Are There Differences in Dissonance Reduction Behavior Between Students and Housewives?

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INTRODUCTION

A good deal of experimental research in psychology and mass communication is based on reactions of college students as respondents. Now and then we hear skeptical comments about the validity of this research, comments which suggest that the student population is likely to be atypical. This skepticism seems even more valid in applied disciplines such as consumer psychology where products and services are generally believed to be more suited to some segments of the population than to the total population.

Some attempts have been made to justify college

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students as subjects on the grounds that, considering fundamental psychological variables, students are *not* atypical of the rest of the population. Others have suggested ways to modify research findings in order to remove any peculiar biases that college students may bring to the studies. Perhaps the best defense of college students as respondents was made by Hovland [4] when he attempted to reconcile the conflicting findings of communications research where experimental studies (mostly on college students) and survey studies (mostly on non-college populations) had turned up different results concerning the process of attitude change. Hovland pointed out that the greater success of experimental studies can be attributed to (1) personal differences of respondents and (2) situational differences between experimental and survey studies. A college student is more motivated due to grade incentive, more involved because he is a student of the subject matter, and is in a subordinate-superior relationship with the researcher. Situational differences would be due to forced exposure and attention to communication, greater receptivity and less perceptual distortions of messages, and more control of external influences on the respondent in the case of the college student.

The tacit assumption in Hovland's analysis seems to be that if the personal and situational differences between the campus population in laboratory studies and the household population in naturalistic studies are eliminated or at least minimized, one should expect no appreciable differences between the two populations in response to a situation. This article reports on a study which tested this proposition.

METHODOLOGY AND DESCRIPTION

The study was focused on the differences in post-decision dissonance between high and low-conflict choice situations. Festinger [3] says that a high-conflict situation presents a choice between two equally attractive alternatives, such as between any two brands ranked adjacently on a preference scale. Conversely, a low-conflict situation is one in which one alternative is preferred far more than the other, such as choice between two brands ranked relatively far apart on a preference scale.

There should be greater post-decision dissonance reduction in the high-conflict situation than in the low-conflict situation. One common way to reduce dissonance is to enhance the attractiveness of the chosen alternative and decrease the attractiveness of the rejected alternative. A standard procedure for observing this tendency is to ask a respondent to rank order various alternatives, make a choice between two alternatives, and finally to rerank all the alternatives.

In this study, two groups of 50 respondents each were chosen. The first group was a randomly-selected sample of graduate male students attending Columbia University. The second group was a random sample of housewives drawn from the town directory of one of the suburban communities in New Jersey, near New York City. Both groups were approached in their respective location; both were given identical messages that explained the purpose and nature of the study and solicited their cooperation; respondents in both the groups were offered a large size tube of toothpaste as an economic incentive to participate. Sampling in both groups stopped when the desired number of 50 respondents was reached. Seven students and three housewives refused to participate. However, the effective samples were reduced to 49 students and 43 housewives because of improper filing of the questionnaires.

POST-DECISION CHANGES IN RANK POSITIONS OF BRANDS

Change in rank	*Chosen brand*		*Rejected brand*	
	House-wives	*Students*	*House-wives*	*Students*
	High-conflict choice (Ranks 3–4)			
Direction of hypothesis	14	14	18	20
Opposite of hypothesis	6	7	2	4
No change	23	28	23	25
Total	43	49	43	49
	High-conflict choice (Ranks 7–8)			
Direction of hypothesis	24	24	17	17
Opposite of hypothesis	6	8	11	12
No change	13	17	15	20
Total	43	49	43	49
	Low-conflict choice (Ranks 3–7)			
Direction of hypothesis	16	14	16	17
Opposite of hypothesis	7	8	11	16
No change	30	27	16	16
Total	43	49	43	49

Each respondent was shown ten popular national brands of toothpaste of approximately the same size to avoid size preference and asked to rank them in order of his preference. He was then asked to rate each of the ten brands on four 10-point scales related to product attributes, and the researcher noted the brands which were ranked as 3, 4, 7 and 8. As soon as the respondent finished rating all the ten brands, he was asked to make three consecutive choices between brands ranked 3 and 4, 3 and 7, and 7 and 8. When each of these choice questions was asked, the two brands involved were held up in front of the respondent. The consecutive choices were rotated to avoid possible position bias. A series of demographic questions was then asked, primarily to create a time interval between the choices and the subsequent reranking of all the ten brands. Finally, the respondent was given identical sheets to rank the ten brands again. Each interview took, on the average, about 35 minutes.

