



# Lifestyle Visions

Presents

# Cognitive Dissonance

Description and Treatment Protocol

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## Research Report: Cognitive Dissonance

### Overview

According to cognitive dissonance theory, there is a tendency for individuals to seek consistency among their cognitions (i.e., beliefs, opinions). When there is an inconsistency between attitudes or behaviors (dissonance), something must change to eliminate the dissonance. In the case of a discrepancy between attitudes and behavior, it is most likely that the attitude will change to accommodate the behavior.

Two factors affect the strength of the dissonance: the number of dissonant beliefs, and the importance attached to each belief. There are three ways to eliminate dissonance: (1) reduce the importance of the dissonant beliefs, (2) add more consonant beliefs that outweigh the dissonant beliefs, or (3) change the dissonant beliefs so that they are no longer inconsistent.

Dissonance occurs most often in situations where an individual must choose between two incompatible beliefs or actions. The greatest dissonance is created when the two alternatives are equally attractive. Furthermore, attitude change is more likely in the direction of less incentive since this results in lower dissonance. In this respect, dissonance theory is contradictory to most behavioral theories, which would predict greater attitude change with increased incentive (i.e., reinforcement).

### Scope/Application

Dissonance theory applies to all situations involving attitude formation and change. It is especially relevant to decision-making and problem-solving.

#### Example:

Consider someone who buys an expensive car but discovers that it is not comfortable on long drives. Dissonance exists between their beliefs that they have bought a good car and that a good car should be comfortable. Dissonance could be eliminated by deciding that it does not matter since the car is mainly used for short trips (reducing the importance of the dissonant belief) or focusing on the car's strengths such as safety, appearance, handling (thereby adding more consonant beliefs). The dissonance could also be eliminated by getting rid of the car, but this behavior is a lot harder to achieve than changing beliefs.

#### Principles:

1. Dissonance results when an individual must choose between attitudes and behaviors that are contradictory.
2. Dissonance can be eliminated by reducing the importance of the conflicting beliefs, acquiring new beliefs that change the balance, or removing the conflicting attitude or behavior.

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## Cognitive Dissonance Theory of Leon Festinger

Aesop tells a story about a fox that tried in vain to reach a cluster of grapes that dangled from a vine above his head. The fox leapt high to grasp the grapes, but the delicious-looking fruit remained just out of reach of his snapping jaws. After a few attempts the fox gave up and said to himself, "These grapes are sour, and if I had some I would not eat them."

### Dissonance: Discord Between Behavior and Belief

Aesop's fable is the source of the phrase "sour grapes." The story illustrates what former Stanford University social psychologist Leon Festinger called *cognitive dissonance*. It is the distressing mental state in which people feel they "find themselves doing things that don't fit with what they know, or having opinions that do not fit with other opinions they hold."

The fox's retreat from the grape arbor clashed with his knowledge that the grapes were tasty. By changing his attitude toward the grapes, he provided an acceptable explanation for his behavior.

Festinger considered the human need to avoid dissonance as basic as the need for safety or the need to satisfy hunger. It is an aversive drive that goads us to be consistent. The tension of dissonance motivates us to change either our behavior or our belief in an effort to avoid a distressing feeling. The more important the issue and the greater the discrepancy between behavior and belief, the higher the magnitude of dissonance that we will feel. In extreme cases cognitive dissonance is like our cringing response to fingernails being scraped on a blackboard—we'll do anything to get away from the awful sound.

### Three Hypotheses: Ways to Reduce Dissonance Between Attitudes and Actions

The focus of cognitive dissonance theory is attitude change. Festinger hypothesized three mental mechanisms people use to ensure that their actions and attitudes are in harmony. Because teaching is about influence as well as instruction, I've found that the principles of cognitive dissonance theory apply to students' interactions with me and among themselves. I'll illustrate different aspects of the theory from events in a class students referred to as "The Island Course."

