

## Twenty Years of Cognitive Dissonance: Case Study of the Evolution of a Theory

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Recent revisions of cognitive dissonance theory no longer encompass some of the important examples, data, and hypotheses that were part of Festinger's original statement. Further, the psychological character of the motivation for cognitive change can be interpreted, in recent statements of the theory, as a need to preserve self-esteem rather than a need to maintain logic-like consistency among cognitions. These changes are so substantial as to prompt the observation that the evolved theory might be identified as a different theory—in fact, as one that predates cognitive dissonance theory. A final, disturbing thought: What if the original dissonance theory, which has now surrendered its name to somewhat different ideas, was correct?

Since the original statement by Festinger in 1957, there have been periodic major restatements of cognitive dissonance theory (Aronson, 1968; Brehm & Cohen, 1962; Wicklund & Brehm, 1976). Each of the restatements of dissonance theory has described a major constriction of Festinger's (1957) original premise that dissonance is a motivational state aroused by the juxtaposition of two cognitive elements,  $x$  and  $y$ , when "not- $x$  follows from  $y$ " (p. 13). Brehm and Cohen (1962) noted that inconsistency had strong motivational properties only when an individual was bound by a behavioral commitment to one of the inconsistent cognitions. In Aronson's (1968) statement, dissonance was hypothesized to be a significant motivational force only when the self-concept or some other firmly held expectancy was involved. In the most recent statement, Wicklund and Brehm (1976) have incorporated and refined the two earlier revisions in terms of the concept of personal responsibility: "Recent research . . . has made it abundantly clear that dissonance reduction as we know it takes place only when the dissonant elements have been brought together through the personal responsibility of the individual who experiences dissonance" (p. 7).

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### Observations on the Evolution of Cognitive Dissonance Theory

Wicklund and Brehm (1976) commented on the 20-year history of dissonance theory by observing, "To the extent that dissonance theory has evolved since 1957, the evolution has been primarily due to the discovery that responsibility is a prerequisite for effects that we call dissonance reduction" (p. 71). While this may seem a modest change, the reader who peruses the original statement of the theory (Festinger, 1957) will discover the following substantial changes:

1. *Several of the original defining illustrations of cognitive dissonance are not encompassed by the contemporary definition.* Among these are:

If a person believed that man will reach the moon in the near future and also believed that man will not be able to build a device that can leave the atmosphere of the earth, these two cognitions are dissonant with one another. (Festinger, 1957, p. 14)

If a person were standing in the rain and yet could see no evidence that he was getting wet, these two cognitions would be dissonant with one another. (Festinger, 1957, p. 14)

In the present version of the theory, neither of these situations is expected to arouse dissonance because they have no apparent element of personal responsibility. (The role of personal responsibility in the definition of

dissonance is discussed further under the fourth point below, concerning the psychological character of the theory's motivation for cognitive change.)

2. As a consequence of the revised definition of dissonance, *some of the evidence once taken as support for dissonance theory is no longer germane*. Here are two examples.

First, Festinger (1957, pp. 158-162) cited an experiment by Ewing (1942) in support of a dissonance prediction about effects of unexpected exposure to a disagreeable communication. Ewing found that the communication produced greater attitude change among audience members who had been led not to expect that the communication would disagree with their prior opinions than among audience members who were led (properly) to expect the communication to disagree. In the present version of dissonance theory, since Ewing's audience members should not have felt responsible for their exposure to the unexpected disagreeing information, there should be no expectation that this condition would enhance dissonance reduction via opinion change.

Second, Festinger (1957, pp. 236-239) noted that there should be dissonance arising from the experience of being in a massive earthquake without experiencing personal injury or other damages. He cited support for this analysis in a study of rumors that occurred following a major earthquake in India in 1934. The rumors, which "predicted terrible disasters to come" (p. 238), were seen by Festinger as serving to reduce dissonance. Because, however, the local inhabitants should not have felt personally responsible for their experience of "living in the area which received the shock of the earthquake but which did not suffer any damage" (p. 237), this evidence is not pertinent to the present version of dissonance theory.

