

DISCREPANCY BETWEEN INSTRUCTOR AND STUDENT EVALUATIONS OF INSTRUCTION: EFFECT ON INSTRUCTOR¹

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ABSTRACT

To find out whether a discrepancy between the instructor's and the student's evaluations of teaching influence teaching, 13 introductory and educational psychology instructors and their students were given a Student Opinion Questionnaire (SOQ) twice: on the fourth week of a fall term and eight weeks after feedback sessions with the instructors. The instructors received feedback on the direction and amount of initial discrepancy. The results showed that the unfavorable discrepant instructors (instructor rating better than students) changed more on skill, feedback, rapport, general teaching ability, and the overall value of the course than the favorably discrepant instructors (student ratings better than instructor). The unfavorably discrepant instructors improved their teaching significantly more than the favorably discrepant instructors.

The feedback of student evaluations of teaching to teachers brought some improvements in teaching at the elementary and high school levels (Bryan, 1963; Gage et al., 1963; Tuckman and Oliver, 1968). The results, however, were less encouraging at the college level. In studies by Centra (1972b), Miller (1971), and Pambookian (1972), instructors who received feedback did not significantly improve their teaching when compared to those who had no access to such information. Interestingly, nevertheless, Pambookian (1974) found that the initial level of student evaluations of instruction had a strong influence on instructors. In his study, the moderately rated instructors developed more positive changes in the teaching dimensions of skill, interaction and rapport, after the feedback, than did the

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favorably or the unfavorably rated instructors, and the changes were significant when compared to the favorably rated ones.

It is believed that people tend to behave in a manner which is consistent with their concept of self as students, teachers, parents, and so on. In the case of teachers, for instance, the cognition "I am an effective instructor" is consistent with *effective teaching* and/or favorable evaluation of it, but inconsistent with ineffective teaching behavior. Likewise, the cognition "I am an ineffective instructor" is consistent with *ineffective teaching* and/or unfavorable evaluation of it, and inconsistent with effective teaching.

No doubt, instructors show satisfaction at receiving evaluations by students which are favorable and approving, and frustration at receiving unfavorable and disapproving evaluations. Moreover, instructors have their own self-evaluations which may be very favorable or very unfavorable assessments of their teaching and classroom interactions.

The introduction of negative and less flattering information about instruction is expected to create dissonance in instructors with favorable self-evaluations, as is the positive information in the case of instructors with unfavorable self-evaluations. It is assumed that cognitive dissonance occurs if an individual realizes that two ideas, perceptions, or behaviors do not fit together, and are therefore incompatible. Research on cognitive dissonance suggests that people confronted with inconsistencies among their cognitions, try to resolve and to reduce them by achieving a balanced state or consonance (e.g., Abelson and Rosenberg, 1958; Festinger, 1957; Glass, 1968; Heider, 1958; Osgood et al. 1957).

In related studies but within the framework of dissonance theory, Bramel (1962) observed that individuals with experimentally produced concepts of themselves (i.e., low self-esteem) tended to accept negative information about their personalities, while subjects with high self-esteem tended to reject such information and project them to others: the greater the dissonance, the greater the amount of projection. Similarly, Deutsch and Solomon (1959) had shown that reactions to evaluations by others were influenced by self-evaluations. They found that when subjects evaluated themselves negatively, they tended to view negatively those who esteemed them highly and to esteem those who viewed them more negatively; in other words, they tended to react more favorably to those whose evaluations were consistent, rather than inconsistent, with self-evaluations. In another study, Aronson and Carlsmith (1962) found that subjects who had expected to perform poorly but who performed well on a task seemed to display more strain over such a performance and changed their superior performance to an inferior one when retested on the same material.

To gain additional insight into their teaching and improve it, instructors, besides self-appraisals, need assessments of instruction by students. The

way instructors describe their teaching may not necessarily correspond to the descriptions by students. How do instructors respond to such an inconsistency? What happens to teaching when instructors whose self-evaluation are favorable are presented with less favorable assessments of them by their students? Or, how do instructors with unfavorable evaluations of self and teaching cope with incompatibility induced by rather favorable appraisals by students? For empirical evidence, these questions warrant attention to, and investigation of, the theory of cognitive dissonance in higher education.