For twenty years I taught a two-week off-campus seminar on the topic of group dynamics. Limited to eight students, this summer school class was held on a remote island in northern Lake Michigan. Travel to and from the island was by a single-engine airplane I piloted. All of us lived together in a cabin that is the only structure on the island. Except when a few of us flew off the island to buy groceries, group members had only each other to talk with.

Although the format of the seminar included regular reading assignments and four hours of class a day, the island course was primarily a venture in experiential education. We learned about group dynamics by studying our own interaction. Students were asked to adopt the role of participant-observer. Whatever happened among us became a legitimate topic for group discussion.

My goals for the course went beyond academic knowledge. I openly embraced the humanistic values that Carl Rogers advanced—congruence, empathic understanding, and unconditional positive regard. (See the introduction to the Relational Development section.) I encouraged students to enact these values through appropriate self-disclosure,



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sensitive listening, and positive feedback that would enhance self-esteem. I also tried to facilitate an honest discussion of the conflict that inevitably comes up when living in close quarters.

Advocates of experiential learning are often lavish in their claims of life-changing impact, yet notoriously short on evidence of long-term positive results. Did the island course achieve my ambitious agenda? In an effort to find out I surveyed the 150 former students whose collective experience spanned two decades. The open-ended responses of the 115 alumni who replied not only provide evidence of lasting impact, they also attest to the power of cognitive dissonance. I've changed their names, but I'll cite their actual words to show how the potential discomfort of conflicting thoughts can induce people to alter their beliefs and actions.

### Hypothesis 1: Selective Exposure Prevents Dissonance

Festinger claimed that people avoid information that is likely to increase dissonance. Not only do we tend to select reading material and television programs that are consistent with our existing beliefs, we usually choose to be with people who are like us. By taking care to "stick with our own kind," we can maintain the relative comfort of the status quo. Like-minded people buffer us from ideas that could cause discomfort. In that sense, the process of making friends is an example of selecting our own propaganda.

Students self-selected themselves for the island seminar; no academic program required the class. Each applicant came for a thirty-minute interview with me before signing up for the course. On one level the meetings gave me a chance to make sure I was putting together a diverse group. Their main function, however, was to give students a chance to consider whether or not they would be comfortable sharing openly with others and, in turn, receiving feedback from the group. I'm not an advocate of forced intimacy, nor did I desire to create dissonance.

Selective exposure worked well in most cases. The majority of students signed up because they were primed for personal change, so like Rodney, they were open to comments from others.

*Rodney:* The island trip came at a major turning point in my life. I was beginning to tire of being the class clown. It was difficult to bullshit Em and the other students. They saw through the mask to an intelligent, introspective guy. I welcomed the opportunity to be quiet.

Over half the respondents recorded a major relational stress occurring shortly before we came together—marriage, falling in love, broken engagement, divorce, date rape, and death of a friend. They, like Rodney, welcomed the open atmosphere they found on the island, and experienced little or no dissonance.

The process of selective exposure failed to protect everyone from dissonance. Kari was one who felt disconnected and lonely, wary of an island-induced togetherness with people she barely knew.

*Kari:* I don't put myself in situations where I don't know the people I'm with. Even a handpicked, carefully selected group is more than I would do without being friends with at least one beforehand.

German psychologist Dieter Frey surveyed all the pertinent research on selective exposure and concluded that the avoidance mechanism doesn't kick in if we don't regard the dissonant information as a threat. Warm personal relationships are probably the best guarantee that we'll consider discrepant views:

*Jake:* At first I thought the people on the island were a bunch of dorks. They viewed me as never serious, insincere, and aloof. I saw myself as very caring and fun to be around. As the barriers broke down, I realized that they were the caring ones. They cared enough to be honest. I learned to be more real with my classmates and friends. The dork conspiracy showed me that there was no substitute for honesty in relationships. If you can't be who you are, who are you?



