Affective–Cognitive Consistency and the Effect of Salient Behavioral Information on the Self-Perception of Attitudes

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Subjects with well-defined or poorly defined prior attitudes toward being an environmentalist/conservationist were identified by assessing the structural consistency between the affective and cognitive components of their attitudes. After subjects completed one of two versions of a questionnaire designed to make salient either past pro-ecology or past anti-ecology behaviors, their final attitudes were assessed. The hypothesis that the self-perception account of attitude expression holds primarily for individuals with poorly defined prior attitudes was supported: Low-consistency subjects, with presumably poorly defined attitudes, but not high-consistency subjects, with well-defined attitudes, expressed postmanipulation environmentalist attitudes that were congruent with the pro- or anti-ecology behaviors made salient by the questionnaire manipulation. The additional finding that high-consistency (vs. low-consistency) subjects' beliefs on five ecology-related issues were more highly intercorrelated supported the assumption that the consistency construct appropriately indexes the degree to which individuals possess well-defined attitudes. A comparison of theory and research on self-schemata with research on the affective–cognitive consistency variable suggested that the latter may be a useful measure of attitude schematicity.

Self-perception theory (Bem, 1972) asserts that people often infer their attitudes (and other internal states) from observations of their overt behaviors and the contexts in which these behaviors occur. Empirical support for this theory is fairly widespread. For example, researchers studying counterattitudinal advocacy (e.g., Bem, 1967, 1972; Bem & McConnell, 1970), pro attitudinal advocacy (e.g., Fazio, Zanna, & Cooper, 1977; Kiesler, Nisbett, & Zanna, 1969), and intrinsic motivation (e.g., Calder & Staw, 1975; Deci, 1971; Lepper, Greene, & Nisbett, 1973; Ross, 1976) have demonstrated that the less people perceive their behaviors to be under the control of contextual stimuli such as reward or justification, the greater is their tendency to express attitudes that correspond to, or are consistent with, these behaviors.

Most self-perception research has examined the relationship between expressed attitudes and behaviors that subjects are induced to perform immediately prior to the time their attitudes are assessed. More recently, Salancik (1974; Salancik & Conway, 1975) demonstrated that attitude inferences can also be influenced by manipulating perceivers' recall of past attitudinally relevant behaviors. For example, before assessing subjects' religious attitudes, Salancik and Conway used a linguistic device to vary the saliency of subjects' past proreligious and antireligious behaviors. Subjects for whom past proreligious behaviors had been made salient perceived themselves as more religious and expressed more positive attitudes toward being religious than did subjects for

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whom antireligious behaviors had been made salient.

Notwithstanding Salancik and Conway's (1975) demonstration that information about past as well as recent behaviors affects attitude judgments, their findings are consistent with other self-perception research in suggesting that persons' attitude expressions represent "top of the head" (cf., Taylor & Fiske, 1978) evaluative judgments, constructed largely on the basis of contemporaneous and salient contextual and behavioral information. This research tradition, then, has tended to regard attitudes as epiphenomena and has focused on the external nature of the information underlying attitude judgments. In contrast, most other attitudinal research (e.g., persuasion, attitude–behavior relations) has been guided by the traditional theoretical view (e.g., Allport, 1935; McGuire, 1969) that attitudes represent relatively enduring learned predispositions of persons. Consistent with this conceptualization, information-processing models of attitude such as those proposed by Fishbein and Ajzen (1975) and others (e.g., Anderson, 1968; Wyer, 1974) have assumed that the locus of much information underlying attitude judgments is internal in the sense that it consists of people's private knowledge of or memory for prior beliefs about and past affective reactions to the attitude object (for an elaborated discussion of self-perception vs. traditional attitude theory perspectives, see Greenwald, 1968, and Wood, 1980).

Both conceptualizations of attitude and assumptions regarding the primary locus of information underlying attitude judgments have received empirical support, and most researchers would probably concur that the two viewpoints can be subsumed under a more general cognitive theory explicitly acknowledging the influence of both internal and external cue information on attitude judgments (cf., Eagly & Himmelfarb, 1978; Wood, 1980). Yet, despite this probable consensus and despite Bem's (1972) original proviso that the self-perception process he described held only to the extent that "internal cues are weak, ambiguous, or uninterpretable" (p. 2), self-perception research has been strikingly successful in demonstrating that subjects' attitude inferences can be so strongly influenced by contemporaneous external cues and that prior attitudes are often not salient for subjects (Bem & McConnell, 1970). Such empirical success leads one to wonder when, if ever, internal cue information (i.e., prior attitudes) might approach the salience of contemporaneous external cues and thus diminish or override the impact of the latter information on people's attitude judgments.