Research on the discrepancy between instructor and students' evaluations of instruction and its effect on instructor is nonexistent.³ The intent of the present study, therefore, was to investigate the effect of positiveness and negativeness of such a discrepancy on the quality of later instruction. It was hypothesized that *the greater the discrepancy between instructor self-evaluation and students' evaluations of instruction, the greater is the change (i.e., improvement) after feedback*. Consequently, the greater the magnitude of discrepancy or dissonance, the greater is the pressure on the instructor to reduce it.

The discrepancy could be negative (unfavorable) or positive (favorable). However, the direction of the discrepancy was thought to be less important in developing changes in instructor than the amount of discrepancies. In fact, the existence of a discrepancy, either negative or positive, between the instructor's and the student's evaluations of instruction creates an imbalance in the instructor who is likely to try to reduce it, the uncomfortable state of tension, thereby restoring a state of equilibrium. Thus, he is more likely to seek consistency in the presence of inconsistency because functioning in an incompatible state, as Rogers (1959) suggests, would frustrate his need for positive self-regard. The above hypothesis also conforms to the theories of *congruity* (Osgood and Tannenbaum, 1955), *dissonance* (Festinger, 1957), *balance* (Heider, 1958), and *strain for symmetry* (Newcomb, 1959). The theories of consistency postulated heretofore, albeit labelled differently, all ". . . had in common the notion that the person" as McGuire (1966) stated, "tends to behave in ways that minimize the internal inconsistency among his interpersonal relations, among his interpersonal cognitions, or among his beliefs, feelings, and actions [p. 1]."

³ Only after having completed his study, did the author learn that Centra (1972b) had been conducting a somewhat similar study but with feedback to effect change only in teachers who had evaluated themselves more favorably than their students had rated them, in the academic year of 1971-72. In his study, Centra (1972a) found a clear discrepancy between the way most instructors described their teaching (which was more positive and favorable) and the way students described it.

Method

SAMPLE

Data were collected from 13 teaching fellows (hereafter called instructors) who were teaching Introductory Psychology (Psych 171) and Educational Psychology (C300) at the University of Michigan in the fall of 1971–72, and the students in their sections. (Psych 171 is a multisection introductory psychology course treated as a social science, and C300, an introductory course in educational psychology.)

The sections were relatively small, the number of students in each ranging from 14 to 25. There were 252 students in 13 sections early in the term, but 231 later in the term. This decrease was due to illness or unexpected absence of some students.

The instructors were free in planning their sections, and showed flexibility with regard to course objectives, procedures and assignments. Almost all of them emphasized classroom discussions intermingled with brief presentations. One of the sections met once a week, eight met twice a week, while the remaining four sections met three times.

The instructors were grouped according to the discrepancy in the instructor's self-ratings and the students' evaluations of instruction prior to feedback. In forming the three types of instructors, only the discrepancy scores on the evaluative items of skill and rapport were taken into consideration, as research (Isaacson et al., 1964; McKeachie et al., 1971) has shown these dimensions gave evidence of effective teaching. The types were (a) *the unfavorably discrepant instructors* (UD; instructor rating better than students, N=2), (b) *the minimally discrepant instructors* (MD; instructor rating as good as students, N=2), and (c) *the favorably discrepant instructors* (FD; student ratings better than instructor, N=9).

INSTRUMENT

Instructor behavior was measured by the revised McKeachie-Lin Student Opinion Questionnaire (SOQ) fully described by Isaacson et al., (1963), Isaacson et al. (1964), and by Pambookian (1974).

The 21 items of the SOQ (three items with high loadings for each stable factor or teaching dimension) dealt with instructor teaching behavior and performance with ratings on the dimensions of skill, overload of students, structure, feedback, interaction, rapport, and achievement standard. Two additional items were also included to appraise the instructor's *general (all-around) teaching ability and the overall value of the course*.

