men judged 11 sales clerks on a 1 (not at all attractive) to 9 (extremely attractive) scale. The sales clerks that seemed to be moderately attractive both for men and women were selected. Pairwise comparison of the level of attractiveness between these four sales clerks revealed non-statistical difference.

## 2.1.3. Procedure

According to a random distribution, when a customer aged 40 or over solicited him for his help in choosing a MP3-Player, the seller was instructed to mimic, or not, the customer. The seller began the interaction by asking the customer to give him the price he/she was willing to pay. Then the seller suggested a model. In the mimicry condition, the seller was instructed to mimic the customer's verbal behavior by literally repeating some of his or her words, verbal expressions or statements. For example, some of the customers initiated the interaction by saying "Hello! Could you help me to choose a MP3 player?" In the non-mimicry condition, the seller was instructed to say "Yes of course", whereas in the mimicry condition, he said: "Hello! Of course I can help you to choose a MP3 player". If the customer said: "I want to buy a MP3 player for my grandson", then in the nonmimicry condition the seller was instructed to say "Yes. How old is he?", whereas in the mimicry condition, he said "A MP3 player for you grandson. How old is he?". The seller was also instructed to repeat, or not, some of the customer's verbal expressions when presenting a MP3-Player (e.g.: "It's funny", "It's light"...). In the mimicry condition, the seller was instructed to try to repeat five expressions or sentences during the interaction. The confederate was also instructed to mimic the customer's nonverbal behavior (i.e. when he stroked his face, folded his arms, scratched his ears, etc.) during the interaction. He was also instructed to try to mimic nonverbal behavior five times during the session, with a delay of three or four seconds after the customer produced this nonverbal behavior. In the non-mimicry condition, the seller was instructed to be careful not to mimic verbal expressions or sentences, or the nonverbal behavior of the customer. Outside of this difference in verbal and nonverbal behavior in the mimicry condition, the four sales clerks were instructed to attempt to act with the customers as they usually did: smiling as usual, standing where they usually did in relation to the customer, responding in the same way. In both conditions, the sellers were instructed to present the same two models to the customer, according to his/her price range.

A male observer standing alone near the MP3 department was instructed to observe the customers discreetly, and to wait until one of them solicited the seller. He was then instructed to approach the dyad and to ascertain whether the customer was really soliciting the seller for information about a MP3 player. Then the observer left the store and waited until the customer emerged, at which point he approached the customer and solicited him/her in this way: "Excuse me, Sir/Madam, would you please answer a short verbal survey in order to improve the quality of the reception of our patrons. It will only take two minutes of your time." All but three (all three in the non-mimic condition) accepted the survey. Five nine-point bipolar semantic scales were used to evaluate the sales clerk and the store itself. For the evaluation of the seller, the customer was asked to assess the seller's competence, agreeableness, ability to stay tuned to the customer, and friendliness. The last scale was used to make a general evaluation of the store. The interviewer thanked the patron, noted his or her sex on the store/ seller-evaluation card, and returned into the store. By describing the customer's appearance to the seller, he ascertained whether the patron had bought a MP3 player, and noted whether the model selected by the patron was or was not one of the two models suggested by the seller.

#### 2.2. Results

In this experiment, 66 customers (29 males and 37 females) were tested in the mimicry experimental condition and 63 (29 men and 34 women) in the non-mimicry control condition. As no difference in patron behavior and evaluation was found in the two experimental conditions, according to the gender of the customer or the sellers, data were collapsed across the sex of patrons and sellers. The first behavioral dependent variable used in this experiment was evaluated by the number of customers who solicited a seller for information about a MP3-Player, and who bought a unit. In the mimicry condition, 78.8% (52/66) of the seller's solicitors left the store after buying a MP3-Player whereas they were only 61.8% (39/ 63) in the non-mimicry condition. The difference between the two rates was significant ( $\chi^2(1/129) = 4.42, p < 0.04, r = 0.18$ ): customers who were mimicked by a seller bought a MP3 player more favorably than customers who were not mimicked. The second behavioral variable measured in this experiment considered the model of MP3-Player bought by the customers. Indeed, when interacting with the customer, the seller was instructed in both conditions to behave as he always did and to suggest two models to the customers. We then evaluated whether the customer who bought a MP3-player took one of the two models suggested by the seller, or chose another model. In the mimicry condition 71.1% (37/52) of the customers chose one of

**Table 1**Means (SD in brackets) of the evaluation scales according to the experimental conditions (scores can theoretically vary from 1 to 9 with a higher score associated with a better positive evaluation).

