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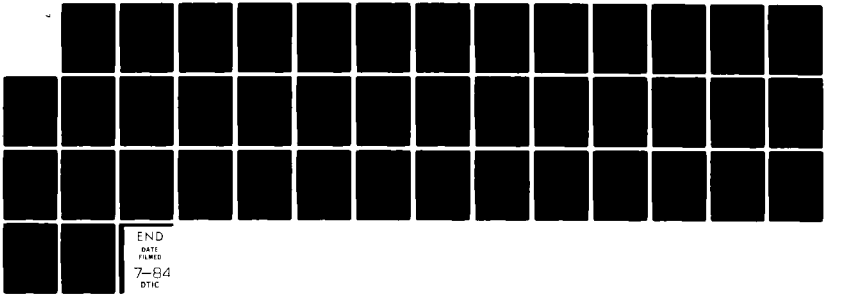

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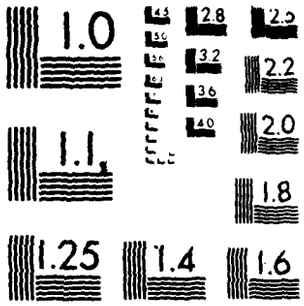

Organizational Behavior Research

Department of Management

Department of Psychology

EFFECTS OF CONFIRMED AND
DISCONFIRMED EXPECTATIONS:
A NATURALLY OCCURING EXPERIMENT

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and

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May, 1984

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The existence of a naturally occuring event (the selection of students for an honors program) permitted a test of cognitive dissonance theory through falsification. Affective reactions to confirmed and disconfirmed expectations were measured using both quantitative and qualitative approaches. Support for dissonance reduction through affective displacement is discovered but the results raise questions about the predictive ability of cognitive dissonance theory. Methodological issues and attributionally based extensions to dissonance theory are discussed.

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EFFECTS OF CONFIRMED AND DISCONFIRMED EXPECTATIONS: A NATURALLY OCCURING EXPERIMENT

The role of expectations in organizational behavior has been a topic of concern in a variety of contexts. For example, the notion of expectations plays a key role in theories of motivation (e.g., Vroom, 1964; Lawler & Porter, 1967), leadership (e.g., House, 1971), and organizational socialization (e.g., Woodman & Shaw, 1982). Although this topic has been examined from several perspectives, the research has generally focused on two aspects of expectations: (1) the extent to which outcomes can be predicted from prior expectations and (2) the effects of discrepancies between expected and actual outcomes (Woodman & Tolchinsky, 1982). Within this latter category, a primary question has been: What is an individual's affective response to discrepancy between expectations and outcomes? Cognitive dissonance (Festinger, 1957) attempts to explain individuals' responses to these discrepancies by emphasizing the individual s need for consistency. Over the years, cognitive dissonance theory has been modified to fit research findings. These modifications are still hotly debated (Ronis and Greenwald, 1979; Fazio, Zanna, and Cooper, 1977) but this debate has not identified how individuals' responses are related to discrepancies between expected and actual outcomes. The purpose

of this research is to explore that relationship through the general research question: What is an individual's affective response to confirmed and disconfirmed expectations?

Festinger (1957) introduced dissonance as a cognitive state which occurs when two elements are inconsistent. These elements may be considered as prior expectations toward an event or situation and actual outcomes. Individuals are thought to base their expectations on past behaviors, beliefs and attitudes, and environments. Past behaviors, beliefs and attitudes, and environments generate information which individuals try to arrange in some consis' nt manner, a cognitive gestalt. This gestalt becomes the basis to construct expectations of future events. At times, however, the actual outcome is discrepant from the expected outcome. This condition results in "psychological discomfort". The individual attempts to reduce the discomfort by altering the "knowledge" of the event or the expectation. Greater dissonance between the event and the individual's expectation is said to be related to greater motivation to reduce the dissonance by altering one or both of these cognitive elements (Brehm and Cohen, 1962). Thus, Festinger (1957) suggests that discrepancies between expectation and outcomes result in motivation to reduce these discrepancies.

