

THE SWEET SMELL OF THE REQUESTER: VANILLA, CAMPHOR, AND FOOT-IN-THE-DOOR

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Several researchers have shown that odors affect human behavior. However, odors have not been studied in the context of specific compliance without pressure. Specifically, the impact of the odor worn by a requester during the foot-in-the-door procedure has not been documented. To address this issue, an experiment was carried out in an ecological setting. Using the foot-in-the-door procedure, a well-known technique for increasing the likelihood that a person will comply with one's request, the requester was perfumed with vanilla, camphor, or nothing. The results show a strong effect of the foot-in-the-door technique when the requester was perfumed with vanilla and no effect of the procedure when the requester was perfumed with camphor. These results are incompatible with the main theoretical interpretations of foot-in-the-door phenomena: self-perception and commitment theories.

Keywords: odors, foot-in-the-door, compliance without pressure, helping behavior.

In relation to the *foot-in-the-door* principle, Freedman and Fraser (1966, p. 195) noted that “*once a person has been induced to comply with a small request, he is more likely to comply with a larger demand*”. In other words, performing a small request increases the likelihood of agreeing to a larger one – the so-called target-request. In a famous experiment (Freedman & Fraser, 1966, experiment 1), Californian housewives were phoned and asked if they would agree to

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being visited at home by a 5-6 member team, supposedly to conduct a survey concerning the housewives' consumption habits (target-request). Presented directly (control condition), only 22.2% complied. However, this request was more readily agreed to when the housewives had first been asked two or three days earlier to answer an 8-question list, dealing with their consumption habits. In that case, 52.8% complied with the visit by the team of 5-6 members.

In the literature, various theoretical explanations of the foot-in-the-door technique effects can be found. First, Freedman and Fraser (1966) have invoked self-perception theory (Bem, 1972): the small request enables the participant to perceive themselves as the kind of person who offers help to those who request it. Hence, once this perception is activated, compliance to the target-request is favored, in order to be consistent with their new self-perception. Second, based on the psychology of commitment (Kiesler, 1971), Joule, Girandola, and Bernard (2007) have considered that the preliminary request commits the participant to a given course of action. *Commitment* is defined as *the link between the actor and his/her behavior*. In other words, the small request generates a "freezing effect" (Lewin, 1947): as soon as the small request is performed, participants are more willing to agree to subsequent demands. Nevertheless, the foot-in-the-door technique is renowned for its effectiveness (for a meta-analysis see Burger, 1999) even when the second requester is a different person, after a delay between the small request and the target request, and when the requester does not meet the participant face-to-face (Freedman & Fraser, 1966; Guéguen, 2002). Curiously, characteristics of the requester (credibility, skin tone, and so on) have been found to have little to do with the compliance induced by the foot-in-the-door technique (Eastwick & Gardner, 2009; Patch, 1986).

A plethora of researchers have shown that aromas, odorants, and scents have an impact on human cognitions, emotions, and behaviors (including subliminal impact; Li, Moallem, Paller, & Gottfried, 2007). More specifically, athletic performance (Raudenbush, Corley, & Eppich, 2001), driving performance (Baron & Kalsher, 1998), and academic performance (Diego et al., 1998) are affected by odors. Moreover, ambient aromas also affect gamblers' (Hirsh, 1995) and consumers' behavior (Guéguen & Petr, 2006; Knasko, 1989).

Surprisingly, studies on the effect that odors have on human social interactions are relatively rare, but their results are interesting. For example, Baron (1997) conducted an experiment on the effect of pleasant odors on helping behavior. He observed that passersby in a zone of a mall with pleasant odors (e.g., pastry baking) were more inclined to accept a request for change (e.g., helping behavior) than were passersby in a zone with neutral odors (e.g., shoes or clothes). In other words, these results suggest that the context of pleasant odors can promote helping behavior. Guéguen (2001) showed that, on a pedestrian crossing, a woman confederate who was instructed to inadvertently drop a glove, was helped

more often by passersby when she wore a strong perfume commonly known to be a luxury product (95%) than when she did not wear any perfume (70%). Here, Guéguen showed that the requester's wearing a pleasant odor increased the likelihood of spontaneous helping behavior.

On the one hand, foot-in-the-door technique researchers have demonstrated the robustness of the procedure, regardless of the features of the requester; on the other hand, few researchers have demonstrated the impact the requester's odor has on spontaneous helping behavior. To my knowledge, the impact of the odor worn by a requester on compliance to a request in the specific foot-in-the-door paradigm has not been explored to date. Thus, in line with Guéguen's study results (2001) it was hypothesized that the presence of a pleasant odor would strengthen compliance (i.e., via the foot-in-the-door technique), whereas the presence of a less pleasant odor would decrease compliance. These predictions were tested in the context of the specific implicit foot-in-the-door paradigm (Fointiat, 2006; Pascual & Guéguen, 2004; Uranowitz, 1975). In the original procedure, two behaviors are involved, but only the small request is explicitly formulated, while the target-behavior is not explicitly presented. The individual was therefore presented with two options: to comply or not to comply.