	Mimicry	No mimicry	Test
Competent Agreeable Stay turned to me Friendly	7.62 (0.80) 7.14 (0.84)	6.90 (0.82) 6.76 (0.76) 6.44 (0.80) 6.40 (0.75)	t(127) = 5.36, $p < 0.001$ $d = 0.99t(127) = 6.27$ , $p < 0.001$ $d = 1.11t(127) = 4.79$ , $p < 0.001$ $d = 0.85t(127) = 6.88$ , $p < 0.001$ $d = 1.22$
General evaluation of the store	7.06 (0.58)	6.35 (0.74)	t(127) = 6.01, p < 0.001 d = 1.07

the 2 models suggested by the seller, whereas they were only 46.2% (18/39) in the non-mimicry condition. Again, the difference between the two rates was significant ( $\chi^2$  (1, 91)=5.83, p < 0.02, r=0.25). It thus appears that customers who were mimicked by a seller bought more favorably one of the two MP3 players suggested by the seller than customers who were not mimicked.

Once out of the store and in the car-park, the customers were solicited to evaluate the seller and the store. The data provided from the scales are presented in Table 1.

The difference between the two groups was analyzed by the help of the Student's t-test. Furthermore, when multiple statistical tests were used with the same data set, we increased the probability of a Type I Error. Accordingly, Bonferroni's adjustment was recommended to compensate for this increased probability. One method used here consisted in dividing the alpha level (0.05) by the number of separate pair-wise comparisons. In this experiment, the alpha level with Bonferroni's adjustment was equal to 0.01, and the t-value for double-sided testing (df=127) was equal to 2.36. In all the pair-wise comparisons, the calculated t-value was greater than 2.36, showing that the differences in evaluation between the two experimental conditions were highly significant. As we can see, mimicry was associated with a more positive evaluation of both the sellers and the store.

In order to study the relation between these dependent variables, a correlation analysis (Bravais–Pearson's coefficient) was performed. The correlation matrix is presented in Table 2.

As can be seen, all the evaluation scales of the seller were found to be highly and positively correlated, and these personal evaluation scales were associated with the general evaluation of the store. The alpha coefficient for the five items was 0.863, suggesting that the items have relatively high internal consistency. Considering this internal consistency, a composite evaluation score was calculated by adding the five scales. It was found in a previous study that this composite score was highly related with customer satisfaction toward the employees and the store and that this composite score was a good predictor of customer loyalty toward the store (Guéguen and Jacob, 2008).

To test whether the evaluation mediates the effect of mimicry on customer's behavior, a statistical mediation analysis (MacKinnon, 2008) was performed. The results of the mediation analysis considering the customer behavior are illustrated in Fig. 1, whereas the mediation analysis considering the choice of the model proposed by the seller are illustrated in Fig. 2.

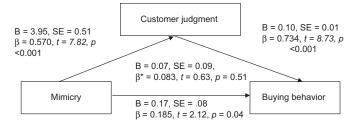
**Table 2**Correlation matrix between the evaluation-score of the seller and the store and the experimental condition.

