

CONFLICT, DECISION, AND DISSONANCE

Chapter 6

Decisions Among Imperfect Alternatives
Elaine Walster and Leon Festinger

The Effect of Anticipated Dissonance on Pre-
Decision Behavior
Marcia Braden and Elaine Walster

Aspects of the Pre-Decision Cognitive Process

■ In Chapter 1 we remarked that in spite of long-standing concern with the problem of conflict and decision making, psychologists have contributed little to an understanding of the cognitive process during the decision-making period. At this point, we must face the fact that the studies reported thus far in this volume have not contributed much to an understanding of this process either.

What have we said about the pre-decision process? It has been demonstrated that the pre-decision period is *not* characterized by a systematic process of spreading the alternatives apart in terms of attractiveness. This, however, is a rather negative kind of contribution—it does not tell us what *does* characterize the pre-decision cognitive process. The only constructive suggestion that has been made is that the pre-decision period is characterized by objective, impartial gathering and evaluation of information about the alternatives involved in the choice. This seems plausible, and some data we have presented tend to support such an assertion. But surely this is not the only thing that occurs during the process of making a decision. If it were, the decision-making process would be a rather orderly affair. The decision maker would simply collect and evaluate information about the various alternatives. As soon as he had collected and evaluated enough information so that he was relatively certain that more information would not alter the preference order that existed, he would make his decision.

Intuitively, however, it seems clear that the decision-making process is not that simple. Other factors certainly enter. Although we are very far from being able to offer any coherent account of everything that occurs, or that may occur, in the pre-decision period, we can present some theoretical and experimental exploration of two other factors that seem possibly important.

There is one obvious limitation on the idea that impartial collecting of information about the alternatives is an adequate description of the pre-decision process. For such a description to be adequate, all the alternatives in a decision situation would have to be clearly defined. Although it is certainly possible to construct laboratory decision situations in which they are so defined, it is probably rarely the case in actual decision situations. The more usual decision situation, while involving some alternatives that are clearly defined, also allows the person to search for, or to invent, new alternatives that may perhaps be more satisfactory to him than any of those which are immediately apparent.

If this is true, then a goodly portion of the time that a person spends making a decision may actually be spent not in collecting and evaluating information, but in trying to discover new alternatives or in thinking about better alternatives that are not actually available to him. He may even spend considerable time trying to devise a way to make better but unavailable alternatives actually available. For example, consider the hypothetical case of a student who has just received his Ph.D and has received job offers from two universities. Let us imagine that one job offers him a higher salary but that the other offers him a lighter teaching load. Let us further imagine that both of these jobs are very attractive to him, but that neither is a complete fulfillment of some image he has of the "ideal job." How does he go about making his decision?

Certainly, he will collect and evaluate all kinds of information about these two jobs and will spend time considering and trying to balance teaching load against salary. But we wish to suggest here that these will not be the only cognitive processes in which he engages. Many other alternatives will suggest themselves to him and he will spend considerable time thinking about, and exploring, aspects of the situation which, in a sense, are irrelevant to the decision he must make. Certainly, he can hope that some third job, even better than either of the two he has been offered, will become available. Even when he eventually disposes of this possibility as unrealistic, there are still other alternatives that he can consider. If job A with its high salary only had less teaching connected with it, he would accept it; or if job B with its lighter teaching load only paid more money, that job would clearly be preferable. He may even go so far as to contemplate proposing

such modifications to the jobs he has been offered. It seems likely that only after he has given up the idea of any of these unavailable alternatives, will he be able to decide between the two jobs.

If such processes commonly occur in decision making, it should be possible to obtain evidence about them in a controlled experimental situation. What one would want in such an experiment would be to put subjects into a relatively simple, straightforward decision situation with clearly defined alternatives. One would then want to manipulate, in a manner which in and of itself would not affect decision time, the likelihood of the person's inventing other alternatives. Measurements of decision time, and indications of what the person had been thinking about while making the decision, should then provide evidence concerning the validity of the above suggestions. Such an experiment, by Walster and Festinger, follows.

Experiment

Decisions Among Imperfect Alternatives

Elaine Walster and Leon Festinger

Does a person, when faced with a choice among imperfect although attractive alternatives, spend time thinking about more attractive possibilities that are not really available? If this does happen, then it is likely to be a feature of many decision-making situations and it would be well to understand more about it. The present experiment was designed to ascertain, in rather preliminary fashion, whether or not such a process could be observed to occur.

In order to do an experiment to ascertain whether such a hypothesized process does indeed occur, one must be somewhat more specific about the details of this process and about its measurable manifestations. One manifestation should be very clear. To the extent that a decision maker considers unavailable "ideal alternatives" and must dispose of these cognitively before making his decision, the total time it takes to make the decision should be longer. In short, if one were to compare an experimental condition in which the person did consider unavailable alternatives with a

condition in which the person did not, the decision time in the former condition should be longer.