Method

Materials

A set of 15 odors was pretested. Twenty-six students evaluated each of them on a 7-point Likert-type scale ranging from 1 = *not at all attractive* to 7 = *very attractive*. Two odors were chosen which differed on their hedonistic evaluation: vanilla ($M_{\text{vanilla}} = 6.32$, $SD = 1.0$) and camphor ($M_{\text{camphor}} = 4.34$, $SD = 1.4$), $t(50) = 5.59$, $p < .0000$. Based on the scale anchors, these two odors were evaluated as being pleasant, although the former was considered more attractive than the latter.

Procedure

Participants ($N = 60$ males and 60 females) aged between 20 and 60 years were chosen at random on the pedestrianized streets of a medium-sized tourist town in the south of France in a predefined area. The study was performed on sunny afternoons at the beginning of spring.

The confederate was a 23-year-old young woman who was casually dressed (jeans/t-shirt/boat shoes) and carrying a pile of papers. Visibly lost, she approached a passerby and asked for directions to a well-known location, saying: "Excuse me madam/sir, would you tell me the way...I'm looking for the Rotonde..." (small request). At the end of the explanation, she politely thanked the passerby and ventured toward the advised direction. After three steps, she

inadvertently dropped her pile of papers, bent down, and began to pick them up. A second confederate observed the scene and noted whether or not the passerby helped in retrieving the “accidentally” dropped sheets of paper (implicit target request). Depending on the experimental condition, she was perfumed with vanilla, camphor, or nothing. In the control condition, there was no verbal interaction between the confederate and the passerby. The confederate walking down the street simply dropped the pile of paper in front of a passerby and a second confederate observed the spontaneous helping – or not – behavior of the passerby.

Results

Preliminary Results

No differences between men and women were observed in terms of helping behavior. Hence the data were aggregated. Additionally, none of the passersby refused to respond to the confederate when asked for directions in the initial request test.

Table 1. *Compliance with the Implicit Target Request*

Condition	No specific	Odor of the requester		Total
		Vanilla	Camphor	
Control (target request only)	5.0	15.0	20.0	13.3
Foot-in-the-door (small request + target request)	45.0	70.0	10.0	41.6
Total	25.0	42.5	15.0	

Notes: Twenty participants per condition. In percentages.

Helping Behavior

A 2 (control vs. foot-in-the-door) x 3 (vanilla vs. camphor vs. no odor) log-linear analysis revealed a main effect of the foot-in-the-door factor ($\chi^2 [N = 120] = 15.93, p = .04$) and a main effect of odor ($\chi^2 [N = 120] = 20.33, p = .002$). An interaction effect between these two variables was also observed ($\chi^2 [N = 120] = 10.7, p = .03$). As predicted, results gained in this study reproduced the classic foot-in-the-door effect: the rate of compliance was lower in the control conditions (8/60) than in the foot-in-the-door conditions (25/60).

Pairwise comparisons indicate the classic foot-in-the-door effect both in the no odor (1/20 vs. 9/20, $\chi^2_{\text{Yate's correction}} = 6.53, p < .01, \phi = .40$) and vanilla conditions (3/20 vs. 14/20, $\chi^2_{\text{Yate's correction}} = 10.23, p < .001, \phi = .50$). However, the foot-in-the-door effect was not observed when the confederate was perfumed with camphor (4/20 vs. 2/20, $\chi^2_{\text{Yate's correction}} = .20, ns$).

Discussion

Once again, it has been observed that agreeing with a small request predisposes an individual to be more likely to agree to a second and costlier request, even if this more expensive request is not explicitly presented. In line with earlier research (Uranowitz, 1975), the implicit foot-in-the-door effect was replicated in this study. Results indicate that when the target request was presented directly (control condition), no odor effect was observed. Along the same lines, the small request was performed regardless of the odor of the requester.

But the main study result confirms that even without a direct request, a pleasant odor (e.g., vanilla) increases compliance (i.e., the foot-in-the-door effect), whereas an odor that is only fairly pleasant (e.g., camphor) seems to decrease it. To a certain extent, the enhancing effect of vanilla is in line with the findings gained by Baron (1997) and Guéguen (2001, p. 1046): a pleasant perfume is expected to enhance human prosocial behavior. Of particular interest, the results gained in this study suggest that camphor inhibits the foot-in-the-door effect. Although the foot-in-the-door technique is accepted as being relatively robust, some characteristics of the requester (such as wearing of perfume) do interfere. Nevertheless, the results of this study are not compatible with self-perception theory (Bem, 1972) or commitment interpretation (Kiesler, 1971). Both of these theories are focused on how people understand their own behavior independently of the social context itself; in that way, the characteristics of the requester do not really matter. Until now, few researchers have focused on the characteristics of the requester (Eastwick & Gardner, 2009; Patch, 1986) in the foot-in-the-door paradigm, and none have taken into account the importance of the sense of smell, which can provide social information about the requester, such as perception of group membership, social status, and so on. Of course, this assumption needs to be explored in future research. Smell does not only lead to positive or negative mood (Baron, 1997), it is also possible that odor provides social information which could, in turn, be used as the basis of social cues in information processing, such as first impression formation. Future researchers should take into account a variety of odors and their respective impact on social perception processes as well as on behavioral consequences.

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