

When Exemplification Fails: Hypocrisy and the Motive for Self-Integrity

Jeff Stone
Princeton University

Andrew W. Wiegand
University of California, Santa Cruz

Joel Cooper
Princeton University

Elliot Aronson
University of California, Santa Cruz

Two experiments investigated how the dissonance that follows a hypocritical behavior is reduced when 2 alternatives are available: a direct strategy (changing behavior to make it less hypocritical) or an indirect strategy (the affirmation of an unrelated positive aspect of the self). In Experiment 1, after dissonance was aroused by hypocrisy, significantly more participants chose to reduce dissonance directly, despite the clear availability of a self-affirmation strategy. In Experiment 2, participants again chose direct resolution of their hypocritical discrepancy, even when the opportunity to affirm the self held more importance for their global self-worth. The discussion focuses on the mechanisms that influence how people select among readily available strategies for dissonance reduction.

How do people choose to reduce the discomfort that arises from a discrepancy between behavior and important attitudes or self-beliefs? In this article we investigate the reduction of psychological discomfort from the dissonance theory tradition (Festinger, 1957; see E. Aronson, 1992; Cooper & Fazio, 1984; Steele, 1988). Dissonance theorists maintain that discrepancies between behavior and belief arouse dissonance (i.e., psychological discomfort), which in turn motivates activities designed to reduce the arousal. Dissonance reduction occurs through a variety of strategies that, for our purposes, can be classified into one of two general categories.

First, psychological discomfort can be reduced through a *direct* strategy—one that involves altering elements of the discrepant cognitions. For example, people can change the discrepant attitude or self-belief (J. Aronson, Blanton, & Cooper, 1995), make compensation for the unwanted behavior (e.g., Sherman & Gorkin, 1980), reduce the importance of either discrepant cognition (i.e., trivialization, see Simon, Greenberg, & Brehm, 1995), or distort perceptions of the circumstances that led to the discrepancy (i.e., claim unforeseeability of or low volition for the behavior; see Cooper & Fazio, 1984).

Direct strategies for dissonance reduction can be distinguished from a second general class of strategies we call *indirect*, which involve activities that reduce dissonance without altering elements of the discrepancy. These include misattributing the discomfort to something other than the discrepancy (Zanna & Cooper, 1974) or reflecting on other valued aspects of the self (Steele & Lui, 1983; Tesser & Cornell, 1991). The fact that direct and indirect strategies have been shown to be effective for dissonance reduction suggests that people have tremendous flexibility when it comes to selecting a strategy for dissonance reduction.

Or do they? The mere fact that a multitude of strategies will reduce dissonance may not indicate that any one strategy for reduction is just as good as another. Indeed, there is evidence indicating that when several options are available, people show preferences for using some strategies over others (e.g., Gotz-Marchand, Gotz, & Irlle, 1974; Olson & Zanna, 1979; Scheier & Carver, 1980). Festinger (1957) noted that selection of a mode of dissonance reduction may depend on a number of factors, such as the importance of the cognitions underlying the discrepancy or the circumstances that led to the discrepant act. It seems likely that even when multiple alternatives for dissonance reduction are available, factors related to the discrepancy and its antecedent conditions might constrain the choice people make for how to reduce their psychological discomfort.

The research in this article focuses on how people reduce the dissonance that follows a specific type of discrepancy—an act of hypocrisy (E. Aronson, Fried, & Stone, 1991; Dickerson, Thibodeau, Aronson, & Miller, 1992; Stone, Aronson, Crain, Winslow, & Fried, 1994). Our goal was to investigate how much flexibility a person who commits a hypocritical act has for reducing dissonance when multiple strategies are available. Clues to understanding dissonance reduction in this case may lie in the antecedents that lead to a hypocritical discrepancy.

Hypocrisy and the Failed Exemplifier

A bout with hypocrisy begins when, perhaps through an act of moral self-presentation, (i.e., exemplification; see Gilbert &

Jeff Stone and Joel Cooper, Department of Psychology, Princeton University; Andrew W. Wiegand and Elliot Aronson, Department of Psychology, University of California, Santa Cruz.

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Correspondence concerning this article should be addressed to Jeff Stone, Department of Psychology, Princeton University, Princeton, New Jersey 08544.

Jones, 1986; Jones & Pittman, 1982), a person advocates publicly the importance of conducting a specific prosocial behavior, such as practicing safer sex to prevent AIDS, conserving water during a drought, or recycling to preserve natural resources. By itself, a proattitudinal and prosocial advocacy should not arouse much dissonance—not much, that is, assuming the speaker follows systematically his or her own good advice. But few people are truly “perfect” in this regard, and there is always the possibility that sometime in the past an exemplifier’s own behavior has fallen short of the standards advocated to others. If the speaker is made aware of instances when he or she did not uphold the advocated standards, the discrepancy between the advocated beliefs and behavior should arouse dissonance. The would-be exemplifier would then be motivated to reduce the psychological discomfort incurred by the hypocritical discrepancy.

The discrepancy produced by hypocrisy, however, may be relatively difficult to resolve. For example, it seems unlikely that the speaker would become less favorable toward a course of action that is both personally and socially acceptable. Not only would this require that one alter important attitudes and beliefs, but also the advocacy may enhance one’s commitment and make the beliefs more resistant to change (Brehm & Cohen, 1962). Instead, to diminish the discrepancy, the advocate could bring his or her own behavior back into line with the promoted beliefs. Practicing what was preached would reduce dissonance without changing the perception of what constitutes appropriate and reasonable behavior.

Direct reduction of the discrepancy also satisfies the need for consistency between behavior and important self-beliefs (e.g., E. Aronson, 1992; Thibodeau & Aronson, 1992). That is, a hypocritical discrepancy between past behavior and advocated beliefs could threaten the speaker’s sense of self as a principled individual, one who strives to be honest and sincere about important issues (e.g., Fried & Aronson, 1995; Stone et al., 1994). Once the self-threat is perceived, the discrepancy may focus a person on taking action capable of maintaining the threatened self-beliefs. Bringing future behavior into line with the advocated standards is the most direct and effective way for a person to restore the self-views of honesty and sincerity following hypocrisy.¹

Previous research supports the predicted effects of hypocrisy on behavior. For example, E. Aronson et al. (1991) and Stone et al. (1994) induced participants to feel hypocritical about their use of condoms during sex to prevent AIDS. The results showed that participants in the hypocrisy condition reported greater intent to improve their use of condoms in the future (E. Aronson et al., 1991) and were significantly more likely to purchase condoms compared to participants in control conditions (Stone et al., 1994). Similarly, DeBruin et al. (1992) demonstrated that following an act of hypocrisy about water conservation, participants increased their conservation behavior by taking shorter showers. Fried and Aronson (1995) successfully induced hypocrisy about recycling and motivated more participants to help a recycling organization but also found that a misattribution cue significantly reduced the effect of hypocrisy on behavior. The effect of misattribution suggests that hypocrisy induces a form of dissonance arousal (e.g., Zanna & Cooper, 1974) that in turn motivates people to adopt behavior consistent with the content of their advocacy.

