

Education Reform and Cognitive Dissonance: The Theory of the Second Guess

Dr. J. R. Clark, Scott L. Probasco, Jr. Chair of Free Enterprise at the University of Tennessee at Chattanooga
Dr. Gordon L. Brady, Director of the Environmental Program at Sweet Briar College
Dr. William L. Davis, Economics, University of Tennessee at Martin

Abstract

Education reform has been a major issue at both the state and national levels in the last decade, and economists have participated in the debate frequently using traditional statistical tools to assess learning gains and associated costs. [Hanushek, Chubb & Moe etc.] The political debate has, however, relied more on emotional responses than objective economic analysis and outcomes have conformed highly to those predicted by the established models in public choice theory. In addition, the manipulation of cognitive dissonance has become a widely used political tool in this debate. In this paper, we combine elements of dissonance theory and the public choice literature to explain behavior as it relates to education reform. We also demonstrate how dissonance can be managed by educational bureaucrats, legislators, and special interests to their own self-interest.

I. Introduction:

A 1983 article by Akerlof and Dickens in the *American Economic Review* applied the theory of cognitive dissonance to a model of individual choice among hazardous industry workers. They argued that workers would first accept hazardous jobs lured by relatively higher wages, and later, because of dissonance, tend to deny (i.e., come to believe that) their jobs were not hazardous, and therefore, they would not buy available safety equipment. They concluded that, "Safety legislation is needed to restore Pareto optimality since the workers have an incorrect assessment of the marginal rate of substitution between safety equipment and money income." They used the same argument to justify social security legislation and to argue against the 1974 Tullock position that higher penalties serve to deter crime.

Akerlof and Dickens were among the first economists to bring the psychological theory of cognitive dissonance to economics, however, their model only applied the concept to private sector decision-making. All three of their arguments identify cognitive dissonance as a source of potential market failure and suggest public sector action to alter the behavioral outcomes. Scientific candor would, however, require that economists apply the same analytical tools to the proposed public sector remedies as they did to identify market failures.¹ Public sector choices are also

subject to cognitive dissonance whether they relate to safety, social, criminal, or any other type of legislation. Most importantly, cognitive dissonance can be manipulated in the legislative process to the self-interest of public sector agents. In this paper, we combine elements of dissonance theory and the public choice literature to explain behavior as it relates to education reform. We also demonstrate how dissonance can be managed by educational bureaucrats, legislators, and special interests to their own self-interest.

II. Dissonance And Individual Choice:

Festinger's theory of cognitive dissonance (1957) is a framework for analyzing the psychological discomfort which may occur when choice has been made and alternatives foregone. Dissonance is created when an individual's choices are not consistent with their values and beliefs. For example, when an individual who believes strongly in the importance of a healthy life style chooses to smoke, he may experience dissonance. Dissonance can arise from individual decision-making, exposure to involuntary information, and lack of social support. The theory predicts two types of resultant behavior. First, since dissonance is a psychological discomfort or annoyance, individuals will try to reduce it.

Second, when dissonance is present, individuals will actively avoid situations and information which would likely increase it.

The implementation of individual decision-making usually causes dissonance. The dissonance, however, occurs only after decisions are made; the act of choosing, therefore, creates dissonance. Psychologist D. K. Adams points that:

After a decision is made, something must still be done to handle the unpleasantness of having rejected something which is after all, attractive. This requires some restructuring or reevaluation of the alternatives which are involved in the decision. [(5) p. 554].

Dissonance which results from decision-making can be reduced by: (1) revoking the decision, (2) increasing the attractiveness of the chosen alternative, (3) decreasing the attractiveness of the unchosen alternative, and/or (4) establishing more similarity between the alternatives. Thus, the efforts are primarily psychological in nature but, nonetheless, represent real costs to the individual.