The other manifestations of this hypothesized process that one can easily specify *a priori* are concerned with the actual content of the cognition of the decision maker at various times in the process of making his decision. Early in the decision process one would expect to see evidence that the person was thinking about unavailable alternatives. By the end of the decision-making process, however, the picture should be different. If it is necessary for the person to accept the unavailability of the "ideal alternatives" and to stop thinking about them before he can make his decision, then by the end of the process of decision making one should be able to obtain evidence that he *has* stopped thinking about them.

One other problem must be solved before a fruitful experiment can be done to test the validity of this suggestion about the pre-decision process. One must find a way to manipulate experimental conditions so that in one condition it is rather likely that "ideal" but unavailable alternatives will occur to the subject, while in another condition it is less likely. Considering the exploratory nature of this investigation, we chose the most direct and least ambiguous way to do this that occurred to us. In order to encourage and facilitate thinking about very good but unavailable alternatives, we would simply have present, in this experimental condition, a very good but unavailable alternative.

The basic design of the experiment was, then, quite simple. All subjects were to be given a choice among attractive but imperfect alternatives. In one condition they would first be shown a "perfect" alternative that was not available to them. In the other condition, to keep the procedure as constant as possible, they would first be shown a worse alternative that was not available to them. We would then compare these two conditions with respect to decision time and to the content of the cognition of the subjects.

Given such a design, it is always possible that differences between these two conditions could stem from the mere presence or absence of a highly attractive object rather than from the specific cognitive process we have envisioned. Hence, we felt it was necessary to have two additional experimental conditions that were treated in exactly the same way as the two mentioned above except for the fact that now the subjects would not be making a decision among the alternatives for themselves. In these two additional conditions the

subjects would be asked to say which of the imperfect alternatives they liked best, but there would be no implication that they would get anything. If the mere presence or absence of the very attractive but unavailable alternative produces any difference between the conditions, it seems likely that this effect would be the same irrespective of whether or not the decision was for themselves. If, however, a difference between the conditions is due to our hypothesized pre-decision process, it should affect only those conditions in which the subjects are actually making a decision for themselves.

Procedure

The subjects used in the experiment were 127 boys from the second and third grades of two Palo Alto, California, schools. Each boy came individually to a room to talk to the experimenter, having been previously informed that she was a representative of a toy company. When the boy entered the experimental room he was seated at a small table and told that the experimenter would show him a number of toys because she was interested in knowing whether or not he liked each of them. The boy was then shown a scale that was specially prepared so as to be suitable for boys of this age. This rating scale consisted of six points, each one represented by a square. The most favorable point was represented by a large square labeled "Really crazy about this toy; the nicest one I've ever seen." The most unfavorable point on the scale was represented by an extremely small square labeled "Just hate it; the worst toy I've ever seen." The four intermediate points on the scale were similarly identified by squares of different sizes and appropriate labels. The scale and its use were explained to the boy carefully. All the labels were read to him and it was pointed out that the size of the square increased as the liking for the toy increased. The boys seemed to understand the scale well and none had any difficulty using it.

The experimenter then produced a number of toys, one at a time, and asked the child to point at the position on the scale which described how much he liked or disliked that toy. The child was told that he could examine and try out each toy as much as he wished before making his rating. The first two toys the child was shown and asked to rate were irrelevant to the experiment. They were intended to set the child further at ease and to accus-

tom him to the procedure of doing the ratings. The third toy that the boy was asked to rate differed, depending on the experimental condition to which the subject had been assigned. Those boys who were to be in the condition with an "ideal" but unavailable alternative were shown a rather large, red, racing-car toy, which was powered by a gasoline engine. Those subjects who were to be exposed to a mediocre but unavailable alternative were shown an ordinary blue sedan toy with no motor at all.

The boy was then shown, and asked to rate, five small racing-car toys, each with a wind-up motor. Each of these toys was different in color and in detail. Furthermore, each of them had a slight defect—some scratches, a wheel slightly loose, steering wheel missing, and the like. As the experimenter produced each of them, one at a time, she pointed out one very desirable aspect of it and also pointed out its defect. In order to avoid monotony in the descriptions and in the boys' ratings of these racers, two "filler" toys similar to the practice ones were presented between the third and fourth of the small racers.

After each car was rated by the child, it was put away out of sight and the next one produced. After the last car was rated and put away, the experimenter administered a "Post-Rating Memory Test." She said to the boy, "You've seen a lot of toys today. I'd like you to tell me every toy you can remember seeing." The experimenter simply recorded which toys the boy mentioned. No probing or prodding was done.

The "ideal" toy (or the "mediocre" toy) was then taken out of the box and placed at the back of the table. The five slightly damaged small racers were placed on the table directly in front of the boy. The experimental procedure now varied depending upon the condition to which the subject had been assigned.