It might be that this concern that people often underutilize internal cue information when queried about their attitudes is unwarranted. As others have noted (e.g., Kelley, quoted in Harvey, Ickes, & Kidd, 1978; Salancik & Conway, 1975; Wood, 1980), self-perception studies often employ experimental tasks or attitude topics that are novel or unfamiliar to subjects. Given the likelihood that subjects have not yet formulated attitudes toward such stimuli, it is understandable that their attitude inferences would be strongly affected by contemporaneous external cues. However, at least some self-perception research has used more familiar experimental tasks (e.g., drawing: Lepper et al., 1973) or attitude objects (e.g., "being religious": Salancik & Conway, 1975) toward which most subjects might reasonably be expected to have prior attitudes. Yet this research, too, has revealed the strong impact of contemporaneous informational cues on attitude judgments.

The present study was explicitly designed to test Bem's (1972) proviso concerning the moderating impact of internal cues, or prior attitudes, on the influence of contemporaneous external cues on attitude inferences. Guiding the present research was the assumption that, independent of the extremity of people's scores on some standard premeasure of attitude, they will differ in the strength or degree of definition of those attitudes. In the experiment, we assessed the extent to which our subjects possessed well-defined prior attitudes. We assumed that internal cue information would rival or override the salience of external cues for subjects with well-defined prior attitudes but not for subjects with poorly defined attitudes. Thus, we hypothesized that only the attitude inferences of the latter subject group would

be strongly influenced by salient behavioral information.

In the study, we investigated subjects' attitudes toward "being an environmentalist/conservationist." At the first of two experimental sessions, subjects with well-defined (vs. poorly defined) attitudes on this topic were identified by assessing the structural consistency between the affective and cognitive components of their attitudes (Rosenberg, 1960, 1968; Rosenberg & Hovland, 1960). According to Rosenberg (1960, 1968), people whose attitudes are characterized by high affective–cognitive consistency (i.e., similar scores on affective and cognitive indices of attitude) are likely to have "well-articulated," "well-thought-out" attitudes reflecting a stable underlying disposition, whereas people whose attitudes are low in such consistency are likely to have "poorly articulated" attitudes that do not reflect a stable disposition toward the attitude object. Consistent with this hypothesis, Rosenberg (1968) showed that greater affective–cognitive consistency was associated with greater attitudinal stability and resistance to persuasion. In addition, Norman (1975), although not Fazio and Zanna (1978), found that higher affective–cognitive consistency was predictive of higher attitude–behavior consistency. At our first experimental session, we attempted to adduce further evidence for Rosenberg's hypothesis by assessing subjects' beliefs on a number of ecology-related issues (e.g., nuclear power, solar energy). We expected that the relationship between subjects' environmentalist attitudes and their ecology-related beliefs, as well as the relationship among these beliefs, would be stronger for subjects exhibiting high (vs. low) affective–cognitive consistency.

At the second experimental session, we employed the linguistic device developed by Salancik and Conway (1975) to make either past pro-ecology or anti-ecology behaviors salient for subjects. Immediately afterward, we reassessed subjects' environmentalist self-perceptions and attitudes. Self-perception theory predicts that subjects for whom pro-ecology (vs. anti-ecology) behaviors are made salient will express more positive attitudes toward being environmentalists/conservationists and, to a greater extent, perceive themselves as being environmentalists. We anticipated, however, that this prediction would be borne out only among subjects previously identified as low in affective–cognitive consistency.

Method

Subjects

Subjects were male and female University of Toronto undergraduates who participated during regular lecture meetings of the first author's introductory psychology course. At the first experimental session, all 99 students in attendance completed questionnaires. Ninety-four students attended class the evening of the second session, and all responded to the experimental materials. Data from 14 of these subjects, who did not attend the first session, were discarded. Both sessions occurred early in the semester and were conducted by the senior author. The experiment and its findings were subsequently discussed during a lecture on attitudes.

Procedure and Measuring Instruments

First experimental session. After describing the study as a "survey of people's attitudes," the course instructor distributed a nine-page questionnaire to subjects. On page 1, subjects indicated their name, sex, and age, and responded to five items pertaining to the attitude object, "being an environmentalist/conservationist." Subjects first indicated their favorability (vs. unfavorability) toward the attitude object (11-point scale) and then rated the attitude object on five 7-point bipolar adjective scales (good vs. bad, wise vs. foolish, pleasant vs. unpleasant, healthy vs. sick, beneficial vs. harmful). Subjects' responses to the five scales were summed to form one semantic differential index of attitude. Both the favorability rating and the semantic differential index assessed subjects' *affect* toward the attitude object and, in addition to serving as attitude premeasures, were used in determining affective–cognitive consistency (see below). The next item (self-perception premeasure) requested subjects to rate the extent to which they considered themselves an environmentalist/conservationist (11-point scale). Finally, subjects indicated the extent to which they had *thought* about the attitude object in the past and how *personally important* they considered the attitude object (9-point scales).