In sum, an act of hypocrisy appears to motivate behavior change as the route to dissonance reduction. Altering behavior directly resolves the discrepancy by bringing one cognitive element (i.e., behavior) into line with the other (i.e., belief). The adjustment of behavior following hypocrisy suggests that, under some conditions, people may choose to reduce psychological discomfort through direct confrontation with the source of their negative arousal.

Direct Versus Indirect Routes to Dissonance Reduction

It is clear from other research, however, that an effective strategy for dissonance reduction can have absolutely nothing to do with the discrepancy that caused the discomfort in the first place. For example, after committing a discrepant act, a person can reduce dissonance by consuming alcohol (e.g., Steele, Southwick, & Critchlow, 1981), engaging in distracting activities (Zanna & Aziza, 1976), misattributing the aversive arousal to various external sources (e.g., a soundproof booth; see Fazio, Zanna, & Cooper, 1977), or simply expressing positive affect (e.g., Cooper, Fazio, & Rhodewalt, 1978). Another effective strategy is to consider one’s standing on positive self-attributes that are unrelated to the discrepancy. For example, research on self-affirmation theory (e.g., Steele, 1988) shows that making positive aspects of the self accessible following a discrepant act attenuates the use of direct routes to dissonance reduction (i.e., attitude change, Steele & Lui, 1983). The thrust of these findings implies that under some conditions, dissonance can be reduced indirectly, that is, without changing elements of the discrepancy itself.

The use of indirect strategies for reducing dissonance—those that reduce dissonance but leave the discrepancy intact—raises an important issue about the relationship between dissonance arousal and reduction. Specifically, it suggests that even when a discrepancy involves highly important cognitive elements, such as firmly held attitudes, self-beliefs, or behavioral standards, a person may not necessarily be motivated to reduce dissonance through a strategy that will directly resolve the discrepancy. Instead, dissonance reduction may be governed primarily by the availability of alternatives and the ease with which an alternative will reduce psychological discomfort (Abelson, 1959; Steele, 1988). Consistent with this reasoning are studies demonstrating that when the order of direct and indirect reduction routes is alternated, participants tend to use the first route available regardless of its relevance to the dissonant act (e.g., J. Aronson et al., 1995; Gotz-Marchand et al., 1974; Simon et al., 1995; Steele & Lui, 1983). Thus, when a discrepancy involves important attitudes or self-beliefs, the motivation to reduce dissonance may not focus people on reducing the discrepancy. Instead, it may focus them on reducing negative affect by

¹ We wish to note that the aversive-consequences revision (Cooper & Fazio, 1984) makes a similar prediction. Specifically, if past behavior is perceived to have caused an aversive outcome, then the speaker may seek to reduce dissonance by “undoing” the consequences through future behavior. Thus, the self-consistency and aversive-consequences revisions make the same prediction, although each makes different assumptions about the source for the dissonance arousal that follows hypocrisy.

any means possible (e.g., Elliot & Devine, 1994; Tesser, Martin, & Cornell, 1996).

Hypocrisy and the Preference for the Direct Route to Self-Integrity

We propose that an act of hypocrisy motivates a desire to deal directly with the discrepancy through behavior change. That is, once aware of the discrepancy between the advocacy and past behavior, a person would rather adopt the behavior advocated to others than simply reduce the discomfort through indirect means. This suggests that, if provided a choice between a reduction route that would re-establish self-integrity directly and one that would reduce dissonance indirectly through a distraction or self-affirmation, a person who has acted hypocritically would choose the most direct route to self-integrity.

The primary purpose of the current research was to investigate preferences for reducing dissonance following hypocrisy when direct and indirect strategies were available. A clear demonstration of preferences among dissonance reduction routes requires that participants simultaneously be provided with multiple alternatives (see J. Aronson et al., 1995; Gotz-Marchand et al., 1974). In this case, participants who were made to feel hypocritical about safe-sex practices were provided with two options: one behavior that would uphold directly their beliefs about practicing safer sex (i.e., purchasing condoms, see Stone et al., 1994) and one behavior that would reduce dissonance indirectly by bolstering unrelated cognitions about the self (i.e., donating time or money to disadvantaged people, see Steele & Lui, 1981). For some participants, only the indirect option was presented; for others, both options were made available at the same time.

We predicted that if an indirect route to reduction were the only option available for dissonance reduction, participants who felt hypocritical would use that route to reduce their discomfort. As suggested by Fried and Aronson's (1995) study, the dissonance that follows an act of hypocrisy can be reduced by an indirect strategy when such a strategy is presented first. If, however, hypocrisy motivates a person to confront the discrepancy head-on, then when a direct route to reduction also is made available, we expected participants to choose the behavioral alternative that dealt specifically with the source of their hypocrisy. Despite the opportunity to affirm an unrelated positive aspect of the self, participants made to feel hypocritical should opt to reduce the discrepancy directly through adopting the very behavior they promoted to others.

Role of Advocacy in Bolstering Responses to Dissonance

It is well documented that disconfirmation of important beliefs causes dissonance and motivates a person to take action capable of restoring those beliefs. One of the first demonstrations of dissonance reduction through behavioral bolstering was reported by Festinger, Riecken, and Schacter (1956) in their classic observation of a group who announced publicly that the world would end on December 21, 1954. When it became clear that the prophecy had failed, instead of changing their beliefs about the prophecy, group members bolstered their doomsday beliefs by proselytizing to new members. Similarly, a laboratory

investigation by Sherman and Gorkin (1980) showed that when participants with strong feminist beliefs displayed anti-feminist behavior during a sex-role stereotyping task, they subsequently took actions on a separate task indicative of strong pro-feminist beliefs (see also Batson, 1975; Dutton & Lake, 1973). In a study by Kantola, Syme, and Campbell (1984) that closely resembles hypocrisy research, a utility company notified community members with strong beliefs in energy conservation that they were wasting electricity. The results showed that residents with strong pro-conservation attitudes significantly reduced their consumption of electricity over a 2-week follow-up period.

It is important to note that in many of these early studies on behavioral bolstering, participants did not advocate their beliefs before receiving information that disconfirmed them. This implies that an advocacy of one's beliefs may not be necessary for the use of behavioral bolstering as a mode to dissonance reduction. Although in the early work only direct routes to dissonance reduction were measured (i.e., behavior change), this research suggests that disconfirmation by itself may be sufficient to arouse dissonance and motivate the use of behavioral bolstering for dissonance reduction.

By itself, learning that one's own behavior has disconfirmed important beliefs could pose a significant threat to the self (e.g., Sherman & Gorkin, 1980). If these beliefs are held in private, however, would disconfirmation by itself cause a specific need to re-establish the validity of those beliefs? It seems that if beliefs are held in private, there may be other ways to reduce dissonance. For example, a person could make slight adjustments in the beliefs to accommodate the disconfirming evidence—to do so would not contradict a public advocacy—or a person could reduce the discomfort by reflecting on other positive aspects of the self. In contrast, advocating the importance of one's beliefs before those beliefs are disconfirmed may leave fewer alternatives for reducing dissonance. The advocacy may increase commitment to the beliefs and may also cause the advocate to focus on restoring self-integrity. As a result, a person who commits an act of hypocrisy may seek to re-establish the initial beliefs, because doing so will further exemplify those beliefs and restore the self-conceptions of honesty and sincerity.

