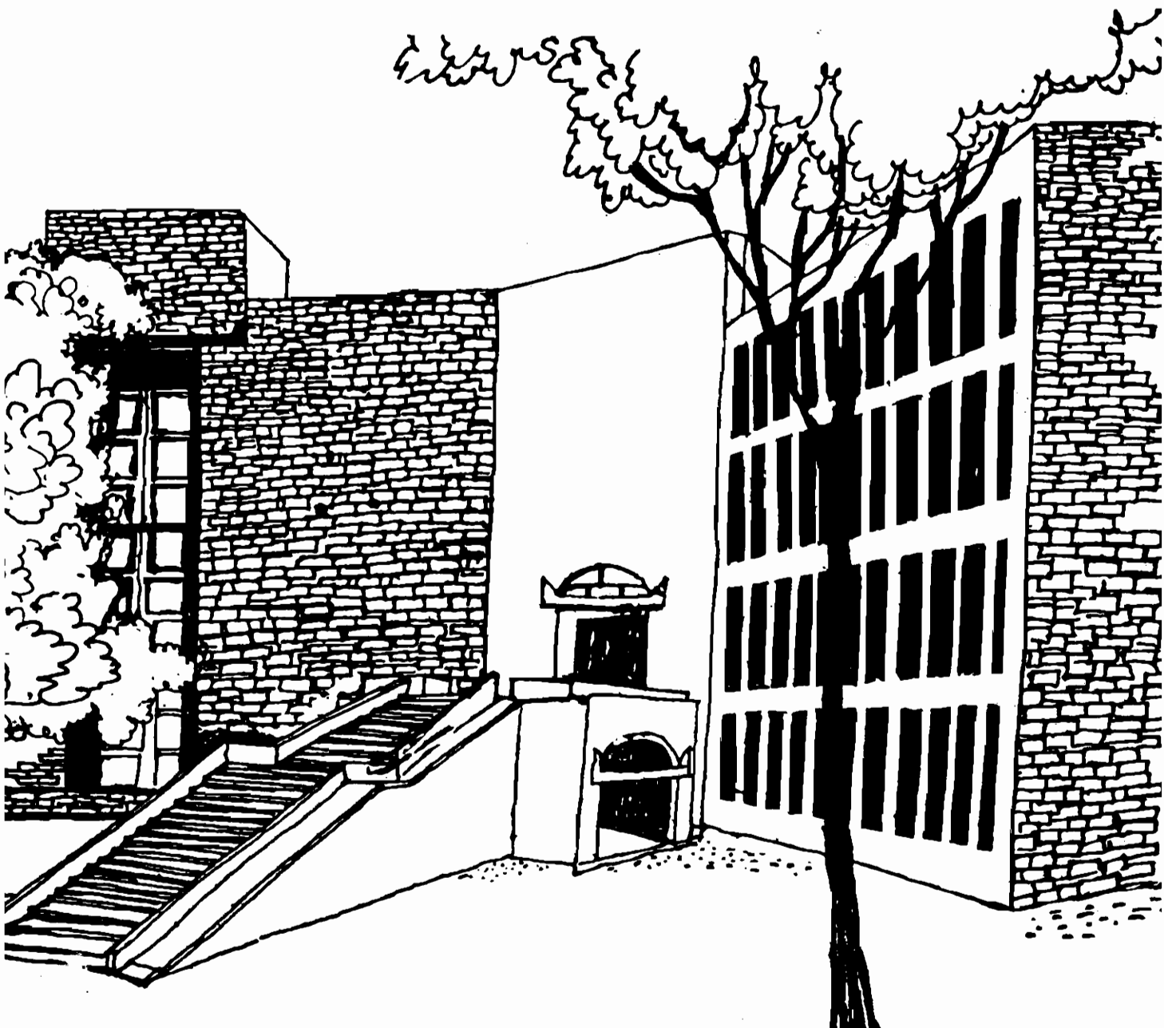




Working Paper



STRATEGIES FOR INFLUENCING ATTITUDE

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STRATEGIES FOR INFLUENCING ATTITUDE

The principal factors influencing attitude are identified as peer group, reference or aspirant group, source and communication*. The purpose of the study is to examine a few applications of communication in influencing attitudes which turn habitual and are therefore difficult to change.

