

EFFECTS OF PAST TRANSGRESSIONS IN AN INDUCED HYPOCRISY PARADIGM¹

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Summary.—Hypocrisy can be considered as a dissonance state expressed as a combination of two factors: commitment (advocating a pronormative position) and mindfulness (being aware of past transgressions). Such inconsistency between what people advocate and their past behaviors is usually reduced by modifying behaviors or behavioral intentions in line with normative advocacy. The aim of this study is to examine the conditions under which this set of behaviors (apparent hypocrisy) can occur. Specifically, the salience of the transgressions was manipulated: participants were led to recall 1 or 4 transgressions varying in severity (serious vs harmless). As expected, recalling 4 transgressions led to greater behavioral change than recalling only 1 transgression. Surprisingly, recalling 4 harmless transgressions induced greater behavioral change than recalling 4 serious transgressions.

Leon Festinger's (1957) theory of cognitive dissonance can be considered one of the crucial theories in social psychology (Harmon-Jones & Mills, 1999). Festinger proposed that when a person holds two cognitions that are psychologically inconsistent, this person will experience an unpleasant drive state or a psychological discomfort which is referred to as cognitive dissonance. Once dissonance is aroused, the individual is motivated to reduce it through attitudinal change, the most studied route of reduction, or by behavioral change. Dissonance effect (i.e., attitude change) has been interpreted in different ways (Bem, 1967; Cooper & Fazio, 1984; Beauvois & Joule, 1996, 1999), but one of the most famous theoretical revisions was presented in Aronson's (1968) self-concept model of dissonance. Aronson suggested that dissonance arises most plainly from inconsistencies that involve the self. So "dissonance is greatest and clearest when it involves not just any two cognitions, but rather, a cognition about the self and a piece of our behavior that violates that self-concept" (Aronson, 1992, p. 305).

Surprisingly, despite its long history and much study, dissonance researchers have relied heavily on a limited number of experimental paradigms, and specifically on the so-called forced-compliance paradigm (Festinger & Carlsmith, 1959), in which dissonance is aroused by getting participants to "freely" perform a problematic behavior. A problematic behavior refers to a counterattitudinal behavior, for example, advocating a position

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one does not support (Festinger & Carlsmith, 1959), or a counter-motivational behavior (e.g., eating grasshoppers; Zimbardo, Weisenberg, Firestone, & Levy, 1965). In the majority of studies, the reduction of dissonance operates through an attitudinal change.

Induction of Dissonance by Hypocrisy

At the beginning of the 1990s, Aronson and his colleagues (Aronson, Fried, & Stone, 1991) developed a new paradigm for inducing dissonance: the hypocrisy-induction procedure. Instead of arousing dissonance by leading people to do something they do not believe, dissonance is aroused by getting people to advocate positions they support but do not always live up to (Fried, 1998). Concretely, an individual is induced to encourage other people to perform certain worthwhile behaviors. Then he is reminded that his own behavior has not always been consistent with those goals. In other words, this person is confronted with the following inconsistency: what he has done in the recent past and what he is advocating right now.

The three initial studies on hypocrisy (Aronson, *et al.*, 1991; Dickerson, Thibodeau, Aronson, & Miller, 1992; Stone, Aronson, Crain, Winslow, & Fried, 1994) used the same basic design, manipulating advocacy (or no advocacy) and recall or no recall of past failures. Aronson, *et al.* (1991) and Stone, *et al.* (1994) applied the hypocrisy-induction procedure to condom use. Participants advocated the systematic use of condoms. They were led to believe their speeches would be used in an AIDS education program. In the hypocrisy condition, participants were also asked to list at what times they themselves had failed to use condoms. These participants indicated an increase in behavioral intentions to use condoms (Aronson, *et al.*, 1991) and later actually bought more condoms (Stone, *et al.*, 1994) than did participants who made only public advocacies or participants who only recalled their past nonuse of condoms. In a conceptual replication, Dickerson, *et al.* (1992) evaluated the efficiency of the hypocrisy-induction paradigm by testing it in a different situation (e.g., water conservation), in which the authors could get a direct behavioral measure of the dependent variable. Hypocrisy was induced by asking participants to sign a flyer promoting water conservation and then answer a questionnaire they believed would help a water conservation program. The aim of this questionnaire was to make them aware of their own poor water conservation. The results showed that these participants later took shorter showers than participants in the control condition.