A 5-point rating scale was used. Based on the frequency of the oc-

currence of a specific teaching behavior in the classroom, the SOQ items were rated as: 1 = This *almost always* occurred; 2 = This *often* occurred; 3 = This *occasionally* occurred; 4 = This *seldom* occurred; and 5 = This *never* occurred.

PROCEDURE

In early October (1971), the fourth week of the term, all the students responded to the SOQ during a prearranged time in class. It was made clear to them that the purpose of the study was to find out what their instructor or his teaching was like, and that the answers to the items should be based on their own *experiences* and *perceptions* that they had during the past weeks in the term. They were told that their instructor would get a summary of the evaluations after the administration of the questionnaire but he would not know the identity of the respondents. The instructors also responded to the SOQ but in accordance with *how they perceived their own teaching and performance*.

Ten days after the initial administration, the results of students' evaluations were presented to each instructor by the researcher. The feedback was in the form of class mean for each item and each dimension. In addition, the instructor received his own self-evaluations, and the discrepancy scores between students' evaluations of him and his own perception of his teaching. And, based on the amount and direction of such discrepancies, each was told whether he differed *unfavorably, minimally, or favorably* from his students' evaluations of him and his teaching. The instructor was encouraged to raise questions regarding the ratings and results but in no instance was he assisted in specific ways to interpret them or utilize the information.

Then, in early December, eight weeks after the feedback sessions, the SOQ was again administered to all students and instructors. In addition, the instructors responded to several items pertinent to evaluations made by students, and regarding the effect of feedback on them.

DATA ANALYSIS

The ratings on each SOQ item were averaged across students for individual instructors on pre- and post-feedback means. Since each teaching dimension was described by three specific items, the 3-item means for each dimension were added to obtain the dimension mean which could, therefore, range from 3 (almost always) to 15 (never). The difference between pre- and post-feedback means was an indication of change in teaching behavior.

The three types of instructors – the unfavorably discrepant, the minimally discrepant, and the favorably discrepant – were compared on all

seven dimensions and the two overall items. Analysis of variance and *t* tests were used to determine whether the positiveness and/or negativeness of discrepancy between instructor and students' evaluations had any effect on later instruction.

Results

The analyses of variance of changes in the teaching behavior among instructors who differed unfavorably, minimally, and favorably on each teaching dimension, showed that the types differed on dimensions of skill ($F = 6.53$, $df = 2/10$, $p < 0.2$, on feedback ($F = 5.05$, $df = 2/10$, $p < 0.3$), and on rapport ($F = 7.72$, $df = 2/10$, $p < .01$). Thus, there were significant differences among the three types of instructors.

Table I presents the pre- and post-feedback means, gain scores, differences between the instructor types and the *t* values. The *t* tests comparing changes in teaching behavior on the three dimensions gave evidence of significant differences between the UD (unfavorably discrepant) instructors and the FD (favorably discrepant) instructors on skill ($t = -3.26$, $df = 10$, $p < .01$), on feedback ($t = -2.94$, $df = 10$, $p < .02$), and on rapport ($t = -2.41$, $df = 10$, $p < .04$).⁴ The UD instructors compared to the FD ones had lower post-feedback means indicating that the former changed more (with respect to the pre-feedback means), and the differences of such changes were significant at .05 level on skill, feedback and rapport.⁵ Thus, there were more positive changes in instructors who had unfavorable discrepancies than in those who had favorable discrepancies prior to feedback. That is, after the feedback, the instructors who had initially thought that they were skillful in their teaching but the students had not perceived them to be doing so well, became *more skillful* (i.e., they explained the subject matter more clearly; they were more skillful in observing students reactions, and more often stimulated the intellectual curiosity of their students), used *more feedback* (i.e., they more often kept students well informed of their progress, told them when they had done a particularly good job; and they more often criticized poor work), and had *more rapport* (i.e., they were more friendly, permissive and flexible, and they more often listened attentively to what class members had to say) in the classroom than instructors

⁴ The *negative sign* indicates the direction of the differences in the comparisons.