Since its inception, cognitive dissonance theory has been modified to make it more congruent with research findings. Aronson (1968), for example, suggested that dissonance reduction aroused motivational forces only when a firmly held expectation was dissonant. Brehm and Cohen (1962) added personal commitment

to one inconsistent element as a prerequisite for highly motivated dissonance reduction. Wicklund and Brehm (1976), after reviewing the history of cognitive dissonance, suggest that the primary modification to the theory has been the inclusion of personal responsibility. The inclusion of responsibility is not inconsequential, for separate fields of study have attempted to relate discrepant outcomes and expectations with personal responsibility. Attribution theory, for example, has introduced the concept of locus of control. Locus of control is said to be invoked as an explanation for discrepant conditions where individuals presumably would not need to reduce dissonance; the dissonance producing situation is not under their control (Lefcourt, 1982). Other studies have suggested that self-esteem maintenance through impression management also influences the dissonance reduction process (Baumeister, 1982). Greenwald and Ronis (1978) note that dissonance theory is shifting more to a study of self or ego.

The shift to emphasizing self within the cognitive dissonance field of study is important theoretically and methodologically. The theoretical shift suggests that concepts of self, which are collections or gestalts which have formed over time, are less malleable than previously portrayed. Individuals may not quickly change their views of themselves but may maintain their self-concepts reasonably intact by displacing responsibility for unexpected outcomes on external forces (Staw, 1981). Methodologically, studies of dissonance need to ask whether the concept of self or the concept of dissonance is being assessed.

If the research intends to measure dissonance, it would seem preferable to isolate that specific construct. Unfortunately, it is not clear that such a distinction can be made (Fazio, Zanna, and Cooper, 1977; Ronis and Greenwald, 1979). The question then becomes two fold: 1) Do individuals reduce discrepancies between expected and actual outcomes? and 2) How can a researcher know that such dissonance takes place? The second question is particularly troubling since the research design is likely to invoke responses associated with dissonance reduction and self-concept.

One possible route to eliminate the confusion of constructs is to conduct research which depends upon falsification; rather than try to support the position that dissonance takes place, eliminate the possibilities that it doesn't. It would appear that a statement about dissonance can be established by eliminating some alternatives. One such alternative is displacement: Shifting emotional affect from an appropriate to an inappropriate object. A displacement perspective of dissonance suggests that when discrepancies occur, individuals will shift their affect to another object or objects rather than change their self-concepts. If such displacement takes place for individuals who encounter discrepant events and for individuals who were in the same group, but whose expectations were consonant with outcomes, the dissonance theory is not supported. Conversely, if the individuals who experience discrepant expectations and outcomes displace their affect while the group with consonant experience and expectations do not, then

dissonance theory is supported. This is the path this research follows. The research attempts to determine individuals' affective responses to confirmed and disconfirmed expectations as a means of testing dissonance theory.

Method

This field research makes use of a naturally occurring event for a source of data. The event was the selection of business school undergraduates for a "fast-track" program which offered educational, professional, and vocational opportunities unavailable to the general student population. During its initial year, the program proposed to select approximately 30 undergraduate students in their junior year. Over 1000 students were eligible to apply for this program and 151 did so. These 151 students serve as the initial research sample.

The selection procedure for the program extended over a period of about 4 months and had three major stages: informal introduction, formal assessment, and selection. Questionnaires were administered to the students following each of these stages. During the informal introduction period, students met with the program directors at a series of mixers where the program was described. The students then indicated their candidacy by submitting a resumé to one of the directors. Each student was then scheduled for a formal individual interview. The students completed the first questionnaire just before they were interviewed. This is referred to as Time 1.

The second phase of the selection procedure included assessing the abilities of each student using individual

interviews. In addition, the students were asked to complete detailed, written accounts of their work experiences. During this period, when the directors were determining who would be admitted to the program, a second questionnaire was given to the students. This second questionnaire was administered to ensure that the students' expectations were not influenced by the interviews. This is referred to as Time 2.

Finally, the directors selected the successful applicants. All students were notified of their acceptance or rejection by mail. Within two weeks of this notification, the third questionnaire was given to students. This questionnaire administration is Time 3 and it occurred approximately 4 months after the Time 1 questionnaire was administered. Only students who responded to all three questionnaires were included in the final sample. Of the 151 students who applied for acceptance to the program 113 completed all questionnaires for a 74.8% response rate.

