The Information Processing of Print Advertisements by Middle-aged Women

Tuhin Chattopadhyay

The purpose of this paper is to explore the most effective print advertising strategy in terms of message strategy and execution framework for middle-aged women in India. Middle-aged women (n = 400) watched twenty advertisements in which message strategy and execution framework were manipulated in a 2×10 completely crossed factorial design and were asked to rate their attention, comprehension, retention, attitudes and purchase motivation about these advertisements. Results suggest that cognitive message strategy along with dramatization as execution framework is most effective for middle-aged women.

Key words**:** *Advertising message strategy, advertising execution framework, information processing, middle-aged women.*

Introduction

As creative complexity and artistic expression continue to be the norm in contemporary print advertising, a further understanding of how consumers process advertisements can only enhance future advertising efforts (Lapidus, 1991). As the marketplace continues to become more competitive with hundreds, if not thousands, of advertisers competing for the consumers' attention (Webb and Ray, 1979), marketers must develop a better understanding of the consumers if they are to reach their desired target audience efficiently and effectively. Research is needed for the advertisers to find out how the target audience processes the information of the advertisements.

The creative department of an advertising agency faces a number of dilemmas while creating an advertisement. The first stage of dilemma starts with whether the message strategy will be cognitive or affective. Once the message strategy is decided the next problem starts with the selection of the right execution framework. The present study on information processing has been carried out by treating print advertisements as information sources and viewers as information processors.

Presently the median age of Indians is 25.1 years and it is anticipated that the median age would rise to 31 by the year 2025. Research also suggests that Indian women are not confined to kitchen anymore as they are gaining ground in family decision making. In the future, due to the relative size and wealth of the middle-aged women, the segment will increasingly attain more buying influence and purchasing power. So looking at the future decision maker of the family, the present research has taken into consideration the middle-aged women and tries to explore the right combination of message strategy and execution framework which will be most effective for them. Recognizing how a middle-aged woman reacts to different message strategies and

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execution framework will continue to become more significant over the next several decades as advertisers strive to build and enhance effectiveness.

This study is designed to extend the knowledge of information processing of advertisements by middle-aged women in India. The objective of the research is to give the advertising industry a definite guideline while targeting the middle-aged women. This study tries to bring forward the most effective combination of message strategy and execution framework for the middle-aged women.

Advertising message and its processing by the consumers: A Review

Advertising message strategy is a well researched topic in both, the academic as well as the practitioner community. Ray (1982) classifies commercials by "format," e.g. warmth, testimony, refutation, repetition and fear. Aaker and Myers (1987) used the term "message factors." Rothschild (1987) refers to classes of creative appeal (rational versus emotional) and execution style (slice of life, product comparison, problem/solution, music, sex and humour). Belch and Belch (1990) used the term "Appeals" (rational, emotional and combinations) and "Execution Styles" (factual message, scientific/ technical evidence, demonstration, comparison, testimonial, slice of life, animation, personality symbol, fantasy, dramatization, humour and combinations).

Cognitive psychologists hold that the consumers seek and use information to assist them in their decision processes in order to maximise utility, reduce levels of risk, or solve problems. It was suggested that the impact of persuasive communications could be understood in terms of three information-processing phases: a) attention to the message, b) comprehension of its contents, and c) acceptance of its conclusions. These three phases are used as a basis for proposing that "the persuasive impact of messages could be viewed as the multiplicative product of six information-processing steps (Eagly and Chaiken, 1993)." These six steps are; presentation, attention, comprehension, yielding, retention and behaviour. These six-steps give a good overview of the attitude change process, reminding us that it involves a number of components. Any independent variable in the communication situation can have an effect on any one or more of the six steps.

A model of the consumer decision process that emphasized the information provided to consumer exposure in commercial messages was developed. Howard and Sheth (1969) made one of the first attempts to accommodate, in one 'catch-all' framework, the wide range of variables believed to be influential in consumer choice. Their framework considered not only consumer informational limitations but also the individual capacities of each consumer. It has now been revised several times most recently in 1994. It now takes into account consumer confidence, as well as information recognition and interpretation. The latest version includes the search for information to solve problems extending beyond limited and routinised tasks to incorporate extensive problem-solving. In 1979, Bettman drew a distinction between information-processing effort from internally-stored information in memory, and information-processing effort involved in acquisition from external sources, such as purchase experience, interpersonal contacts and access to secondary sources of information. "The consumer is constantly being bombarded with information which is potentially relevant for making choices.

The consumer's reaction to that information, how that information is interpreted, and how it is combined or integrated with other information may have crucial impacts on choice. Hence, decisions on what information is to be provided to consumers, how much should be provided and how, require knowledge of how consumers process, interpret and integrate that information in making choices (Bettman, 1979)."