The next four questionnaire pages consisted of 22 items designed to assess the *cognitive* component of subjects' attitudes. Following Rosenberg (1960, 1968), each item pertained to 1 of 22 values (e.g., happiness, a world of beauty, a sense of accomplishment, world harmony, pleasure, human welfare, good health) and consisted of two 9-point rating scales.[1] On the first scale, subjects

[1] These 22 values were selected on the basis of pretesting with a group of subjects ($n = 26$) who indicated, for each of a large set of values, whether the value was relevant to the attitude object. These subjects also indicated whether there were redundancies among values.

rated the extent to which attainment of a particular value (e.g., happiness) would be helped (vs. hindered) by "being an environmentalist/conservationist." On the second scale, subjects rated how positive (vs. negative) they considered the value. The weighted cognitive index of subjects' attitudes was calculated by multiplying their two ratings for each item and then summing the resulting 22 products (Rosenberg, 1960). Along with the affective indices described earlier, this index was used in determining affective–cognitive consistency (see below). Prior to the experiment, 89 pilot subjects completed the 22-item instrument. Analysis of their data indicated that the instrument possessed satisfactory reliability (average item total $r = .58$, coefficient $\alpha = .88$).

The next three questionnaire pages consisted of 5 opinion statements on ecology-related issues and 14 filler statements on other topics. Subjects indicated their agreement with these opinion statements on 15-point scales. The ecology-related statements were: "More nuclear power stations should be built," "Nonreturnable soft drink bottles should be outlawed," "Aerosol spray cans are damaging to the environment and should be banned," "The government should make the development of solar energy technology its highest energy priority," and "nonbiodegradable consumer goods such as colored tissue and toilet paper should be outlawed."

Finally, the last questionnaire page consisted of the 33-item Crowne-Marlowe social desirability scale (Crowne & Marlowe, 1964). This scale was included in order to explore, and hopefully to rule out, the possibility that social desirability concerns underlie persons' tendencies to exhibit affective–cognitive consistency.

After subjects had completed and handed in their questionnaires (a task requiring approximately 30 minutes), the instructor began the evening's lecture. While noting that the questionnaires would be discussed later in the term, the instructor made no mention of a second experimental session.

Second experimental session. At the beginning of class 2 weeks later, subjects were asked to complete two one-page questionnaires. On the first questionnaire, subjects indicated, for each of 26 ecology-related behavioral statements, whether or not the particular behavior was self-descriptive: Subjects were instructed to place a check mark next to behaviors they considered "true" for them and to leave blank behaviors they considered "not true." Two versions of this questionnaire, representing the two levels of the pro-ecology (vs. anti-ecology) behavior saliency manipulation (see below), were randomly distributed to subjects. On the second questionnaire, subjects indicated their name and responded to the experiment's major dependent measures. Except for minor differences in scale length, these postmanipulation measures were identical to the self-perception and two attitude premeasures: Subjects indicated the extent to which they considered themselves environmentalists/conservationists, their favorability (vs. unfavorability) toward being an environmentalist/conservationist (both 15-point scales), and rated "being an environmentalist/conservationist" on the five 7-point adjective scales described earlier.

Independent Variables

Affective–cognitive consistency. As suggested by Rosenberg (1968) and Norman (1975), affective–cognitive consistency was determined in the following way: Subjects ($N = 99$) were rank ordered on the basis of an affective index (average of each subject's Z scores on the two attitude premeasures) and also on the basis of the overall favorability implied by the weighted cognitive index. The absolute value of the discrepancy between each subject's standing in the two rankings was defined as his or her level of affective–cognitive consistency. Lower (higher) discrepancy scores reflected higher (lower) consistency. Subjects ($n = 50$) whose discrepancy scores were below the median (18.4, range = 1–98) were considered high in consistency, whereas subjects ($n = 49$) whose scores fell above the median were designated low in consistency.

Saliency manipulation. The first questionnaire distributed at the second session consisted of 13 pro-ecology and 13 anti-ecology behavioral statements of the general form "I do (or refuse to do) X," where X is pro- or anti-ecology behavior. Using the linguistic device developed by Salancik and Conway (1975), we prepared two versions of this questionnaire, one designed to make pro-ecology behaviors salient and the other designed to make anti-ecology behaviors salient. The linguistic device is based on the tested assumption (Salancik & Conway, 1975) that the probability of endorsing a statement "I do X *on occasion*" is higher than the probability of endorsing a statement "I do X *frequently*." Implementation of this device involved systematically varying the wording of the 26 behavioral statements such that, in the pro-ecology version, pro-ecology behaviors were paired with "on occasion" (or "occasionally") whereas anti-ecology behaviors were paired with "frequently" (e.g., "I occasionally pick up other persons' garbage and take it to the trash can," "I occasionally carpool rather than drive separately," "I frequently litter," "I frequently leave on lights in rooms I'm not using"). Opposite pairings were used to create the anti-ecology version of the questionnaire (e.g., "I frequently pick up other persons' garbage . . . ," "I frequently carpool . . . ," "I occasionally litter," "I occasionally leave on lights . . .").

Results

The design included two levels each of the saliency manipulation, affective–cognitive consistency, and subject sex. Since preliminary analyses yielded no significant effects involving sex, all reported analyses ignored this variable.