The questionnaire included fifteen Likert scale statements. Two of these statements asked the respondent to indicate whether he or she expected to be selected for the program, and if selected, whether the applicant would actually participate. The other thirteen items indicated potential benefits of the program. Students were asked to indicate the extent to which they agreed or disagreed that the program would actually benefit the participants in the manner stated. The extent to which the student believed the program would benefit the participants was taken to be the extent to which he or she valued the program.

The response scale extended from "1" (excellent or strongly agree) to "5" (poor or strongly disagree). Five questions were reverse scored. Additionally, the questionnaire administered at Time 3 included open ended questions regarding the program itself and the selection process. The Time 3 questionnaire also reworded the expectations questions so that students retrospectively gauged whether they expected to be selected and participate in the programs. The expectations questions appear as items 1 and 2, the students' value of the program appear as items 3-15, and the open ended questions appear as items 18 and 19 in Appendix A.

A comment about the open ended questions is necessary. As noted earlier, a debate exists whether dissonance research actually measures concepts of self or dissonance reduction. This debate raised several issues about how students' displaced affect to discrepant outcomes could be measured. It seemed that open ended questions were preferable to the Likert scale items in the earlier portion of the questionnaire, but the form of the questions was problematic. If the students were asked a direct question about their affective responses, it could be argued that students would likely mask their answers; self-concept would play an integral role in the responses. Unfortunately, no clear alternatives exist, particularly with the use of the questionnaire methodology.

In an attempt to reduce the possibility that students would filter their affective responses, the open ended questions indirectly attempted to elicit displaced affect. In the first

question, students were asked to offer advice to other students who apply to the program in the future. The second question solicits comments and suggestions from the students regarding the selection process. In both questions, students are given the opportunity to offer advice based upon direct and vicarious experiences. This opportunity does not eliminate the possibility that a student's self-concept will influence his or her response, but it was hoped that such an influence would be reduced.

Results

The results will be presented in three parts: properties of the questionnaire, overall findings, and findings related to the confirmed and disconfirmed expectations. Recall that the questionnaire was administered at three times and consists of expectations and program value questions. The internal consistency reliability (Cronbach Alpha) for the program value questions is quite acceptable at Time 1, Time 2, and Time 3. These results plus test-retest reliabilities are displayed in Table 1. These results indicate that the program value scale items tap into the same construct and that the questionnaire reports results consistently over time.

Insert Table 1 About Here

The overall findings indicate that students expected to be selected for the program, expected to participate and highly valued the program. When asked whether they expected to be selected for the program, students responded that they believed their chances were between "Excellent" and "Good" ($\bar{X}_1$ =1.9; where

Excellent=1, Poor=5). This expectation of being selected remained stable through the second questionnaire administration ($\bar{X}_2$ =1.9). Because students' responses remained unchanged in this question, it was assumed that the interviewers did not influence students' expectations. Even after the students had been notified that they had been accepted or rejected, they believed, in retrospect, that their chances for being selected for the program were "Good" ($\bar{X}_3$ =2.0). The results show that, as a group, these students expected to be selected for this program, these expectations were consistent over time, and that being rejected for the program did not change the expectations which they previously held.

Similarly, students expected to participat. in the program. Students responded that they believed their chances of participating, if selected, were "Excellent" ($\bar{X}_1$ =1.0; where Excellent=1, Poor=5). These responses were consistent at each time the questionnaire was administered ($\bar{X}_1$ =1.0, $\bar{X}_2$ =1.1, $\bar{X}_3$ = 1.2).

The students' values for the program were examined to determine whether these values changed over time. Recall that students indicated their perceived value of program outcomes on items 3 through 15 (See Appendix A). Responses to questions 3 through 15 were summed to yield an index of overall value used for subsequent analysis. Table 2 displays the results of correlated t tests at Time 1, Time 2, and Time 3. The test

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Insert Table 2 About Here

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determined that a significant ($p \leq .001$) change in students' perceived value of the program outcomes occurred between Time 2 and Time 3. This indicates that all 113 students' value of the program appeared stable over an extended period of time (approximately 3 months) but changed significantly after acceptances to and rejections from the program were announced.