In communication, use has been made of fear, educative and emotive appeals along with challenge and refutation (Mc Guire 1973). In India, the use of these appeals are found in a number of products. Insurance companies use fear appeals, while the maker of Vicks uses emotive appeals. Challenge and refutation are frequently found in industrial and consumer durables such as xerox machines and refrigerators. In addition to above there are strategies based on information processing theory. The use of such strategies is rare in the Indian market. Quite a few of these applications are routed through appeals to arouse an affective response rather than a logical thinking process. Affective conditioning or an affective state could be described as being in a cheerful/receptive or hostile/alienated state of mind.

Despite wide application of the various communication appeals in India, very little research has been done to examine the usage of information processing based change strategies.

* Some of the mechanisms used for influencing attitude are through cognitive dissonance (balance theory) and Behaviour/experience-learning-attitude paradigm. These are not within the purview of this study and hence not discussed.

Strategies based on information processing theory and classical conditioning:

Storage and retrieval, the two basic elements of information processing, are operationalised to achieve the desired response. (See Craig and Sternthal for details on information processing). Storage strategy tends to foster an association with a new stimulus. The retrieval strategy uses previous association to develop or modify an existing association. The approaches rest on the same premise, that of classical conditioning. Classical conditioning is a process of influencing response through repeated pairing with a stimulus. The earliest experiment relates to Pavlovian experiment involving bell, food and dog. Food, the unconditional stimulus (US), was given to a dog that salivated, an unconditional response (UR). The repeated pairing of bell with food, led the dog to salivate when the bell rang. The dog was conditioned to evoke a conditional response (CR) (through the bell, a conditional stimulus (CS)), similar to unconditional response, salivation evoked by the food (US).

Use of storage and retrieval strategy based on information theory has been demonstrated by Tybout, et al (1981), to combat the impact of an adverse rumour. The McDonald fast food chain was rumoured to be using red worm meat in its hamburgers. This resulted in its sales to decline. The findings by Tybout, et al, supported the supremacy of strategy based on information processing theory over the simple refutation strategy.

The experiment could be explained by the classical conditioning framework. In the rumour situation the respondent is conditioned to McDonald (CS) through the association of the worm rumour (US). In storage strategy the respondent is getting conditioned to evoke a response (CR - a favourable attitude) to McDonald (CS) through an association with sauce made of worms, a delicacy (US). In retrieval strategy, an earlier association is being used to evoke response (CR), different from the UR where CR is the desired response. In the process the attitude is being modified. In either case, a positive association is being used to modify the existing association/attitude.

Some of the other applications based on the premise of classical conditioning relate to design of campaign. Classical conditioning has been accepted as a mechanism for understanding and developing effective advertising*. A jingle or a voice (US) evoking a positive response is paired with a product (CS) to evoke a similar response (CR). The researchers bear out this association (See Nord and Peter 1980, Gorn: 1982 Zajonc and Markus 1982). Bierley, Mc Sweeny and Vennieuwkart (1985) have shown that preference for an arbitrary stimulus can be classically conditioned. Siegal (1977, Holland 1980) demonstrated that CR need not resemble UR.

* Vaughn (1980) approached the problem indirectly. He classified the products into high and low involvement categories. These were further classified into 'feeling' and 'thinking' oriented products. Likely decision processes of the consumer for different categories formed the basis of advertising strategy. Thus* for the industries (thinking oriented) product, the message should elicit, thinking process. The message for feeling oriented product (cosmetics, costly dresses) should be through affective route, to lead to affective conditioning.

According to Nord and Peter, affective conditioning can influence the attention level of the respondent. Zajonc and Marcus contend that affective conditioning can occur without logical processes. Mention of affective conditioning is found in the literature on 'mood' (Gardener 1985) and 'involvement', (Zaichkoswkey 1986). Further evidence is found in literature on attitude and attitude as a mediating variable in the final response to an ad (Mckenzie, Lutz, and Belch, 1986). These have direct relevance for ad design and its effectiveness.

Allen and Madden (1985) and McSwaney and Bierley (1984) have discussed various issues relating to classical conditioning. Two major issues on which views remain equivocal are the processes and context under which classical conditioning occurs. These are -

a. The relevant context of classical conditioning - whether passive uninvolving (low involving) context is more amenable to classical conditioning.

Till now few studies have been reported supporting affective conditioning in situation of high involvement.

b. The process involved in classical conditioning - is it through the affective conditioning or cognitive process or an interplay of both.