Decision Conditions. In these conditions the subject was asked to choose which of the five slightly damaged racers he wanted as a free gift for himself. The experimenter said:

O.K., there's one more thing I'd like you to do. Since we get all our toys free, we decided to give each boy who helped us a toy to thank him for coming in. We had planned to give you this toy [*holding up the "ideal" or the "mediocre" toy depending upon the experimental condition*], but then the toy makers changed their minds; they decided *not* to give you that one. Instead, you can have any of *these* racers that you want. Why don't you figure out which of the racers you want, and as soon as you know for sure, tell me and I'll give it to you.

Preference Conditions. In these conditions the subject was asked to state which of the five slightly damaged racers he liked best, but there was no implication that he would receive any toy for himself. The experimenter said:

O.K., there's one more thing I'd like you to do. We had planned to ask you about this car [*holding up the "ideal" or the "mediocre" toy depending on the experimental condition*], but then the toy makers changed their minds; they decided *not* to ask you about that one. Instead, we would like to ask you something about *these* racers. The toy makers never know which kind kids will end up liking best. To get some idea, we'd like you to tell us which racer you think is the best. Why don't you figure out which racer you like best, and as soon as you know, tell me and I'll write it down.

In both sets of conditions the experimenter, using a hidden stop watch, measured the time it took from the end of this statement until the boy indicated which toy he wanted (or liked best). The subject was then asked to rate, on the same scale he had used previously, the toy he had chosen.

All subjects in the experiment were given a second memory test in a somewhat different form from the first one described above.

Post-Decision Memory Test. After the choice had been made and the chosen racer had been rated, the boy's chair was turned away from the table, he was asked to shut his eyes, and the experimenter said:

Now you know all the toys that are on the table. Well, the first time I showed them to you, I told you a lot of things about them, and when you played with them, you probably noticed a lot of things about them. I'd like you to tell me everything you can remember about every single toy that's on the table now.

Pre-Decision Memory Test. A memory test before, rather than after, the decision was used for some subjects in the "ideal" alternative conditions only. For these subjects, about four seconds after the choice instructions, the experimenter said: "Oh dear. Close your eyes. I was supposed to ask you one thing before you decide which car you want (or like best)." The experimenter then gave exactly the same instructions as for the post-decision memory test. After the subject had finished, the experimenter said, "O.K., now you can finish deciding which car you want (like best)."

The experimenter recorded which cars were mentioned during

TABLE 6.1
Number of Subjects in Experimental Conditions

| | Decision Condition | Preference Condition |
|---|------------------------|----------------------|
| "Ideal" Unavailable Alternative | | |
| Pre-Decision Memory Test | 11 | 11 |
| Post-Decision Memory Test | 30 | 23 |
| "Mediocre" Unavailable Alternative | | |
| Pre-Decision Memory Test | Not included in design | |
| Post-Decision Memory Test | 30 | 22 |

this second memory test and whether the remarks about each of them were positive or negative. At the conclusion of the session the experimenter told each subject that his gift for helping in the study would be delivered to him the following week. The subjects were asked not to tell their classmates about the experiment.

Altogether, six experimental conditions were run. Subjects were assigned to conditions at random but no attempt was made to have an equal number of subjects in each condition. Rather, more subjects were assigned to those conditions in which we wanted to have more reliable measures. Table 6.1 gives a summary of the design and the number of subjects in each condition.

Results

Before examining the evidence relevant to the main hypothesis of the study, it would be well to check on whether or not we did, indeed, create the experimental conditions that were intended. Two major points are involved here. First, is the "ideal" unavailable alternative really much better than the alternatives that are available and is the "mediocre" unavailable alternative worse than the available ones? Second, can we be reasonably sure that the mere presence of the "ideal" or the "mediocre" car does not in itself, because of the effect of comparison, alter the attractiveness of the five slightly damaged racers? Unless we have evidence on this, we cannot be sure that we have really presented the same decision situation in the two sets of experimental conditions.

On the first point there is really very little question. The "ideal"

car was actually an extremely desirable toy and the "mediocre" car was quite undistinguished. The data, of course, bear this out. It will be recalled that the very first thing done in the experiment was to have the subject rate each of the toys on a six-point scale. The average rating given to the "ideal" car (75 subjects) was 1.1, very close to the maximum liking on the scale. The average rating given to the "mediocre" car (52 subjects) was 3.1, close to the point on the scale that was labeled "Like a little more than most toys." The average ratings given by all subjects to the five slightly damaged racers was 2.1, midway between the other two. All of these means differ from one another at very high levels of statistical significance. It is clear that the "ideal" car was seen as more attractive, and the "mediocre" car as less attractive than the alternatives among which they were later to choose.