Pervasive information in society may create dissonance, also. New information to which an individual is involuntarily exposed may be dissonant with his opinions or attitudes already held, and thus cause psychological discomfort. Individuals may be involuntarily exposed to information, accidentally or forcibly, through interaction with the media and/or others. Dissonance caused by involuntary exposure to information can be reduced by intentionally misperceiving or avoiding it, and/or changing one's opinion after being exposed.²

Festinger asserts that dissonance is created, also, in most social settings. Specifically, he argues that disagreement with other individuals, or groups of individuals (i.e., lack of social support), tends to create dissonance. The magnitude of this type of dissonance is a function of the following:

- * the number of agreeing and disagreeing persons
- * the importance of the issue in dispute
- * the attractiveness of the disagreeing person
- * the credibility of the disagreeing person

Dissonance caused by lack of social support can be reduced by changing one's opinion to agree with the disagreeing persons, persuading the disagreeing parties to change their opinions, and/or disparaging the disagreeing persons.

Dissonance also has a great deal to do with the reformulation of beliefs and preferences.

"Persons not only have preferences over states of the world but also over their beliefs about the state of the world. ...not only are people able to exercise some choice about belief, given available information, they can also manipulate their own beliefs by selecting sources of information likely to confirm desired beliefs." [Akerlof and Dickens, 1983].

This process of reformulating one's preference function links past choices to future choices. For example, an individual may consider the costs and benefits of smoking cigarettes and decide to smoke. After experiencing respiratory discomfort, bearing the social stigma placed on smokers, and frequently viewing the Surgeon General's warnings, an individual may reformulate his preference function and decide not to smoke. This earlier choice, which was made in the context of the choice--influencing costs, was changed when the smoker incurred the choice-influenced costs similar to those postulated by Buchanan in 1969. The particular value of dissonance theory to the economist is that it gives us several tools to analyze and predict human behavior between choices or in situations where choices are infrequent and/or involve very substantial transactions costs.

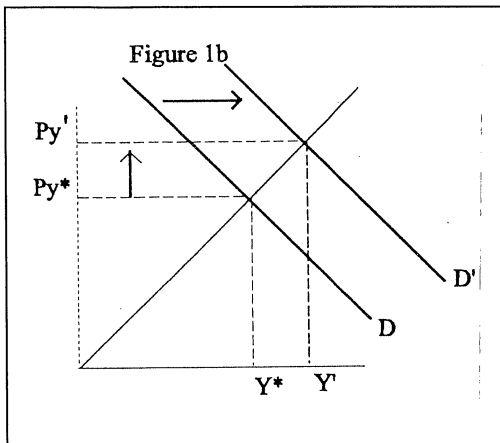
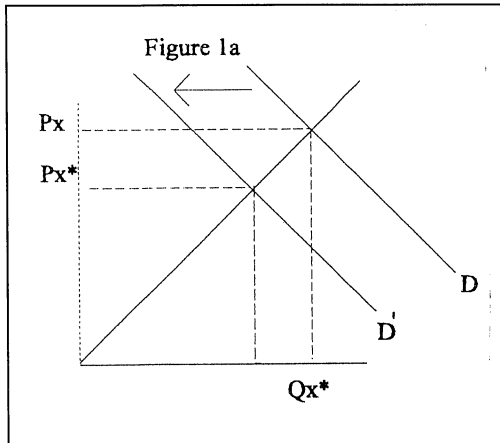
III. Dissonance and Markets:

At the heart of public choice theory, is the recognition that all individuals are self-interested, whether they are making private choices or acting to implement social choices as part of the public sector. [Tullock, 1965]. Public sector agents are able to manipulate various choice-influenced costs to further their own interests. In order to apply dissonance theory to public sector decisions, we first illustrate the concept of dissonance in the contest of market exchange.