Objective of the study

The study would examine these issues under high involvement situation. It would develop appropriate strategies and generate hypotheses from the findings for further testing.

The basic exercises would consist of using conditioning to reorient irrational food aversion and reverse undesirable food preferences (high involvement situation). It would be an extension of the experiment by Tybout et al and based on the same conceptual framework.

Procedure

In order to reorient vegetarians towards non-vegetarian food, and vice-versa, a sample comprising two segments, one strictly vegetarians and the other strictly non-vegetarians, was taken. To examine the first issue, viz., the contextual importance, a high involvement situation was taken up. This was done as the earlier studies generally related to low involving context. Besides, if affective conditioning could be proved for high involvement situation, the results could be extended to that of low involvement situation. For the second issue, viz., the processes involved, appeals based on two approaches were used. First approach used storage/retrieval strategy* analogous to Tybout's experiment which would be expected to generate affective

* Retrieval strategy, also known as resonance strategy is one of the creative approaches to designing an ad.

conditioning - more so in retrieval strategy. The second approach using normative/educative message would be expected to generate cognitive processes.

Sample Choice

Since attitude toward food is also influenced by factors like economy, infrastructural facilities, and lack of knowledge, care was taken to control these factors in selecting the target segment. The profile of the respondent was upper middle class, middle aged (35 to 45 years), educated, who could be described as knowledgeable, enlightened segment of the society. To get representation from the major ethnic and regional groups, quota sampling was used. In all, 140 respondents were chosen. Of these, 80 were strictly vegetarian and 60 were non-vegetarian. Only those with strong bias toward vegetarian or non-vegetarian food were chosen. The respondents were identified through an initial questionnaire (see appendix Questionnaire, - 1). A semantic differential, (1-7) point scale was used. High scores indicated positive orientations towards vegetarian food. Summated scores exhibiting extreme attitude was represented by a maximum score of 126 for a strict vegetarian and 18 for a strict non-vegetarian. Only respondents exhibiting extreme attitudes were chosen. The average scores of the vegetarians and non-vegetarians were 89 and 30 respectively.

Design of the Experiment

The following layout was used for the experiment:

Design of the Experiment

The following layout was used for the experiment:

Table 1 : Design Layout

Segments		Vegetarian			Non-vegetarian		
Orientation of treatment	Group	Positive toward non-vegetarian food	Negative toward vegetarian food	-	Positive toward vegetarian food	Negative toward Non-vegetarian food	-
		Expt.	Expt.	Control	Expt.	Expt.	Control
Strategy							
Storage		T ₁ (S ₁)	T ₂ (S ₁)	- (S _c)	T ₁ ' (S ₁ ')	T ₂ ' (S ₁ ')	- (S _c ')
Retrieval		T ₃ (S ₂)	T ₄ (S ₂)	-	T ₃ ' (S ₂ ')	T ₄ ' (S ₂ ')	-
Education		T ₅ (S ₃)	T ₆ (S ₃)	-	-	-	-

segment were randomly allocated to 3 strategy cells and control. The process was similar for the non-vegetarian segment. In the vegetarian segment, group S1 was exposed to treatments T1, and T2; S2 to T3 and T4; and S3 to T5 and T6; Sc was the control group. Educative appeals were used only for the vegetarian segment. The pattern was similar for the non-vegetarian segment. (See Exhibits IV & V, for treatment for vegetarians and non-vegetarians respectively).

The experimental groups were exposed to treatments within (4-7) days of administration of the initial questionnaire. After two days of the experiment, another questionnaire (See Exhibits 2 & 3) was administered to the control and the experimental groups to test their orientation and attitude. Orientation measures were taken basically to assess the impact of the inputs on behavioural aspects. Both attitude and orientation scores were compared with those of the control groups. The shift in attitude from the pre-exposure stage was also measured on the dimension - 'adequacy of food'.

No confederate was used. Instead, treatments were administered in the form of news, published reports from authentic sources, and pamphlets. Discussion was held by the interviewer lasting nearly an hour.

Variables

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Independent Variables

Treatments were selected following the framework of Tybout et al (1981). The final set of treatments was chosen by screening an initial list. A set of five treatments for each cell was presented to 10 judges who were briefed on the objective and methodology of the experiment. They were asked to categorize the treatments into the most appropriate category (viz., T1, T2 . . . T6, T1' T4') where T1 represented the strategy of storage with positive orientation towards non-vegetarian food for the vegetarian segment. Treatment with the highest tally in a

category was chosen to represent that category*.