A further well-known 'catch-all' model was developed by Engel and Blackwell (1992). This model includes a central control unit, information processing, environmental influences and a decision process. Here, information processing is seen as a result of exposure to external stimuli, including marketing efforts, attention, comprehension, yielding and retention in long-term memory, and it can thus have an impact upon decision-making processes as and when the need arises.

In 1994, Damasio (in his book *Descartes' Error)* proposed that emotions cause attention to shift towards the stimulus that causes an emotion, as a result of the limbic system's autonomic reaction. In 2005, Erik du Plessis proposed that the emotional and rational are not two conflicting things in the brain, but work together towards the survival of the organism: emotions direct attention, so that the organism recognizes things it should avoid or approach.

While most of the researchers try to find out how consumers process information by developing models and theories, little attempt is made to find out the cognitive style of different segments differentiated by sex and age. Since we know that the advertising will be most effective when it matches the consumers' cognitive ability, the present research has taken different advertisements with different combination of message strategy and execution framework to find out the most effective one for the middle-aged women.

Sampling Design

The population available for study is the middle-aged women of India in the age-group of 30 to 50 years. Using multi-stage area sampling, 400 respondents are randomly selected for the research from all over India. The mean age of the sample is 41.3 years.

The researcher takes an exhaustive list of all print media advertisements (3000) for middle-aged women published in India from 2005 to 2007 by twenty leading advertising agencies of India. The advertisements for middle-aged women are further classified into twenty segments of all permutations of two types of message strategy (cognitive message strategy and affective message strategy) and ten types of execution framework (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/technical evidence, comparison, personality symbol, dramatization). The entire segmentation of the advertisements was done by the Q-sort procedure to bring more objectivity in to the research. Once the segmentation is complete, one advertisement from each stratum is randomly selected. Hence, twenty advertisements have been selected for middle-aged women.

Data Collection Design

The 400 middle-aged women respondents are shown the 20 advertisements with different combination of two types of message strategy and ten types of execution framework.

Questionnaires were also provided to them while watching the advertisements. The five dependent variables of the research namely attention, comprehension, attitude, retention and purchase motivation are measured on a five-point likert scale for each of the twenty advertisements.

Statistical Design

Five dependent variables have been identified:

1. Ability to gain attention
2. Message comprehension
3. Retention of the advertisement
4. Attitude towards the advertisement
5. Purchase motivation of the consumers

Two independent variables (Factors) have been selected:

1. Message strategies
2. Execution framework

2 treatment levels of Message strategy (1st Factor) has been taken into consideration into the current research:

1. Cognitive
2. Affective

10 treatment levels of Execution framework (2nd Factor) has been taken into consideration into the current research:

1. Animation
2. Slice of life
3. Testimonial
4. Demonstration
5. Fantasy
6. Informative
7. Scientific/ technical evidence
8. Comparison
9. Personality symbol
10. Dramatization

The dependent variables are in interval scales and independent variables are in nominal scales. The statistical tool used for conducting the analysis is factorial MANOVA. Four test criteria have been used while conducting MANOVA: Bartlett–Pillai criterion, Wilk's lambda criterion/ Maximum likelihood criterion or U-statistic, Hotelling—Lawley criterion and Roy's greatest characteristic root (gcr) or Eigen value. The interaction effect between the message strategy and execution framework is tested. If the interaction is significant, we cannot examine the main effects because the main effects will not tell the complete story.

If sufficient evidence for accepting null hypothesis has not been found, factorial ANOVA is performed on each of the dependent variables separately to specify the impact of independent variables on dependent variables. Knowing that message strategy has a significant impact on the dependent variables, z-test is conducted to know whether cognitive message strategy or affective message strategy has a greater impact on the dependent variables. The mean of cognitive and affective message strategy has been compared with the hypothesis testing.

On finding that the execution framework leaves a significant impact on the dependent variables, post hoc test is computed to find out which level of execution framework has the maximum impact. Pairwise comparisons have been computed for all combination levels of the independent variable. The post hoc procedure of Tukey's honestly significant difference (HSD) has been used.

The following assumptions are taken care of before the computation of MANOVA:

1. The dependent variables are normally distributed within the group. Normality diagnostic test is performed on each dependent variable for each level of independent variable. Two statistics are used for this purpose: Kolmogorov—Smirnov test and Shapiro—Wilk statistic. The level of significance obtained for these tests is greater than 0.05 which indicates that no normality violations exist. In addition, the value of kurtosis and skewness are between +1 and -1. The normal Q-Q plots for the distribution of dependent variables for each level of factors are also inspected.
2. There are linear relationships among all pairs of dependent variables.
3. Homoscedasticity has been examined by means of Levine's test. It tests the null hypothesis that the error variance of the dependent variables is equal across groups. The resulting p-value of Levene's test is higher than the critical value (.05), thus suggesting equality of error variances across different levels.
4. The homogeneity of variances and covariances has also been tested with the help of Box's test of equality of covariance matrices. It tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

Hypothesis formulation and analysis

H_0: There is no difference among vectors of means (centroid) of consumer's attention, message comprehension, attitude, retention and purchase motivation across different levels of message strategies and execution framework.