In the context of individual markets, dissonance is a determinant of demand. Its impact is realized via a change in individual taste. Consequently, it is a special case of a change in taste which affects the position of the market demand curve. The diagram in Figure 1a shows a conventional market which achieves equilibrium at P^* and X^* , exclusive of any dissonance component. The introduction of dissonance alters the position of the demand curve in this market. The demand curve for good X shifts to the left, reflecting the notion that dissonance alters consumers' preferences away from X, and toward other goods.

The magnitude of the dissonance associated with good X is also subject to manipulation by sellers and competitors of good X, as is shown in Figure 1a and 1b. Sellers of good Y may attempt to "foment" dissonance in the minds of consumers of X, and simultaneously attempt

to "quell" that dissonance by persuading them to shift to good Y. If they are successful, the demand curve for good X shifts inward as in 1a, and the demand for good Y shifts outward as in 1b. Consequently, equilibrium quantities rise in market Y and fall in Market X.



The 1990-91 television advertising campaign between AT&T long distance service and U.S. Sprint provides a case-in-point. AT&T attempted to foment dissonance by reminding customers who switched to Sprint that they now may have more trouble in getting operator assistance and instant refunds for wrong numbers than in the past. AT&T also offers to reconnect old customers to the AT&T system free of charge. This amounts to an offer to quell dissonance. Obviously, the successful management of dissonance in the private sector can increase profits.

IV. Public Sector Dissonance and The Theory of the Second Guess:

As mentioned earlier, dissonance is created when an individual's choices are not consistent with their values

and beliefs. For example, when an individual who believes strongly in the importance of good education votes against any new education spending, he may experience dissonance. Dissonance can arise from individual decision-making exposure to involuntary information, and lack of social support. The theory predicts two types of resultant behavior. First, since dissonance is a psychological discomfort or annoyance, individuals will try to reduce it. Second, when dissonance is present, individuals will actively avoid situations and information which would likely increase it. Dissonance which results from decision-making can be reduced by: (1) revoking the decision, (2) increasing the attractiveness of the chosen alternative, or (3) decreasing the attractiveness of the unchosen alternative. Thus, the efforts are primarily psychological in nature but, nonetheless, represent real costs to the individual. Since dissonance is a psychological reaction to prior choices or information which affects how the individual feels about their choices, we therefore borrow a pun from Anthony Downs and accurately characterize our theory as "the theory of the second guess."

Pervasive information in society may also create dissonance. New information to which an individual is involuntarily exposed may be dissonant with his opinions or attitudes already held, and thus, cause psychological discomfort. Individuals may be involuntarily exposed to information, accidentally or forcibly, through interaction with the media and/or others. Dissonance caused by involuntary exposure to information can be reduced by intentionally misperceiving or avoiding it, changing one's opinion after being exposed, or even calling for public sector action. For example, an individual who believes strongly in the importance of education and has supported it with tax dollars and political support in the past may be exposed to significant media coverage of information pointing out poor performance by the educational system. In the last four years, the American media has featured extensive coverage of falling SAT scores, declining relative performance of American students on math and science tests, American students being "economic illiterates" and/or not knowing enough geography to identify France on a world map. [Carmody, Jordan, Kelly, Stout,] Having had this exposure, some voters have reversed their decision to support education, while others have attempted to discount such stories as inconsequential, insubstantive or just wrong. [Carter] Some have called for educational reform. [Clymer] In an attempt to reduce the dissonance experienced with past choices as well as involuntary exposure to negative information, many voters have sought situations of social support concurrent with their views. They do so by associating with those holding similar viewpoints and/or values.

V. Dissonance Management in the Iron Triangle:

The theory of cognitive dissonance can easily be extended to the public sector to illustrate how educational issues are manipulated by legislators, bureaucrats, and special interest groups to their own self interest. Let's, consider each leg of the iron triangle individually.

