Reversible and Irreversible Decisions:
Preference for Consonant Information as a Function of Attractiveness of Decision Alternatives

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The present experiment determined whether preference for consonant or dissonant information differs when (a) decisions are reversible instead of irreversible, and (b) when different amounts of dissonance are induced. Dissonance was manipulated by having subjects make decisions between alternatives with varying degrees of similarity in attractiveness. Subjects' preference for consonant information was generally stronger after making irreversible decisions than after making reversible ones. When decisions were irreversible, the relative preference for consonant over dissonant information increased with the similarity in attractiveness of the decision alternatives. When decisions were reversible, the relative preference for consonant information decreased with the similarity in attractiveness of the alternatives. In accordance to earlier investigations on selective exposure, experimental manipulation did not affect the avoidance of dissonance information. The results are interpreted in terms of both dissonance theory and choice certainty theory.

Research within the framework of cognitive dissonance theory has centered upon the effect of making a decision on the attractiveness of the decision alternatives (see, for example, Brehm, 1956; Brehm & Cohen, 1959; Greenwald, 1969). In the typical experiment, subjects first rank order a series of consumer objects and then choose between two of these alternatives selected by the experimenter. Dissonance theory implies that, after the choice has been made, the attractiveness of the chosen alternative should increase and the attractiveness of the rejected alternative should decrease. The theory also implies that dissonance should be greatest and the reevaluation of alternatives most pronounced when the two choice alternatives are initially highly similar in attractiveness.

In contrast, there has been only a little research on the effect of making a decision on preferences for decision-relevant information. This issue is of great practical importance. A bias in information seeking (for example favoring

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decision-supporting over decision-opposing information) may be disfunctional for optimal decision-making in the future. In addition, an understanding of the processes of postdecisional information seeking is important for theoretical reasons. So, for example, dissonance theory postulates that after making a decision subjects show a tendency to select information expected to be consonant and to avoid information expected to be dissonant.

In the present experiment, subjects made a decision between two choice-alternatives. The decision subjects made was either irreversible or reversible. The similarity of the attractiveness of the choice alternatives was either high, middle, or low. After having made this decision, subjects' tendencies to seek out information relevant to the decision were investigated. Mills (1965a, 1965b) was the first to test the effect of similarity in alternative attractiveness on information seeking. In these studies, subjects first rank ordered a number of alternatives and then made a decision between alternatives that varied with respect to their similarity in attractiveness. The subjects then indicated their interest in advertisements (that is, information expressed in positive terms) for all alternatives. The baseline used to determine "information seeking approach" and "avoidance" in that research was the amount of interest predicted from the desirability of the particular alternatives.

The present experiment extended the studies of Mills by having subjects actively choose as well as actively avoid information featuring both positive and negative aspects. In addition, the study measured the seeking and avoidance of information for both the chosen and nonchosen alternative. Also, the reversibility of the decision was varied.

When the decision made is irreversible, dissonance should theoretically be greater when the alternatives from which the subjects have chosen are more similar in attractiveness. Thus, both the selective seeking for consonant information and the selective avoidance of dissonant information should be greatest under these conditions. That is, there should be a positive, linear relationship between the similarity of the alternatives and the amount of selective seeking and avoidance.

When the decision can be reversed, however, the predictions are not as clear. This is primarily because this "decision" may not be sufficiently committing to arouse any postdecisional dissonance (see Festinger, 1964). To this extent, the tendencies to search for consonant information and avoid dissonant information should be weaker than when decisions are irreversible. No explicit hypothesis was made about the effect of similarity in attractiveness of the alternatives in the reversible condition.[1]

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METHOD

Overview

Subjects rank ordered 14 objects and then chose either between second- and third-ranked alternatives (high similarity), between the second and seventh (medium similarity), or between the second and thirteenth (low similarity). The choice was either reversible or irreversible. After choosing, subjects selected from positive and negative comments about the chosen book which they wanted to read and which they did not want to read. They did the same thing from positive and negative comments about the nonchosen book. The design was a 2 (Reversible vs. Irreversible Decision) × 3 (High vs. Medium vs. Low Similarity) factorial.

Procedure

Subjects were 97 male and female students (aged 15 to 18 years) from schools in Mannheim, FRG. The general procedure was patterned after Brehm (1956). Subjects run individually were told that the study was an investigation of consumer behavior. They then received a sheet listing the authors and titles of 14 paperback books, which were displayed on a table in front of them. The subjects were asked to evaluate and to rank all 14 books according to their reading desirability. At the time they made these evaluations, they were unaware that they would be asked later on to choose between two of these books. However, after the evaluations were completed, subjects were told that the books were a private gift from the publishers, and that every subject would get one book as a reward, supplementing the experimental payment.

Before making their choices, subjects were asked to fill out a consumer questionnaire. This questionnaire served to bolster the cover story that the experiment was actually a consumer investigation and to give the experimenter time to prepare the experimental manipulations. The questionnaire, which took about 15 minutes to complete, asked subjects about the money they wanted to invest in certain consumer activities, the amount of money they had available per week, the consumer products they already owned, and the products they hoped to possess in five years. The content of this questionnaire was irrelevant to the experimental manipulations or dependent variables. After completing the questionnaire, subjects were allowed to choose between two books—either between their second and third choices, between their second and seventh, or between their second and thirteenth, depending upon the similarity condition to which they were randomly assigned. Before making their decision, subjects were informed about the irreversibility or reversibility of the decision.