Check on Experimental Conditions

Saliency manipulation. To assess the success of the saliency manipulation, an analysis of variance was performed on a "salient behavior" index. This index was derived from subjects' responses to the 26-item questionnaire designed to manipulate their pro-ecology (vs. anti-ecology) behavioral endorsements and represented the number of pro-ecology statements minus the

number of anti-ecology statements that subjects actually endorsed. As expected, the main effect for the saliency manipulation proved highly significant on this index, $F(1, 76) = 29.40$, $p < .0001$: Subjects who completed the pro-ecology version of the questionnaire endorsed significantly more pro-ecology (vs. anti-ecology) behaviors as self-descriptive than did subjects who completed the anti-ecology version (M's = 5.69 vs. .58). Separate analyses on each component of the index revealed that both were affected by the manipulation: pro-ecology behaviors, $F(1, 76) = 8.32$, $p < .005$, and anti-ecology behaviors, $F(1, 76) = 36.11$, $p < .0001$. Although a marginally significant Consistency × Saliency Manipulation interaction on the salient behavior index, $F(1, 76) = 3.11$, $p = .09$, suggested that the manipulation had a slightly greater impact on the pro- and anti-ecology behavior endorsements of low-consistency (vs. high-consistency) subjects, the main effect for the saliency manipulation proved significant within both subject groups ($ps < .025$ and .001 for high- and low-consistency subjects, respectively). Further, when the influence of subjects' initial attitudes and self-perceptions on their behavioral endorsements was partialed out in an analysis of covariance on the salient behavior index, the saliency manipulation main effect remained highly significant, $F(1, 73) = 26.21$, $p < .0001$, whereas the Consistency × Saliency Manipulation interaction disappeared, $F(1, 73) = 1.42$, $p = .24$. It should also be noted that the two-way interaction proved nonsignificant in the analysis of variance on the pro- and anti-ecology components of the salient behavior index ($ps = .17$ and .12, respectively). Finally, the analyses of the salient behavior index and its two components revealed no overall differences between high- and low-consistency subject samples in terms of their means ($Fs < 1.0$) or variances ($Fs < 1.33$).

Affective–cognitive consistency. As expected, the correlation between the affective and cognitive indices used to determine affective–cognitive consistency was significant for high-consistency subjects ($r = .83$, $p < .001$) but nonsignificant for low-consistency subjects ($r = -.20$). It is important to note that the two consistency groups did not differ significantly in terms of their means or variances on the affective and cognitive indices of their attitudes (all $Fs < 1.0$). Thus, prior to the saliency manipulation, high- and low-consistency subjects evidenced no difference in the extremity or variability of their attitudes toward being an environmentalist/conservationist.

Analyses on the remaining measures assessed at the first experimental session also revealed little difference between the two consistency samples. High- and low-consistency subjects did not differ in the extent to which they reported thinking about their environmental attitudes in the past or in the extent to which they considered the attitude object personally important ($Fs < 1.0$). Whereas low-consistency (vs. high-consistency) subjects indicated greater agreement with the statement "More nuclear power stations should be built" ($p < .01$), the opinions of the two subject groups did not differ on the remaining four ecology-related issues ($Fs = 1.23$ or smaller). Finally, the fact that the two consistency groups did not differ in their Crowne-Marlowe scores ($F < 1.0$) suggests that social desirability concerns do not underlie persons' tendencies to manifest high or low affective–cognitive consistency.

Self-Perceptions and Attitudes

Analysis of variance revealed no significant differences among experimental conditions on either the self-perception premeasure or the two attitude premeasures (favorability ratings, semantic differential index). Thus, the three corresponding postmanipulation measures were treated by analyses of variance.[2]

Cell means for the postmanipulation measures appear in Table 1. The saliency manipulation main effect was significant on all three post measures: favorability ratings, $F(1, 76) = 8.48$, $p < .005$; semantic differential index, $F(1, 76) = 10.05$, $p < .005$; and self-perceptions, $F(1,76) = 4.08$, $p < .05$. Overall, subjects for whom pro-ecology (vs. anti-ecology) behaviors were made salient in the context of the second experimental

[2] Each postmanipulation measure was also submitted to an analysis of covariance, using its corresponding premeasure as the covariate. The results of these analyses were virtually identical to those reported in the text.

Table 1
Mean Postmanipulation Self-Perception and Attitude Scores as a Function of Affective-Cognitive Consistency and Salience of Pro- Versus Anti-Ecology Behaviors

	High consistency		Low consistency	
Dependent variable	P-E	A-E	P-E	A-E
Self-perceptions	9.00	9.68	11.33	8.25
Semantic differential index	29.13	28.72	31.25	26.38
Favorability ratings	11.73	11.00	12.17	10.62

Note. P-E = pro-ecology behaviors salient; A-E = anti-ecology behaviors salient. Higher numbers indicate a greater tendency to describe oneself as an environmentalist/conservationist and more positive attitudes toward being an environmentalist/conservationist. Cell *n*s ranged from 15 to 25.

session reported more positive attitudes toward "being an environmentalist/conservationist" and, to a greater extent, perceived themselves as being environmentalists. These findings replicate those reported by Salancik and Conway (1975), who studied self-perceptions and attitudes about religiosity, and thus lend further support to the self-perception account of attitude expression.