The student sample was then broken into two groups: Those who were accepted into the program and those who were not. Again, t-tests were used to determine whether any changes in the students' value of the program occurred. Those students who were accepted into the program did not significantly alter their value for the program. On the other hand, those students who were not accepted did change their value of the program. The t-test

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Insert Table 3 About Here

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indicates that this group of students significantly ($p \leq .001$) changed their value of program outcomes between Time 2 and Time 3. These students exhibited more negative values at Time 3 than at Time 2.

A final step in the data analysis is the examination of the open ended questions of the two student groups. The student responses were content analyzed and placed into five categories: preparation, selection-individual, selection-program, decision, and program. "Preparation" includes comments which students made about their activities prior to any formal contact with the program. "Selection-individual" refers to the period of time

when students were being interviewed and includes students' comments about their contribution to the selection process. "Selection-program" refers to the same time period as "selection-individual", but the comments are directed toward the contribution of the program's selection mechanisms. The "decision" group pertains to students' comments regarding the program's final decision to accept or reject the student applicant. Finally, "program" includes responses which refer directly to the program itself, as opposed to the selection process. These general groups were those most likely to be commented on by the students. Also, it is possible that if students are to displace affect, they would use readily identifiable targets (i.e. the program, the selection process, and the decision to accept or reject).

The open ended questions were answered frequently. Only 10 of the rejected applicants and 3 of the accepted applicants failed to make a comment on at least one question. The distribution of the comments among the various groups is displayed in Table 4.

Insert Table 4 About Here

Many students from both groups commented on the selection process, responses which were solicited by the question itself. The rejected applicants made more comments about the selection mechanisms than any other category. The accepted applicants also made many comments on the selection process, but split their remarks almost evenly between the role they played in the selection process and the selection mechanisms. Students from

both groups made observations about preparing for the selection process and on the program itself. The latter comments were somewhat intriguing since the program itself was not in operation, only the selection mechanisms were operating.

In order to get a clearer understanding of the nature of the students' affective responses, each comment was placed in one of three categories: positive, negative, and neutral. If the comment presented the category in a manner which was considered favorable, equitable, helpful, or correct, the comment was classified as positive. On the other hand, when the student assigned attributes which were generally damaging, hindering, unfair, or incorrect to the category, it was rated as negative. When no clear distinction could be made, the comment was placed in the neutral category.

The rejected applicant group's responses are displayed in Table 5. Overwhelmingly, these students made more negative

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Insert Table 5 About Here

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comments about the selection mechanisms than positive statements. The negative statements frequently charged the selection mechanisms as being biased or unfair. The following are some examples:

> "People who don't have [job] experience or an excellent GPA [Grade Point Average] have much better people and communication skills than those with high grades."
>
> "Look into all students past job experience i.e. talk to their employers about the student's experience and job mastery. (all applicants!)"
>
> "I believe I was misinformed about the number of students

that would be chosen. That is very misleading. The interview was too structured."

"Know somebody"

Some students in the rejected group did make positive comments on the selection mechanisms.

"I think the selection process is very fair and that the students selected are very outstanding."

"...the entire process is worth it simply for the interview even though I was not accepted. The interview is invaluable."

"...it's a worthwhile experience (gives you a step forward in interviews, resumé, etc.). It helps you see what areas you need improvement in."

As a group, however, the rejected students made far more comments about the selection mechanisms than any other aspect of this event. These comments were significantly ($X^2 = 11.43$, $p < .01$) more negative than positive.

The accepted students also made many comments about the selection mechanisms, although their comments were more evenly distributed between positive and negative statements. These students' negative statements seemed to be less acrimonious and more often included constructive suggestions than condemning

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Insert Table 6 About Here

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commentary.

"The graduate student who interviewed me seemed totally bored and unprepared. All I did was answer the same questions that were on my resumé."

"Have, if possible, 3 people interviewing the "finalists" and have them ask harder questions."

"Get better interviewers because the current ones make the

> students more nervous than they were at the start of the interview. RECORD (tape) all interviews and write notes afterwards because it is difficult to talk to someone who appears not to be listening."

Students in this group who made positive comments about the selection mechanisms seemed to make generalized statements, much like the students in the rejected group.

> "I thought the selection process was very fair because the applicant could prove himself in the interview or in the managerial dimensions or both."
>
> "I really thought the selection process was well organized."
>
> "I feel that the selection process was fair."