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### Hypothesis 2: Post Decision Dissonance Creates A Need for Reassurance

According to Festinger, close-call decisions can generate huge amounts of internal tension after the decision has been made. Three conditions heighten post decision dissonance:

- (1) the more important the issue,
- (2) the longer an individual delays in choosing between two equally attractive options, and
- (3) the greater the difficulty involved in reversing the decision once it's been made, then the more the person will agonize over whether he or she has made the right choice. Sometimes referred to as "morning-after" doubts, the misgivings or second thoughts that plague us after a tough choice motivate us to seek reassuring information and social support for our decision.

A classic example of post decision dissonance is the mental turmoil a person experiences after signing a contract to buy a new car. The cost is high, there are many attractive models from which to choose, and the down payment commits the customer to go through with the purchase. It's not unusual to find a customer in the library poring over the pages of the *Consumer Reports* auto issue *after* placing an order. The buyer is seeking information that will quiet nagging doubts.

Daily living on the island required students to make lots of group decisions. What kind of food did they want to buy with limited funds? When would they turn off the generator at night? On what basis were they willing to be graded? By far the hardest decision for most students turned out to be whether or not to voice the conflict they felt with another person.

*Karen:* A guy in the course had a habit of hugging people—it bothered me. He crossed over my personal boundaries for someone I didn't know very well. I finally told him in the kindest way I knew, but he didn't take it well. I still remember how torn up I felt inside. Did I do the right thing?

That night Karen sought support from the other women in the group. Their reassurance put her qualms to rest. She now looks back on the experience as positive, a first step at learning not to be afraid of honesty with others and asserting her rights.

### Hypothesis 3: Minimal Justification for Action Induces a Shift in Attitude

Persuasion researchers have long distinguished between public compliance and private acceptance. But before cognitive dissonance theory came along, it seemed natural to think of inner attitude and outward behavior as the beginning and end of a cause-and-effect sequence.

For example, suppose I want students at the island to study more and water-ski less. Conventional wisdom suggests that I must convince them that the reading assignments are filled with valuable insights that apply to their lives. Then they'll study and value the material.

#### Attitude $\leftrightarrow$ Behavior

Festinger's minimal justification hypothesis reverses the sequence. The hypothesis suggests that the best way for me to stimulate long-term student interest in group dynamics literature is to get them to read it.



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### Behavior $\neq$ Attitude

Festinger attached one important condition, however. Instead of giving students massive rewards for studying the material—granting automatic As, doubling the food budget, bestowing lavish praise—I should offer only the minimum incentive required to draw them away from the beach to the books.

Thus if one wanted to obtain private change in addition to mere public compliance, the best way to do this would be to offer just enough reward or punishment to elicit overt compliance.

Festinger's advice squares with what I observed on the island. In the early years of the course, test scores made up the bulk of the final grade. Students dutifully read the assigned material, yet once the test was over; they showed little interest in the ideas presented. In later years, quizzes counted for only 10 to 20 percent of the total grade, yet students still did the reading. Perhaps a feeling of group accountability or conformity pressure spurred them on. Whatever the reason, it was these students who brought an interest in the theoretical concepts of group dynamics back to campus. From my perspective, minimal justification brought about the best results.

*Joan:* I have thought from time to time over the years that of all the course work I've done through the doctoral level that I've retained more from the Island Course than any other.

### Tracking Down the Cause and Effect of Dissonance

The noncommonsensical nature of Festinger's minimal justification hypothesis generated a great deal of hostility in social science circles. Theorists who interpreted all behavior as the result of incentives seemed affronted at the notion that rewards might hurt a cause rather than help it. The controversy stimulated a mass of studies from advocates and detractors of the surprising prediction. It all began with the famous \$1/\$20 experiment.