H_1: The vectors of means (centroid) of consumer's attention, message comprehension, attitude, and retention and purchase motivation are statistically different across different levels of message strategies and execution framework.

Since Sig. = .000 for all of these effects, we can conclude that both main effects and the interaction effects are statistically significant ($p < .05$). Since the p-value is less than the alpha level (.05), the null hypothesis is rejected. Individual ANOVAs are performed in order to see which dependent variables have large, medium, small or no effect. The three assumptions of ANOVA, namely, independent observations (i.e. no correlation between error terms and no correlation between independent variables and error terms), normal distribution and homogeneity of variances also hold true.

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.
MessStrat * ExeFrame	Pillai's Trace	.104	18.778	45.000	3.990E4	.000
	Wilks' Lambda	.899	19.045	45.000	3.568E4	.000
	Hotelling's Trace	.109	19.271	45.000	3.987E4	.000
	Roy's Largest Root	.067	59.092[a]	9.000	7.980E3	.000

The statistic is an upper bound on F that yields a lower bound on the significance level.

With the dependent variable of '**consumer's attention**', the following 3 hypotheses can be framed:

1. The mean level of consumer's attention towards advertisements remains the same for both types of message strategies. (Main effect 1)
2. The mean level of consumer's attention towards advertisements remains the same for all types of execution framework. (Main Effect 2)
3. The mean level of consumer's attention towards advertisements remains the same for all combinations of message strategies and execution framework. (Interaction Effect)

The analysis reveals that the consumer's attention is significantly different for the two types of message strategies ($F = 3.862$, $p < .01$) and all the ten types of execution framework ($F = 8.576$, $p < .01$). There also exists a significant interaction effect between the message strategies and execution framework ($F = 20.966$, $p < .01$)

With the dependent variable of '**message comprehension**', the following 3 hypotheses can be framed:

1. The mean level of message comprehension from advertisements remains the same for both two types of message strategies. (Main effect 1)

2. The mean level of message comprehension from advertisements remains the same for all types of execution framework. (Main Effect 2)

3. The mean level of message comprehension from advertisements remains the same for all combinations of message strategies and execution framework. (Interaction Effect)

The analysis reveals that the consumer's message comprehension is significantly different for two types of message strategies ($F = 6.066$, $p < .01$) and ten types of execution framework ($F = 13.711$, $p < .01$). There also exists a significant interaction effect between the message strategies and execution framework ($F = 21.204$, $p < .01$)

With the dependent variable of '**consumer's retention**', the following 3 hypotheses can be framed:

1. The mean level of consumer's retention of the advertisements remains the same for both types of message strategies. (Main effect 1)

2. The mean level of consumer's retention of the advertisements remains the same for all types of execution framework. (Main Effect 2)

3. The mean level of consumer's retention of the advertisements remains the same for all combinations of message strategies and execution framework. (Interaction Effect)

The analysis reveals that the consumer's attention is significantly different for the two types of message strategies ($F = 5.345$, $p < .01$) and all the types of execution framework ($F = 11.985$, $p < .01$). There also exists a significant interaction effect between the message strategies and execution framework ($F = 18.694$, $p < .01$)

With the dependent variable of '**consumer's attitude**', the following 3 hypotheses can be framed:

1. The mean level of consumer's attitude towards advertisements remains the same for both types of message strategies. (Main effect 1)

2. The mean level of consumer's attitude towards advertisements remains the same for all types of execution framework. (Main Effect 2)

3. The mean level of consumer's attitude towards advertisements remains the same for all combinations of message strategies and execution framework. (Interaction Effect)

The analysis reveals that the consumer's attention is significantly different for the two types of message strategies ($F = 7.110$, $p < .01$) and all the ten types of execution framework ($F = 7.562$, $p < .01$). There also exists a significant interaction effect between the message strategies and execution framework ($F = 4.491$, $p < .01$)

With the dependent variable of '**purchase motivation**', the following 3 hypotheses can be framed:

1. The mean level of consumer's purchase motivation from advertisements remains the same for both types of message strategies. (Main effect 1)

2. The mean level of consumer's purchase motivation from advertisements remains the same for ten types of execution framework. (Main Effect 2)

3. The mean level of consumer's purchase motivation from advertisements remains the same for all combinations of message strategies and execution framework. (Interaction Effect)

The analysis reveals that the consumer's attention is significantly different for the two types of message strategies ($F = 5.247$, $p < .01$) and all the ten types of execution framework ($F = 7.141$, $p < .01$). There also exists a significant interaction effect between the message strategies and execution framework ($F = 8.201$, $p < .01$)

Three separate F-ratios are computed for each of the five dependent variables to determine how much of the variance in the dependent variable can be attributed to each of these three effects. Each F-value represents the ratio of the variance from that particular effect relative to random error variance. Thus, the three sources of between-group variance (Message strategy effect, Execution framework main effect, and Message strategy * Execution framework interaction) result in three F-values.