There is, however, some question concerning the second point of whether or not the attractiveness of the available alternatives was affected by the presence of the "ideal" or the "mediocre" car. There are several sets of data that one can examine in relation to this question. Let us look first at the initial ratings of the five slightly damaged racers. It will be recalled that on the initial ratings, the "ideal" or the "mediocre" car always came before the five racers. Consequently, if having seen and rated the "ideal" or the "mediocre" car affected the attractiveness of the five racers, it might be evident in the initial ratings. The average rating given to the racers by those who saw the "ideal" car (75 subjects) was 2.2; the corresponding average rating given by those who saw the "mediocre" car (52 subjects) was 1.9. The difference between these two means does not come close to an acceptable level of statistical significance, but there is the suspicion, nevertheless, that an effect may have occurred which, for our present purposes, is undesirable. The five slightly damaged racers may, indeed, seem less attractive to those who have seen the "ideal" car.

One can pursue the question by looking at other relevant data. It will be recalled that, after the choice had been made, the subjects were asked to rate, once more, the racer which they had chosen. This occurred, of course, after the "ideal" or the "mediocre" car had been shown to them again, and consequently the effect on the attractiveness of the chosen racer might be even stronger. The average post-decision ratings of the chosen racer are shown in

TABLE 6.2
Average Post-Decision Ratings of Chosen Racer

| | Made Decision | Indicated Preference |
|------------------------------------|-----------------|----------------------|
| "Ideal" Unavailable Alternative | 1.6 (N = 41) | 1.6 (N = 34) |
| "Mediocre" Unavailable Alternative | 1.4 (N = 30) | 1.3 (N = 22) |

Table 6.2. These averages are presented separately for those who were choosing a gift for themselves and for those who were simply indicating a preference.

Again we see the same tendency in the data. Although the differences again do not approach statistical significance, there is once more the suspicion that having seen the "ideal" car makes the slightly damaged racer less attractive.

There is one more set of data relevant to this question. It will be recalled that all subjects were given a second memory test either after the choice had been made or at the beginning of the decision process. On this second memory test they were asked to recall all the characteristics they could remember about each of the cars. The experimenter recorded what they remembered and whether it was a positive or a negative attribute. If the presence of the "ideal" car did make the slightly damaged racers seem less attractive, it might be expected that this would reveal itself in more emphasis on the negative characteristics of the racers. Table 6.3 presents these data for the six experimental conditions. The table gives the average number of characteristics mentioned altogether, and the difference between the number of negative and the number of positive characteristics recalled. In all conditions, more negative than positive characteristics were recalled.

An examination of the figures in Table 6.3 reveals that for the conditions in which the subjects were choosing a racer as a gift for themselves, there is a clear difference in the recall of positive and negative characteristics. In the "ideal" unavailable alternative conditions they recall, on the average, 1.9 and 1.8 more negative than positive characteristics of the five racers. The corresponding figure for the "mediocre" unavailable alternative condition is only

TABLE 6.3
Recall of Positive and Negative Characteristics of the
Five Slightly Damaged Racers

| | Decision | | Preference | |
|--|--------------------|-------------------------------|--------------------|-------------------------------|
| | Number Recalled | Negative Minus Positive | Number Recalled | Negative Minus Positive |
| "Ideal" Unavailable Alternative: | | | | |
| Post-Decision Memory | 3.5 | 1.9 | 3.2 | 0.8 |
| Pre-Decision Memory | 3.3 | 1.8 | 3.1 | 0.4 |
| "Mediocre" Unavailable Alternative: | | | | |
| Post-Decision Memory | 3.4 | 1.1 | 3.8 | 0.5 |

1.1. The difference between the "ideal" and the "mediocre" conditions is significant at the 2 per cent level. There are no clear or consistent differences among the "Preference" conditions. Altogether, the subjects in the Preference conditions recall positive and negative characteristics in more nearly equal numbers than do subjects in the "Decision" conditions. Why this should be is not clear. It is possible that, in general, negative characteristics seem more important when a decision is to be made for a gift for oneself. It is also possible that since the instructions in the Preference conditions dwelt on the desire of the manufacturers to know how well children liked these toys, the subjects may have tended to see the slight damages as not a necessary aspect of the racer. When the subject chose the toy he himself wanted to keep, the damages were, of course, inescapable.

Whatever the reason for the difference between the Decision and the Preference conditions, we must accept the conclusion that a difference probably exists in the attractiveness of the available alternatives, depending upon whether the unavailable alternative was "ideal" or "mediocre." In other words, we cannot maintain, unfortunately, that the same decision situation was present psychologically in all conditions. In the "mediocre" unavailable alternative conditions they were making a choice among slightly more attractive alternatives than in the "ideal" unavailable alternative

conditions. We will have to bear this in mind as a possible source of alternative interpretations of the results of the experiment.