In the present study, we predicted that dissonance would be aroused when participants were made aware that their behavior had disconfirmed their beliefs. However, if their beliefs were held in private, we predicted that they would not systematically seek to re-establish their beliefs when other routes to dissonance reduction were available. Consequently, fewer participants whose private beliefs were disconfirmed would choose the direct strategy for dissonance reduction. In contrast, we predicted that following an act of hypocrisy, which begins with a public advocacy, participants would show a clear preference for adopting the behavior that would re-establish the validity of their belief system and restore their self-integrity.

Framing of Past Behavior

The final purpose of the current research was to investigate how thinking about past behavior after a pro-attitudinal advocacy creates dissonance. In the previous research on hypocrisy (e.g., E. Aronson et al., 1991; Stone et al., 1994), "mindfulness" about previous behavior was induced by having participants recall situations in the past when they had failed to

conduct the course of action advocated in their speech. As noted above, thinking about past failures to uphold important beliefs might by itself lead people to adopt actions consistent with their beliefs to reduce dissonance.

There is reason to suspect, however, that simply thinking about the reasons for not performing a specific behavior could inhibit behavioral compliance. For example, if people use negative attitudes or attributions about an object to justify avoidance of that object, then introspection about the excuses or justifications for failing to act could facilitate less, not more, compliance. Such may especially be the case when people perceive that their reasons reflect a consensus or represent the norms for behavior (Snyder & Higgins, 1988). That is, when perceived as normative, excuses and negative attitudes may indicate that most people also avoid the behavior (i.e., descriptive norm) or that most believe the behavior ought to be avoided (i.e., injunctive norm). Thus, if people believe it is normative to avoid a particular course of action, making the norm salient may undermine compliance (e.g., Cialdini, Reno, & Kallgren, 1990).

The framing of past behavior may be a crucial determinant of the dissonance and behavior change that follow an act of hypocrisy. When framed as normative, the exemplifier may not perceive his or her past behavior as discrepant from the advocated course of action. In contrast, when the reasons for not upholding one's beliefs are framed as personal or non-normative, then past behavior does represent a significant discrepancy from one's beliefs. The meaning of the discrepancy will pose a threat to self-integrity, it will arouse dissonance, and the speaker will be motivated to adopt his or her own good advice to reduce dissonance.

Experiment 1

Overview

We induced hypocrisy in Experiment 1 using the AIDS prevention topic and procedures reported by Stone et al. (1994). The experimental design was a 2 (framing reasons as personal vs. normative) \times 2 (dissonance reduction routes: indirect only vs. choice for indirect or direct) factorial with two external control groups (i.e., personal reasons only and advocacy only; see below). The percentages of participants who purchased condoms and donated to a homeless project were the primary dependent variables.

Method

Participants

Participants were 128 undergraduate students from a University of California campus who were recruited for a study on "health and persuasion." Participation was restricted to students between the ages of 18 and 25 who reported that they had been heterosexually active within the previous 3 months. Of the sample, 87% participated for partial course credit and were promised an additional \$4 during scheduling, ostensibly because the study ran longer than 1 hr. The remaining 13% of participants were paid \$5 for their participation.²

The data from 16 participants were excluded before the analysis of the results. Six were excluded because they expressed suspicion about the procedures during debriefing; 3 were excluded because of a procedural error by the experimenter; 2 were excluded for failing to follow the instructions on the dependent measures; and 5 were excluded after

revealing in the postexperimental questionnaire that they had never been sexually active. The final sample ($N = 112$) consisted of 68 female and 44 male participants.

Procedure

Making the advocacy. The procedures for inducing the public advocacy were identical to those used in Stone et al. (1994). Experimenter 1 (E1, who was male) asked participants to videotape a speech for a high school AIDS prevention program about the importance of using condoms to prevent AIDS. To assist development of their speeches, participants were provided a list of facts about AIDS and transmission of HIV. Once participants had outlined a speech, they were escorted into an adjoining room where they were seated in front of a video camera. After participants had recorded their speech, they returned to the main office, where they signed a release form for their videotape. The text of the release form reiterated that at least part of their speech would be used in a video collage for the "Universitywide AIDS Prevention Program."

Framing past reasons. The framing manipulation was introduced when E1 explained that he wanted to identify the types of excuses and reasons people give for not using condoms. Participants were provided with a list of "excuses" constructed from the reasons offered by participants in previous research (e.g., E. Aronson et al., 1991).

Participants in the *personal-reasons* condition were asked to examine the list and

pick out the excuses that have applied to the times in the past when YOU failed to use condoms. And if you think of any other excuses that have applied to YOU in the past that are not on our list, please indicate those as well.

Participants in the *normative-reasons* condition were asked to examine the list and

pick out the excuses that you have heard OTHER people give in the past for not using condoms, like your friends or roommates. And if you think of any other excuses that you have heard OTHER people use in the past for not using condoms, please indicate those as well.

E1 assured participants that their lists would be anonymous and asked them to place their lists in an envelope when completed.

Participants in the *personal-reasons-only* external control group prepared a speech as described above and were ushered into the videotaping room to record it. However, E1 "discovered" that the videotape was missing and that they could not record the speech. E1 announced that there was, however, another aspect of the research that participants could help with, and so E1 ushered participants back into the main office and introduced them to the personal-excuses listing task described above. Thus, participants in the personal-reasons-only external control group were primed for their pro-AIDS-prevention beliefs in the same way as the hypocrisy group, but they never made a public advocacy about the importance of practicing safer sex.

We also included an *advocacy-only* external control group in which participants constructed and delivered the advocacy as described above. These participants then went directly to the reduction route manipulation without systematically being made to consider past behavior. This condition was conducted as a no-dissonance control to examine the potential

² Participants recruited from outside the psychology participant pool were offered an extra dollar as added incentive for participation. A planned comparison showed that those who were paid \$5 for participation did not spend more money on condoms or donate more to the homeless project compared to those paid \$4 for their participation.

demand characteristics inherent to the choices offered to participants described in the next section.

Manipulating the availability of the reduction routes. After the framing manipulation, E1 announced that he had to leave and was going to turn the rest of the procedure over to the graduate student in charge of the project. E1 then went into another adjoining office. A moment later, Experimenter 2 (E2, who was blind to the framing manipulation) entered the main office, introduced himself, and paid participants either four or five \$1 bills for participating. Participants were then asked to complete a pay receipt for the business office. Before participants could complete the receipt, E2 introduced the reduction route manipulation.

In the *indirect-only* condition, E2 announced that he was working on another study that participants might be interested in. The study, he explained, involved local homeless people; essentially, he was trying to set up a program to feed homeless people, but to help with the costs of the project he was asking students who participated in psychology studies if they would like to make a donation. If participants were interested, there were receipts for their donation on a desk behind them. The donation was completely anonymous, and participants were told they could donate by completing a receipt, placing the receipt in an envelope, and then placing their donation in a separate envelope.

E2 stressed that participants should not feel obligated to donate to the homeless project and reminded them that the donation would be anonymous. After delivering the donation instructions, E2 announced that the study was completed and that he had to leave to set up the videotape for the next participant. He instructed participants to complete the payment receipt before they left and to leave it on the desk. Then, to reduce the possibility of experimenter demand on their decision to make a donation, E2 entered the adjoining videotape room and closed the door, leaving participants alone in the main office.