Interpreting Significant Main Effects of "Message Strategy"

Since $p < .01$ for the main effect of message strategy for all the dependent variables, there is a significant effect for that factor. The marginal means for the levels of the factor are examined to determine which group is significantly higher (or lower) than the other.

To test, whether cognitive message strategy or affective message strategy has a greater impact, the mean of cognitive and affective message strategy is compared with the following hypothesis:

$\boldsymbol{H_0: = \mu_1 - \mu_2 = 0}$ against $\boldsymbol{H_a: \mu_1 - \mu_2 > 0}$

Where $\boldsymbol{\mu_1}$ is the mean of cognitive message strategy and $\boldsymbol{\mu_2}$ is the mean of affective message strategy.

The test statistic for the comparison of means which will be used is a ***two-sample z statistic***

Group Statistics

	Message Strategy	N	Mean	Std. Deviation	Std. Error Mean
Attention of the consumer towards the advertisement	Cognitive	4000	3.45	.556	.009
	Affective	4000	2.64	.668	.011
Comprehension of the consumers	Cognitive	4000	3.54	.571	.009
	Affective	4000	2.53	.664	.011
Retention of the Advertisement in memory	Cognitive	4000	3.50	.604	.010
	Affective	4000	2.46	.743	.012
Attitude towards the advertisement	Cognitive	4000	3.63	.539	.009
	Affective	4000	2.50	.719	.011
Purchase Motivation	Cognitive	4000	3.52	.578	.009
	Affective	4000	2.54	.684	.011

Independent Samples Test

	Z	df	Sig. (2-tailed)	Mean Difference
Attention of the consumer towards the advertisement	58.990	7998	.000	.810
Comprehension of the consumers	73.002	7998	.000	1.011
Retention of the Advertisement in memory	68.328	7998	.000	1.035
Attitude towards the advertisement	79.500	7998	.000	1.130
Purchase Motivation	69.403	7998	.000	.983

The mean scores for the middle-aged women consumer preference about the advertisements showed that cognitive message strategy is significantly higher than the affective message strategy on characteristics related to attention, message comprehension, retention, attitude and purchase motivation. This finding suggests that the participants perceived the cognitive message strategy to be more interesting, appealing, impressive, and memorable than the affective message strategy. The cognitive message strategy also had a significantly greater impact on participants' purchase intentions than did the affective message strategy, a worthwhile finding for the advertisers.

Interpreting Significant Main Effects of Execution framework

Post Hoc Methods

Since $p < .01$ for the main effect of execution framework for all the dependent variables, there is a significant effect for execution framework. We further need to examine out of 10 levels of Execution framework, which levels have more impact than the others. For each significant dependent variable, post hoc test was computed. Pairwise comparisons were computed for all combinations of the execution framework. The post hoc procedure applied in the current research is Tukey's honestly significant difference (HSD) method. Using the post-hoc test, it is seen that dramatization has the most significant impact among all the levels of execution framework on all the dependent variables.

Interpreting Significant Interaction Effects

The interaction effect is the effect that message strategy has on the execution framework. Interaction means that the independent variables are not purely independent; they have a complex (interactive) influence on the dependent variables. An M * E interaction is a change in the main effect of message strategy over levels of execution framework or the change in the main effect of execution framework over levels of message strategy.

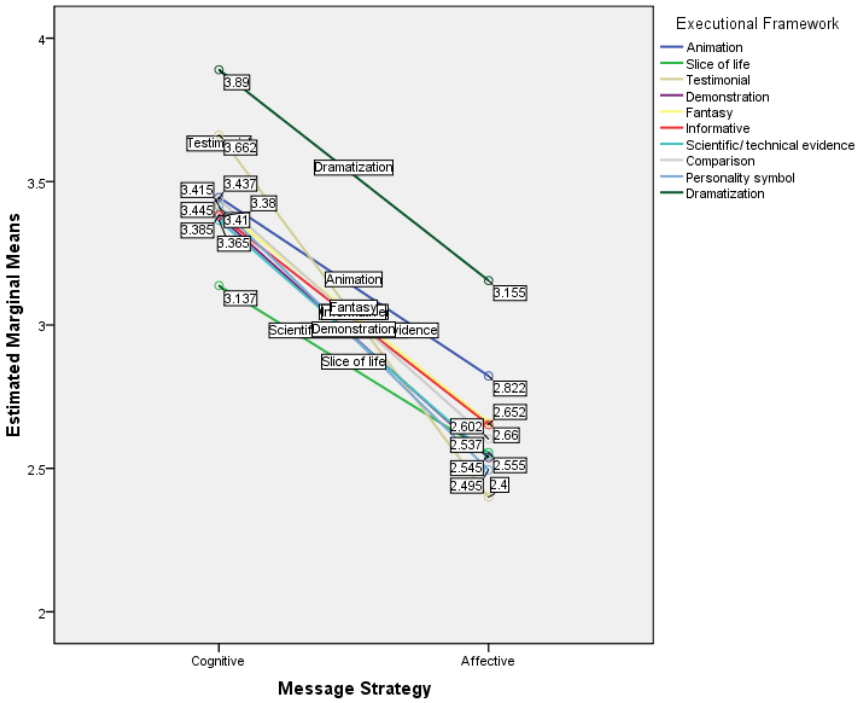
The following table shows how the participant's attention gets changed from affective message strategy to cognitive message strategy for all the levels of execution framework.