In the *irreversible* condition, the subjects were told that it would be impossible to change their decision. In the *reversible* condition the subjects were told that independently of their present decision, they would have the opportunity to revise their choice within the next three days if they so desired. To maximize the effectiveness of the experimental manipulations, the experimenter repeated the instructions. After subjects made their choice, the experimenter told them that he had collected some articles from magazines, newspapers and

scientific journals about the books which they could read. There were 12 comments per book, six positive and six negative.

The subjects were told that they could choose only *three* because they would not have enough time to read all 12. In addition, they were told that the experimenter had written the titles and conclusions of the articles on a sheet, so that they would get an idea of the contents of the articles. Examples of the positive conclusions are: "This book is clearly written and easy to understand"; "the book integrates all new research in this field"; "the author of the book is a very competent person in this field." The negative conclusions included: "The book is badly organized"; "the author is not very competent in this field"; "the book neglects some very important scientific findings." The subjects were then asked to indicate which 3 comments they wanted to read regarding the chosen book and, after that, the 3 comments they wanted to read regarding the nonchosen alternative. In addition, they were asked to indicate which 3 comments concerning the chosen and nonchosen alternatives they would not like to read at all. After this subjects were debriefed about the experimental purpose. All subjects, of course, received the book they preferred most.

RESULTS

The mean number of positive comments about the chosen alternative which subjects selected when asked to pick three comments they wanted to seek is shown in Table 1. As expected, subjects showed a stronger preference for decision-supporting information following irreversible decisions than they did following reversible ones [$F(1,84) = 3.44$; $p < .05$]. The interaction of similarity and decision reversibility was also significant [$F(2,84) = 5.10$; $p < .008$]. As expected, the preference for decision-supporting information after an irreversible decision increased as the two decision alternatives increased in similarity. For reversible decision no explicit hypothesis was made. Interestingly a negative, linear relation was obtained such that the more similar the decision alternatives were, the *less* the preference for consonant information.

Linear trend analyses of data under each decision condition separately indicated that in each case, the effect of similarity was significant ([$F(2,84) = 4.13$; $p < .02$] and [$F(2,84) = 3.60$; $p < .05$]).

The results for the number of negative comments about the chosen alternative which subjects selected when asked to pick three comments they did not want to read showed a similar pattern. However, analyses of these data yielded no significant effects. Also there were no significant differences for the selections of comments concerning the nonchosen alternative.

DISCUSSION

The results show that persons who have made an irreversible decision increase their preference for consonant information as the similarity in attractiveness of the choice alternatives increases. When dissonance concerning an irreversible decision is low, subjects are confident that they have chosen the

TABLE 1 Number of Positive Comments about the Chosen Alternative

Reversibility of Decision	Similarity in Attractiveness: High	Medium	Low
Irreversible	2.00	1.50	1.41
Reversible	1.13	1.23	1.67

right alternative and therefore they do not have a strong desire for consonant information (see also Canon, 1964; Lowin, 1969; Frey, 1981).

Also the results show that there is a stronger preference for consonant information following irreversible decisions than following reversible ones. Since the irreversible decisions are binding, subjects' response to postdecisional dissonance is to bolster their initial choices by seeking additional consonant information. Following a reversible decision, on the other hand, there is less commitment and, therefore, little or no dissonance. Under this condition utility considerations may predominate. In considering whether to revise the decision, choice-inconsistent information may be more useful than choice-consistent information.

However, it is not obvious why the utility of two types of information should increase with the similarity of the alternatives. Thus it is not at all clear how utility by itself could account for the negative relation for the reversible decision. On the other hand, the negative relation for the reversible decision is predicted from choice certainty theory and is similar to results reported by Mills and Ross (1964).

The data pattern which indicated that there were differences for information seeking but not for information avoidance is consistent with earlier research on selective exposure. One reason that there were no differences in avoidance of dissonant information in this study, as well as in earlier selective exposure studies, could be that avoiding dissonant information does not decrease dissonance; it only prevents it from increasing further. Contrary to this, however, seeking consonant information does help to decrease dissonance.

It is interesting that there are no differences between the different experimental conditions for the nonchosen alternative. It was expected that subjects in this condition would look for different information, dependent on their level of cognitive dissonance. However, it is possible that the nonchosen alternative is less important for the subjects and that, therefore, no selectivity effects are to be seen.

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NOTE

[1]A word should be said regarding the absence of a prediction of curvilinear relationship between amount of dissonance and the search for consonant information in the present experiment, although different degrees of dissonance were manipulated in the present study. While it is correct that Festinger (1957) predicted a curvilinear relationship between amount of dissonance and seeking of consonant information, the drop in seeking of consonant information was not postulated to occur until the presence of an extremely large amount of dissonance. From Festinger's examples (1957, p. 128-129) it is clear that he meant a situation in which a decision was made and later a large amount of dissonance was introduced. Since such a situation was not present in the high similarity conditions of the present study, the prediction of a curvilinear relationship was not applicable to this study.

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