Participants in the *indirect-versus-direct* condition were turned over to E2 in the same fashion. However, as E1 was leaving, he was heard by participants to say, "Oh, could you tell [participant name] about the condoms?" E2 briefly explained that because they had participated in the AIDS study, participants would get the chance to purchase condoms for a big discount. Before he explained that, E2 said that he needed to tell participants about another study he was working on. E2 then introduced the indirect option in the same way as described above. After stressing the anonymity of the donation, E2 introduced the option to purchase condoms by saying, "Now, before you make any decision about that, let me tell you how you can get condoms for a discount."

E2 explained that as a condition of the grant that was funding the AIDS study, he was required to offer students who participate the opportunity to purchase condoms as a way of encouraging safer sexual practices. E2 emphasized that participants did not have to buy any condoms at that moment, but if they were interested, the condoms were located in a container on a table behind them, and there were coins in a dish so they could make change if they purchased. After presenting the two options, E2 announced that he had to leave as described above. Participants were then left alone in the office to complete the payment receipt and decide whether to use one of the reduction options or leave.

In both conditions of the reduction route manipulation, participants' attention was directed to a second desk behind them, located by the entrance to the main office. In the *indirect-only* (donation) condition, the desk held the donation receipts, a bowl with some spare change, and two envelopes (one for the donation and one for the intake receipt). In the *indirect-versus-direct* condition (donation vs. condoms), the contents of the desk included a clear plastic container full of condoms (see Stone et al., 1994). The container held 140 condoms, 10 each of fourteen different brands. Next to the condoms was a list of "Currently Available Brands."

When E2 heard participants open the main office door to leave, he reappeared from the adjoining room and asked them to complete one last questionnaire (no participant refused). After completing a survey of their prior sexual behavior, participants were probed for suspicion and provided a brief explanation of the procedures.³

Direct vs. Indirect Strategies

Intake Receipt
Form #31-32154
Social Science Bus. Office

Date: _____

Donation To (Please circle one):

AIDS Prevention (condoms)

Project to Feed the Homeless

Amount: _____

Indirect-only Strategy:

Intake Receipt
Form #31-32154
Social Science Bus. Office

Date: _____

Project Title:

Project to Feed the Homeless

Amount: _____

Figure 1. An example of the receipts created to offer the choices for dissonance reduction at the completion of the experiment.

Dependent measure. To measure a preference for a direct versus indirect route to dissonance reduction, it was necessary to constrain the choice so that participants could not both donate money and purchase condoms. This was accomplished by creating a receipt that presented the donation and condom purchasing as mutually exclusive options (see Figure 1). For participants in the *indirect-versus-direct* condition, the options to donate money or purchase condoms were presented side by side, and the receipt instructed them to indicate their preference by circling one of the options (only 2 participants circled both and thus were excluded from the data analysis). In addition, participants were asked to indicate the dollar amount they wished to spend on condoms or wished to donate to the homeless project. For participants in the *indirect-only* condition, only the donation option appeared on the receipt.

Results

Choice for a Direct Versus Indirect Route

To examine the choice participants made concerning how to reduce dissonance, we analyzed the percentage of participants

³ Participants were "partially" debriefed because they were going to be interviewed later about their sexual behavior as part of a separate survey. The partial-debriefing procedure was similar to a normal debriefing procedure (e.g., E. Aronson et al., 1991), including probes for suspicion, with one exception: We did not explain the hypotheses to participants. Thus, we were able to identify suspicious participants and explain the procedures and deception without creating a demand for how they would respond to the follow-up interview. The results of the survey are available on request from Jeff Stone.

who donated to the homeless project using log-linear analysis of variance (ANOVA) procedures. A 2 (reasons framing: personal vs. normative) \times 2 (availability of reduction routes: unrelated only vs. unrelated and related) log-linear ANOVA revealed a significant main effect for the availability of the reduction routes, $\chi^2(88) = 16.62, p < .0001$, and the predicted interaction between how past behavior was framed and the availability of the reduction routes, $\chi^2(88) = 12.94, p < .003$. To unpack the meaning of the interaction, we conducted planned comparisons of the percentages shown in Table 1.

First, as predicted, when donating money to the homeless project was the only option for dissonance reduction, participants for whom the reasons were framed as personal (i.e., the hypocrisy condition) were significantly more likely to donate (83%) compared to participants who donated when past reasons were framed as normative (52%), $\chi^2(44) = 5.42, p < .02$. This supports the hypothesis that to induce dissonance motivation, the reasons for past failures must be framed as applying to one's own past behavior. That 83% donated when dissonance was aroused also suggests that the donation was a viable indirect route by which to reduce dissonance.

Furthermore, the data show that significantly more participants in the hypocrisy condition donated money to the homeless project (83%) when the indirect option was their only route to dissonance reduction, compared to the percentage of hypocrisy participants who donated when they had a choice between donating and purchasing condoms (13%), $\chi^2(44) = 43.29, p < .0001$. In contrast, when the reasons were framed as normative, the percentage of participants who donated was not influenced by the availability of the alternatives for dissonance reduction (52% for indirect-only participants compared to 48% for the indirect-versus-direct participants, $\chi^2 < 1, ns$). This pattern of donation supported the hypothesis by showing that (a) the availability of routes to dissonance reduction had an effect only on participants who were induced to feel hypocritical (i.e., those who considered their own personal reasons for not using con-

doms) and (b) that more participants donated when it was the only route available for dissonance reduction compared to the percentage who donated when the direct option (i.e., condom purchasing) also was made available.

If only 13% of participants in the hypocrisy condition donated when provided another option, did the rest of them choose to purchase condoms instead? We analyzed the percentage of participants who purchased condoms across the levels of reasons framing in which participants were offered both the condom purchasing and donation alternatives. The results showed the predicted main effect of reasons framing on the percentage of participants who purchased condoms, $\chi^2(44) = 17.25, p < .0003$. As can be seen in Table 1, significantly more participants in the hypocrisy condition chose to purchase condoms (78%) compared to the percentage of participants who considered the reasons other people give for not using condoms (26%).⁴ Among hypocrisy participants, the difference between the 78% who chose condoms and the 13% who chose the donation is highly significant, repeated log-linear ANOVA $\chi^2(22) = 20.06, p < .0001$. Thus, when they had a choice, more participants in the hypocrisy condition chose to use the direct route over the indirect route for dissonance reduction.