Dependent Variable	Level of Execution Framework	Mean of the level with affective message strategy	Mean of the level with cognitive message strategy	Percent increase from affective to cognitive
Attention of the consumers towards the ad	Animation	2.822	3.445	22.07654
	Slice of life	2.555	3.137	22.77886
	Testimonial	2.4	3.662	52.58333
	Demonstration	2.537	3.38	33.22822
	Fantasy	2.66	3.41	28.19549
	Informative	2.652	3.385	27.63952
	Scientific/	2.545	3.365	32.22004
	technical evidence			
	Comparison	2.602	3.437	32.0907
	Personality symbol	2.495	3.415	36.87375
	Dramatization	3.155	3.89	23.29635

Figure 1 is the representation of the above table which shows how the consumer's attention gets increased from affective message strategy to cognitive message strategy for each level of execution framework.

Figure 1

Message strategy by execution framework on middle-aged women's attention towards advertisement



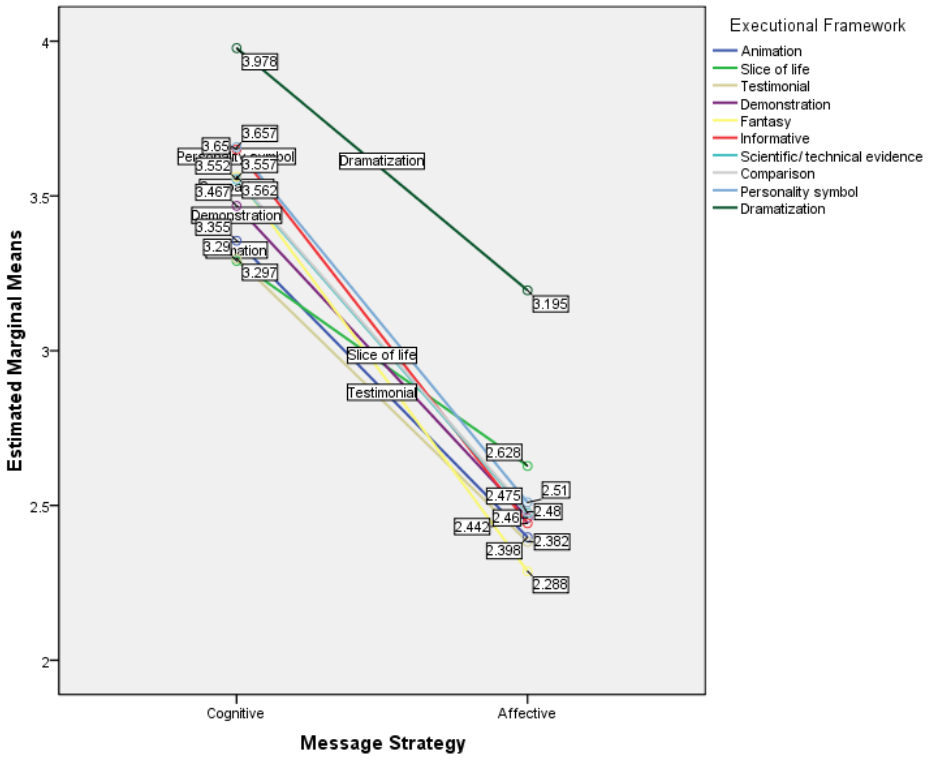
The following table shows how the participant's message comprehension of the advertisement gets changed from affective message strategy to cognitive message strategy for all the levels of execution framework.