⁵ The gain or change scores were obtained by subtracting the pre-feedback means from the post-feedback means. The lower the post feedback means on dimensions of skill, feedback, rapport, and the two overall items – teaching ability and the value of the course – the more the change in the direction of teaching improvement and effectiveness.

TABLE I

Individual *t* Tests Comparing Differences in Changes in Teaching Behavior of Instructors, Differing Greatly or Minimally From Student Evaluations Prior to Feedback, on Significant Teaching Dimensions

Dimension	Type ^a	Feedback Pre	Post	Gain	Types Compared	Differ- ence	<i>t</i>	<i>p</i> ^b
Skill	1	7.83	6.57	-1.26	1 vs. 2	-0.66	-0.90	NS
	2	6.39	5.79	-0.60	1 vs. 3	-1.85	-3.26	0.01
	3	5.83	6.42	0.59	2 vs. 3	-1.19	-2.12	0.06
Feedback	1	12.19	9.77	-2.42	1 vs. 2	-0.91	-0.96	NS
	2	10.70	9.19	-1.51	1 vs. 3	-2.18	-2.94	0.02
	3	10.41	10.17	-0.24	2 vs. 3	-1.27	-1.72	NS
Rapport	1	3.64	3.50	-0.14	1 vs. 2	0.33	0.85	NS
	2	3.96	3.49	-0.47	1 vs. 3	-0.73	-2.41	0.04
	3	3.90	4.49	0.59	2 vs. 3	-1.06	-3.49	0.01

Note: In the table, abbreviation: NS = not significant.

^a For Type 1, the unfavorably discrepant instructors, N=2.

Type 2, the minimally discrepant instructors, N=2.

Type 3, the favorably discrepant instructors, N=9.

^b $t_{.05} \geq 2.23$, $t_{.01} \geq 3.17$; $df=10$.

who had perceived themselves as ineffective in teaching but the students had thought they were effective and doing fine in the classroom.

It was also evident that, compared to the FD instructors, instructors who were minimally discrepant (MD) from students' evaluations, improved significantly on rapport ($t = -3.49$, $df = 10$, $p < .01$), and showed strong trends in the same direction on skill ($t = -2.12$, $df = 10$, $p < .06$).

Figure 1 gives the gains and losses made by the instructors after they received feedback. It is obvious that the greatest gains were made by the UD instructors on skill and feedback, while the MD instructors showed more gain on rapport than either of the other two types. However, the least gain on these dimensions were made by the FD instructors. After the feedback, in fact, they became less effective in the use of skill and rapport. Instead of improvement, they displayed ineffectiveness. (The mean initial evaluations on skill, feedback and rapport indicate that there was room for change and improvement in the case of the three types of instructors – see Table I.)

It is of interest to note here that there were significant differences among the three types of instructors in general teaching ability ($F=6.96$,

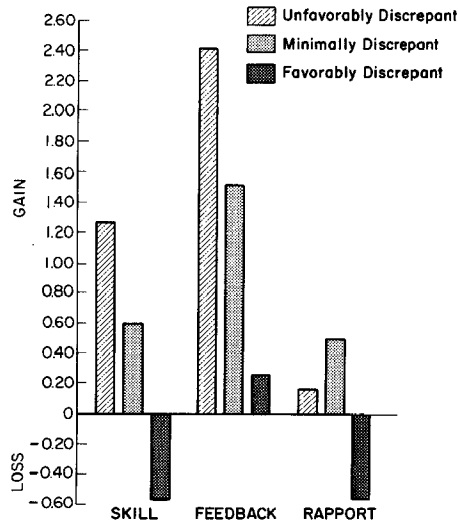


Fig. 1. Mean gain scores on each dimension for instructors differing unfavorably, minimally, and favorably from students' evaluations prior to feedback.

Note: The *gains* are given positive values and presented above the center line.