### Would I Lie to You?

In the late 1950s, Festinger and James Carlsmith recruited Stanford University men to participate in a psychological study of unknown purpose. As each man arrived at the lab, he was assigned the boring and repetitive task of sorting a batch of spools into lots of twelve and turning square pegs a quarter turn to the right. The procedure was designed to be both monotonous and tiring. At the end of an hour the experimenter approached the subject and made a request. A student assistant had supposedly failed to show up, and the researcher needed someone to fill in by telling a potential female subject in the waiting room how much fun the experiment was. Dissonance researchers call this "counter-attitudinal advocacy." We'd call it lying.

Some of the men were promised \$1 to express enthusiasm about the task; others were offered \$20. It is comforting to know that six of the men refused to take part in the deception, but most students tried to recruit the young woman. The typical conversation was similar for both payment conditions:

She: "I heard it was boring."

He: "Oh no, it's really quite interesting."

What did differ were privately expressed attitudes after the study was over. Students who lied for \$20 confessed that they thought the task of sorting spools was dull. Those who lied for \$1 maintained that it was much more enjoyable.



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(Festinger and Carlsmith practiced their own form of deception in the study—subjects never received the promised money.)

By now you should have a pretty good idea of how dissonance theorists analyze the results. They note that \$20 was a huge sum of money (worth more than \$50 in today's economy). If a student felt qualms about telling a "white lie," the cash was a ready justification. Thus he felt little or no tension between his action and attitude. But the men who lied for a dollar had lots of cognitive work to do. The logical inconsistency of saying a boring task was interesting had to be explained away through an internal dialogue:

I'm a Stanford man. Am I the kind of guy who would lie for a dollar? No way. Actually what I told the girl was true. The experiment was a lot of fun.

Festinger says that \$1 was just barely enough to induce compliance to the experimenter's request, so students had to create another justification. They changed their attitudes toward the task to bring it into line with their behavior.

You can probably think of alternative ways to account for Festinger and Carlsmith's findings. The study has been replicated and modified many times in an effort to close off loopholes that would admit other explanations. The results have made it necessary to qualify Festinger's minimal justification hypothesis. Today most persuasion researchers accept a revised version of cognitive dissonance theory.

### Saving Face: The Rationalizing Animal

University of California social psychologist Elliot Aronson was attracted to cognitive dissonance theory because of Leon Festinger's startling minimal justification prediction. He quickly determined that the theory in its original form had some "conceptual fuzziness." It failed to state the conditions under which a person would definitely experience dissonance. When early disciples of Festinger weren't sure what the theory predicted, their advice was, "If you want to be sure, ask Leon."

Aronson concluded that the issue isn't *logical* inconsistency, but *psychological* inconsistency. We aren't rational animals; we are rationalizing animals who want to appear reasonable to ourselves. He interprets the \$1/\$20 experiment as a study of self-esteem maintenance. "If dissonance exists, it is because the individual's behavior is inconsistent with his self-concept." The Stanford men were in a bind because they regarded themselves as decent, truthful human beings. If they had seen themselves as liars, cheats, or jerks, they would have felt no tension.

According to Aronson, the amount of dissonance a person can experience is directly proportional to the effort he or she has invested in the behavior. Since Marine boot camp is tougher than basic training in the regular Army, Aronson would expect a recruit to feel greater tension if he violated the norms of the Marine Corps. The harder it is to get into a group, the more an initiate values membership. Rarely does a football player brag that his coach schedules light workouts.

Even the reactions of Aesop's fox make sense in light of the animal's low investment of energy. Aronson points out that the fox wouldn't think the grapes were sour if he had spent the whole afternoon jumping to get them. Attitudes follow behavior because of the effort we've committed.

For many who enrolled in the island seminar, the feature of the course that took the most effort was a self-disclosure exercise labeled "This Is Me." Each night after dinner one person would have an uninterrupted thirty minutes to tell the



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story of his or her life. The open-ended format allowed students to select a level of transparency within their comfort zone. For a few painfully shy students like Jason, however, the anticipatory dissonance was acute. As cognitive dissonance theory predicts, so was the transformation.