Dependent Variables

For the first issue, that of examining the context in classical conditioning, attitude was measured on five dimensions, see Table 3, using five point Likert scale (Strongly disagree = 1 and strongly agree = 5). Scores were noted before and after the experiment. Orientation score (See Table 4) taken on a Likert scale (very unlikely = 1 to very likely = 5) basically represented the inclination of the respondent. To verify the second issue, a questionnaire was administered after the respondents completed the experiment. The questionnaire examined the following aspects:

1. If a respondent has changed his attitude, what were the reasons? If not, why?
2. Is he more tolerant towards the views expressed on the other kind of diet? If so, why?

The responses were categorized into (i) logical : containing product specific, health related rationale; (ii) affective: containing words like 'felt like', 'this is our tradition', 'gives me pleasure', etc., which are indicative of irrational motives; and (iii) others : containing responses which could not be classified in either of the preceding categories.

* There was no tie-up. The probability of two treatments having same frequency in a category is low, = $\binom{5}{2} \left[\frac{10 \cdot 9^3}{9^5} \right]^{10}$, from occupancy problem, where 5 treatments were equivalent to number of balls and 10 categories were equivalent to number of cells.

Analysis

(i) Context and Conditioning

Should conditioning take place due to the three treatments, viz., storage, retrieval, and education (education only for vegetarian segment), the mean scores of attitude on 5 dimensions examining nutrition, mixed diet, and adequacy of the current diet should reflect changes. The post exposure attitude scores for either group are expected to be higher with respect to pre-exposure and control scores on dimensions '1' and '4', reflecting importance of mixed diet. Similarly scores on '3' and '5', examining adequacy of balanced diet should be lower. Again scores on '2' should be significantly lower for the vegetarian segment.

To test for the efficacy of the different treatments/strategies, average attitude scores under different strategies on the five dimensions were tested. To ensure that the change in attitude was not due to other extraneous factors, the following hypotheses were tested for the three treatments, viz., storage, retrieval, and education for the two segments.

a: $H_0[M_{exp}(2) = M_{exp}(1)]$ against $H [M_{exp}(2) > M_{exp}(1)]$ for dimension 2,3,5; and against $H = (M_{exp}(2) < M_{exp}(1))$ for '1' and '4' (See Table 3)

where $M_{exp} (1) =$ Pre-exposure average attitude of the experimental group;

$M_{exp} (2) =$ the Post-exposure average attitude of the experimental group

b: H_0 $M_{cont}(2) = M_{cont}(1)$, to test for the environmental effect, if any,

where $M_{cont}(1)$ = the pre-exposure average attitude of the control group

$M_{cont}(2)$ = the post-exposure average attitude of the control group

c: H_0 [$M_{exp}(1) = M_{cont}(1)$]

d: H_0 [$M_{exp}(2) = M_{cont}(2)$] against H [$M_{exp}(2) > M_{cont}(2)$] as above

'c' and 'd' were tested for the treatment effect, taking into account the environmental influence.

'a' and 'd' should be rejected in favour of the alternatives indicated above in the absence of positive conditioning; 'b' and 'c' should be accepted, assuming absence of environmental effect.

The trend in the orientation scores for the different treatments was analysed by examining the characteristics of the frequency curve. A favourable orientation would be reflected by a shift towards a negatively skewed distribution (with $mean < median < mode$). An unfavourable orientation should be indicated by a shift towards a positively skewed distribution (with $mode < median < mean$). As no pre-exposure measures were taken, the scores of the experimental groups were compared with those of the control groups.

To examine the second issue, only 60 of the total of 140 respondents (screened from the initial questionnaire) were interviewed. The responses against storage/retrieval strategies

were classified by coding of the responses by a group of 10 judges, coding co-efficient ranged from 0.5 to 0.75.

Findings

The pre and the post-exposure scores on adequacy of food are presented in Table 2. Post-experimental attitude and orientation scores are given in Table 3 and 4 respectively. Table 5 provides the frequency distribution of the categorized responses.