More recently, Fried and Aronson (1995) and Fried (1998) applied the hypocrisy-induction procedure to recycling behaviors. For example, Fried and Aronson (1995) showed that hypocrisy-induced participants were more inclined to help a recycling organization than controls. They also demonstrated that a misattribution context (Zanna & Cooper, 1974) reduced the

effect of the hypocrisy induction on subsequent behavior. This effect of misattribution suggests that induced hypocrisy is actually a form of dissonance arousal.

In all these experiments, it was shown that the recall of personal transgressions (Stone, Weigand, Cooper, & Aronson, 1997) is a necessary condition to arouse dissonance. We wanted to test whether the quantity and the nature of these transgressions could affect the outcome (behavioral change). It was hypothesized that more serious transgressions would lead to greater dissonance and that greater behavioral change than would more harmless transgressions. Also, recalling four transgressions should arouse more dissonance than recalling one transgression. From Festinger's perspective, each recalled transgression has the status of a dissonant cognition, so adding dissonant cognitions should increase the total amount of dissonance.

METHOD

Hypocrisy was induced using the standard procedure: advocacy and recall of past salient transgressions. All the participants advocated safe driving and were asked to recall times when they had failed to drive carefully. Salience of past transgressions was manipulated yielding a two-way design: 2 (number of recalled transgressions: 1, 4) \times 2 (transgression severity: Harmless, Serious).

Moreover, two control groups were used. In the target-behavior only condition, target behavior was proposed directly. In the advocacy control condition, participants only advocated driving safety.

Participants

Men and women ($N=135$), students from the University of Provence (France), were recruited individually; participation was restricted to those who had driver's licenses. Fifteen participants were dropped from the analysis; of these, five were dropped before participation because they refused to write the advocacy, and three were dropped because they expressed suspicion. Seven were excluded after revealing that they had not driven since they had obtained their driver's licenses.

Material

In a pretest, 40 students were asked to assess 39 infractions of the highway code. They had to indicate on a 9-point Likert-type scale how serious each infraction was, from 1: Not at all serious to 9: Absolutely serious. Four infractions were assessed as Not all serious: eating while driving ($M=2.0$, $SD=1.2$), not stopping when a traffic light is yellow ($M=2.1$; $SD=0.8$), using the horn to greet a friend ($M=1.6$; $SD=0.7$), and wearing shoes which are not adapted to driving ($M=2.0$; $SD=1.2$).² Four infractions were per-

²The overall items correspond to French rules of the road.

ceived as Absolutely serious: not fastening safety belts ($M=4.5$; $SD=0.9$), not respecting stopping distance ($M=4.0$; $SD=1.0$), drunk driving ($M=4.4$; $SD=0.9$), and not obeying a stop sign ($M=4.5$; $SD=0.7$).

Procedure

Pronomative advocacy.—The procedure for public advocacy was identical to those used in Aronson, *et al.* (1991). As soon as the participant entered the lab, the experimenter introduced himself as a member of a road-safety association. All participants were told they would be helping to develop a road-safety prevention program. To do so, the experimenter explained that part of their participation would involve advocating the importance of respecting driving rules.

To ensure that participants were freely choosing to write the advocacy (Foiniat & Grosbras, 2007), the experimenter continued as follows: "I will understand if you don't want to argue such a position... it's up to you...". Then, the participants wrote an essay on a sheet of paper.

Salience of transgression(s).—After writing their statements, participants were randomly assigned to one of the four experimental conditions. They were given forms on which they were asked to describe all the times in the recent past when they had broken the driving rules. Groups of participants were asked to recall four Harmless or Serious transgressions or one Harmless or Serious transgression. These forms were constructed on the basis of the pretest. Participants in the four different conditions had to complete a questionnaire, as shown in Appendix 1.