*Jason:* Before the autobiographical "This Is Me" time, I was extremely nervous. I couldn't imagine talking for that long. Then I burst. Words, times, details, events, places, gushed out in what one of the groupies later called "this weird energy." He was right. It was my first major self-disclosure before a group. I don't remember what I said, as much as that it came easily, with urgency, and afterwards so many questions. I felt loved, accepted, and chiefly, an interesting person. It was the genesis of the social me.

### Personal Responsibility for Bad Outcomes

As a predictor of dissonance, Aronson's fear of looking foolish proved better than Festinger's logical inconsistency. But it remained for University of Texas researcher Robert Wicklund and his colleague from the University of Kansas, Jack Brehm, to establish the definitive conditions under which counterattitudinal advocacy leads to change in conviction. They determined that personal responsibility for undesirable consequences is the ultimate cause of dissonance. Wicklund and Brehm also showed that this sense of accountability comes only when we *foresee* problems looming on the horizon yet *choose* to keep going in the same direction. Two examples from the island course illustrate the link between dissonance and choice.

I asked island course alumni to write about the single incident that held the most significance for them. One fellow wrote about the group's unanimous resistance to his demand for a gallon of milk per day:

*Larry:* I argued for buying plenty of milk to last the remainder of our time together. When the group vetoed me I insisted on going on the next plane ride to shop for groceries. That way I got my milk, but still not as much as I wanted. I felt angry at being cast as the group deviant and argued with some "jerk-know-it-all." I knew I'd clash with him and there was nothing I could do about it.

Larry took no personal responsibility for the conflict that swirled around him. Because he felt he had no choice, he experienced no cognitive dissonance and his attitude never changed. Contrast Larry's response with the dissonance Natalie describes.

*Natalie:* I made a life-changing discovery during an influence exercise. My partner and I "won" the exercise, but I felt terrible afterward about manipulating others. The experience has stuck with me ever since because I saw graphically how I can violate another person's dignity when I get power-hungry or competitive. This applies to my relationship with my husband and trying to "get my way." It was a watershed experience.

Consistent with Wicklund and Brehm's prediction, a sense of hurting others was dissonant with Natalie's ideal self, so she changed her competitive attitude. Cognitive dissonance can have a powerful effect.

Critique: Dissonance over Dissonance

Despite extensive revisions, cognitive dissonance theory still has weaknesses. In Chapter 3, I illustrated the problem of testability with my boyhood pal's "never-miss shot" on his driveway basketball court. In the same way, cognitive dissonance is the never-miss prediction of communication theory. When it works, the results are spectacular. When it doesn't, the true believer treats the negative result as tacit evidence that the person in question didn't feel enough dissonance. In other words, the theory could never be proved wrong.



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The criteria for a good scientific theory also recommends simplicity. Many critics think that Festinger's appeal to cognitive dissonance, as an explanation for opinion change is unnecessarily complicated. For example, Cornell University psychologist Daryl Bem agrees that attitudes change when a person acts with minimal justification, but he claims that *self-perception* is a much simpler explanation than cognitive dissonance. He believes we judge our internal dispositions the same way others do—by observing our behavior.

Bem ran his own \$1/\$20 study to test his alternative explanation. People heard a recording of a Stanford man's enthusiastic account of the spool-sorting, peg-turning task. Some listeners were told he received \$1 for recruiting the female subject. Since he had little obvious reason to lie, they assumed that he really liked the task. Other listeners were told that the man received \$20 to recruit the woman. These folks assumed that the man was bored with the task and was lying to get the money. Bem's subjects didn't speculate about what was going on inside the Stanford man's head. They simply judged his attitude by looking at what he did under the circumstances. If people don't need an understanding of cognitive dissonance to forecast how the men would react, Bem asks, why should social scientists? Bem is convinced that cognitive dissonance theory is like the mousetrap pictured on page 36, much too convoluted.