I. Context and Conditioning

Adequacy scores (Table 2) were taken to measure the overall impact on attitude toward food after the experiment. In the event of classical conditioning, the impact of storage and retrieval should be felt in lower post exposure scores. This was not borne out by the findings. In general, the averages moved up relative to the pre-exposure and the control scores and were significant for education in the vegetarian segment. The respondents were more resistant to education inputs. The low impact of the other treatments could be due to lack of strong positive association, where messages may not have been in consonance with the respondent's experience. This would be specifically true for messages biased in favour of non-vegetarian food and targeted for the first time to a strict vegetarian who had no previous exposure to a situation advocating consumption of non-vegetarian food. The failure across all treatments could also be attributable to the consumer's resistance to change.

Table 2 : Attitude Scores on 'Adequacy of food'

Groups	Vegetarian		Non-vegetarian	
	Pre-exp.	Post-exp.	Pre-exp.	Post-exp.
Storage	3.41 (1.00)	3.57 (0.98)	4.52 (1.20)	5.00 (1.49)
Retrieval	4.00 (0.90)	4.50 (1.00)	4.33 (1.15)	4.72 (1.27)
Education	4.42 (1.00)	5.00 (1.00)		
Control	3.83 (0.90)	4.00 (0.82)	5.00 (0.98)	5.00 (0.96)

1. Figures within brackets indicate variances.

2. The respective means were tested for the hypotheses 'a', 'b', 'c', 'd'.

The differences were significant for education across all differences

indicating a negative impact of (alienation toward) the education input. It may

be noted that the pre-exposure score ^{of} sample 'S₃' ^{was} higher relative to other samples with respect to control. Control differences were insignificant,

confirming absence of environmental influences.

Dimensions	Vegetarian				Non-vegetarian		
	Storage	Retrieval	Education	Control	Storage	Retrieval	Control
1. Non-vegetarian with plenty of fresh vegetable salads and fruits makes a balanced diet	4.00 (1.00) ² 6.39** ³	3.51 (1.20) 4.59**	4.01 (6.91) 6.5**	2.00 (0.96)	3.80 (1.00) 4.22**	4.01 1.10 4.77**	2.50 (0.90)
2. Fresh vegetables, fruits and cereals can meet all the needs of the body	3.91 (1.27) -4.32**	4.00 (1.10) -2.47**	5.00 (0.86) 1.15	4.70 (0.51)	2.72 (1.10) 2.27*	2.30 (1.21) 0.90	2.01 (0.86)
3. The present diet is adequate, up to my expectation and taste, and is fulfilling	3.57 (0.98) -1.43	4.50 (1.00) 1.66	5.00 (1.00) 3.31**	4.00 (0.82)	5.00 (1.49) 0.00	4.72 (1.27) -0.84	5.00 (0.96)
4. A nutritious diet is a judicious combination of vegetarian and non-vegetarian food	2.63 (1.70) 2.55**	1.50 (1.25) -0.60	2.10 (0.97) 1.29	1.70 (0.96)	3.52 (1.50) -2.92**	3.85 (1.30) -2.04*	4.51 (0.80)
5. Balanced diet can be had from either	3.70 (1.38) 0.64	4.00 (1.31) 1.63	4.00 (0.90) 1.84	3.50 (0.58)	3.51 (1.20) 3.33**	3.31 (1.10) 2.74**	2.51 (0.60)

1. Scores \angle 3 indicate disagreement

2. Variance within brackets

3. t-value (treatment - control)

** significant at both levels

Besides, the message with one sided appeal could arouse negative responses to the message against firmly held beliefs. Thus a message addressed to vegetarians and highlighting only low protein content of vegetable diet is likely to generate dissonance leading to rejection of the message. The message should highlight both the positive and the negative aspects of vegetable diet.

The post-exposure scores on other dimensions (Table 3) show significant impact against '1' and partially against '2' and '4' in the desired direction. There is no significant dip in '5'. Scores on '2' remain nearly unaffected for the non-vegetarian segment. This is to be expected. The pattern is similar under education. Responses as mentioned earlier may reflect defense mechanisms against dissonant messages. The instruments used in the study achieved fair credibility as borne out by the responses. Hence acceptance or rejections of messages were due to reasons other than the lack of credibility. The implications could be in terms of communication strategy, source, appeals, order of presentation, and the process of inducing positive attitude.