Let us then turn to an examination of the evidence relevant to the hypothesis that, in order for a decision to be made, the person must first turn his attention away from more attractive, but unavailable, alternatives. A simple, although gross, reflection of such a pre-decision process should be observable in the length of time required to make the decision. If such a process does occur, it should result in longer decision times. Thus, one would expect that when a decision is made in the presence of an "ideal" unavailable alternative, the decision time would be longer, on the average, than when the decision is made in the presence of a "mediocre" unavailable alternative. Furthermore, one would expect that this effect on decision time would be observed only when a decision was to be made, and not when a mere preference was to be stated. In the Preference conditions, where the subject is merely asked to state which he likes best, there is no reason to assume that he must put the "ideal" alternative out of his mind in order to state such a preference.

Table 6.4 presents the data on average decision time for those four experimental conditions in which a meaningful measure of decision time could be obtained. No such measure could be obtained in the two conditions in which the decision process was interrupted in order to administer a pre-decision memory test.

On the whole, the data in Table 6.4 support the hypothesis. The decision time is significantly longer ($t = 2.27$, 58 degrees of freedom) when the subjects choose a toy for themselves in the presence of an "ideal" unavailable alternative than when such a decision is made in the presence of a "mediocre" unavailable alternative. When only a statement of preference is required, rather than a decision, the difference is negligible and not at all significant statistically, although it is in the same direction. An analysis

TABLE 6.4
Average Time (in Seconds) to Make a Decision Among
the Five Slightly Damaged Racers

| | Decision | Preference |
|------------------------------------|----------|------------|
| "Ideal" Unavailable Alternative | 29.7 | 13.2 |
| "Mediocre" Unavailable Alternative | 18.6 | 10.2 |

of variance, however, reveals that the interaction is not significant ($F = 2.85, p = .20$). In short, while one difference is and the other is not significant, the difference between the differences does not reach an acceptable level. The data, hence, while supporting our hypothesis, are not compelling.

One must also, of course, in interpreting these data, take into account the possibility that at least some of the difference in decision time may be due to differences in the attractiveness of the alternatives rather than to the occurrence or non-occurrence of the hypothesized pre-decision process. After all, there is evidence in the literature (e.g., Barker, 1942) that decisions between unpleasant alternatives take longer than decisions between pleasant alternatives. It is unlikely, however, that this factor could account for the large difference in decision time that we obtained. The difference in attractiveness of the available alternatives depending on whether the "ideal" or the "mediocre" car was present was very small. Also, in all cases the slightly damaged racers were very attractive to the children. However, considering the marginal levels of significance in the data, and considering that at least part of the effect may be due to other factors, we must regard the decision-time data as not conclusive by themselves.

We can, however, look for corroborating evidence in the data obtained in the two memory tests. It will be recalled that the major purpose of these memory tests was to get an indication of the extent to which the "ideal" or the "mediocre" car was salient in the cognition of the subject at various periods with respect to the decision. If our hypothesized pre-decision process does occur and if it is responsible for the increased decision time, we would expect to see evidence that when the "ideal" unavailable alternative is present, and when the decision is to be made for oneself, the "ideal" car should be very salient early in the decision process. By the time the decision is made, however, the subjects should have stopped thinking about it. Such changes in the extent to which they think about the unavailable alternative should not occur if the "mediocre" car is present, or if a preference, rather than a decision, is being stated. Table 6.5 presents the data on the percentage of subjects who mention the unavailable alternative on the various memory tests. It seems plausible to take this as an indication of how salient the unavailable alternative is, at that time, in the cognition of the subject.

TABLE 6.5
Per Cent of Subjects Recalling the Unavailable Alternative

| | Memory Test I | Memory Test II Pre- Decision | Memory Test II Post- Decision |
|---|------------------|---------------------------------------|--|
| "Ideal" Alternative, Decision | | | |
| Pre-Decision Memory (N = 11) | 64 | 91 | |
| Post-Decision Memory (N = 30) | 83 | | 50 |
| "Ideal" Alternative, Preference | | | |
| Pre-Decision Memory (N = 11) | 82 | 73 | |
| Post-Decision Memory (N = 23) | 74 | | 83 |
| "Mediocre" Alternative, Decision | | | |
| (N = 30) | 37 | | 60 |
| "Mediocre" Alternative, Preference | | | |
| (N = 22) | 41 | | 64 |

If we look at the last two rows in Table 6.5, we may note that the memory for the "mediocre" car presents a rather simple picture. It makes no difference whether a decision is being made or a preference is being stated in the presence of this car. On the first memory test after the initial rating of the toys it turns out that this car is not very memorable—about 40 per cent of the children mention it. This is not surprising, since it is such an undistinguished toy. By the end of the experiment, after the decision or statement of preference, they have seen the car again and more of them—about 60 per cent—remember it.

The data for those subjects who stated a preference in the presence of the "ideal" car present a picture that is not too different. The "ideal" car is, of course, much more immediately memorable. In one condition 82 per cent, and in another condition 74 per cent, mention it on the first memory test. There are no significant changes from these initial figures as the decision process proceeds. At the beginning of the pre-decision period, 73 per cent mention it, and after the decision, 83 per cent mention it. There is no indication of any change.