Despite detractors, dissonance theory in its present form has made a significant contribution to the field of attitude change. Its implications for the persuader are clear. High-pressure tactics may get immediate compliance, but they won't gain long-term commitment. The hard sell is out; the soft sell is in.

People who want to stimulate a permanent change in attitude might consider developing an ongoing, warm relationship with the folks they want to influence. That way they can bypass selective exposure screens and be there to offer reassurance when post-decision dissonance kicks in. The agent of change who understands cognitive dissonance will offer incentives to induce others to act in new ways, but not so many or so great that others regard the offer as one they can't refuse. The wise advocate will take pains to insure that people who respond favorably have a good understanding of the future implications of their decision. Then, if things turn sour, the new convert won't.

### Questions to Sharpen Your Focus

- \* Cognitive dissonance is a *distressing mental state*. When did you last experience this *aversive drive*? Why might you have trouble answering that question?
- \* The results of Festinger's famous \$ 1/\$20 *experiment* can be explained in a number of different ways. Which explanation satisfies you?
- \* Suppose you want your friends to change their sexist attitudes. What advice does the *minimal justification hypothesis* offer?
- \* I see cognitive dissonance theory as a "never-miss shot." What would it take to make the theory *testable*?

### A Second Look

*Recommended resource:* Elliot Aronson, "The Rationalizing Animal," *Psychology Today*, May 1973, pp. 46–51.  
*Original statement:* Leon Festinger, *A Theory of Cognitive Dissonance*, Stanford University, Stanford, Calif., 1957.  
*Secondary resource:* Daniel J. O'Keefe, "Cognitive Dissonance," in *Persuasion: Theory and Research*, Sage, Newbury Park, Calif., 1990, pp. 61–78.



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*Selective exposure*: Dolf Zillman and Jennings Bryant (eds.), *Selective Exposure to Communication*, Lawrence Erlbaum Associates, Hillsdale, N.J., 1985.

*\$1/\$20 experiment*: Leon Festinger and James Carlsmith, "Cognitive Consequences of Forced Compliance," *Journal of Abnormal and Social Psychology*, Vol. 58, 1959, pp. 203–210.

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*Personal responsibility*: Robert Wicklund and Jack Brehm, *Perspectives on Cognitive Dissonance*, Lawrence Erlbaum Associates, Hillsdale, N.J., 1976.

*Development of the theory*: Elliot Aronson, "The Return of the Repressed: Dissonance Theory Makes a Comeback," *Psychological Inquiry*, Vol. 3, 1992, pp. 303–311.

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*Self-perception*: Daryl Bem, "Self-Perception: An Alternative Interpretation of Cognitive Dissonance Phenomena," *Psychological Review*, Vol. 74, 1967, pp. 183–200.

*Critique*: Charles Lord, "Was Cognitive Dissonance Theory a Mistake?" *Psychological Inquiry*, Vol. 3, 1992, pp. 339–342.

### Terminology

<b>Adaptation</b>	What it says: adapting to the world through assimilation and accommodation
<b>Assimilation</b>	The process by which a person takes material into their mind from the environment, which may mean changing the evidence of their senses to make it fit.
<b>Accommodation</b>	The difference made to one's mind or concepts by the process of assimilation. Note that assimilation and accommodation go together: you can't have one without the other.
<b>Classification</b>	The ability to group objects together on the basis of common features.
<b>Class Inclusion</b>	The understanding, more advanced than simple classification, that some classes or sets of objects are also sub-sets of a larger class. (E.g. there is a class of objects called dogs. There is also a class called animals. But all dogs are also animals, so the class of animals includes that of dogs)
<b>Conservation</b>	The realization that objects or sets of objects stay the same even when they are changed about or made to look different.
<b>Egocentrism</b>	The belief that you are the center of the universe and everything revolves around you: the corresponding inability to see the world as someone else does and adapt to it. Not moral "selfishness", just an early stage of psychological development. The move away from egocentrism is called decentration.
<b>Operation</b>	The process of working something out in your head. Young children (in the sensorimotor and pre-operational stages) have to act, and try things out in the real world, to work things out (like count on fingers): older children and adults can do more in their heads.