In other words, source* identity could be important. For the vegetarian segment, a strict vegetarian turned, a mixed diet taker, may be a more trustworthy person, with whom the respondent is able to identify himself. Such a source may be more effective than an expert or an outsider (a non-vegetarian). The same should apply to non-vegetarian segment also. The findings also

* The effect of source was not studied.

indicate that an affective tone is likely to generate more receptivity than educative/normative tone (Fear appeals were not tested). Order of presentation becomes important, for a strong argument against the current diet at the beginning can totally alienate the respondent leading to rejection. The argument should be slowly built up with the conclusions being obvious at the end and preferably left to the respondent. Inducive strategy should be an optimum combination of source and message to create receptive mood. If the target audience are parents, then, health and success in career of children could be key themes. These merit further research.

In orientation (Table 4), scores higher than 4 indicate favourable orientation. For the vegetarian segment, shifts for the experimental groups are in the desired direction relative to the control group on points '2', '3', '6', '7' and '10' under storage. No shifts are noted either under retrieval or education. For the non-vegetarian segment, no shift has taken place. The average scores have moved down, the exception being the dimension '8', 'that of taking safer non-vegetarian food'.

More encouraging results in the orientation scores seem to indicate that respondents may be progressively taken from an extremely rigid attitude to other kind of diet (unconditional response) to a more tolerant attitude to other kind of diet (conditional response). The progression may be considered to be on a continuum. The position of an individual or a segment on this continuum would dictate the strategy and also indicate which segment is likely to be more responsive.

Table 4 : Orientation Scores (Average (AV) and Mode Values (MD))

Orientation	Treatments	Vegetarian segment							
		Retrieval		Storage		Education		Control	
		AV	MD	AV	MD	AV	MD	AV	MD
1.	Would not advise friends/ acquaintance against non-vegetarian food.	5	5	4.4	4	4.2	4	2.27	3
2.	May give non-vegetarian to my kid	3	3	3.6	4	2	2	2.5	2
3.	May try out non-vegetarian some day	3.5	3	2.8	3	2	2	2.0	1
4.	Would like to seek more information	2.3	2	3.1	3	3	2	2.7	2
5.	May go for mixed diet	2	2	2.2	2	2.5	2	2.2	2
6.	Would look for substitute vegetarian (giving same value as non-vegetarian)	3.5	3	3.8	4	4.0	4	4.1	4
7.	May not stick to old diet	3.1	3	2.6	3	2.2	2	4.0	4
8.	Reduce the oil in cooking	4	4	4.6	4	4.0	4	4.5	4
9.	Get the advice of doctor	3	3	4.0	4	3	3	4.2	4
10.	Change over to less fatty oils	4	4	4.4	5	4	4	4.2	4
		Non-vegetarian							
1.	My go for mixed diet	3.3	3	3.5	3			3.2	3
2.	Look for substitute vegetable food giving same food value as non-vegetarian	2.0	2	2.5	3			2.5	2
3.	Would increase the vegetable contents in the diet	2.0	2	3.1	3			1.5	2
4.	Would like to read more on vegetarian food and nutrition	3.0	3	4.0	4			3.2	3
5.	Would discuss about food with friends, acquaintance	2.9	3	3.8	3			3.5	3
6.	May change over to new diet	1.6	2	2.5	3			1.8	2
7.	Reduce non-vegetarian contents	1.3	1	2.0	2			1.5	1
8.	Take safer non-vegetarian such	3.5	3	3.0	3			3.0	3

Scores higher than '3' indicate likelihood of compliance.

II The Processes Involved

The distribution of responses is given in Table-5. The sample includes both vegetarians and non-vegetarians with rigidly held attitudes.

Table 5: Distribution of Responses against storage/retrieval strategy

(n = 60)

Responses	Orientation of respondent	
	Change (more tolerant)	No change
Rational	15	13
Non-rational	-	20
Others	5	7

Though the responses have been categorized according to verbal statements, it is not clear whether rational cues have been offered to justify an irrational attitude or motivation. We also noticed that people were less tolerant when it came to their own behaviour, vis-a-vis that of others. In general, people with more rigid attitude initially (Questionnaire I) tended to offer both rational and irrational responses.*

Discussion

The experiment has not clearly established the presence of conditioning in high involvement situation. The process seems to reflect on interplay of affective as also logical processes. The contention by Zajonc (1980), namely, that of affective conditioning occurs without logical processes is not supported in the high involvement situation. Observations of Nord and Peter (1980) have been partially confirmed in that storage and retrieval strategies made the respondent receptive to messages

than education inputs. Siegal's statement, that of conditional response being different from unconditional response is borne out by the orientation scores. These reflected more tolerant attitude. Preference for arbitrary stimulus may not take place unless affective conditioning occurs. (Bierely et al).