Dependent Variable	Level of Execution Framework	Mean of the level with affective message strategy	Mean of the level with cognitive message strategy	Percent increase from affective to cognitive
Message comprehension	Animation	2.398	3.355	39.90826
	Slice of life	2.628	3.29	25.19026
	Testimonial	2.382	3.297	38.4131
	Demonstration	2.46	3.467	40.93496
	Fantasy	2.288	3.562	55.68182
	Informative	2.442	3.65	49.46765
	Scientific/ technical evidence	2.475	3.552	43.51515
	Comparison	2.48	3.557	43.42742
	Personality symbol	2.51	3.657	45.69721
	Dramatization	3.195	3.978	24.50704

Figure 2 is the representation of the above table which shows that how the consumer's message comprehension gets increased from affective message strategy to cognitive message strategy for each level of execution framework.

Figure 2

Message strategy by execution framework on middle-aged women's comprehension of advertisement



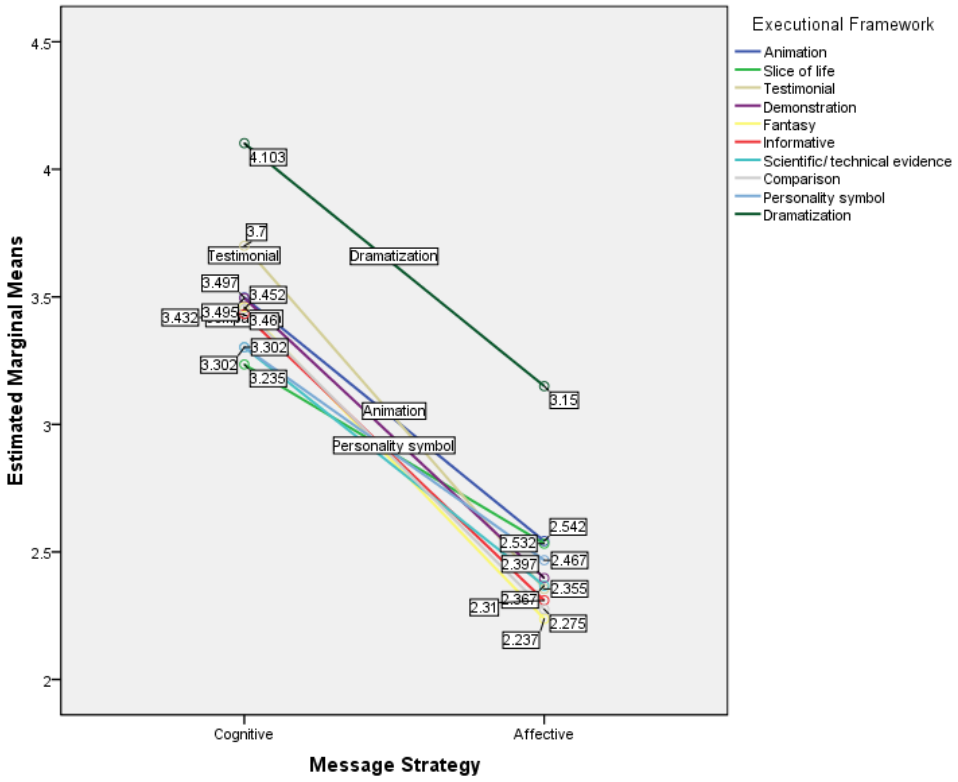
The following table shows how the participant's retention gets changed from affective message strategy to cognitive message strategy for all the levels of execution framework.

Figure 3 is the representation of the above table which shows that how the consumer's retention gets increased from affective message strategy to cognitive message strategy for each level of execution framework.

Dependent Variable	Level of Execution Framework	Mean of the level with affective message strategy	Mean of the level with cognitive message strategy	Percent increase from affective to cognitive
Retention of the ad	Animation	2.542	3.497	37.56884
	Slice of life	2.532	3.235	27.76461
	Testimonial	2.355	3.7	57.11253
	Demonstration	2.397	3.495	45.80726
	Fantasy	2.237	3.46	54.67143
	Informative	2.31	3.432	48.57143
	Scientific/ technical evidence	2.367	3.302	39.50148
	Comparison	2.275	3.452	51.73626
	Personality symbol	2.467	3.302	33.84678
	Dramatization	3.15	4.103	30.25397

Figure 3

Message strategy by execution framework on middle-aged women's retention of advertisement