More important, however, the Consistency × Saliency manipulation interaction proved significant on subjects' semantic differential scores, $F(1, 76) = 7.01$, $p < .01$, and their self-perception scores, $F(1, 76) = 9.64$, $p < .005$. The patterning of the interaction on these variables, as well as a similar but nonsignificant patterning on subjects' favorability ratings, $F(1, 76) = 1.06$, supports our hypothesis that the saliency manipulation would more strongly influence the self-reported attitudes and self-perceptions of low-consistency (vs. high-consistency) subjects (see Table 1). Indeed, planned comparisons revealed that for low-consistency subjects, the constrast between pro- and anti-ecology conditions was significant on all three postmanipulation measures (Fs ≥ 7.91, ps $< .01$ or smaller). For high-consistency subjects, however, the pro- versus anti-ecology contrast proved nonsignificant on all three postmeasures (Fs ≤ 1.71, ps $> .15$ or larger).

Correlational analyses provided additional evidence regarding the differential informational determinants of high- and low-consistency subjects' postmanipulation responses. As expected, correlations computed between subjects' salient behavior scores (i.e., number of pro- minus anti-ecology behavioral endorsements on the manipulation questionnaire) and their postmanipulation self-perceptions and attitudes were generally higher for low-consistency (vs. high-consistency) subjects: self-perceptions, rs $= .59$ versus $.38$, $p < .10$; favorability ratings, rs $= .57$ versus $.34$, $p < .10$; and semantic differential scores, rs $= .25$ versus $.25$, *ns*. In contrast, correlations between subjects' premanipulation and postmanipulation self-perceptions/attitudes tended to be greater for high-consistency (vs. low-consistency) subjects: self-perceptions, rs $= .61$ versus $.50$, $p = .23$; favorability ratings, rs $= .58$ versus $.15$, $p < .025$; and semantic differential scores, rs $= .33$ versus $.18$, $p = .23$.[3] To explore more directly the relative influence of initial attitudes/self-perceptions versus contemporaneous behavioral informa-

[3] In evaluating these findings, it is important to note that the high- and low-consistency samples differed little in terms of their within-group standard deviations on the seven variables included in the correlational analyses. The F tests yielded only two significant group differences (all other comparisons were nonsignificant, Fs[39, 39] = 1.40 or smaller, ps $> .10$ or larger): High-consistency (vs. low-consistency) subjects manifested less variability in their premanipulation semantic differential scores (SDs = 3.49 vs. 5.19, $p < .01$) but greater variability in their postmanipulation favorability ratings ($SD = 2.05$ vs. 1.48, $p < .05$). To the extent that a restricted range on a variable reduces the magnitude of the correlation that may be observed between that variable and others, we may have overestimated (in favor of our hypothesis) the difference in correlations between consistency groups in one case (r between premanipulation and postmanipulation favorability ratings) and underestimated (in opposition to our hypothesis) group differences in two cases (r between premanipulation and postmanipulation semantic differential scores and r between salient behavior index and postmanipulation favorability ratings).

tion on subjects' final attitudes/self-perceptions, we performed three multiple regression analyses for each consistency group. Each analysis regressed one postmanipulation measure (i.e., self-perception, favorability, or semantic differential scores) on (a) its corresponding premanipulation measure and (b) the salient behavior index. The results of these analyses are shown in Table 2. Examination of the F (and associated p) values, partial rs, and beta weights for the two predictors (where comparison of β^2 for the two predictors reflects their relative importance in explaining variation in the criterion variable; cf. McNemar, 1969, p. 195) reveals that the postmanipulation self-perceptions and attitudes of high-consistency subjects were better predicted by their initial self-perceptions and attitudes than by the environmental behaviors they were induced to endorse. In contrast, low-consistency subjects' postmanipulation responses were better predicted by the environmental behaviors they endorsed than by their initial self-perceptions and attitudes.

Affective–Cognitive Consistency and Ecology-Related Beliefs

Correlational analyses explored the relationship between subjects' (premanipulation) attitudes toward being an environmentalist/conservationist and their beliefs on five ecology-related issues as well as the interrelatedness of these beliefs. These analyses included data from all 99 subjects who attended the first experimental session.