The memory data for those subjects who made a decision in the presence of the "ideal" unavailable alternative, however, pre-

sent quite a different pattern. Here again, of course, the "ideal" car turns out to be quite memorable, being remembered by 64 per cent and 83 per cent of the subjects in the two conditions. Early in the pre-decision period, however, there is some tendency for increased memory of the "ideal" car. While seven out of 11 subjects mentioned it on the first memory test, ten out of the 11 mention it on the second memory test in the pre-decision condition. With such a small number of cases the change is, of course, not significant. It is, however, in line with the expectation one would have from the hypothesis.

More conclusive, and more significant statistically, are the data for the post-decision memory. In this condition, 83 per cent mentioned the "ideal" car after the initial rating, but only 50 per cent mention it after the decision has been made. This change is highly significant. Eleven boys who mentioned it on the first test did not mention it on the second one; only one boy mentioned the "ideal" car on the second test who had not mentioned it on the first one. The difference in post-decision memory of the "ideal" car between the decision and the preference conditions is also significant ($\chi^2 = 6.02, p = .02$).

These data support the contention that the subjects in the decision condition had to push the "ideal" unavailable alternative out of their minds in order to make a decision. Given these data on memory, it also seems more plausible to attribute the increased decision time in this condition to the same process.

■

If we allow ourselves to speculate freely about the significance of the experiment by Walster and Festinger that has just been described, we are led to some interesting ideas about the decision-making process. The Walster and Festinger experiment, in and of itself, is frankly preliminary and exploratory. It constitutes an attempt to determine whether a possible psychological process does or does not occur. Although the data are weak in spots, on the whole they provide evidence that the hypothesized process does occur. Let us then accept the proposition that if a person is faced with a decision between imperfect alternatives, he may devote time and effort to a search for better alternatives and may

consider possibilities even though he knows they are not available to him.

Such a proposition is interesting but it is certainly not startling. It is perfectly plausible that this process can occur, and the experiment has shown that one can arrange conditions, in a rather obvious manner, so that it is likely to occur. But there is a more interesting aspect to the idea behind the experiment. Usually, when we think about a situation in which a person must decide among two or more alternatives, we analyze the situation, and theorize about it, in terms of the characteristics of the alternatives and the person's behavior with respect to these alternatives. The Walster and Festinger experiment shows, however, that this is too narrow a framework within which to reach an adequate description of pre-decision cognitive processes. The behavior of the person, his considerations and his thought processes, are not confined to the alternatives between which he must decide. Factors outside this narrow realm also affects what he does.

Once we start looking outside the immediate decision situation for factors that affect behavior in the pre-decision period, we can be led in many directions. What, for example, would be the effect on pre-decision cognitive processes of arbitrarily restricting the number of possible alternatives; what kinds of conditions produce impulsive rather than deliberate decisions; in what kinds of circumstances do people refuse to make decisions?

It was natural for us to think of, and to explore, the possible consequences of the anticipation of post-decision dissonance for pre-decision behavior. It is by no means clear to what extent, if at all, in the ordinary course of making a decision, a person anticipates dissonance and reacts to this anticipation. And we have little or no evidence on the basis of which one may specify which variables increase or decrease the likelihood of anticipating dissonance during the pre-decision period. It seems plausible to assert that if a person has experienced considerable post-decision dissonance in the past, he may be more likely to anticipate it and to react to this anticipation. But this kind of assertion is not very helpful.

There are some things, however, that can be said in spite of all this unclarity. If a person anticipates dissonance as a consequence of making a decision, he would be expected to react by attempt-

ing to minimize, or to avoid completely, the anticipated dissonance. There are a limited number of ways in which the person may seek to do this. He may, in the pre-decision period, attempt to persuade himself that the decision is of little importance, or he may try to avoid making the decision altogether. If the decision is of little importance, there will generally be less post-decision dissonance. To the extent that the person can avoid the responsibility for making the decision, he also avoids the post-decision dissonance.

It is clearly possible to test these ideas in a laboratory experiment. Regardless of how prevalent the anticipation of dissonance is in the ordinary decision situation, we can certainly create an experimental condition in which we can be sure that dissonance is anticipated. If we set up such an experiment so that the magnitude of the anticipated dissonance is rather independent of the importance of the decision, then the following prediction is clear. In a condition in which the person anticipated dissonance as a consequence of making a decision we should observe some reluctance to make the decision. If the situation is such that it is easy to avoid making the decision, we would expect to observe such avoidance. Braden and Walster report such an experiment below.

Experiment

The Effect of Anticipated Dissonance on Pre-Decision Behavior

Marcia Braden and Elaine Walster

There are times when a person will avoid making a decision even though he has a preference between the alternatives. Sometimes, for example, a person in a restaurant, after staring at the menu for some time, will breathe a clear sigh of relief if her companion offers to order for her. A high school graduate faced with a choice between two colleges may sometimes almost beg his parents to tell him which one to choose. Such reluctance to make a decision is not rare.