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Schema (or scheme)	The representation in the mind of a set of perceptions, ideas, and/or actions, which go together.
Stage	A period in a child's development in which he or she is capable of understanding some things but not others

### Stages of Cognitive Development

Stage	Characterized by
<b>Sensori-motor</b> (Birth-2 yrs)	Differentiates self from objects Recognizes self as agent of action and begins to act intentionally: e.g. pulls a string to set mobile in motion or shakes a rattle to make a noise Achieves object permanence: realizes that things continue to exist even when no longer present to the sense (pace Bishop Berkeley)
<b>Pre-operational</b> (2-7 years)	Learns to use language and to represent objects by images and words Thinking is still egocentric: has difficulty taking the viewpoint of others Classifies objects by a single feature: e.g. groups together all the red blocks regardless of shape or all the square blocks regardless of color
<b>Concrete operational</b> (7-11 years)	Can think logically about objects and events Achieves conservation of number (age 6), mass (age 7), and weight (age 9) Classifies objects according to several features and can order them in series along a single dimension such as size.
<b>Formal operational</b> (11 years and up)	Can think logically about abstract propositions and test hypotheses systematically Becomes concerned with the hypothetical, the future, and ideological problems

### Quote from "Basic Psychology", Henry Gleitman, Norton 1983 "Cognitive Consistency"

... people try to make sense of the world they encounter. But how? In effect, they do this by looking for some consistency among their own experiences and memories, and turning to other people for comparison and confirmation. If all checks out, then all well and good. But what if there is some inconsistency? The Asch study (*Solomon Asch, 1956*) showed what happened when there is a serious inconsistency between one's own experiences (and the beliefs based on them) and those reported by others. But suppose the inconsistency is among the person's own experiences, beliefs or actions? Many social psychologists believe that this will trigger some general trend to restore cognitive consistency - to reinterpret the situation so as to minimize whatever inconsistency may be there. According to Leon Festinger, this is



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because any perceived inconsistency among various aspects of knowledge, feelings and behavior sets up an unpleasant internal state - cognitive dissonance - which people try to reduce whenever possible (*Festinger, 1957*).

Cognitive dissonance is not always reduced so easily. An example is provided by a study of a sect that was awaiting the end of the world. The founder of the sect announced that she had received a message from the "Guardians" of outer space. On a certain day, there would be an enormous flood. Only the true believers were to be saved and would be picked up at midnight of the appointed day in flying saucers. (Technology has advanced considerably since the days of Noah's Ark.) On doomsday, the members of the sect huddled together, awaiting the predicted cataclysm. The arrival time of the flying saucers came and went; tension mounted as the hours went by. Finally, the leader of the sect received another message: To reward the faith of the faithful, the world was saved. Joy broke out and he believers became more faithful than ever.

Given the failure of a clear-cut prophecy, one might have expected the very opposite. A disconfirmation of a predicted event should presumably lead one to abandon the beliefs that produced the prediction. But cognitive dissonance theory says otherwise. By abandoning the beliefs that there are Guardians, the person who had once held this belief would have to accept a painful dissonance between her present skepticism and her past beliefs and actions. Her prior faith would now appear extremely foolish. Some members of the sect had gone to such lengths as giving up their jobs or spending their savings; such acts would lose all meaning in retrospect without the belief in the Guardians. Under the new circumstances, the dissonance was intolerable. It was reduced by a belief in the new message, which bolstered the original belief. Since other members of the sect stood fast long with them, their conviction was strengthened all the more. They could now think of themselves, not as fools, but as loyal, steadfast members of a courageous little band whose faith had saved the earth.