As a group, then, the accepted students did make many comments about the selection mechanisms; a finding which parallels the rejected student group. The accepted students made about the same number of negative comments as positive comments. Also, the tone of the accepted students' negative statements seemed to be less rancorous than the rejected students' negative comments.

The accepted students chose to comment more frequently about another aspect of the selection process: their personal role. The accepted students made significantly ($X^2 = 7.2$, $p < .01$) more statements about the part which they played in the selection process than the rejected students. Moreover, the accepted students viewed their role as a positive one; no student in this group wrote a statement about their role which could be classified as negative. The students seemed to believe that effort and self-confidence were two key ingredients in their success.

> "Be sure to take enough time to remember <u>all</u> instances in

which your areas of competence are demonstrated."

"Be confident about yourself and your talents and abilities. Don't give up and definitely put forth your best effort."

"Compile a good, concise resumé; spend time on the questionnaire; and prepare for the interview (be self-assured when answering questions, know your future goals, evaluate your strengths and weaknesses)."

By comparison, the rejected students viewed their role in the selection process as a negative one.

"I know that I didn't do as well as I could have on the written questionnaire."

"The one thing this process has taught me is that my interviewing experience is very poor."

These two groups differed significantly in the number of comments made on their roles in the selection process. The accepted students frequently credited effort and self-assurance as dominant factors while the rejected students almost always viewed themselves in a negative manner, if they made any comment whatsoever.

The number of students in either group who made statements about the program itself was quite small. These few comments are interesting, however, because the program was new to the university and had carried out no activities nor did it have any history of activity. The accepted students remarks regarding the program were all positive.

"...the program is an opportunity [future students] can't afford to pass up and that they are very smart for wanting to participate in such an exciting program."

"I would suggest that everyone who is interested and willing [should] participate in the program regardless of grades, major, or graduate school plans."

Rejected students, on the other hand, presented a more balanced view; about as many students viewed it as positive as students who believed it was negative.

> "I believe it is a real opportunity for learning and better employment. The rest of us are (I am) still interested in the seminars and stuff."
>
> "I think the program is geared for the 'big talker' type of person who joins clubs, etc. just so it will "look good on his record"."

One of the rejected applicants had very strong feelings about the program:

> "As a rejected applicant, it is my sincerest wish that in the event of one of the participants not being able to continue in the program, that I be considered above all others to fill that person's vacancy. I believe participation in the _____ Program to be too valuable of a learning experience to be allowed to be shared by fewer students than what is possible."

The students in both groups who commented on the program seemed fairly confident that the program either was or was not worthwhile. There was little ambivalence in their remarks. These observations may have been generalized from the selection process.

As a final note, the students' responses to the accept or reject decision and their preparation for the selection process will be described. Few students made any comment about their preparation or how others might prepare for the selection process. Those few statements which were made can be captured with the phrase "Don't get your hopes up.", a statement that was used by most of those students who chose to comment. The decision to accept or reject was commented on by only two rejected students out of the entire sample. They wrote:

> "I think you made a great mistake in not choosing me for the program. I may not have the exact characteristics you are seeking, but I would more than compensate for those deficiencies through hard work and persistance."
>
> "See you at the top!"

It appears that these students have rejected the program's rejection.

Discussion

The purpose of this research is to determine individuals' affective responses to confirmed and disconfirmed expectations. Hopefully the findings of this study will contribute to the debate over the value of dissonance theory. Because no direct test of dissonance theory has evolved, this study suggests that alternative explanations be examined. If competing explanations to dissonance theory can be eliminated, the theory gains support. This research attempted to determine whether individuals would displace affect in circumstances where their expectations were confirmed and disconfirmed. In order to contribute to the debate, however, some requisites of research methodology require attention.