Independent Effects of Disconfirmation and Advocacy on Behavior

We tested the role of exemplification in bolstering by comparing the purchase and donation responses of participants in the hypocrisy condition against the pattern of responses observed in the personal-reasons-only group (i.e., participants who did not advocate condom use but considered their own past reasons for not using condoms). A 2 (condition: hypocrisy vs. personal reasons only) \times 2 (option: purchase vs. donation) mixed log-linear ANOVA revealed a marginal main effect for condition, $\chi^2(31) = 3.57, p < .06$, and a significant interaction between the two variables, $\chi^2(31) = 9.41, p < .002$. As seen in Table 1, significantly fewer participants in the personal-reasons-only control condition purchased condoms (20%) compared to the percentage who purchased in the hypocrisy condition (78%), $\chi^2(31) = 2.05, p < .05$. As predicted, disconfirmation of one's beliefs without a public advocacy did not lead participants to re-establish their beliefs. However, 40% of the personal-reasons-only participants also donated money to the homeless project, demonstrating that fully 60% of the participants whose private beliefs were disconfirmed opted for a dissonance reduction route of one kind or another. This replicates and extends previous research by showing that disconfirmation of important beliefs will lead to dissonance arousal (e.g., Sherman & Gorkin, 1980; see Stone et al., 1994) but, without advocating one's beliefs, disconfirmation by itself does not motivate a person to re-establish the initial beliefs.

Finally, the public advocacy by itself did not arouse any dissonance; only 20% of participants who only made the speech used their money to either purchase condoms (10%) or donate

Table 1
Sample Size and Percentage of Participants in Each Condition Who Used the Direct and Indirect Strategy(s) Made Available at the Completion of Experiment 1

Reduction strategy(s) available	N	% who used money to:	
		Donate to the homeless project	Purchase condoms
Personal reasons (hypocrisy)			
Indirect-only	23	83%	
Direct versus indirect	23	13%	78%
Normative reasons			
Indirect-only	23	52%	
Direct versus indirect	23	48%	26%
Personal-reasons only			
Direct versus indirect	10	40%	20%
Advocacy only			
Direct versus indirect	10	10%	10%

⁴ There were no effects of gender on condom purchasing. However, the analysis of the condom purchasing revealed a significant main effect of ethnicity on condom purchasing, $\chi^2(44) = 5.75, p < .02$. Significantly more Caucasian participants purchased condoms (68%) compared to Hispanic participants when they had the option (20%).

to the homeless project (10%). These data suggest that the experimenter's request did not create a general demand to use one of the reduction routes.

Discussion

The data clearly supported all three hypotheses. After advocating the importance of condom use, more participants reduced dissonance by means of one of the behavioral alternatives when past failures to uphold their beliefs were framed as personal. In comparison, if they thought about the reasons other people give for not using condoms, fewer participants purchased condoms. This suggests that the motivation to bolster one's beliefs following exemplification relies on the personal relevance of past failures to uphold one's beliefs. In addition, the route to dissonance reduction clearly depended on the availability of the behavioral alternatives. When an indirect alternative was the only alternative for dissonance reduction, participants in the hypocrisy condition were significantly more likely to use the indirect route compared to those for whom past reasons were framed as normative. However, when a direct route also was made available, significantly more participants chose to directly confront past failures to uphold their beliefs. The preference for the direct over the indirect route strongly supported the primary hypothesis concerning the need to reestablish directly one's self-integrity following an act of hypocrisy.

There are at least two important alternative interpretations for the preferences shown by participants in the hypocrisy condition. One is that participants chose to purchase condoms rather than donate to the homeless project because the condoms had material value—participants received something in exchange for their money. This interpretation is consistent with the notion that when multiple alternatives are available, judgments of the costs and benefits of each alternative will determine the route to reduction (e.g., Abelson, 1959; Steele, 1988).

Although it is possible that the condom purchase may have been judged as more beneficial because of its material value, a cost-benefit analysis seems hard pressed to account for the large percentage (83%) of participants in the hypocrisy condition who donated when it was the only option available. Moreover, the donation was arguably less costly in terms of the amount of effort required to complete the behavior—participants had only to place money in a clearly marked envelope. In contrast, to purchase condoms, participants had to search through a large container of different brands and styles before making payment. Relative to the effort required to donate, the condom purchase may have been more costly in terms of the number of steps and the amount of time required to complete the behavior. The fact that participants in the hypocrisy condition took the time to sort through and purchase condoms may be indicative of the need to restore self-integrity in spite of the effort required to do so. Thus, even when less costly routes were available (including that participants could have left immediately with their payment in full), restoring self-integrity appeared to be the more central concern.

Another potential explanation for the observed preferences has to do with an assumption about the self-esteem-maintenance function of a dissonance reduction route (e.g., Greenwald & Ronis, 1978; Steele, 1988; Tesser & Cornell, 1991). For example, according to self-affirmation theory (Steele, 1988), the

effectiveness of any strategy for dissonance reduction is a function of the importance of that activity to global self-worth. To be effective, the self-concept dimension affirmed by a given dissonance reduction strategy must be as important to global self-worth as the self-concept dimension threatened by the behavioral discrepancy. If affirming on an unrelated but relatively less important self-dimension is the only option available for dissonance reduction, a person may have to look for another reduction strategy or affirm the same lower level dimension again and again until the threat subsides. Thus, preferences among multiple strategies for dissonance reduction may be a function of the importance of the self-concept domain represented by each reduction strategy (cf. Tesser et al., 1996).

In the current study, if purchasing condoms reflected a more important aspect of the self relative to the aspect of self reflected in the donation, then the observed preference for the direct route does not necessarily demonstrate a specific need to restore self-integrity—participants may have chosen to purchase condoms because it represented a more important self-concept domain and was therefore more capable of reaffirming global self-worth. To examine this, we conducted a survey in which students from the same college sample were asked to rate the importance of using condoms for AIDS prevention and donating to feed homeless people to their perceptions of global self-worth. These ratings were embedded among 20 behavioral descriptions and collected on a 10-point self-rating scale. The results showed that using condoms to prevent AIDS was rated as significantly more important to global self-worth ($M = 9.46, SD = 1.12$) compared to donating to feed homeless people ($M = 6.27, SD = 1.95$), two-tailed $t(124) = 16.92, p < .0001$. Thus, it appears that in Experiment 1 the self-integrity route was also the route most capable of restoring global self-worth. This suggests that the preferences obtained in Experiment 1, rather than demonstrating a preference for a direct over an indirect route, may have demonstrated how the hierarchical structure of the self mediates the self-esteem maintenance process following dissonance arousal (Steele, 1988; Tesser et al., 1996).

We propose that the motive to restore self-integrity following an act of hypocrisy is independent of a more general need to repair one's self-worth. That is, an act of hypocrisy threatens the self, and part of the motivation to reduce dissonance could be directed toward repairing the damage a hypocritical act does to feelings of global self-esteem. The data from the indirect-only condition in Experiment 1 support this contention—when it was the only option available, participants in the hypocrisy condition donated to the homeless project despite its irrelevance to their threatened perceptions of honesty and sincerity. However, if it is more important to restore specific conceptions of self-integrity, then participants should opt for a direct route to dissonance reduction, even when an alternative exists that might provide superior restoration of global self-worth. As we have argued, indirect routes are not as effective or desirable for restoring specific conceptions of integrity following an act of hypocrisy. Behaviors that can bolster important but unrelated views of the self are useful for reducing dissonance, but after an act of hypocrisy global self-esteem maintenance is a secondary concern.