The study has its share of limitations. We have examined the message only. Influence of source, group was not considered. This must be studied to improve the strategy. The age of the respondents ranged from 25 to 40 years. Age is clearly an important variant in the attitude change process. Its effect could have been taken in by segmenting the respondents on the basis of both age and attitude. The findings are based on the assumption that the treatments, i.e. messages, have been reasonably effective. However, responses from the respondents indicate both familiarity and alienation*. Lack of familiarity and alienation may have led to higher dissonance and therefore, rejection of the messages. The other major assumption was uniform receptiveness of the respondent. The experiment has, however, been able to throw some light on context and processes involved in classical conditioning. It would be difficult to achieve affective conditioning in a high involvement situation, unless support of source or strong association is available. Conditioning may be initiated by both affective as also cognitive processes.

* "I have never heard of this" (lack of familiarity)
"The claim is farfetched"; "It has nothing to do with me or my needs" (alienation).

Implications

The findings within limitations have implications for choice of segment in terms of amenability, the treatments in terms of efficiency, and the overall strategy. To influence social behaviour, people with less rigid attitude should be considered. Messages should be indirect with emotive appeals emphasizing health and safety of children. Storage strategy was found to be more effective. This could be owing to familiarity, whereas in the case of retrieval, lack of familiarity may have led to high dissonance.

Direct educational input may lead to alienation. This could be provided later once positive or tolerant attitude has developed as reflected in orientations 1, 2, and 3. This would then act as a reinforcer to reduce cognitive dissonance. Disparity in attitude between 1 and 4 could have implications for message strategy, order or presentation and routes to be taken. Messages emphasizing both positive and negative, rather than only negative, aspects could be more acceptable to either groups. Should strong cues exist, retrieval strategy could be tested. Orientation scores on points 1 and 3 support slow induction strategy through the routes of i) the health of child and ii) a tolerant attitude towards the views of others. To bring a person to the point of changing his attitude would be time consuming. Efforts could be made to influence orientation as illustrated in Table 4. Once favourite orientation has been achieved, the segment/person becomes more amenable to stronger messages.

The emerging hypotheses from the study are:

1. Messages alone without the support of source or group would be insufficient to induce change in a high involving situation.
2. Conditioning processes in a high involving situation are unlikely to be only affective. They are likely to be an interaction of both, where resistance can be minimized by affective conditioning but acceptance or yielding could come through source or group influence and lead to a cognitive process in a one to one dialogue. Impersonal message is not likely to be effective.
3. Affective overtones in a communication can achieve at least a receptive disposition, and therefore an (effective?) exposure, which is the first step to achieving the objective(s) of communication. However impact on exposure of other appeals, namely, fear, challenge etc need to be ascertained. A comparative analysis could be carried out.
4. Preference for arbitrary stimulus can occur only under low involvement situation, where affective conditioning may work.

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APPENDIX

Attachment: Questionnaire 1 : Please indicate your views on food

	<u>Not at all true</u>	<u>Very true</u>
1. Veg food offers more variety	- - - - -	- - - - -
2. Veg food provides balanced diet	- - - - -	- - - - -
3. Veg is easier to digest	- - - - -	- - - - -
4. Vegetarian is less prone to disease	- - - - -	- - - - -
5. Vegetarian ages slowly	- - - - -	- - - - -
6. Vegetable is tastier than non-veg.	- - - - -	- - - - -
7. Non-veg more filling	- - - - -	- - - - -
8. Non-veg requires more ingredients for cooking	- - - - -	- - - - -
9. Non-veg is fibrous	- - - - -	- - - - -
10. Non-veg food decompose decays quickly	- - - - -	- - - - -
11. Sight of vegetable is pleasant	- - - - -	- - - - -
12. Non-veg higher in protein	- - - - -	- - - - -
13. Non-veg is more tasty	- - - - -	- - - - -
14. Non-veg. has more variety	- - - - -	- - - - -
15. Non-veg is higher in protein	- - - - -	- - - - -
16. Sight of non-veg food is unpleasant	- - - - -	- - - - -
17. Non-veg cooking cumbersome	- - - - -	- - - - -
18. Non-veg is more energy giving	- - - - -	- - - - -
19. The present diet is adequate ^{and} upto my expectation		