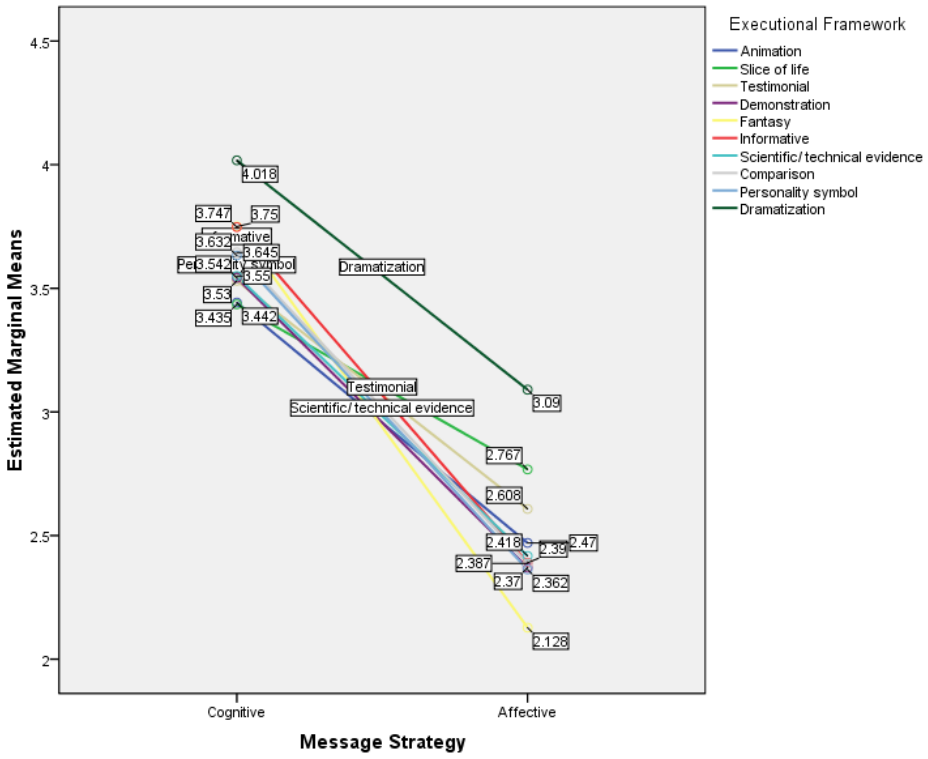
The following table shows how the participant's attitude gets changed from affective message strategy to cognitive message strategy for all the levels of execution framework.

Dependent Variable	Level of Execution Framework	Mean of the level with affective message strategy	Mean of the level with cognitive message strategy	Percent increase from affective to cognitive
Attitude of the consumers towards the ad	Animation	2.47	3.442	39.35223
	Slice of life	2.767	3.435	24.14167
	Testimonial	2.608	3.53	35.35276
	Demonstration	2.37	3.542	49.45148
	Fantasy	2.128	3.75	76.2218
	Informative	2.39	3.747	56.77824
	Scientific/ technical evidence	2.418	3.55	46.81555
	Comparison	2.387	3.645	52.70214
	Personality symbol	2.362	3.632	53.76799
	Dramatization	3.09	4.018	30.03236

Figure 4 is the representation of the above table which shows that how the consumer's attitude gets increased from affective message strategy to cognitive message strategy for each level of execution framework.

Figure 4

Message strategy by execution framework on middle-aged women's attitude towards advertisement

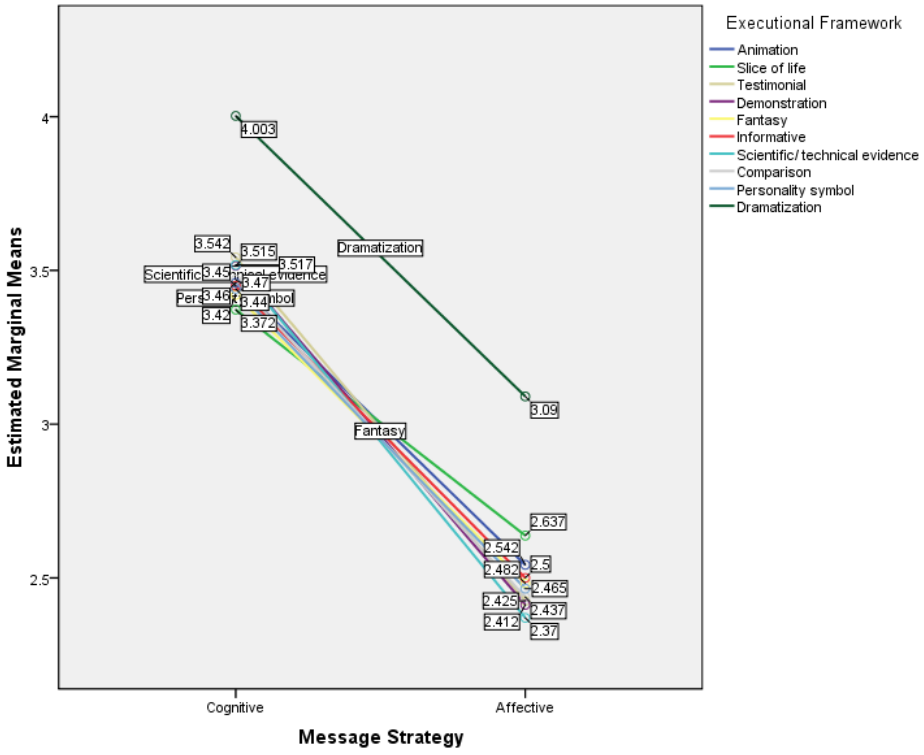


The following table shows how the participant's purchase intention gets changed from affective message strategy to cognitive message strategy for all the levels of execution framework.