Attitude–belief relationship. Subjects' agreement with the five ecology-related opinion statements were summed to form one index, with higher scores implying greater favorability toward the environment. As expected, the correlations between this opinion index and the two attitude indices (i.e., affective and weighted cognitive index) were larger for high-consistency (vs. low-consistency) subjects: affective index, rs = .55 versus 12, $p < .01$; and cognitive index, rs = .43 versus .18, $p < .08$ (both one-tailed zs). Further, when the two attitude measures were correlated with subjects' opinions on each of the five issues, the correlation coefficient was larger for high-consistency subjects in 9 out of 10 possible group comparisons. The average correlations between subjects' ecology-related beliefs and the affective (cognitive) index were .398 (.313) and .068 (.114) for high- and low-consistency subjects, respectively.

Relationship among beliefs. As we anticipated, the ecology-related beliefs of high-

Table 2
F *Values and* β *Weights for Predictor Variables and Partial Correlations Between Predictor and Criterion Variables in Multiple Regression Equations*

Criterion variable and predictor variables	High-consistency subjects (n = 40)			Low-consistency subjects (n = 40)		
	F value	β weight	Partial r	F value	β weight	Partial r
Postmanipulation self-perceptions						
Initial self-perceptions	17.78****	.55	.57****	5.01**	.31	.34**
Salient behavior index	3.30	.24	.28**	11.56***	.47	.49****
Postmanipulation favorability ratings						
Initial favorability ratings	15.08****	.52	.54****	.62	.10	.13
Salient behavior index	2.38	.21	.24	17.86****	.56	.57****
Postmanipulation semantic differential scores						
Initial semantic differential scores	4.08*	.31	.32**	.39	.10	.10
Salient behavior index	2.00	.22	.23	1.54	.21	.20

Note. For tabled F values, dfs = 1, 37; for tabled partial rs (one-tailed tests), dfs = 37.
* $p \approx .06$. ** $p < .05$. *** $p < .01$. **** $p < .001$.

Table 3
Correlations Among Ecology-Related Beliefs for Combined Samples of High- and Low-Consistency Subjects

	1	2	3	4	5
1. Nuclear power	3.71 (3.58)	−.05	−.16	.06	.19*
2. Solar energy	.19*	3.02 (3.28)	.26**	.19*	.15
3. Nonreturnable bottles	.32***	.40***	3.45 (3.11)	.55***	.42***
4. Aerosol sprays	.21*	.13	.39***	3.20 (3.05)	.45***
5. Biodegradable products	.34***	.31***	.58***	.57***	3.40 (3.81)

Note. Intercorrelations for high-consistency subjects ($n = 94$) appear below the diagonal and those for low-consistency subjects ($n = 94$) appear above the diagonal. Within-group standard deviations (shown without [with] parentheses for high-consistency [low-consistency] subjects) for the belief measures appear along the diagonal. No significant group variance differences were obtained (Fs = 1.26 or smaller). Higher scores on the belief measures indicated less agreement that more nuclear plants should be built and greater agreement that solar energy technology should be supported, nonreturnable bottles outlawed, aerosol spray cans banned, and nonbiodegradable products outlawed (see Method section for exact wording of belief statements).
* $p < .05$. ** $p < .01$. *** $p < .005$.

consistency (vs. low-consistency) subjects tended to be more highly interrelated. The average intercorrelation among beliefs was .347 for high-consistency subjects and .238 for low-consistency subjects, and in 7 of 10 possible group comparisons, the pair-wise correlation coefficient was higher for high-consistency subjects. Because pilot subjects ($n = 89$) had also completed the opinion questionnaire and the procedure used to classify subjects into high and low consistency groups was identical for the experimental and pilot samples (i.e., the same median consistency score obtained in both samples), the two samples were combined. For this larger sample, the average relationship among beliefs was .354 and .216 for high- and low-consistency subjects, respectively. Further, as Table 3 indicates, 8 of the 10 group comparisons yielded a larger pair-wise correlation for high-consistency subjects ($p < .10$, one-tailed, by Mann-Whitney U test).[4]

Among the filler items appearing on the opinion questionnaire completed by experimental subjects were five statements dealing with the United States' cultural domination over Canada (e.g., "The number of U.S. programs shown on Canadian television should be reduced"). If, as Rosenberg (1960) claimed, the consistency construct is domain specific rather than a reflection of a general individual difference, high- and low-consistency subjects (whose consistency was assessed with respect to their environmental attitudes) should show no difference in the degree to which their beliefs about cultural domination are interrelated. In line with this reasoning, the average intercorrelation among these beliefs proved quite similar for high- and low-consistency subjects (mean rs = .343 and .391, respectively). Further, of 10 possible group comparisons, 4 yielded a larger pair-wise correlation for high-consistency subjects, whereas 5 yielded a larger correlation for low-consistency subjects (one comparison yielded a tie).