3. *One of Festinger's (1957) original "basic hypotheses" (p. 3) has had sufficient confirmation to have been, in effect, dropped from the theory*. The hypothesis was "When dissonance is present, in addition to trying to reduce it, the person will actively avoid situations and information which would likely increase the dissonance" (p. 3). Wicklund and Brehm (1976) have concluded that "it is difficult to obtain evidence for selective avoidance of 'dissonance-arousing' information" (p. 189).

4. *The psychological characteristics of the motivation for dissonance reduction have changed*. In the original theory, dissonance was a

state of discomfort associated with any inconsistency between relevant cognitions. The psychological essence of the motivational state was something akin to logical inconsistency as indicated by the words "follow from" in the definition (Festinger, 1957, p. 13): "Two elements are in a dissonant relation if, considering these two alone, the obverse of one element would follow from the other." In contrast, the motivational force in present versions of dissonance theory has much more of an ego-defensive character.

As noted earlier, self-concept cognitions were first made important in dissonance theory in Aronson's (1968) analysis. Wicklund and Brehm (1976) would appear to have steered away from Aronson's appeal to self-concept. However, their assumption that dissonance is aroused only when a person is responsible for producing some undesired consequence makes it difficult to distinguish their conception of dissonance reduction from one of ego defense.<sup>1</sup> This point may be illustrated by observing that contemporary dissonance theorists analyze the counterattitudinal role-playing experiment as involving dissonance between the cognitive elements A (*I believe X*, where X is the initial opinion) and B (*I agreed to advocate not-X*). Taken by itself, this AB pair of cognitions has an obvious property of logic-like inconsistency. However, because responsibility for undesired consequences is also assumed to be present when dissonance is aroused, it becomes possible to hypothesize

<sup>1</sup> Wicklund and Brehm (1976) did not, in fact, assert that a person must be responsible for producing an undesired consequence in order to experience dissonance (see their exact statement about responsibility quoted in the first paragraph of this article). However, a more recent statement by Brehm (Note 1) has made this explicit: "A dissonance reduction effect is obtained when a person brings about a consequence that he would (in the absence of other forces) avoid as long as he knew that the consequence would or could happen." Some other currently active dissonance researchers, Mark Zanna and Joel Cooper, similarly have stated that the condition necessary for dissonance arousal is "responsibility for aversive consequences" (Cooper, Note 2). The responsibility-for-undesired-consequences definition of dissonance is a product of two decades of research on counterattitudinal role playing, originating in experiments by Kelman (1953) and Festinger and Carlsmith (1959) and culminating in publications by Calder, Ross, and Insko (1973) and Collins and Hoyt (1972). In both of the latter articles, responsibility for undesired consequences was pinpointed as a condition that maximized attitude change in the direction of counterattitudinal role playing.

that the pair of cognitions that produces tension toward cognitive change is not the AB pair just described, but rather a somewhat different pair, that is, C (*I caused [undesired] consequence Y*) and a self-concept cognition, D (*I am a good [or intelligent] person who does not do such evil [or stupid] things*). In this fashion, it is possible to argue that the motivation for cognitive change in contemporary versions of dissonance theory is indistinguishable from ego defense.

#### Dissonance Theory and Self Theory: Convergent Evolution

Cognitive dissonance theory has shown a history of adapting its theoretical statement to be consistent with the body of empirical data it has spawned. Interestingly, the behavior of the theorists doing the revising is a near-perfect illustration of dissonance reduction of the sort intended in the original statement of the theory but excluded by the present version. (It is excluded in the present version because those doing the revising were often not personally responsible either for the earlier versions or for the data that suggested their revisions.)