$df = 2/10, p < .02$), and a strong trend toward difference in the over value of the course ($F = 3.65, df = 2/10, p < .06$). The t tests indicate that compared to the FD instructors, the UD instructors developed significant changes with respect to general teaching ability ($t = -3.35, df = 10, p < .01$) and the overall value of the course ($t = -2.49, df = 10, p < .03$). After the feedback, these instructors were perceived and described by their students to be "very good" instructors, and the course was thought to be "more valuable" than before. The MD instructors, also, compared to the FD instructors, significantly improved their teaching ability ($t = -2.23, df = 10, p < .05$).

Discussion

These results lend some support to the hypothesis that the greater the discrepancy between instructor self-evaluation and students' evaluations of instruction early in the term, the greater is the change (i.e., improvement) after feedback. The changes were greater on the teaching dimensions of skill, feedback, rapport, and on the two overall items: general teaching ability and the value of the course.

Obviously, feedback was somehow helpful to the MD instructors as the gain scores between pre- and post-feedback evaluations indicate, it appeared however that, in general, the UD instructors (instructor better than students,

that is, instructor self-evaluation was favorable but students' evaluations of instruction were unfavorable prior to feedback) changed more and the changes were positive and toward the improvement of teaching. The UD instructors responded positively to (negative) feedback from students and significantly improved their teaching when compared to the FD instructors (students better than instructor, that is, students' evaluations of instruction were favorable but instructor self-evaluation was unfavorable prior to feedback) who seemed to benefit least from positive information about their teaching, thus showed deterioration in classroom interactions.

The sample size (whether small or large) notwithstanding, might the pre- and post-feedback differences reported have easily occurred simply as a regression effect phenomenon? Having looked at, and studied, the individual and instructor type means it was not apparent that instructors with high means regressed toward the mean nor did those with lower means. Moreover, regression toward the means was difficult to occur because instructors in Type 3 (where most of the cases were, $N = 9$) showed more and consistent movement away from the means. Although this tendency may represent actual movement (as the students commonly perceived that there was *real change*) rather than simply statistical artifact data are not complete enough to give a definitive answer as to what caused the movement.

It must be asked why did negative (unfavorable) and positive (favorable) discrepancies have a differential effect on instructors? According to the dissonance theories (e.g., Abelson and Rosenberg, 1958; Festinger, 1957; Heider, 1958; Newcomb, 1959; Osgood and Tannenbaum, 1955), both discrepancies in evaluations – unfavorable and favorable – should have been a possible source of discomfort for the instructors to behave so as to maximize the consistency among their information, perceptions and behavior. No doubt, after receiving feedback and knowing about the discrepancies, the UD instructors became more responsive to students' perceptions and evaluations, and brought about changes in their teaching, thus alleviating the tension and eliminating the imbalance.

The FD instructors, nevertheless, did not change their teaching behavior – even though there was room for improvement – to restore a condition of balance or consonance plausibly expected by the consistency theories? Why? These instructors apparently experienced dissonance, but it seemed that either they disregarded their self-perceptions in favor of students' evaluations which were favorable and did not care to use the information given them as a means of further improvement; or they merely ignored such evaluations (or distorted them), and persisted acting the way they were

used to doing, thus safeguarding their concept of themselves as *instructors*.⁶

In the case of instructors with favorable discrepancies, it may seem logical to ask whether their teaching as perceived by them was consistent or inconsistent with their expectation, their self-concept? (It was shown that there was inconsistency between their evaluations of them and students' evaluations of their teaching.) According to Aronson (1968, 1969), one of the major determinants of dissonance arousal is whether or not discrepancy or incongruity exists between a cognition about the self and cognition about a behavior (i.e., teaching in this case) which violates this self-concept. Instructors, for instance, may pursue at times an inappropriate teaching behavior if it is important to their self-concept and its maintenance.