	Buying behavior	Choice of the model	Competent	Agreeable	Stay turned to me	Friendly	General evaluation of the store
Experimental condition <sup>a</sup> Buying behavior <sup>b</sup> Choice of the model <sup>c</sup> Competent Agreeable Stay turned to me	r(128)= -0.19 p < 0.04	r(90) = -0.25 p < 0.02 r(128) = 0.13 ns	r(128) = -0.43 $p < 0.001$ $r(128) = 0.61$ $p < 0.001$ $r(90) = 0.52$ $p < 0.001$	r(128)=049 p < 0.001 r(128)=0.51 p < 0.001 r(90)=0.48 p < 0.001 r(128)=0.73 p < 0.001	r(128) = -0.39 $p < 0.001$ $r(128) = 0.47$ $p < 0.001$ $r(90) = 0.38$ $p < 0.001$ $r(128) = 0.57$ $p < 0.001$ $r(128) = 0.72$ $p < 0.001$	r(128) = -0.52 p < 0.001 r(128) = 0.39 p < 0.001 r(90) = 0.19 p < 0.001 r(128) = 0.51 p < 0.001 r(128) = 0.54 p < 0.001 r(128) = 0.53	r(128) = -0.48 p < 0.001 r(128) = 0.43 p < 0.001 r(90) = 0.23 p < 0.04 r(128) = 0.48 p < 0.001 r(128) = 0.49 p < 0.001 r(128) = 0.48
Friendly						p < 0.001	p < 0.001 r(128) = 0.53 p < 0.001
General evaluation of the store							p < 0.001

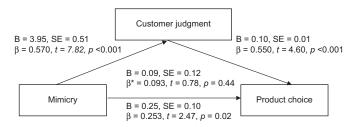
<sup>&</sup>lt;sup>a</sup> For experimental condition 1=Mimicry condition and 2=non-mimicry control condition.

<sup>&</sup>lt;sup>b</sup> For buying behavior 1=purchase and 0=no purchase.

<sup>&</sup>lt;sup>c</sup> For choice of the model 1 = customer had chosen one on the two models proposed by the seller and 0 = customer had chosen another model that one of the two models proposed by the seller.



**Fig. 1.** Mediation of the effect of Mimicry on buying by customer judgment. B is the unstandardized coefficient, ES is the Standard Error of the unstandardized coefficient,  $\beta$  is the standardized coefficient when we regress the dependent variable on the independent variable.  $\beta^*$  is the standardized coefficient when we regress the dependent variable (buying behavior) on the independent variable alone (Mimicry), without including the mediating variable (customer judgment) in the equations.



**Fig. 2.** Mediation of the effect of Mimicry on customer product choice by customer judgment. B is the unstandardized coefficient, ES is the Standard Error of the unstandardized coefficient,  $\beta$  is the standardized coefficient when we regress the dependent variable on the independent variable.  $\beta^*$  is the standardized coefficient when we regress the dependent variable (product choice) on the independent variable alone (Mimicry), without including the mediating variable (customer judgment) in the equations.

For buying behavior, mimicry was found to be significantly related to it, as well as to the general judgment of the seller and the store. The judgment score was also noted to be significantly related to buying behavior. When controlling the judgment score, it seemed that mimicry did not appear related with buying behavior suggesting that the relation between the independent variable (Mimicry) and the dependent variable (buying behavior) was mediated by the judgement score.

With the second dependent variable (choice of the model proposed by the seller) it also appeared that the relation between the independent variable (Mimicry) and the dependent variable (choice of the model) was mediated by the general judgement of the store performed by the customer.

## 2.3. Discussion

This first experiment confirmed the hypothesis that mimicry increases the buying behavior of the customers and that this behavior was mediated by judgement about the seller and the store. However, when considering customer buying behavior, there were several limitations in this experiment that we addressed in experiment 2. First, each of the four sales clerks where perhaps not really blind with the hypothesis because they were instructed to mimic the customers or not, thus gathering that mimicry was associated with higher efficiency in a selling context. Therefore, their behavior may have, inadvertently, differed in other relevant aspects. Secondly, it was unclear in the first experiment whether customer behavior increased when the customer was mimicked, or whether buying behavior decreased when the customer was not mimicked. To address this problem, we registered the sales of each clerk four weeks prior to the actual experiment to serve as a baseline for the two experimental conditions.

#### 3. Experiment 2

#### 3.1. Method

#### 3.1.1. Overview

Experiment 2 was similar to Experiment 1 with three exceptions. Experiment 2 was conducted in one other store. However, the store was near the same store where experiment 1 was carried out and belonged to the same business group. Five sellers participated in this experiment and were blind of the hypothesis. A baseline condition was introduced before the experiment. For four weeks the sellers were observed to register their sales. After that, they were solicited to participate in the experiment and were observed for 4 weeks. In this experiment only customer behavior (buying a product or not and choice vs no choice of the model proposed by the seller) was observed. The participants were 178 males and 261 females (ranging in age from 40 to 70), shopping alone, who solicited a sales clerk in the MP3 section for his help in choosing a model.