The continuing process of adjusting a theoretical statement to maintain its currency with empirical data is scientifically questionable. Revision, as opposed to rejection, of a theory is acceptable only so long as basic characteristics of the theory remain intact. In the case of dissonance theory, the emerging centrality of the notion of personal responsibility for undesired consequences does appear to have changed the basic character of the theory. The theory seems now to be focused on cognitive changes occurring in the service of ego defense, or self-esteem maintenance, rather than in the interest of preserving psychological consistency. Indeed, contemporary dissonance theory bears a striking resemblance to theoretical statements about ego-related cognitive processes that existed well before Festinger's (1957) statement. For example,

When a person reacts in a neutral, impersonal, routine atmosphere, his behavior is one thing. But when he is behaving personally, perhaps excitedly, seriously committed to a task, he behaves quite differently. In the first condition his ego is not engaged; in the second condition it is. . . . We have seen that *under conditions of ego-involvement the whole personality manifests greater consistency in behavior*, reveals not specificity

in conduct but generality and congruence. (Allport, 1943, pp. 459, 472, italics added)

If self-deception either by denial or by disguise is accepted as characteristic of a [defense] mechanism, the problem still remains as to the source of or reasons for the self-deception. The obvious interpretation is that the need for self-deception arises because of a more fundamental need to maintain or to restore self-esteem. Anything belittling to the self is to be avoided. (Hilgard, 1949, p. 374)

As experiences occur in the life of the individual, they are either (a) symbolized, perceived and organized into some relationship to the self, (b) ignored because there is no perceived relationship to the self-structure, (c) denied symbolization or *given a distorted symbolization because the experience is inconsistent with the structure of the self*. (Rogers, 1951, p. 503, italics added)

It seems nearly as difficult to accept a perception which would alter the self-concept in an expanding or socially acceptable direction as to accept an experience which would alter it in a constricting or socially disapproved direction. (Rogers, 1951, p. 506)

While the above statements are harmonious with contemporary versions of dissonance theory and its associated body of empirical data, they have little direct pertinence to the original version. Dissonance theory has evolved, in other words, in the direction of convergence with a body of theory that predated it.

The passages quoted above from Allport (1943) and Hilgard (1949) were from addresses in which each forecast a shift in psychological theory to a focus on self or ego. This predicted focus on self was apparent in clinical psychology and personality theory in the 1940s and 1950s, as exemplified in the influential nature of the work of Allport, Goldstein, Maslow, Snygg and Combs, and Rogers. Social psychologists, on the other hand (and after a long delay relative to the prediction), appear to have backed into a focus on self. This emerging trend in social psychology is apparent not only in the evolution of cognitive dissonance theory but in other developments such as (a) the interest in differences in inference (attribution) processes for self-relevant versus other-relevant information (this is referred to as the *actor-observer distinction* by attribution theorists, e.g., Jones & Nisbett, 1971), (b) theoretical interpretation of the consequences of

perceptual focus on the self (Duval & Wicklund, 1972; Scheier & Carver, 1977), and (c) the incipient development of a body of data in which "self" is demonstrated to be an organizing principle in human information processing (e.g., Cantor & Mischel, 1977; Markus, 1977; Rogers, Kuiper, & Kirker, 1977).

#### Final Observation: Status of the Original Dissonance Theory

There have been many good consequences of the 20-year history of dissonance theory. If the present authors are correct in assuming that the 20-year evolution signals a birth of social psychological interest in the construct of "self," this convergence with self theory should not be regarded as a step backward. Rather, the many studies inspired by dissonance theory assure that the new focus on self will proceed from a strong foundation of relevant empirical findings.

Perhaps the only victim of the evolutionary process is the original version of dissonance theory, which has effectively been discarded. But has it ever really been proven wrong?

Consider the possibility that dissonance researchers abandoned portions of the original theory because their experiments inadvertently tapped self-protective cognitive processing instead of, or in addition to, dissonance reduction. The ego-related cognitive processes, being relatively easy to observe, may have pulled the theory in their direction. Had effort been directed instead at achieving more precise methods of testing the original dissonance formulation, perhaps more support for it would have been obtained. Possibly, dissonance-reduction effects in the original sense exist but are weaker than the self-esteem-maintaining effects that have been observed. For this reason, the experiments needed to observe effects predicted by the original dissonance theory must be carefully designed to avoid confounding with self-esteem processes and must also be powerful enough to detect relatively small effects. Are these experiments still worth doing?