Aronson (1968) and Brehm and Cohen (1962) qualified Festinger's (1957) basic concept of dissonance reduction by suggesting that motivation to reduce dissonance is dependent upon an individual's concept of the dissonant element. Aronson (1968) notes that one element must be a firmly held expectation while Brehm and Cohen (1962) suggest that personal commitment to one element is necessary before an individual will be motivated to reduce the dissonance. This field study meets those requirements. These students were self-selected; out of

approximately 1000 students, these 151 applicants chose themselves to participate in the selection process. The importance of this self-selection is magnified in light of the length and rigor of the selection process. Students knew that fewer than 1 out of 4 would be successful. The selection process lasted approximately 4 months and required a substantial amount of work from the students. This behavior strongly suggests that these students expected to be selected to participate in the program. This behavioral indication of high expectations is supported by the students' questionnaire responses. The entire sample indicated that their chances for being selected were high and this expectation did not greatly change, even after the students knew that they were accepted or rejected. Similarly, the students indicated that, if selected, the chances that they would actually participate were high at each of the measurement times. These findings strongly support the position that the students were personally committed to the program and that the students held a firm expectation of being selected. These findings suggest that this naturally occurring event was an important and desirable event in the lives of these students and, as such, an appropriate setting to examine affective responses to confirmed and disconfirmed expectations.

Dissonance theory suggests that individuals will be motivated to reduce inconsistent elements. The concept pursued in this research was to determine if students would displace affect in a similar fashion irrespective of whether their expectations were confirmed or disconfirmed. The results generally support the

view that the students with disconfirmed expectations respond differently than those students whose expectations are confirmed. The rejected students significantly disvalued the potential outcomes of the program. At first glance, this would seem to support the concept of dissonance; these students' expectations were dissonant with an event, therefore these inconsistencies are made more consonant by disvaluing the program. The data raise other issues, however.

An important issue appears to be the roles of the various elements in the selection process. Accepted students were more likely to consider their own characteristics as important and positive while the rejected students were more likely to view the selection mechanisms as an unfavorable, but important, component of the process. One could argue that this outcome might be predicted by dissonance theory; selected students more highly value themselves while rejected students disvalue the program. Yet, an opposite argument can be made from dissonance theory. Rejected students might just as well more highly value the program after being rejected from the program. Students base their expectations on past experiences. These experiences have led them to believe that they will be selected for the program. By being rejected, the students are being told, in effect, that their expectations are not consistent with reality. The students may not be inclined to alter concepts of self, particularly since these concepts have been established through numerous incidents over time. The program or its manifestation, the selection process, is a more malleable element than the self. The program

could be disvalued, as many students in this study did. But students could also reason that the standards were extreme or that the competition was acute; a few rejected students made such comments. Why didn't more students follow this approach? By disvaluing the program, the students also implicitly lower their own status. If they weren't chosen for a program which they now disvalue, it appears that the students are also prepared to disvalue themselves.

This issue of the predictive ability of dissonance theory regarding affective response is further highlighted by the qualitative data. Some individuals responded by writing negative comments, while others made positive statements. One student who was rejected from the program stated that the "...selection process is very competitive and it is important that only the most outstanding students represent _____University." while another rejected student wrote "Have a good background of phoney high school government activities and make the normal seem better". This is the critical question for dissonance theory. Why do some individuals with cognitive dissonance respond with a valuing comment while another uses a disvaluing statement? This issue is not resolved by dissonance theory. It appears that individuals attempt to reduce dissonance, but it is not clear how such reduction will occur.

One field of study which has attempted to respond to that question is attribution theory. Essentially, attribution theory seeks to determine the causal relationships individuals establish in order to explain why an event occurred (Heider, 1958).

Attribution studies suggest that when individuals fail, it is necessary to "explain" that event. Common explanations of success and failure are luck, ability, effort, and task difficulty (Weiner, 1982). These explanations may be classified according to their stability, causal locus, and degree of controlability. Attribution theory literature suggests that individuals are more likely to ask why an event occurred when it was unexpected (Lau and Russell, 1978). Further, the attribution of the causes of that event are likely to influence future expectations. For example, if individuals believe the causes of an event are internal and that they have control over the causes, these individuals are likely to expect similar outcomes in the future. On the other hand, if the causes are uncontrollable and external to the individual, he or she has less reason to expect that a similar outcome will reoccur (Weiner, 1982).