#### 3.2. Results

The dependent variables used in this experiment were the same as before and considered customer behavior: buying a product or not (DV1) and choosing one of the two models proposed by the seller or not (DV2). Results are presented in Table 3.

With the number of customers who bought a product, an independent chi-square test analysis of the 3 (experimental condition)  $\times$  2 (buying behavior) design revealed a significant effect ( $\chi^2(2, N=439)=14.73, p<0.001, r=0.18$ ). Additional comparisons revealed that the Mimicry condition was statistically different than the No-mimicry condition (81.5% vs 63.4%,  $\chi^2(1, N=220)=6.88, p<0.01, r=0.17$ ) and the baseline condition (81.5% vs 58.0%,  $\chi^2(1, N=327)=14.70, p<0.001, r=0.21$ ). Comparison between the no-mimicry condition and the baseline condition was not significant (63.4% vs 58.0%,  $\chi^2(1, N=331)=0.90, ns, r=0.05$ ).

With the choice of the model performed by customers who bought a product a significant difference was found ( $\chi^2$ (2, N=269)=8.44, p<0.02, r=0.17). Additional comparisons revealed that the Mimicry condition was statistically different than the Nomimicry condition (67.1% vs 45.6%,  $\chi^2$ (1, N=142)=6.46, p<0.02, r=0.21) and the baseline condition (67.1% vs 49.6%,  $\chi^2$ (1, N=212)=6.31, p<0.02, r=0.17). Comparison between the nomimicry condition and the baseline condition was not significant (45.6% vs 49.6%,  $\chi^2$ (1, N=184)=0.25, ns, r=0.04).

The results found in this second experiment confirmed the results found in experiment 1. Here, mimicry was associated with an increase in the rate of buying behavior, and with an increase in the rate of customers who bought one of the MP3 player models suggested by the sellers. This effect was found when comparing the data with the no-mimicry condition and the baseline condition. Such effects seem to show that in experiment 1 the effect of mimicry was really associated with an increase of customer behavior when the customer was mimicked and not with a decrease of such behavior when the customer was not mimicked.

**Table 3**Number of customers who bought a MP3-player and customers who took one of the two models suggested by the seller according to the experimental condition.

	Mimicry	Non-mimicry	Baseline
Customer buying a product Buying customers who took a model suggested by the seller	` ' '	63.4% (71/112) 45.6% (26/57)	` ' '

#### 4. General discussion

The results of the two experiments presented above support the postulate that mimicry is associated with customer behavior and customer judgment in a real buying context. First, when considering the customer's behavior, it was found that mimicry was associated with a significant rate of buying behavior, and when this behavior occurred, it was found that mimicry was associated with a greater persuasion effect, because the rate of customers who bought one of the MP3 player models suggested by the sellers was significantly higher than when no mimicry was performed. Considering the literature on mimicry, these results appear to be original. Indeed, in the only two experiments designed to examine customer behavior, Van Baaren et al. (2003) found that waitresses who mimicked the verbal behavior of customers in a restaurant increased the size of the tips they received. This experiment was conducted in the Netherlands, where service charges are included in the bill. Thus, giving a tip to a waiter or a waitress is not systematic. Giving a tip to a restaurant employee is not strictly speaking an ordinary part of consumer behavior, but rather a form of altruism. In our experiment, we evaluated an aspect of consumer behavior which was not associated with altruism because the customers were interested in a product, and the dependent variables used in our experiment only considered whether each customer bought or did not buy the product after their interaction with the seller. The customer behavior measured here is clearly original, and genuinely different than in Van Baaren et al.'s study, in which customer behavior seems to be an inappropriate concept: buying behavior appeared to be a more appropriate form of customer behavior. Thus, for the first time, we found that buying behavior is affected by mimicry, particularly when this behavior is displayed in a field setting. We also found that in the mimicry condition, customers complied more favorably with the product suggestion displayed by the seller. In some ways, this result is congruent with the results found by Bailenson and Yee (2005). These scientists found that a participant interacting with a virtual agent presenting a verbal agreement, found this virtual agent more persuasive when mimicry was used (the virtual agent mimicked the participant's head movements at a 4-s delay). It was found that participants indicated a higher agreement rate with the message delivered by the agent when they were mimicked. Our experiment brought out the same persuasive effect on the part of the mimicker, but it was associated with true buying behavior, and not with an agreement with the seller's argument or with buying intent.