#### Postscript: An Appreciation of Dissonance Theory

The authors, along with many others, believe that dissonance theory has been an extremely stimulating force within and beyond social psychology. The enigmas posed by the original statement of dissonance theory and later, by

the juxtaposition of that statement with research results, have motivated research that has advanced greatly the understanding of human cognition. We have observed that, in the course of these 20 years of empirical and theoretical advance, dissonance theory has evolved in a direction of convergence with ideas from the tradition of self theory. At the time of this writing, dissonance theory is still actively inspiring novel empirical findings and evolving further theoretically (e.g., Cooper, Note 3; Zanna, Note 4); perhaps to a point at which the present observations about congruence with self theory may soon be outdated. The pace of theoretical evolution indicates the sustained vigor of the dissonance theory tradition. At the same time, this rapid evolutionary pace entails a risk that some ideas will be accepted or abandoned without adequate empirical scrutiny.

#### Reference Notes

1. Brehm, J. W. Personal communication, November 15, 1977.
2. Cooper, J. Personal communication, February 10, 1977.
3. Cooper, J. The arousal of dissonance and responsibility for aversive events. In Charles A. Kiesler (Chair), *Twenty years later: Current perspectives on cognitive dissonance*. Symposium presented at the meeting of the Society of Experimental Social Psychology, Austin, Texas, October 1977.
4. Zanna, M. P. Self perception, dissonance, and ego defensive style. In Charles A. Kiesler (Chair), *Twenty years later: Current perspectives on cognitive dissonance*. Symposium presented at the meeting of the Society of Experimental Social Psychology, Austin, Texas, October 1977.

#### References

- Allport, G. W. The ego in contemporary psychology. *Psychological Review*, 1943, 50, 451-478.
- Aronson, E. Dissonance theory: Progress and problems. In R. P. Abelson et al. (Eds.), *Theories of cognitive consistency: A sourcebook*. Chicago: Rand McNally, 1968.
- Brehm, J. W., & Cohen, A. R. *Explorations in cognitive dissonance*. New York: Wiley, 1962.
- Calder, B. J., Ross, M., & Insko, C. A. Attitude change and attitude attribution: Effects of incentive, choice, and consequences. *Journal of Personality and Social Psychology*, 1973, 25, 84-99.
- Cantor, N., & Mischel, W. Traits as prototypes: Effects on recognition memory. *Journal of Personality and Social Psychology*, 1977, 35, 38-48.
- Collins, B. E., & Hoyt, M. F. Personal responsibility-for-consequences: An integration and extension of the "forced compliance" literature. *Journal of*

- Experimental Social Psychology*, 1972, 8, 558-593.
- Duval, S., & Wicklund, R. A. *A theory of objective self awareness*. New York: Academic Press, 1972.
- Ewing, T. A study of certain factors involved in changes of opinion. *Journal of Social Psychology*, 1942, 16, 63-88.
- Festinger, L. *A theory of cognitive dissonance*. Stanford, Calif.: Stanford University Press, 1957.
- Festinger, L., & Carlsmith, J. M. Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology*, 1959, 58, 203-210.
- Hilgard, E. R. Human motives and the concept of self. *American Psychologist*, 1949, 4, 374-382.
- Jones, E. E., & Nisbett, R. E. The actor and the observer: Divergent perceptions of the causes of behavior. In E. E. Jones et al. (Eds.), *Attribution: Perceiving the causes of behavior*. Morristown, N.J.: General Learning, 1971.
- Kelman, H. Attitude change as a function of response restriction. *Human Relations*, 1953, 6, 185-214.
- Markus, H. Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, 1977, 35, 63-78.
- Rogers, C. R. *Client-centered therapy: Its current practice, implications, and theory*. Boston: Houghton Mifflin, 1951.
- Rogers, T. B., Kuiper, N. A., & Kirker, W. Self-reference and the encoding of personal information. *Journal of Personality and Social Psychology*, 1977, 35, 677-688.
- Scheier, M. F., & Carver, C. S. Self-focused attention and the experience of emotion: Attraction, repulsion, elation, and depression. *Journal of Personality and Social Psychology*, 1977, 35, 625-636.
- Wicklund, R. A., & Brehm, J. W. *Perspectives on cognitive dissonance*. Hillsdale, N.J.: Erlbaum, 1976.

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