The self-concept and self-esteem seem, therefore, to be important variables in behavior change in the presence of actual dissonance between two cognitions or behaviors (Aronson, 1968, 1969; Aronson and Carlsmith, 1962; Rogers, 1959). Rogers (1959) suggested that to preserve the self-structure and maintain a positive self-regard, the individual may allow an experience into awareness but in a form that makes it consistent with the self. Consequently, if the concept of self includes the cognition "I am an ineffective instructor," the experience of receiving high (favorable) evaluations by students could easily be distorted to make them consonant by perceiving in them such cognitions as "the students are immature and lack experience to evaluate me adequately; can't they see I am doing a lousy job?" Individuals seem to be motivated to maintain a consistent or stable self-concept by employing direct forms of defensive denial (e.g., Edlow and Kiesler, 1966).

It seems plausible that individuals will, under certain conditions, actually perform poorly, seek out failure in order to confirm self-referent expectancies. Aronson and Carlsmith (1962) predicted that even if a person develops a negative self-referent performance expectancy, he will likely try to maintain it. That is, the person who expects to perform poorly will experience discomfort when he actually gives a superior performance. It may be that the FD instructors in this study had low or unfavorable perceptions of themselves as instructors, and tried to maintain the low self-concept no matter how others reacted to, or evaluated them. Feeling of low self-esteem and the subsequent anticipation of failure (ineffective teaching, in this case),

⁶ Incidentally, dissonance theories have been questioned by some psychologists. For example, Tedeschi, Schlenker, and Bonoma (1971) commented that no single theory thus far is capable of explaining all the conditions under which cognitive or behavioral inconsistencies are "irritating" to an individual. Moreover, the mechanism by which individuals are aroused to action (as the existence of dissonance is a motivating state for them) to reduce imbalance or incongruence, may need further investigation and explanation.

could have played significant part in the use of feedback.

Another possible explanation for the ineffectiveness of the FD instructors is that having a low opinion of themselves (unfavorable self-evaluation), they would negatively perceive their teaching abilities, and doubt their successful performance in the classroom, thus inadvertently increasing the level of anxiety which is likely to detrimentally affect their teaching and interactions. Rosenberg (1962) showed that a high level of anxiety was associated with a low-level of self-esteem, self-concept.

It seems that feedback is likely to develop changes to the extent that it is seen by the instructor as helpful in resolving discrepancies or cognitive inconsistencies. Moreover, an awareness of teaching behavior does not necessarily follow the rules of logic as it follows the rules of what Abelson and Rosenberg (1958) called "psycho-logic". Therefore, teaching or perception of it which serves a self-defensive function, new knowledge in the form of feedback may be resisted tenaciously by various means and ways (cf. Adams, 1963; Adams and Rosenbaum, 1962; Edlow and Kiesler, 1966; Harvey et al. 1957).

Mere imbalance or cognitive dissonance does not seem to be solely responsible for changes in instructors; other factors might also be operating on them in bringing about changes or hindering it, such as: the direction of dissonance, the importance of a particular teaching behavior and satisfaction or dissatisfaction with it, the self-concept, the high anxiety state associated with low self-esteem, and so on.

It appears that the amount and direction of discrepancy between an instructor's and students' evaluations of instruction could be significant variables in instructor change and improvement after feedback. Although the data were based on the students' perceptions and evaluations of a particular instructor, for real interpretation and sound generalizations of findings however, more instructors should be included in the sample.

The author believes that further research is needed to determine the conditions under which the inconsistency reducing behavior will occur, and the variables that guide the choice in responses of instructors after information on their performance in the classroom. Moreover, in view of these findings, he recommends that for the efficient use of feedback by instructors (a) the instructor should be provided with a *model* for effective instruction. It may be possible that when he is given, besides student dissatisfaction with, and criticism of, teaching, the direction his students would like him to change, he can resolve the inconsistency by beginning to change in the direction of preferred teaching style by students; (b) classroom interactions and teaching should be observed by a trained or "experienced" professor. Having access to such first-hand observations of instructor in action and students' evaluations of instruction, the observing professor in giving feed-

back to the instructor could help him interpret the “negative” or “positive” information, and make realistic suggestions for the improvement of his teaching.

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