In our first experiment, it was also found that mimicry was associated with a more positive evaluation of the mimicker. Such results are congruent with previous experimental studies. Chartrand and Bargh (1999, study 2) found that, participants who were mimicked by a confederate subsequently reported a higher mean of liking for the confederate, and described their interaction with the confederate as smoother and more harmonious compared to those who were not mimicked. Maurer and Tindall (1983) also found that a counselor who mimicked the arm and leg position of a client was evaluated more favorably by the client. Our results confirm these previous data by showing that mimicry enhanced liking for the mimicker in a selling context. Perhaps this effect could be explained by the fact that mimicry as a process establishes a higher-quality rapport: a rapport which, in return, affects the evaluation of the mimicker and his/her powers of persuasion. LaFrance (1979) found through correlational analysis that a synchrony of posture between an instructor and his/her college's students was associated with a higher evaluation score of the class' rapport with the instructor. Lakin and Chartrand (2003) found that mimicry may be part of a behavior repertoire designed to create rapport with counterparts. These authors demonstrated that having an affiliation goal, or having unsuccessfully attempted to affiliate in an interaction, increased mimicry. In the same way, Johnston (2002) and Yabar et al. (2006) found greater mimicry of a member of an in-group than of a member of an out-group. If this is the case, and the desire of affiliation and mimicry are so clearly associated, this relation could help us to explain our results. If we mimic others in order to create affiliation, we may be able to perceive that others who mimic us are expressing a desire to create affiliation. Thus, in our experiment, mimicry could have enhanced the customers' feeling of a greater rapport with the seller. One of the evaluation scales used in this experiment (did not stay/ stayed tuned to me) seems to confirm that mimicry enhanced this perception of the seller's desire to create affiliation and rapport with the customer. An additional effect of mimicry on judgment was obtained in our experiment when it was found that the evaluation of the mimicker's professional competence was positively affected by mimicry. This effect is new, because this dimension has never been evaluated in previous studies. This result could not be explained by a halo effect, because it was the first scale presented verbally to the customer by the interviewer. Such a result is congruent with the theoretical position of Lakin et al. (2003), for whom the positive effect of mimicry in social interaction is explained by the fact that mimicry is interpreted by the counterpart as a desire, on the mimicker's part, to create affiliation and rapport. Now, in the part of our experiment in which customers had to judge a seller, this desire to create affiliation and rapport could have been perceived as professional competence, because this desire is perceived as an important quality for a seller to posses if he wishes to improve his sales performance. With some nonverbal behavior like tactile contact, it has been found that a sales clerk or restaurant employee giving a slight touch to a customer, is associated with a higher buying rate, a greater amount of money spent, and larger tips given to an employee (Guéguen and Jacob, 2006; Hornik, 1992a; Kaufman and Mahoney, 1999; Smith et al., 1982). Concomitantly, the professional qualities of the seller or the restaurant employee were evaluated more positively (Crusco and Wetzel, 1984; Hornik, 1992b; Stephen and Zweigenhaft, 1986; Wycoff and Holley, 1990). As in our experiment, it was also found that a suggestion made by a waiter was more favorably accepted when the employee slightly touched the patrons when interacting for the first time (Guéguen et al., 2007). In these experiments, the various effects of tactile contact were interpreted as a consequence of the employee's desire to create a better rapport with the customer. In return, this perception by the customer will explain why the customer bought more products or gave more tips, and why the "toucher" was evaluated more positively. If mimicry, like tactile contact, has the ability to create this impression of a greater desire on the part of the mimicker to create affiliation and rapport with the person mimicked, this could explain our results on behavior and judgment.