We tested this hypothesis in a second experiment by arousing hypocrisy on a less important self-dimension and then providing participants a choice between a behavior that would enhance a

more important unrelated self-attribute (i.e., an indirect strategy) versus a behavior that would restore integrity on the less important but threatened self-attribute (i.e., a direct strategy). Preferences for the more important, indirect strategy would provide relatively clear evidence that the hierarchy of the self determines how people prefer to reduce dissonance (e.g., Steele, 1988). However, if participants chose the direct strategy that was less important to their global self-worth, then the data would provide further support for the proposed motivation to deal directly with the source of one's hypocrisy as the preferred mode for dissonance reduction.

Experiment 2

Overview

In the second experiment we "reversed" the conditions of the first experiment: All participants were made to feel hypocritical about their past failure to help homeless people (a less important self-dimension according to the survey results). Participants were then paid and offered one of three dissonance reduction alternatives: One-third of the participants were offered an opportunity to restore self-integrity by donating to a homeless project, one-third of the participants were offered an opportunity to affirm global self-worth by purchasing condoms at a discount, and one-third of the participants were offered a choice between the direct (donation) and indirect (condom purchase) alternatives. Thus, the design was a one-way comparison among three groups with the percentage of participants who purchased condoms and donated to the homeless project as the primary dependent variables.⁵

Method

Participants

Participants were 35 female undergraduates at Princeton University who were recruited to participate in a study on community involvement and paid \$5 for their participation.⁶ During scheduling, all reported that they were not currently doing volunteer work in the community. Eight participants did not complete the procedures: 4 because they refused to make the advocacy, 2 who refused to believe that the speech would be shown to anyone, and 2 who expressed a negative attitude toward volunteerism during the introduction. This left a total of 27 participants in the three experimental conditions.

Procedure

Participants were told that the purpose of the research was to find ways of encouraging community involvement through the use of a public service announcement (PSA). Ostensibly, the research was attempting to determine the most effective speaker for a televised PSA. The experimenter explained that he thought community members might be more effective than an "expert" on volunteerism because they would be seen as more representative or similar to people who live in the community. Thus, participants were led to believe that the purpose of the study was to compare the persuasive effects of similar others against an expert when people viewed a televised PSA about volunteerism.

Inducing hypocrisy. To create the "similar others" message, the researcher explained that he was collecting videotapes of students delivering short persuasive speeches about the importance of volunteerism. Participants were told that the director of the Student Volunteers Council (SVC, a campus volunteer organization) was making a similar videotape

for the "expert" condition.⁷ Participants were led to believe that groups of students would eventually view one of the videotapes and that their attitudes about volunteerism would be measured to determine which PSA was more persuasive. Participants were then asked if they would videotape a short persuasive speech about the importance of volunteerism. To assist development of a speech, participants were provided with SVC information about student volunteer activities, which included work in homeless shelters and soup kitchens. Participants constructed an outline of the speech and then were escorted into an adjoining room to record the videotaped message. After they had recorded their speech, the experimenter escorted them back to the office and asked them to sign a release for their videotape.

To make participants aware of their own failures to volunteer, we chose to focus their attention on behavior that may have prevented them from volunteering their time. To accomplish our goal, participants were asked to think about and list all the types of activities they engaged in when they had spare time outside of their coursework.

The experimenter explained that he was interested in knowing more about the reasons why people fail to volunteer their time. He noted that coursework keeps most students very busy but that he believed that, when they have spare time, many probably choose to do other activities instead of volunteering. The experimenter explained that if he knew which activities students liked to do in their spare time, then he could add something to a PSA campaign about how to manage spare time for volunteerism. The experimenter then handed participants a list of "activities that students are likely to do in their spare time." Participants were instructed to examine the list and then make a list of the activities that applied to their own leisure time. The experimenter stressed the anonymity of their responses and instructed them to place their completed list in an envelope.

While participants worked on their lists, the experimenter consulted a random-numbers table to determine which reduction route(s) to offer at the completion of the study. When participants placed their list in the envelope, the experimenter announced that the study was completed and paid them for their participation.

Manipulating the reduction-route options. The experimenter told participants that they needed to complete a receipt for the participant payment, but before they started he suddenly "remembered" something else he had to tell them.

In the *indirect-only* condition, the experimenter explained that he was also involved with research on AIDS prevention. In fact, he had received funding for research on factors that encourage condom use and safer

⁵ It is important to note that the second experiment was conducted at a different university. Consequently, it was necessary to establish that within the new participant sample, donating to feed the homeless and using condoms to prevent AIDS were as differentially important to global self-worth as they were within the sample from Experiment 1. The previously described survey of behavior and self-worth was administered to the new participants during a pretest administration for another research project. Although there was more variability in the ratings, the results closely replicated the first set of data: Participants reported that using condoms to prevent AIDS was significantly more important to their global self-worth ($M = 8.69, SD = 2.76$) compared to donating to feed homeless people ($M = 6.28, SD = 2.28$), $t(66) = 5.59, p < .0001$.

⁶ Only female participants were used in this study, because very few men were available for participation in the paid pool at Princeton University (e.g., see J. Aronson et al., 1995). In addition, the self-worth survey data for these participants replicated the behavioral differences reported in the overall sample.

⁷ We wish to thank SVC Director Chris Drake for his cooperation and advice in planning this study. All proceeds donated by participants were given to the SVC's homeless and hunger awareness project at the completion of the study.

sex. According to his research, it was especially important to encourage college students to use condoms, because many report they are sexually active but do not use condoms every time they have sexual intercourse. He explained that the AIDS organization that was funding his work supplied him with condoms to pass along to students in his research, and even though the PSA research was not about condom use and AIDS, the granting agency required that he provide participants the opportunity to purchase condoms at a discount. He noted that although participants may not be sexually active right now, his research suggests that it is a good idea to have condoms on hand—just in case. He then directed participants to a table behind them where the condoms were located.

The assortment of condoms were held in a basket (the brands and styles were identical to those available in Experiment 1). Next to the condom basket was an envelope marked "condom purchases." The envelope held four false receipts, three \$1 bills and 4 quarters in change.

In the *direct-only* condition, the experimenter explained that the SVC was supporting his research on volunteerism, and in return the SVC had asked him to tell students about one of its volunteer projects. The SVC was promoting "Hunger and Homelessness Awareness" and, as part of the program, coordinated clothing drives and provided volunteers to a local soup kitchen. According to the experimenter, the SVC was developing a "meals on wheels" program, which was designed to feed homeless people who do not come to shelters or soup kitchens. Because the SVC had recently suffered some severe cuts in its funding, the experimenter explained that it needed some economic help to get the new program started. Consequently, participants were told that they could help by making a donation to the SVC "meals on wheels" program. The experimenter emphasized that the hunger awareness project was not directly related to his research, he was just passing the information along, but if participants wanted to help the homeless project by making a donation, the SVC had provided envelopes in which they could place a donation. Participants were instructed to place their donation envelope in a box that the SVC would ostensibly collect at the end of the week.

On the opposite end of the table from the condoms was a stack of envelopes marked "SVC hunger and homeless project." Behind the envelopes was a file box with a lid marked "Student Volunteers Council." Inside the box were four sealed envelopes.

In the *indirect-versus-direct* condition, the experimenter always began with the indirect option (i.e., the condoms) and then presented the direct option (i.e., the donation) with the segue: "Before you decide on that, let me tell you about one other project that you may be interested in. As I mentioned before . . ."