Discussion

Our hypothesis that the self-perception account of attitude expression holds primarily for individuals who do not possess well-defined prior attitudes toward the target attitude object was supported. At the second experimental session, the attitude judgments and self-perceptions of subjects with poorly

[4] A separate analysis of the beliefs expressed by high-consistency (vs. low-consistency) pilot subjects revealed that the average belief intercorrelation was .358 (vs. .215) and that 8 of the 10 possible group comparisons yielded a larger pair-wise correlation for high-consistency subjects. It should also be noted that the pair-wise correlations accounting for the 2 reversals to the overall pattern (larger rs for high-consistency subjects) in the pilot sample and the pair-wise correlations accounting for the 3 reversals in the experimental sample showed no overlap.

defined prior attitudes were strongly affected by the contemporaneous behavioral cues made available to them.: Low-consistency subjects for whom past pro-ecology (vs. anti-ecology) behaviors were made salient expressed significantly more favorable attitudes toward being environmentalists and significantly heightened perceptions of being environmentalists. Further, the regression analyses revealed that the postmanipulation responses of low-consistency subjects were better predicted by the pro- or anti-ecology nature of the behaviors they were induced to endorse than by their prior self-perceptions and environmentalist attitudes.

In contrast to these findings, subjects who were high in affective–cognitive consistency were not significantly affected by the pro-ecology (vs. anti-ecology) behavior manipulation. Although the manipulation was successful in inducing these subjects, like low-consistency subjects, to endorse pro-ecology (vs. anti-ecology) behaviors as self-descriptive, their postmanipulation attitude judgments and self-perceptions reflected no appreciable reliance on these contemporaneous behavioral cues. Presumably, high-consistency subjects possessed strong internal cues regarding their feelings and self-perceptions about being environmentalists and thus did not need to "infer" their attitudes from currently available behavioral information. Consistent with this interpretation, the regression findings indicated that the postmanipulation responses of high-consistency subjects were better predicted by their prior attitudes and self-perceptions than by the contemporaneous pro- and anti-ecology behavioral cues available to them.

Although these findings strongly support our major hypothesis, it is important that their implications for self-perception theory not be overstated. We think it would be inappropriate to conclude that the self-perception account of attitude expression holds *only* for individuals with poorly defined prior attitudes or, more specifically, that persons with well-defined attitudes *never* express attitudes that reflect, at least in part, the impact of salient and contemporaneous external cues. (Indeed, had our saliency manipulation been more potent, the final attitudes expressed by high-consistency subjects might have begun to reflect—albeit to a lesser extent than the final attitudes of low-consistency subjects—the impact of currently available behavioral cues.) Although our results indicate that both internal cue information (i.e., prior attitudes) and external cue information can influence attitudinal judgments, we suspect that the latter kind of information often predominates. As Taylor and Fiske (1978) recently suggested, individuals may frequently respond with little thought to the most salient stimuli in their environment and thus may typically express "top of the head" opinions (and other judgments) that reflect little or no information beyond that available to them in the immediate situation.

Affective–Cognitive Consistency

The fact that high- and low-consistency subjects responded in the predicted manner to our saliency manipulation, as well as the fact that their postmanipulation attitudes and self-perceptions were best predicted by internal and external cue information, respectively, is consistent with Rosenberg's (1968) hypothesis that the affective–cognitive consistency construct appropriately indexes the extent to which people possess well-defined attitudes with respect to a particular object. Our correlational analyses provided further evidence regarding the validity of the consistency construct. The relationships between subjects' environmentalist attitudes and their ecology-related beliefs, as well as the relationships among these beliefs, were stronger for high-consistency (vs. low-consistency) subjects. These findings indicate that persons who score high on the affective–cognitive consistency dimension can be distinguished from those who score low on this dimension on the basis of the presence (vs. absence) of an organized set of supporting cognitions in relation to the attitude object. In this regard, it is important to note that our two consistency groups manifested little difference in the degree to which their beliefs on a nonecology topic (cultural domination of Canada by the United States) were interrelated. This result is compatible with other research that has obtained nonsignificant correlations between subjects'

consistency scores in different attitudinal domains (Norman, 1975; Chaiken & Garisto, Note 1) and provides additional evidence for the assumption that the affective–cognitive consistency construct is truly domain specific rather than simply reflective of a more general individual difference.

Although the above findings support the utility and validity of the consistency construct as an index of attitude definition, it should be noted that we found no differences between high- and low-consistency subjects on several ancillary measures where differences had been anticipated. Thus, we found no greater tendency for high-consistency (vs. low-consistency) subjects to consider the attitude object personally important or to report thinking about their attitudes in the past. Correlations between subjects' consistency scores and these measures were also low and nonsignificant ($rs = .12$ and .09 for thought and importance ratings, respectively).[5] In addition, Fazio and Zanna (1978) found no relationship between affective–cognitive consistency and several other potential indicants of attitude strength: self-reported certainty of attitude and number of past direct experiences with the attitude object.