Attribution theory may help explain the qualitative data. The students who applied for the program have a history of at least modest success; their progress in educational settings attests to that. According to attribution theory those students who are confronted with a disconfirmation of this success will associate some combination of locus of control and controllability to this event. If the students decide that the disconfirmation was due to internal factors which are controllable, this implies that the student was responsible for the outcome and such an outcome may reoccur. On the other hand, if the students assign the outcome responsibility to an external, uncontrollable cause, then the individual may expect that the

outcome was an isolated one with low probability of reoccurrance. This explanation fits the findings of the qualitative data. Students who were accepted more frequently commented on their individual roles in the selection process and viewed their roles as positive. Students who were rejected attributed the flawed selection mechanisms as the cause of their disconfirmed expectations. For the accepted students, this means that they will expect similar future outcomes because they were responsible for the current outcome. The rejected students, however, can dismiss this outcome because of the locus of causality and look to more positive future outcomes.

A combination of the qualitative and quantitative data appears to support this explanation of the students' affective responses. At Time 2, when the selection process was essentially complete, the second questionnaire was administered. The purpose of that questionnaire was to assure that the selection process itself was not biasing the students' responses. As reported in the findings section, the students' mean response on the expectation question at Time 1 was identical to the mean at Time 2. The students' responses did not indicate that the selection process influenced their expectations, nor did it significantly change their value for the anticipated program outcomes. Turning to the qualitative data at Time 3, however, an investigator would be led to believe that the selection process was a critical component of selection, a process that the rejected students commented on frequently and in a negative manner. This suggests that, at the time, students did not indicate that the selection

mechanisms were important enough to change their expectations or their view of program outcomes. Retrospectively, however, that selection process seems to have gained importance in the final determination of acceptance or rejection. The students offered negative views of the selection process and disvalued the program. Even at Time 3, rejected students were still unwilling to change their expectations in any significant way. It seems that for most of these students, displacing affect toward an external force beyond their control "explains" the rejection and allows them to undertake future activities which may entail rejection.

A question flows from the description of attributing failure to external, uncontrollable forces: Why did other rejected students internalize the locus of causality? One explanation is that the students are more aware of their limitations or that they are less inclined to be negative about other people. Still, if attribution theory suggests that associating failure with external causes allows individuals to move on to subsequent tasks, then what factors motivate individuals who internalize the reasons for their failure? It does not seem likely that an individual would consistently internalize reasons for rejection. Patterns may exist, however, and the individual characteristics associated with people who simultaneously internalize rejection causality and move toward situations with a high rejection potential would be an interesting topic for study.

In summary, a quantitative analysis of changes in perceived value of the opportunities represented by the program is in

general agreement with notions of cognitive dissonance theory. Individuals whose expectations of being selected were disconfirmed appeared to reduce dissonance by lowering their perceived value of the program. However, cognitive dissonance notions are less helpful in drawing distinctions between dissonance reduction and/or changes in self concept. A qualitative analysis of subjects' responses to open-ended questions sheds some light on this issue. Here, results are interpretable in the context of attribution theory. Individuals with disconfirmed expectations are more likely to attribute their lack of success to external causes, suggesting that dramatic changes in self concept did not occur in this situation. The outcomes of both quantitative and qualitative analyses taken as a whole provide some additional support for dissonance reduction and consistency theories while at the same time highlighting the severe limitations of cognitive dissonance notions in isolation to predict specific forms that dissonance reduction might take.

TABLE 1

Reliabilities for Program Value Questionnaire

Reliabilities	Time 1	Time 2	Time 3
Internal Consistency (Cronbach Alpha)	.86	.88	.90
Test-Retest	.87	.80	

TABLE 2

T-tests for Applicants' Value of the Program Across Time

Group	Times	n	t	P
All Applicants	1 and 2	113	-1.09	<.28
	2 and 3	113	-6.60	<.001

TABLE 3

T-tests for Accepted and Rejected Applicants' Value of the Program Across Time

Group	Times	n	t	P
Accepted Students	1 and 2	32	-1.20	<.24
	2 and 3		-0.13	<.90
Rejected Students	1 and 2	81	-0.45	<0.65
	2 and 3		-7.98	<.01

TABLE 4

Frequency of Applicants' Responses to Open Ended Questions

	Accepted Applicants	Rejected Applicants
Preparation	2	6
Selection-Individual	16	4
Selection-Program	13	35
Decision	0	2
Program	3	7

Note: The total number of comments does not equal the number of students who responded to open ended questions because some answers could not easily be placed in one of the five groups.