Legislators

Legislators use educational issues to affect both elections and legislation by fomenting dissonance among supporters of their opponents and quelling dissonance among their own proponents. They do so by appeal to expertise, popular association, and exposure to involuntary information. For example, in the 1988 campaign, President Bush attempted to portray himself as the education President. During the 1992 campaign, opponents frequently attempted to foment dissonance among Bush supporters by publicizing negative news reports of educational performance and what they view as a paucity of new federal dollars allocated to education. [Carter] They were, in effect, attempting to "scare up some votes" for other candidates.

Public choice theorists have argued that voters are rationally ignorant when confronted with choices among "bundles of political goods" which certainly may include educational issues. [Tullock, 1967; Downs, 1957] For example, less than half of the American electorate can correctly identify their Congressman, much less know where he or she stands on educational issues. Typically, the voter relies on information that is freely supplied by others (legislators, political parties, news media, friends, and interest groups).

Information provided by legislators is designed to manage voter dissonance in the legislators' favor. A political campaign is designed to quell dissonance among a candidate's supporters and foment dissonance among the opposition. Political "muckraking" is nothing more than an attempt to provide information to voters which will discredit and reduce the attractiveness of political opponents. Discrediting an opponent can also be viewed as an attempt to expose information that would not have been searched for by potential supporters and thus create dissonance in them. Fomenting dissonance is really a form of scare tactic which, in effect, attempts to "scare up some votes" by making voters uncomfortable with their prior choices.

In addition, legislators foment and quell dissonance using appeal to expertise and popular association. Festinger makes two points that are relevant to the involuntary information argument. "If a person voicing

disagreement is seen as expert or very knowledgeable on such matters, the dissonance between knowledge of his contrary opinion and one's own opinion will be greater." [Festinger, 1957] Candidates who seek the endorsement of such authorities in a particular field are, in effect, attempting to quell dissonance among their proponents and foment dissonance among their opposition on the issues which the endorser possesses expertise. A clear example would be the appearance in the fall of 1991 of Education Secretary, Lamar Alexander, in support of Tennessee Governor McWherter's tax reform program in the name of education. Festinger's contention that dissonance is directly related to the credibility of one's opponent is also consistent with the economists' perception that votes and political power are not distributed symmetrically across the field of candidates and the voting public.

Another variable which clearly will affect the importance of the cognitive elements, and hence, the magnitude of the dissonance is the attractiveness of the person voicing the disagreement or of the group within which it is voiced. It is plausible to assume that the dissonance between one's own opinion and knowledge of a contrary opinion voiced by some other person is greater if the other person is...attractive. [Festinger, 1957]

This is similar to Galbraith's concept of "conventional wisdom" and may explain why movie and television personalities have become spokespersons on political causes. Examples in education issues include appearances by country music personalities in support of Tennessee Governor Ned McWherter's education bill. While they may have very little technical credibility in terms of knowledge or understanding of the issues, they were in some sense "attractive" to the voting public and could serve to quell and foment dissonance.

The attractiveness issue can also go a long way in explaining why certain earmarking techniques are used to make tax issues more palatable to the public. Taxing liquor and tobacco earmarked for health care expenditures, while still a tax, is emotionally more acceptable and produces less dissonance on the part of voters. For example, the 1991 attempt of Tennessee Governor McWherter's Administration to link tax reform with increased spending on education was most likely designed to reduce voter dissonance regarding a tax increase. [Branson]

Special Interest Groups

Education special interest groups can foment dissonance for their cause and quell dissonance for a price justifying their own existence and seeking rents in the process. They