There are at least two possible explanations for this reluctance.

It is plausible to suppose that the conflict situation itself is somewhat unpleasant. If this is true, then one can interpret the avoidance of a decision as a means of avoiding, or escaping from, the conflict. The other possible explanation involves the anticipation of post-decision dissonance. Even though dissonance does not exist until after the decision is made, a person may react to the anticipation of such dissonance because through previous experience he has learned to be wary of it. One way to avoid any post-decision dissonance is to avoid making a decision.

Both of these explanations may be correct; that is, both processes may play a part in producing avoidance of decision making. There is, however, no clear evidence that either of these processes does, in fact, occur. This experiment represents an attempt to determine whether or not one can observe decision avoidance as a reaction solely to the anticipation of dissonance. We will not concern ourselves with the possible unpleasantness of conflict except to see to it that this factor does not play a differential role in the experiment.

The design of this experiment is quite simple. There are two experimental conditions. In both of them, subjects are faced with the identical decision. In one condition the situation is described so as to increase the anticipation of dissonance. In the other condition, with instructions held as constant as possible, the anticipation of dissonance is not encouraged. One should observe more frequent refusal to make a decision in the former condition. In order to ensure that the measurements would be sensitive enough, the experimental situation was arranged so that it was easy to refuse to make the decision.

Procedure

Forty-two high school girls were used as subjects in the experiment. The girls volunteered to participate in a "survey conducted by a company that produced popular phonograph records." They were told that they would be paid one dollar for participating in the survey.

Each girl was interviewed individually. When she arrived for the interview she was told that we were interested in finding out some things about teenagers' preferences. She was then shown

the names of 13 popular singers and asked to rank them from most liked to least liked. The purpose of this, apart from lending credibility to the ostensible purpose of the "survey," was to obtain some indication of the extent to which the girls liked one particular singer whose name was identified with the two records between which they would later be asked to choose.

The experimenter then engaged in an elaborate explanation of a "new promotion technique" that the company sponsoring the survey was about to use. The purpose of this explanation was simply to set the stage for the manipulation of anticipated dissonance. The experimenter explained that movies and plays were often reviewed and that quotations from the reviews, used in advertising, were successful in attracting new viewers. The record company had decided to use a similar promotional technique—they were going to print quotations from reviews on the labels of two records that were soon to be released. These quotations were to be recommendations from high school girls about the records.

The experimenter then drew the girl's attention to two stacks of records on the table. One of these stacks of records had green labels and the record was titled "The Stranger"; the other stack had white labels bearing the title "Forgetting You." The same singer was listed as the recording artist on both records. The subject was told that these were advance copies of the records. They had not yet been released, so the girl, of course, had not heard either of the songs. Before releasing them, the company was trying to find out which quotations from high school girls' recommendations would be most effective in selling each record. Last week, in order to get some quotations for possible use, these records had been played to girls in a different high school and those girls had written recommendations for the record they especially liked. Two lists of very enthusiastic recommendations, one list for each of the two records, now existed.

The experimenter continued, explaining that the next step was to discover which of these recommendations would be best to use for advertising on the labels of the records when they were released. The plan was to assemble a large number of small groups, four girls to a group, and to read to each group the recommendations for one of these records. Each group would then vote on which recommendation would most make them want to hear and

buy the record being described. The best way to obtain honest and helpful votes from such groups was to have someone their own age meet with each group, read the list of recommendations, and get the votes. This procedure, they were told, had turned out to be most successful. The experimenter then asked the girl if she would be willing to help out by reading the list of recommendations about *one* of the records to four different groups of girls during the next two weeks. After the girl agreed to do this (and they all did) actual appointment times were set up.

The experimenter then proceeded to create a situation in which subjects were asked to make a decision under circumstances in which they either did, or did not, anticipate that dissonance would ensue. To create a condition of "anticipated dissonance," the experimenter said:

As you can see from the stacks of records here on the table, we have lots of copies of the two records. We decided we might as well give one to each girl who helps us out by reading one of the lists of recommendations to four groups of other girls. Before you leave today, we'll flip a coin to determine which of the two records you'll be given as a gift.

Since you'll be reading recommendations about only one of these records to other girls, it seemed to us that you could probably do a better and fairer job during the next two weeks if you read the list of enthusiastic recommendations about the record which you do *not* get yourself. That means that if, on the coin toss, you get this record [*pointing to one*], it will be your job to read the things students really like about this record [*pointing to the other one*], and vice versa.

Oh, golly, wait a minute! Just yesterday we decided that if any of the students helping us had any special preference for one or the other of the records, she could *choose* which one she wanted. Naturally, if you choose a record, you will then read the things people liked best about the record you didn't choose. If you don't want to decide which one you like best, we can still flip a coin as we planned before. What would you like to do?