The lack of a relationship between quantity of direct experiences with the attitude object and structural consistency does not necessarily undermine the validity of this construct. Certainly, people seem capable of forming strong, well-defined attitudes toward objects with which they have had no personal direct experiences (e.g., capital punishment, abortion). The possibility that structural consistency is unrelated to individuals' self-reports of the personal importance of the attitude object, the amount of time they have spent thinking about their attitudes in the past, and their attitudinal certainty is somewhat more disconcerting, since it seems reasonable that people would be more likely to form well-defined attitudes toward objects of greater personal importance and that people possessing well-defined attitudes would have thought more about and would express greater confidence in their attitudes. Clearly, more research examining the relationship between affective–cognitive consistency and these and other possible indicants of attitudinal strength or definition, as well as research exploring possible antecedents of structural consistency, is necessary before the validity of this construct can be fully accepted. Given the apparent lack of relationship between affective-cognitive consistency and various self-report indicants of attitudinal strength, such research might also entertain the interesting possibility that people whose attitudes are characterized by high (vs. low) structural consistency and whose behavior, in our own and previous research (Norman, 1975; Rosenberg, 1968), indicates that they possess strong, well-defined attitudes are, for whatever reason, not especially aware of this fact.

Before we conclude, two additional points about the affective–cognitive consistency construct deserve mention. First, it is important to note that this construct assumes the validity of a multicomponent view of attitudes (cf., Bagozzi, 1978; Katz & Stotland, 1959; Kothandapani, 1971; Ostrom, 1969; Rosenberg, 1968). Although popular at one time, this conceptualization has been largely superseded in recent years by a unidimensional view that regards the cognitive and affective (and conative) components of attitude as alternative measures of the same underlying affective dimension rather than as distinguishable constructs (cf. Fishbein & Ajzen, 1974, 1975). The present findings, as well as previous research on affective–cognitive consistency (Norman, 1975; Rosenberg, 1968), support the idea that affect and cognition represent differentiable components of attitude. Further, using confirmatory factor analysis, Bagozzi and Burnkrant (1979) recently substantiated the validity of a two-component (affective/cognitive), but not a single-component (affective), model of attitude. The view that attitude is a multidimensional construct clearly

[5] Norman (1975), who studied attitudes toward volunteering for psychological research, also found no relationship between subjects' consistency scores and the extent to which they considered the attitude object important or reported thinking about the attitude object in the past. Also in line with our findings, Norman found no differences between his high- and low-consistency subjects in the extremity of their attitudes. Thus, there is little reason to believe that individuals whose attitudes are characterized by high (vs. low) consistency will necessarily possess highly polarized attitudes.

deserves renewed empirical attention by attitude researchers. To illustrate only one possible direction that such research might take, we are currently pursuing Greenwald's (1968) suggestion that the affective and cognitive components of attitude may have separate antecedents (Chaiken & Garisto, Note 1).

Finally, it is interesting to compare the affective–cognitive consistency construct and existing research on this variable with recent theorizing and research in personality psychology regarding self-schemata (Kuiper & Rogers, 1979; Markus, 1977; Rogers, Kuiper, & Kircker, 1977). According to self theorists (e.g., Markus, 1977), individuals who are schematic (vs. aschematic) along a particular trait dimension (e.g., independence–dependence) are people who possess well-articulated cognitive generalizations about the self in that trait domain. Because an attitude can be regarded as a judgment concerning the self's orientation toward some object, an individual whose attitude toward some object is characterized by high (vs. low) affective–cognitive consistency might plausibly be labeled *attitude schematic* (vs. *aschematic*).

Existing research indicates that self-schemata facilitate the processing of information about the self and that schematics (vs. aschematics) can supply more behavioral evidence supporting their self-perceptions, are more resistant to counterschematic information, and exhibit greater confidence in predicting their behaviors on schema-related dimensions (Kuiper & Rogers, 1979; Markus, 1977; Rogers et al., 1977). Schematics are also postulated to manifest greater cross-situational consistency in their trait-related behaviors (Markus, 1977). The idea that affective–cognitive consistency may be a schemalike concept is given credence by Norman's (1975) demonstration that people who exhibit high (vs. low) structural consistency manifest greater attitude–behavior correspondence. Also compatible with this notion are Rosenberg's (1968) demonstration that higher affective–cognitive consistency confers greater resistance to persuasion and the present study's results, since both experiments could be interpreted as indicating that attitude-schematic individuals are more resistant to counterschematic information.

We believe that it would be premature to assert that the assessment of affective–cognitive consistency provides an acceptable method for identifying persons whose stated attitudes do or do not reflect a well-articulated schema in a particular attitudinal domain. Nevertheless, we are intrigued by the theoretical and empirical parallels that seem to exist between the affective–cognitive consistency literature and the literature on self-schemata, and feel that further research exploring the utility of the consistency construct as a measure of attitude schematicity is warranted. As suggested by the literature on self-schemata, such research might investigate whether greater structural consistency facilitates the processing of attitude-relevant information, whether high- and low-consistency persons differ in their predictions regarding the likelihood of performing attitude-consistent behaviors, and whether they differ in their ability to provide behavioral or cognitive evidence supporting their stated attitudes.

Reference Note

1. Chaiken, S., & Garisto, B. *Experiential antecedents of affective–cognitive consistency.* Research in progress, University of Toronto, 1981.

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