Another interesting effect found in this experiment was the positive effect of mimicry on the evaluation of the store. Previous studies never evaluated this perception of the context. Of course this effect is perhaps explained by a classical halo effect, but it is also possible that mimicry has the potential to create a positive mood, leading in turn to a more positive evaluation of the store. A recent study found that mimicry was associated with an increase in positive mood. Guéguen (2009) carried out an experiment in two bars during sessions of speed dating for which young women confederates volunteered to mimic or not some verbal expressions and nonverbal behaviors of a man for 5 min. Data revealed that the men evaluated the dating interaction more positively when the woman mimicked them, and that mimicry was associated with a higher evaluation score of the relation. It was also found that mimicry increased men's mood. To return to touch, its effect on mood has been shown in previous studies (Fisher et al., 1976; Whitcher and Fisher, 1979). Thus, given the potential of mimicry to create the same feelings and to affect customer behavior in the same way, it will be interesting to explore this effect of mimicry on mood in future studies. Tactile contact by someone interacting with us has the property to influence our mood and is perceived as a

desire to create affiliation and rapport. The same effect may be activated by mimicry.

More interesting, it was found that customer's judgement of the store and the seller mediated the relation between mimicry and buying behavior. To our knowledge, in the studies where the effect of mimicry on behavior was tested (Van Baaren et al., 2003, 2004) this mediation effect of judgment was not tested. Further studies also found that mimicry was associated with more favorable judgement of the mimicker (Chartrand and Bargh, 1999; Maurer and Tindall, 1983) but without introducing any behavioral measure. In this experiment, for the first time, this mediating effect of judgement in the relation between mimicry and behavior was tested and tested in a real-life situation. Thus, our results seems to show that mimicry led to increase positive feelings of the mimicker, that led the person mimicked, in return, to comply with the mimicker's suggestion.

#### 4.1. Limitations

The present study has certain limitations that need to be taken into account when considering the study and its contributions. The sample sizes were low and a replication with larger samples is now necessary to generalize the findings. Only customers aged 40 or over were tested in these experiments for practical reason (if was found that in this store, this age range often requested information and help from the seller) but the generalization of the effect of mimicry to customers below 40 years is necessary. In this experiment we tested only four clerks. This number is larger than in Van Baaren et al. (2003) who used only one employee but replication with a larger sample of employees is necessary and with a better control of some variables associated with the employees: age, gender, physical attractiveness. Moreover, generalization of the effect of mimicry to different products and different stores is now essential. We found a positive effect of mimicry on customer behavior and judgment in these experiments conducted in France, but the generalization of such a positive effect to other cultures still remains in question given the fact that most of the previous studies on mimicry were conducted in western countries. At least, as we found that mimicry is associated with positive evaluations of the sellers and the store, it would be interesting for further studies to evaluate the effect of mimicry on other aspects of customer evaluations, such as perception of service quality, customer truth. In these experiments, we only studied the immediate effect of mimicry on customer behavior, but it would also be interesting to study the long-term effect, such as loyalty or word-of-mouth behavior.

## 4.2. Managerial applications

Our study would appear to present clear managerial applications. It might be financially advantageous for store managers to incite their sales staff to use mimicry when interacting with customers, in order to create in them this greater desire of affiliation and rapport, but also to improve the evaluation of the store and to improve sales. Such positive effects on evaluation could be interesting in the creation of a positive word of mouth (East et al., 2008) and/or to reinforce customer loyalty (Gremler and Brown, 1996).

#### 5. Conclusion

In conclusion, for the first time in an experimental approach, it was found in this experiment that mimicry was associated with a greater behavioral influence in a selling context. This effect on customer behavior – observed in a real selling context – was the

first evaluation of this type of the effect of mimicry. These results also confirmed previous experimental studies showing that mimicry was associated with greater score of liking for the mimicker. Furthermore, these studies focused on the assessment of personal qualities. In our experiment, it was found that the assessment of other qualities was significantly improved by the use of mimicry, such as a higher score for the seller's professional qualities, and a higher evaluation of the context. This effect tends to show that mimicry may be a powerful new influence technique, of interest to both scientists and business and sales professionals.

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