To reduce demand, the experimenter announced that he was going upstairs to catch a friend (leaving participants in private), and if they finished completing the receipt before he returned, they were free to leave (giving them the option not to use either reduction strategy). Then the experimenter said that if they were interested in (a) purchasing condoms from the AIDS project or (b) donating to the hunger program, he just needed them to complete another intake form. Participants were then directed to put the intake form in the envelope with their (a) donation or (b) payment for the condoms.

The experimenter then exited the room, closed the door, and waited for participants to exit the room. Once participants opened the office door to leave, the experimenter asked them to return to the office to discuss the experiment. Participants were then carefully probed for suspicion concerning the procedures and the presentation of the reduction route(s) and were fully debriefed about the true purposes of the study.

Participants' choices to donate money or purchase condoms were collected with the same type of intake receipts used in Experiment 1 (see Figure 1). Specifically, the receipt either provided each option by itself for participants in the indirect-only and direct-only conditions or provided both options when the two reduction routes were made available together.

Results

We subjected the percentages of participants who donated, purchased condoms, or chose one option over the other to

Table 2
Percentage of Hypocrisy Participants Who Donated Money to the Homeless Project, Purchased Condoms, or Chose One Option Over the Other in Experiment 2

Option available:	% who used money for:	
	Donation	Purchase
Direct-only	67	
Indirect-only		44
Direct versus indirect	67	11

planned log-linear comparisons. As seen in Table 2, 67% of the participants donated when it was the only option available, whereas 44% of the participants purchased condoms when it was the only option available. This difference was not significant ($\chi^2 < 1$) and indicates that each option was used to reduce dissonance when presented alone. When the two options were offered together, 67% chose to donate, and only 11% chose to purchase condoms, a significant difference, $\chi^2(8) = 5.92, p < .02$. Thus, despite the fact that donating to help feed homeless people was rated as significantly less important to global self-worth, participants showed a clear preference for it over the indirect route (i.e., condom purchase) for dissonance reduction. This supports the hypothesis that hypocrisy motivates a specific need to restore self-integrity, even when a person has other options available that are more enhancing of his or her global self-worth.

General Discussion

The results from both experiments demonstrate that an act of hypocrisy induces a form of dissonance motivation that people, if given a choice, prefer to reduce directly by adopting the behavior they advocated to others. Even when a viable indirect strategy was equally available, required relatively less effort to enact, and was more capable of restoring global self-worth, significantly more participants chose to address their hypocritical discrepancy through direct means. This suggests that for certain types of behavioral discrepancies the effective reduction of psychological discomfort requires direct confrontation with the discrepant cognitions. Indirect strategies will suffice, but when they have the option, people prefer to confront the discrepancy directly as the means to dissonance reduction.

The data from Experiment 1 illuminated some factors that were important to the choice for a direct over indirect dissonance reduction strategy. First, dissonance in the hypocrisy paradigm was mediated by how past behavior was framed. The data suggest that once a person advocates the importance of conducting a specific action, mere exposure to contradictory behavior does not pose a threat to self-integrity. Perhaps exemplification by itself does not inspire the speaker to consider how personal behavior relates to the content of the advocacy. It may be similar to giving advice: If the wisdom has pedagogical value or the potential to yield a positive outcome for the audience, we do not mind advising others about behaving in a socially appropriate manner. Moreover, presenting oneself as a role model who exemplifies prosocial conduct may create a positive impression not only on the audience but also on oneself (Jones & Pittman,

1982; Schlenker & Trudeau, 1990). Consequently, when asked to think about how friends and roommates fail to uphold the advocated standards, the speaker makes a downward comparison that maintains the façade of exemplification and prevents contradictory behavior from registering as a threat to self-integrity.

However, if an exemplifier does consider how his or her own behavior relates to the standards promoted in the speech, the speaker is suddenly confronted with the stark realization that he or she does not practice what was preached. The discrepancy between past behavior and one's advocated beliefs makes the exemplifier acutely aware that the self-presentation was fraudulent and deceitful, and this threatens the honesty and sincerity with which the beliefs were conveyed. As a result, dissonance is aroused, and the advocate becomes motivated to make up for the transgression by adopting the promoted course of action.

The data from Experiment 1 also extend our knowledge of the conditions under which disconfirmation will cause a person to bolster his or her initial beliefs as the route to dissonance reduction (Festinger et al., 1956; Sherman & Gorkin, 1980). As predicted, without a public advocacy, participants whose past behavior disconfirmed their beliefs (i.e., the personal-reasons-only group) did not systematically choose to re-establish their beliefs directly when an indirect route to dissonance reduction was available. Taken by itself, the data suggest that having one's beliefs disconfirmed is sufficient to arouse dissonance, but to facilitate bolstering or strengthening of those beliefs as the route to dissonance reduction, some kind of public commitment to them may be necessary (e.g., Festinger et al., 1956). Otherwise, it appears that other, less direct routes to dissonance reduction can provide a reasonable alternative when they are available.

On the Flexibility of Different Strategies for Dissonance Reduction

The observed choice for direct confrontation with the source of one's hypocrisy would seem to question the view of dissonance reduction as a flexible process (e.g., Steele, 1988). One difference between the flexibility perspective and our own may be an assumption about the goal of dissonance reduction. For example, self-affirmation theory (e.g., Steele, 1988) proposes that the goal of dissonance reduction is not to maintain the specific self-concept threatened by behavior but is aimed at restoring the global integrity of the entire self-system. If people can reflect on other positive self-resources once dissonance is aroused, they can reduce their discomfort without confronting the issue that caused the initial threat (e.g., Steele & Lui, 1983; Steele, Spencer, & Lynch, 1993). Similarly, Tesser and Cornell (1991) reported that processes such as comparing positively to a close other on a personally relevant task, or basking in the reflected glory of a close other's performance on an irrelevant task, significantly reduced the use of a direct mode to dissonance reduction (i.e., attitude change). Tesser and Cornell concluded that if various self-evaluation maintenance strategies can substitute for each other, then dissonance reduction processes must serve a single, higher order goal, such as global self-evaluation maintenance. Together, these perspectives assume that dissonance reduction serves the superordinate goal of maintaining global self-worth. When either indirect or direct strategies are

capable of satisfying the superordinate goal, they are interchangeable and provide people with considerable flexibility for reducing the discomfort that follows a behavioral discrepancy.

We question, however, the degree to which the relevant research supports this conclusion. For example, in many of the experiments relevant to the flexibility perspective (e.g., Steele & Lui, 1983; Tesser & Cornell, 1991), participants were presented systematically the indirect option *before* the opportunity to deal directly with the discrepancy through attitude change. Although it is clear that participants used the indirect options when each had the potential to reaffirm or maintain global self-worth, it is not clear that they deliberately *chose* the indirect route over the direct route—that is, when participants completed the self-affirming survey, were they actively substituting self-affirmation for attitude change? There is no indication in the published reports that participants were aware of the potential to confront the discrepancy directly at the time they reduced dissonance through an indirect strategy. Thus, we believe that these studies do not demonstrate a "substitution" process. Furthermore, we argue that when participants use an indirect strategy before they are presented a direct strategy, it does not necessarily indicate that the strategies are perceived as similar and interchangeable. The present research suggests that people may prefer to use certain dissonance reduction strategies over others. Under some conditions, they may prefer to confront directly the source of their arousal. The results of Experiment 2 further indicate that the desire to reduce the discrepancy directly can even supersede the use of an indirect strategy that has more value to global self-worth.