RESULTS AND DISCUSSION

Changes in rank positions of the brands involved in the three choice situations were noted following the standard procedures used in dissonance studies [1]. If the change was in the direction of the hypothesis (increasing the rank of the chosen brand and decreasing that of the rejected brand), it was given a plus sign; and if the change was in opposition to the hypothesis (decreasing the rank of the chosen brand and increasing that of the rejected brand), it was given a minus sign. Those respondents who did not change the rank positions of the choice alternatives in each of the three situations were grouped together and discarded from statistical analysis. A sign test was performed on the proportions of plus and minus signs in the residual samples. The analysis was separately done for the chosen and rejected brands in each of the three situations.

The interest here concerns the difference (or the lack thereof) between the student and the housewife samples. As such, one is not really concerned that the theory of cognitive dissonance be successful in its predictions. Nor should the question of interaction effects among the three choices of brands ranked 3 and 7 be of concern here. Both of these factors should be the same in the two samples unless the theory explicitly dictated them to be otherwise.

The data analysis in the table gives the frequency of respondents in each choice situation distributed among the three categories (plus, minus, and no change) separately for the chosen and the rejected brands and for the two groups. In all three choice situations, there was a *remarkable* degree of similarity between students and housewives in their post-decision dissonance reduction. A chi-squared analysis between the two groups for each of the changes in all the three choice situations failed to reveal any significant differences.

The study also supports the dissonance theory hypothesis that a high-conflict situation creates greater dissonance than a low-conflict situation. Combining frequencies in the chosen and the rejected brands and a sign test on each of the three situations reveal that while the probabilities show significant results for high-conflict situations (choices between ranks 3 and 4, and 7 and 8), the same is not the case for the low-conflict situation (choice between ranks 3 and 7).

Although the proposition of the study was that one should expect no differences between the students and the housewives, the remarkable degree of similarity observed in their behavior is somewhat surprising. Because the student sample was exclusively male and the other exclusively female, the results imply that either there are no sex differences in post-decision dissonance reduction or within-group differences cancel them out. Second, there was an average age difference between the two samples of almost 10 years. This suggests that age also may not be a factor determining differences in post-decision dissonance reduction. Third, and perhaps the most important aspect, is that toothpaste as a consumption object is likely to be more important to the housewife than to the student. There is a general belief that students tend to be much less involved in the purchase of household items than housewives. In the case of toothpaste, the housewife's role in the family dictates that she must look after the dental care of the members of the household, particularly of the children. It is then easy to speculate that the findings of this study are only a unique support of the hypothesis, that they cannot be generalized, and that greater reliability in the hypothesis will come only if the study is replicated.

There are, however, some counter arguments. First, toothpaste is a personal care item and, as such, a high-risk product for all consumers. Cox [2] shows ample evidence that personal care products generally tend to be perceived as high-risk items; the consumer is more involved than in the case of other frequently purchased products such as grocery items, suggesting that toothpaste may be an important product for both the groups, although it may be more important to the housewife than to the student. Second, the student population consisted of graduate students, some of whom may be married and have their own households. This would tend to bring the involvement aspect for each group into parity. Third, it should be remembered that both groups were involved in *simulated* choice situations which entailed no monetary sacrifice. This may neutralize any relative differences in the product involvement and importance between the two groups. Finally, the study was anchored to a theory that has been applied in many diverse fields with considerable success [1].

REFERENCES

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