In the One-serious transgression condition, the infractions A and B were drunk driving and nonrespect of stopping distance. In the Four-serious transgressions condition, two more infractions were added, infraction C, not stopping when traffic light is yellow, and infraction D, wearing shoes which are not adapted to driving. In the One-harmless transgression condition, infractions A and B were eating while driving and using the horn. In the Four-harmless transgressions condition, two more infractions were added, infraction C, not fastening the safety belt, and infraction D, not obeying a stop sign.

At the same time participants were given the questionnaire, the experimenter informed the participants they were free to complete the questionnaire or not: "Feel free to do it or not... it's up to you...". (Foiniat & Grosbras, 2007).

Dependent Measures

All participants received the main dependent measure: volunteering in a road-safety association. Each of them received a form asking if they were willing to deliver handbills to promote safe driving. The form allowed participants to respond as follows: "No, I do not have time right now to help"

or "Yes, I would be willing to distribute handbills. I agree to distribute $\times 50$ handbills." The experimenter stressed that participants should volunteer only the number of handbills they were genuinely willing to distribute. Participants were then asked to write their local address and phone number. They were told they would be contacted by the association volunteer coordinator. As soon as this measure was completed, participants were thanked for their participation and debriefed.

RESULTS

First of all, none of the participants exhibited difficulty recalling past transgressions. Moreover, no difference in response patterns was observed between the men and women who took part in this experiment. Thus, the data presented in Table 1 have been aggregated. Furthermore, none of the participants refused to recall their past transgressions (transgression questionnaire). Table 1 presents the results based on the percentage of participants who volunteered and the number of handbills they agreed to distribute.

TABLE 1
NUMBER OF VOLUNTEERS BY SERIOUSNESS OF RECALLED TRANSGRESSIONS
AND NUMBER OF TRANSGRESSIONS ($N=20$)

	Controls		Hypocrisy Condition: Transgressions			
	Target behavior	Advocacy	Serious	Harmless	Serious	Harmless
No. Volunteers	2	5	8	9	5	14
No. Handbills	150	90	150	72	160	125

Note.—First row is the number of volunteers for handbill distribution in each condition. Second row is the mean number of handbills that volunteers agreed to distribute.

Rate of Volunteering

When presented directly, the target behavior appears to be costly, since only 2 of the 20 participants volunteered compared to 36 of 80 in the overall experimental conditions (Yates' correction $\chi^2_{1,100}=6.90$, $p<.01$, $\phi=.26$). It seems that the hypocrisy-induction procedure is fruitful to promote behavioral intentions, although the results show that the difference between all experimental conditions (36/80) and the advocacy-only condition (5/20) was not significant ($\chi^2_{1,100}=2.65$, $p<.10$, $\phi=.16$). A log-linear analysis (2 quantity of recalled transgressions: 1, 4) \times 2 (transgression severity: Harmless, Serious) using volunteering as a dependent variable (Logit model) showed an effect of number of transgressions ($\chi^2_{1,80}=5.10$, $p=.02$, $\phi=.25$). A nonsignificant interaction between the number of transgressions and severity of transgressions was observed ($\chi^2_{1,80}=5.32$, $p=.06$, $\phi=.26$). However, this effect was due to the Four-harmless transgressions condition. A 2-by-2 comparison

showed that this group differed significantly from the One-serious ($\chi^2_{1,40} = 3.64, p = .05, \phi = .30$) and One-harmless ($\chi^2_{1,40} = 8.12, p = .004, \phi = .45$) conditions. No difference was observed among these three latter groups.

Numbers of Handbills Volunteer Participants Agreed to Distribute

A 2 (quantity of recalled transgression: 1, 4) \times 2 (transgression severity: Harmless, Serious) analysis of variance was run. No main effect for the severity of transgressions was observed ($F_{1,32} = 2.23, ns; \eta^2 = .21$). A significant main effect of number of recalled transgressions was observed ($F_{1,32} = 7.20, p = .01; \eta^2 = .68$). It seems that recalling only a single transgression increases the involvement of the participants in their volunteering commitment. Furthermore, the Least Significant Difference (LSD) test suggested that participants led to recall four serious transgressions agreed to distribute significantly fewer handbills than participants in each of the hypocrisy conditions.