In our view, it is the goal of diminishing the discrepancy itself that motivates the choice for direct confrontation with the source of the arousal. According to the self-consistency (E. Aronson, 1968; see Thibodeau & Aronson, 1992) and the new-look revisions of dissonance (Cooper & Fazio, 1984), the dissonance that derives from discrepancies between important beliefs and behavior can focus a person on making amends for the aversive outcome and restoring the specific self-views threatened by the discrepant act. The goal of dissonance reduction, then, is not to sustain a globally positive self, as suggested by self-affirmation (Steele, 1988) or self-evaluation maintenance (Tesser & Cornell, 1991), but rather is to uphold important beliefs about oneself and the efficacy of one's behavior. As noted earlier, discrepancies between important beliefs and behavior may threaten global self-worth, and when direct means to reduction are not available, indirect strategies capable of sustaining global self-worth should provide relief from the psychological discomfort. The data from the indirect-only conditions in Experiments 1 and 2 support this supposition.

Nevertheless, even when an effective indirect route is available, a person who commits a dissonant act may have a more important concern in mind—the personal significance of the discrepancy. For example, hypocrisy often occurs after an attempt to educate or admonish others, such as when a parent or mentor advises a particular course of action to a child or student. By preaching to others, the advocate has presented him- or herself as an exemplifier, a role model who is honest and sincere about what was preached. If the goal of the exemplifier is to hold oneself up as an example to others, but the example is disgraced because of previous failures to practice what was preached, then the discrepancy between belief and behavior

arouses dissonance and motivates the desire to restore one's self-integrity. Performing the advocated behavior is the most direct way to satisfy the specific goal of reducing the discrepancy between behavior and important standards for how one should behave (E. Aronson, 1992; Thibodeau & Aronson, 1992).

In sum, hypocrisy may represent one condition under which dissonance reduction operates with much less flexibility compared to other types of discrepancies. That is, the goal of dissonance reduction following an act of hypocrisy is not to achieve a general perception of self-worth but to achieve reduction of the discrepancy that caused the initial discomfort. It is possible that many of the traditional discrepancies studied in the dissonance literature also focus participants on the specific goal of discrepancy reduction, but because few studies have offered more than one reduction route at a time, the goal of dissonance reduction in these circumstances is unknown. Nevertheless, the present set of studies suggests that although people may have some flexibility in how they resolve a behavioral discrepancy, the flexibility they exhibit depends on the nature of the discrepancy and the options for reduction that are available once the discrepancy has occurred.

Methodological Concerns

It is important to consider the influence of demand characteristics that could have guided the choices observed in both experiments. First, we used several procedures designed to reduce experimental demand on the decision. For example, the experimenter always exited the room before participants made their choices of which, if any, reduction route to use. This allowed participants the freedom to choose a particular route in private or, if they decided to not use either alternative, to leave the experiment without concern for how they might be evaluated. The experimenter also stressed repeatedly the anonymity of the reduction choices. Finally, the effectiveness of these precautions was gauged during the outset of the debriefing, when participants were asked to report how much pressure they felt to act on the experimenter's request. As noted earlier, very few participants reported feeling any pressure whatsoever, and those who did were not included in the data reported here.

Second, we attempted to eliminate demand through our experimental design. For example, we purposely set the potential for demand to operate against our hypotheses—the indirect routes in each experiment were linked explicitly to the experimenter (i.e., the homeless project in Experiment 1 and the AIDS prevention project in Experiment 2), whereas the direct routes were linked explicitly to a third party (i.e., the AIDS prevention research in Experiment 1 and the SVC volunteerism in Experiment 2). Thus, if participants were trying to please the experimenter, they should have used the options for dissonance reduction that ran opposite to the predicted (and obtained) patterns of data.

The best evidence against a demand account of the observed effects is provided by the no-dissonance control group (i.e., the advocacy-only condition) from Experiment 1. The results showed that the majority of participants (80%) left without using either option (see the results of the advocacy-only condition in Stone et al., 1994, for a similar finding). If a general demand was operating, more participants would have purchased condoms or donated their payment, even when they were not

motivated by dissonance to do so. Thus, providing multiple behavioral options for dissonance reduction is methodologically feasible and can be accomplished without introducing demand characteristics.

Limitations and Future Directions

One limitation to the current results is that the procedures rendered the dissonance reduction strategies mutually exclusive—use of one precluded use of the other. There is evidence suggesting that people may use more than one strategy for dissonance reduction at a time (e.g., J. Aronson et al., 1995), and it is possible that participants would have used both options had that opportunity been made available. However, although people may prefer to use multiple routes for dissonance reduction following hypocrisy, we believe the use of multiple options would include use of a direct strategy for discrepancy reduction.

It should also be noted that the current research does not rule out a purely cognitive interpretation of the choice for the direct option. For example, the direct route was always related to the hypocrisy, whereas the indirect route was always unrelated to the topic of the hypocrisy. When the choice was offered, the contrast between the relevance of the options to the threat may have made the direct route more salient and more likely to be chosen. While the salience of the route may have played a role in the choice, this interpretation might have difficulty accounting for the fact that the threat and direct route also were salient in the personal-reasons-only control condition, but the salient connection did not produce systematic use of the direct option. It therefore seems unlikely that dissonance motivation played an epiphenomenal role in the choice. Nevertheless, there may be important cognitive mechanisms (e.g., Abelson, 1959; Steele, 1988) and individual differences (e.g., Olson & Zanna, 1982) that mediate how people choose among various routes to dissonance reduction.

Finally, we believe the apparent attentiveness to how dissonance was reduced was guided by the specific behavioral issue (i.e., condom use, volunteerism) responsible for the discomfort. This speculation, in itself, is interesting: Although previous research on the misattribution of arousal following dissonance (Fried & Aronson, 1995; see Cooper & Fazio, 1984) indicates that people are not always consciously aware of the source of their discomfort, it appears from our data that people are capable of discerning between equally available routes for reduction. The degree to which conscious deliberation of the choice reflects conscious awareness of the source of the arousal, however, cannot be determined from the research reported here. It seems possible that when important goals or self-identities are threatened, people may be consciously aware of why they feel uncomfortable, which in turn may signal the best course of action for dissonance reduction (e.g., Cooper & Fazio, 1984; Tesser et al., 1996). The conditions under which dissonance is a pre- to postconscious process suggest an intriguing direction for future research (e.g., Bargh, in press).

It is important to consider that outside the laboratory people often have more than one option for how to resolve discrepancies between their behavior and beliefs. It also is important to recognize that not all routes to dissonance reduction are perceived as equal; the strategies people use for dissonance reduction have psychological meaning and, under some conditions,

they may pay strict attention to how their integrity is restored. This is not to say that people are single-minded or intractable; rather, it is to acknowledge the versatility and integrity with which human beings uphold their dignity after a fall from grace.

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