TABLE 5

Categorization of Rejected Students' Affective Responses to Open Ended Questions

	Positive	Negative	Neutr
Preparation	1	4	1
Selection-Individual	0	3	1
Selection-Program	7	28	0
Decision	0	2	0
Program	3	4	0

TABLE 6

Categorization of Accepted Students' Affective Responses to Open Ended Questions

	Positive	Negative	Neutra
Preparation	1	0	1
Selection-Individual	15	0	1
Selection-Program	7	6	0
Decision	0	0	0
Program	3	0	0

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APPENDIX A

The following questions deal with what you expect the CBA Fellows Program to be like. For each question put the number of the answer which comes closest to your expectations in the space provided at the beginning of each question. Please answer all the questions. Please put your name at the top of this page.

_____ 1. I believed that my chances of being selected to participate in the CBA Fellows Program were:

1	2	3	4	5
Excellent	Good	So So	Slight	Poor

_____ 2. Since I have been selected to participate in the CBA Fellows Program, the chances that I will actually participate are:

1	2	3	4	5
Excellent	Good	So So	Slight	Poor

_____ 3. People who participate in the CBA Fellows Program will be able to better clarify their career goals than those who are not in the program.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree/Disagree	Disagree	Strongly Disagree

[Note: Questions 4-15 use same answer format.]

_____ 4. People who participate in the CBA Fellows Program will develop better communications skills than those who are not in the program.

_____ 5. People who participate in the CBA Fellows Program will develop a poorer understanding of corporate life than those who are not in the program.

_____ 6. People who participate in the CBA Fellows Program will develop career paths leading to career goals more easily than those who are not in the program.

_____ 7. People who participate in the CBA Fellows Program will develop fewer management skills than those who are not in the program.

_____ 8. People who participate in the CBA Fellows Program will develop a poorer understanding of the manager's role than those who are not in the program.

_____ 9. People who participate in the CBA Fellows Program will develop more confidence to be a manager than those who are not in the program.

_____ 10. People who participate in the CBA Fellows Program will get better job than those who are not in the program.

_____ 11. People who participate in the CBA Fellows Program will get into better graduate school (if they choose to do so) than those who are not in the program.

_____ 12. People who participate in the CBA Fellows Program will get promoted less quickly than those who are not in the program.

_____ 13. People who participate in the CBA Fellows Program will develop better decision-making skills than those who are not in the program.

_____ 14. People who participate in the CBA Fellows Program will develop greater ability to apply technical knowledge than those who are not in the program.

_____ 15. People who participate in the CBA Fellows Program will gain less valuable job experience than those who are not in the program.

_____ 16. Looking back over the past semester, I would say that applying for the CBA Fellows Program was:

1	2	3	4	5
Of Absolutely No Value		Somewhat Valuable		A Valuable Learning Experience

17. Next year, if a friend asked for my advice before applying for the CBA Fellows Program, I would recommend that he or she:

_____ Definitely apply
_____ Apply only if he or she were an outstanding student
_____ Not apply

18. What comments or suggestions would you offer to others who apply to the CBA Fellows Program in the future?

_____
_____
_____
_____

19. What comments or suggestions would you offer to the CBA Fellows Program in regard to the selection process?

_____
_____
_____
_____

APPENDIX B

Question Means and Standard Deviations at Time 1, Time 2, and Time 3

Question Number	$\bar{X}1$	SD1	$\bar{X}2$	SD2	$\bar{X}3$	SD3
1	1.9	.54	1.9	.61	2.0	.63
2	1.0	.31	1.1	.39	1.2	.66
3	1.5	.67	1.7	.64	2.0	.86
4	1.8	.71	1.9	.79	2.4	.88
5	1.4	.53	1.4	.52	1.6	.69
6	1.9	.69	2.0	.76	2.2	.87
7	1.4	.69	1.5	.67	1.6	.60
8	1.4	.51	1.4	.51	1.6	.58
9	1.7	.69	1.8	.73	2.2	.86
10	2.7	.66	2.6	.71	2.8	.95
11	2.7	.72	2.7	.73	2.9	.86
12	2.0	.63	2.0	.66	2.0	.68
13	2.0	.61	1.9	.66	2.3	.80
14	2.2	.74	2.2	.78	2.5	.90
15	1.4	.56	1.4	.62	1.6	.60

Note: Smaller $\bar{X}$ = greater agreement with statement

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