Dependent Variable	Level of Execution Framework	Mean of the level with affective message strategy	Mean of the level with cognitive message strategy	Percent increase from affective to cognitive
Purchase motivation of the consumers by watching the advertisement	Animation	2.542	3.46	36.1133
	Slice of life	2.637	3.372	27.87258
	Testimonial	2.425	3.542	46.06186
	Demonstration	2.412	3.515	45.72968
	Fantasy	2.482	3.42	37.7921
	Informative	2.5	3.45	38
	Scientific/ technical evidence	2.37	3.517	48.39662
	Comparison	2.437	3.47	42.38818
	Personality symbol	2.465	3.44	39.55375
	Dramatization	3.09	4.003	29.54693

Figure 5

Message strategy by execution framework on middle-aged women's purchase motivation on watching the advertisement



Discussion

There is no denial of the fact that middle-aged women of India do not form a homogeneous group as there is wide diversity in terms of their economic capability, culture and taste. However, research also suggests that majority of the middle-aged women want themselves to be treated rationally with respect to advertisements. Middle-aged women tend to be more value-conscious and seldom get carried away with the emotional content of the advertisement. However, it is interesting to note that middle-aged women want rational messages along with 'dramatic' execution framework. They want some rational situation through which the characters could induce some excitement and suspense in their mind. Though dramatization technique is well-suited to television, recent advances in the creative techniques have made it popular in the print advertisements also. The purpose of using drama is to draw the viewer into the action it portrays (Belch and Belch 1990). Advocates of drama note that when it is successful, the audience becomes lost in the story and experiences the concerns and feelings of the characters (Deighton, Romer and McQueen, 1989). By understanding the cognitive style of the middle-aged women, it can be found out that the selection of dramatization as an execution style is not entirely random. Rather there exists a sound reason behind it. With time, they tend to be more rational while purchasing. However, they would also like to enjoy a story which can thrill them. While exposed to different print advertisements, whenever they get a rational exciting story, their attention, comprehension, retention, attitude and purchase intention gets positively influenced.

Conclusion

From this research, it can be concluded that advertisements with cognitive message strategy and execution framework with dramatization are most effective while targeting towards middle-aged women. The real challenge for the creative department of the advertising agency is to incorporate both a rational and dramatic element in the stipulated space of the print media. The limitation of this research is that only print media has been considered and the levels of execution framework and message strategies are not exhaustive. This research can further be advanced with the help of brain scanning devices like fMRI, EEG and MEG. Neuro-marketing research can be carried out by observing the function in the brain while the consumer is watching the advertisements. The future of segmentation for advertising lies in considering cognitive style as a prime parameter.

References

Aaker, D.A. and Myers, J.G. 1987. *Advertising management.* Prentice Hall.

Belch, G.E. and Belch, M.A. 1990. *Introduction to advertising and promotion: An integrated marketing communications perspective*. Chicago, IL: Richard D. Irwin.

Bettman, James R. 1979. *An information processing theory of consumer choice*. Reading, MA: Addison-Wesley Pub. Company

Damasio, A. 1994. *Descartes error*: *Emotion, reason, and the human brain*. New York: Avon Books.

Deighton, J., Romer D. and McQueen J. 1989. Using drama to persuade. *Journal of Consumer Research*, 16, 335-343.

Eagly, A. H. and Chaiken, S. 1993. *The Psychology of Attitudes*. Fort Worth, Philadelphia (etc.): Harcourt Brace Jovanovich.

Engel, J.F. and Blackwell, R.D. 1992. *Consumer Behavior*. New York:College Publishing.

Howard, J.A. and Sheth, J.N. 1969. *The Theory of Buyer Behavior.* New York: Appleton-Century-Crofts.

Lapidus, R.S. 1991. Visual information processing of print advertising: Cognitive and experiential response to artistic style. *ETD collection for University of Nebraska: Lincoln. Paper AAI9200144*.

Nicosia, F.M. 1966. *Consumer decision processes: marketing and advertising implications.* Prentice Hall.

Plessis Du, E. 2005. *The advertised mind: Ground-breaking insights into how our brains respond to advertising*. Kogan Page Publishers.

Ray, M. 1982. *Advertising and communications management.* Englewood Cliffs, NJ: Prentice-Hall.

Rothschild, M.L. 1987. *Advertising: From fundamentals to strategies*. Lexington, MA: Heath.

Webb, P. and Ray, M. 1979. Effects of TV clutter. *Journal of Advertising Research, 19,* 7-12.