To create an experimental condition of "anticipated consonance," subjects were given the identical instructions in the identical order except that throughout they were told that they would read the recommendations about the record they *received* to the groups of other girls. When they were told that they could choose a record, they were told that if they did so, they would read the list of recommendations about the record they chose. Thus, the only difference between the two conditions was whether they ex-

pected to read a list of statements extolling the record they would possess, or one extolling the record they would not possess.

Next, either the girl chose a record, or a coin was flipped, as she desired. She was then asked to rate each of the two records on a nine-point scale on which 1 was labeled "Think I will like it extremely much," and 9 represented "Think I will dislike it very much."

The experiment was then explained to each girl, and she was paid one dollar for participating.

Results

Two experimental conditions were created in the experiment, one of anticipated dissonance and one of anticipated consonance. Actually, of course, these designations of the experimental conditions are correct only if the subject chooses which record she wants. Reading enthusiastic recommendations for an alternative that one has rejected may be expected to create dissonance. Reading such recommendations about a record one does not own because of the toss of a coin certainly does not create any dissonance. Consequently, if the subject reacts in anticipation of dissonance, one would expect a higher incidence of unwillingness to choose in the anticipated-dissonance condition. The experimental situation was designed, of course, to make it easy for the subject to avoid making the choice. First, there was little basis for making a choice. The singer was the same on both records, and they did not hear the records. Only the different titles could provide a basis for choosing. In addition, not choosing was described as a normal and usual procedure so as to make it easy for the girl to say she would rather flip a coin.

Given the ease of avoiding a choice, one may expect that any difference between the two conditions in reluctance to choose would be adequately reflected in the relative frequency of avoiding choice. These data are presented in Table 6.6. It is clear from the table that where consonance is anticipated, in spite of the meager basis for choosing, the great majority (81 per cent) make such a choice rather than leave the matter to chance. This, of course, is what one would expect and seems quite sensible. Even if only a slight preference exists, why not make a choice? When

TABLE 6.6
Number of Subjects Who Make or Avoid a Decision

| | Anticipated Dissonance | Anticipated Consonance |
|-----------------|---------------------------|---------------------------|
| Choose a Record | 6 | 17 |
| Flip a Coin | 15 | 4 |

dissonance is anticipated, however, the data are reversed. In this condition 71 per cent want to flip a coin. The difference between the two conditions is highly significant statistically ($\chi^2 = 11.63$). In short, if dissonance is anticipated as a direct consequence of making a decision, there is a decided tendency to avoid the decision.

The data seem rather clear and it is difficult to think of other possible reasons for the difference between the two conditions. The subjects were assigned at random to the experimental conditions and, on the one pre-measure we obtained, are quite comparable. The average rank of the singer associated with the two records (out of 13 singers) was 4.2 and 4.5 for the anticipated-consonance and anticipated-dissonance conditions, respectively. In other words, the singer was rather well liked, and about equally so in both conditions.

One can also examine whether the difference in experimental procedure made any difference in how well the girls expected to like the records. If it did make a difference, this might be a clue to alternative interpretations. The average rating, on a nine-point scale, was 4.2 in the anticipated-consonance, and 4.1 in the anticipated-dissonance condition. The girls expect to like the records moderately. But again, there is no difference between the conditions.

It is possible, of course, that linking the anticipated dissonance to the choice brought the two alternatives closer together in attractiveness; that is, the girls may have been faced with a decision between "having the better record and doing something unpleasant" and "having the inferior record and doing something pleasant." This, if it made the alternatives nearly equal, could result in difficulty in choosing, which subjects expressed by refusing to choose. If this explanation were correct, however, one would

expect a fair number of the girls in the anticipated-dissonance condition to have chosen the inferior record, since, for some, the "unpleasant" action versus "pleasant" action difference would outweigh the difference in attractiveness of the records. This did not occur. It seems reasonable to conclude that the avoidance of decision was, indeed, a consequence of anticipated dissonance.

■

We have presented some evidence in this chapter that the pre-decision period can, and probably should, be viewed as involving more than a mere process of choosing between alternatives. It seems clear from the Walster and Festinger experiment that, strictly speaking, not all of the time consumed in the pre-decision period is spent in the process of deciding. That is, it is not all spent in the process of comparing and evaluating the available alternatives. Some time is spent in considering other more attractive alternatives, even though these may be unavailable. It seems equally clear from the Braden and Walster experiment that willingness or unwillingness to make a decision is affected not solely by the difficulty of the decision or by aspects of the conflict itself. The anticipation of post-decision dissonance produces a heightened reluctance to choose.

Both of the experiments reported in this chapter are preliminary in nature. They are, in a sense, demonstrations that these two effects do occur. The experiments do not contribute much to an understanding of the variables that would determine the magnitude of these effects, nor do they contribute much to an understanding of how factors outside the immediate decision situation interact with the conflict in which the person finds himself. Perhaps, however, these demonstrations will help open the way for such new understanding.