popularize educational issues with their media resources and then promote themselves as the solution to the problem by fighting for the "right" laws and programs, as defined by themselves. The group can then represent itself as the solution to the problem and thereby provide a means of quelling the voter dissonance which it fomented in the first place. The special interest group, in effect, attempts to scare the rents out of voters or engages in what might well be called "rent scaring behavior." For example, a special interest group, such as the Joint Council on Economic Education, first popularizes the issue of "economic illiteracy" by releasing the results of commissioned studies through the news media. In December of 1988, they hosted a news conference at the annual convention of the American Economic Association and had Paul Volker, then Chairman of The Federal Reserve Board of Governors and member of the Board of Directors of the Joint Council, pronounce that American students are "economically illiterate." The news media not only picked this up nationwide, but the Joint Council prepares a mailer to all 50 state councils and 300 centers for economic education reporting the news and supporting studies and suggested ways for local personnel to maximize the impact this information has on the public. Both the news conference and follow-ups by state and local personnel concluded with the view that this is evidence for the need for more teacher training in economics and students to have more courses in economics at an earlier age. Such behavior is both legal and ethical by today's standards and not unique to the Joint Council.³ Such groups tend to promote themselves as the solution to the problem, and in the process, solicits public support and funds which may serve to quell a portion of the dissonance held by those who are concerned with the problem. [Brady, 1991]

Bureaucrats


Educational bureaucrats can manage dissonance to expand their bureaus and budgets. When special interest groups and legislators focus public attention on an issue, there will invariably be a call for public sector action of some type. Consequently, each new educational issue that is identified and brought to public attention by a special interest group offers the potential for staff and budget expansion of the educational bureaucracy. For example, fears regarding the relatively poor performance of American students in science and mathematics has become the subject of wolf crying. Numerous media releases [Carmody, Jordan, Kelly, Stout] in 1992 headline views such as American students do poorer than the students in many third world countries on standardized tests in these

disciplines. However, as McKenzie pointed out in 1991, much of this is a thinly veiled justification for significant budget expansion requests of the Department of Education. [Clymer, *The Tennessean*]

VI. Conclusion:

Until recently, cognitive dissonance had been used by economists primarily to explain market failures and justify the need for public sector intervention. However, public sector action is also subject to cognitive dissonance and "the theory of the second guess" illustrates how the psychological reactions of voters to educational issues can be manipulated by legislators, special interest groups, and bureaucrats to their own self interest. Legislators use educational issues to affect both elections and legislation by quelling dissonance among their proponents and fomenting dissonance among opponents. They do so by appeal to expertise, popular association, and exposure to involuntary information. Education special interest groups can foment dissonance for their cause and quell dissonance for a price justifying their own existence and seeking rents in the process through rent scaring behavior. They use their media resources to spread fear about educational issues such as why some high school graduates can't read, then offer themselves as the solution to the problem. Educational bureaucrats also manage dissonance to expand their bureaus and budgets since each new educational problem justifies additional responsibility and resources.

VII. Suggestions for Future Research:

The confluence of economics and the psychological theory of cognitive dissonance has been shown to be a valuable tool in analyzing human behavior as applied to education reform. The tool is however, much more broadly applicable than this narrow area. For example, there is an identifiable relationship between economic development and both the magnitude and frequency with which dissonance is experienced by choice makers. Therefore, applying dissonance theory to the theory of economic development appears to be especially fertile ground. Second, dissonance can be managed in the public sector and exchanged like any other non tangible political good. The further application of dissonance theory to public choice obviously holds promise. Finally, an entire dissonance quelling industry has evolved in the United States including psychological counseling and uncountable fringe therapies such as primal scream therapy, co-counseling, rebirthing, and EST. Applying economics and dissonance theory to these markets will likely yield new and interesting results. 

*** Footnotes ***

1. The evenhanded application of similar economic tools to both market failures and proposed public sector solutions is characteristic of much of the research in public choice. See Charles J. Goetz, "Uncommon Common-sense vs. Conventional Wisdom," The Virginia School of Economics, George Mason University Seventh Annual Lecture in Political Economy, page 10.
2. The study of public choice, itself, has in some cases been considered a dissonance quelling technique as first illustrated by Clark and Lee, 1993.
3. Additional examples include efforts by the American Lung Association and the American Cancer Society to popularize anti-smoking literature and media. While they solicit funds for their support in the name of research, the majority of the budget is spent on media campaigns as illustrated in the now-well-publicized Bennett Report.

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