Please indicate your agreement or disagreement on the given scale

1-----2-----3-----4-----5

Strongly
disagree

Strongly
agree

QUESTIONNAIRE - 2 Please indicate below on the 5 point scale your likelihood

of the followings:

	Not at all Likely	Not Likely	Not Sure	Likely	Very Likely
	1	2	3	4	5
1. Would not advise friends/acquaintance against non-veg. food					
2. May give non-veg to my kid					
3. May try out non-veg some day					
4. Would like to seek more information					
5. May go for mixed diet					
6. Would look for substitute veg, (giving same value as non-veg food)					
7. May not stick to old diet					
8. Reduce the oil in cooking					
9. Get the advice of doctor					
10. Change over to less fatty oils					

Please indicate your agreement or disagreement on the given scale

	Strongly disagree	Strongly agree
1. Non-veg. with plenty of fresh veg-salads and fruits make a balanced diet		
2. Fresh vegetables, fruits and cereals can meet all the needs of the body		
3. The present diet is adequate, upto my expectation, taste and fulfilling		
4. A nutritious diet is a judicious combination of veg and non-veg food		
5. Balanced diet can be had from either.		

of the following:

	Very unlikely	Not likely	Not sure	Likely	Very likely
	1	2	3	4	5
1. May go for mixed diet					
2. Look for substitute vegetable food giving same food value as non-veg.					
3. Would increase the vegetable contents in the diet					
4. Would like to read more on veg. food and nutrition.					
5. Would discuss about food with friends, acquaintance.					
6. May change over to new diet					
7. Reduce non-veg. contents					
8. Take safer non-veg. such as fish					

Please indicate your agreement or disagreement on the given scale

	Strongly disagree	Strongly agree
1. Non-veg. with plenty of fresh veg-salads and fruits make a balanced diet.		
2. Fresh vegetables, fruits and cereals can meet all the needs of the body		
3. The present diet is adequate upto my expectation, taste, and is fulfilling		
4. A nutritious diet is a judicious combination of veg and non-veg food		
5. Balanced diet can be had from either.		

hibit - IV: Treatments Administered to Vegetarian Segment

Orientation	To develop positive attitude toward non-veg.	To develop negative attitude toward veg.
Treatment		
Storage	T ₁ One of the best cures for asthma is gulping down live fish. In fact many of our effective medicines contain non-veg. ingredients. We consume them in the form of medicine.	T ₂ Report on increase of cholesterol due to heavy intake of vegetable oil fats.
Retrieval	T ₃ Taste of synthetic chicken soup is good, but the real one is still better. When hard work comes one thinks of solid food. Last time it was chicken soup for my son. (Other occasions: during pregnancy, recovery from acute illness).	T ₄ There have been quite a few cases of undernutrition amongst vegetarians. The symptoms were weakness, poor growth due to deficiency in protein and such vital elements. The remedy given were tonics made mostly from non-vegetable extract.
Education	T ₅ Doctor's advice, what books on health and hygiene say. Discussion punctuated by 'should' and 'must'.	T ₆ To gain the same amount of energy/proteins etc. one requires double or more the amount of vegetable as compared to non-veg. This puts strain not only on the money but also on the physical system to digest.

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W : Treatments given to non-vegetarian

Orientation	To develop positive attitude toward veg.	To develop negative attitude toward non-veg.
Treatments		
Storage	<p>T₁-</p> <p>A recent report based on scientifically proved experiments (report shown) found that a judicious combination of veg. is as good as non-veg. food. It can serve all the needs of vitality, energy, required at different ages. In fact many healthy citizens, with long life, have been strict vegetarians.</p>	<p>T₂-</p> <p>Non-veg taken from animal proteins often considered the most expensive, prestigious food, are neither essential nor desirable as major sources of protein in a diet (from report), given detail chart, emphasizing balanced diet. Only non-veg. may lead to constipation.</p>
Retrieval	<p>T₃-</p> <p>Scurvy was a dreaded disease long time back when sailors used to suffer from this due to lack of vitamin-C, readily available from fresh vegetables. No food is complete without fresh vegetables, salads, rich in colour, rich in food and taste.</p>	<p>T₄-</p> <p>The current condition of non-veg market is so unhygienic. No wonder the worst hit among the current victims of epidemics were those taking non-veg food.</p>