Discussion

The effect of hypocrisy has been obtained in a wide area of behaviors: AIDS prevention, homeless program participation, natural resource conservation, recycling, and reducing prejudice (Son Hing, Li, & Zanna, 2002). The results show that the hypocritical procedure is efficient to promote volunteering in a road-safety association, but on the other hand, they show the limits of the paradigm. As expected in terms of cognitive dissonance (Festinger, 1957), a main effect for the number of transgressions was observed. Participants recalling four transgressions were more inclined to volunteer than participants recalling only one transgression. It seems reasonable to conceive that recalling one transgression, however serious it is, would not be enough to arouse dissonance. Moreover, it was predicted that the more serious the transgressions, the more dissonance; seriousness should enhance the self-awareness, and consequently increase dissonance (Gibbons, 1990). Thus, hypocrisy should be higher in serious transgression conditions than in harmless transgression conditions. Results suggest this is not the case.

Taken together, these results emphasize the importance of the number and quality of transgressions. When several transgressions threatened the self, as could be the case when participants recalled several serious transgressions, no hypocrisy-induction effect was observed. This effect in the Four-serious transgressions group can be understood in terms of guilt, reactance, or denial.

An alternate interpretation of the hypocrisy effect is guilt (O'Keefe, 2002). In hypocrisy-induced situations, persons are made aware of hypocritical state (in the colloquial sense of "saying one thing but thinking or doing another"; Barden, Rucker, & Petty, 2005); this is a paradigmatic guilt-arousing circumstance (O'Keefe, 2002). One can argue people feel more guilty when recalling four transgressions than when recalling one transgression. So

volunteering for a road-safety association could help the participants to reduce their feelings of guilt. This was only observed when the recalled transgressions involved harmless consequences. When the transgressions were serious, the effect disappeared. In the serious transgressions conditions, no difference was observed for the number of transgressions. Guilt interpretation cannot explain this result.

Reactance (Brehm, 1966) could account for the lack of volunteering in the Four-serious transgressions condition. It seems plausible that this manipulation may have been too heavy-handed. It is conceivable that participants may have felt that the experimenter was trying to shame them, to make them feel guilty so that they would volunteer. Thus, participants may have been motivated not to reduce the dissonance, but to restore their feelings of freedom and, thus, refused to volunteer.

One can consider that recalling several serious transgressions threatens the self-concept. In that case, no behavioral change is observed, supposedly because it is easier to choose denial (Aronson, 1999).

Finally, it is conceivable that recalling four serious transgressions could arouse dissonance, but at the same time inhibits its reduction. Fried (1998) showed that when it is difficult for participants to envision correcting past transgressions (i.e., when the participants were identified with their transgressions), they reduced the dissonance by changing their attitude. The lack of hypocrisy-induction effect does not mean there was no dissonance arousal. The better way to test this assumption would be to offer different means of dissonance reduction: behavioral change, attitudinal change, and trivialization (Simon, Greenberg, & Brehm, 1995). If attitudinal change is observed when participants recalled four serious transgressions, it might be concluded that these participants are experiencing dissonance; thus the interpretations in terms of guilt, reactance, or denial might be rejected. Using a dissonance thermometer (Elliot & Devine, 1994) could be useful to assess the psychological discomfort after the recall of the first serious transgression, after the second serious transgression, etc. If participants recalling four serious transgressions reported psychological discomfort, it could suggest that dissonance was aroused.

The hypocrisy-induction procedure seems to be especially efficient when the situation *per se* is socially desirable (Stone, *et al.*, 1997). The driving behaviors belong to this category; the induction-hypocrisy paradigm could be a useful tool to promote behaviors high in social desirability.

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Accepted October 8, 2008.

APPENDIX 1 TRANSGRESSION QUESTIONNAIRE

You will find below two plausible illustrations of infractions. Please choose one and describe the situation as accurately as possible:

In the recent past, I have:

Infraction A

What: _____

When: _____

Passengers: _____

Circumstances: (night, traffic heavy/light . . .) _____

Infraction B

When: _____

Where: _____

Passengers: _____

Circumstances: (night, traffic heavy/light . . .) _____