

**PSYCHOLOGY AND SUCCESSFUL
MARKETING
- A PSYCHOLOGICAL ANALYSIS OF
CONSUMER MOTIVATION AND
ADVERTISING EFFECTIVENESS**

**A Thesis submitted to the
Department of Marketing
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Degree M.Phil in Marketing**

by

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TO TOM, MY FATHER, MY BEST FRIEND AND MY SEVEREST CRITIC.

ABSTRACT

This is a study of the relationship between psychology and consumer buying behaviour. It examines ways in which consumer perception and motivation are influenced by the manipulation of specific psychological variables in a television promotion of infant foods.

Fieldwork was carried out in Dublin in February 1993 with a test group of 103 women, using a video of the selected television commercial and a questionnaire. The test sample of women was subdivided into 3 separate categories, comprised of pregnant women, first time mothers and subsequent mothers.

The methodological foundation for this research derives from the work of S.H. Britt 1978. A modified version of his psychological model of communication was developed for this study, incorporating specific psychological variables related to the processes of attending, learning and remembering and motivating.

Using this model, the following psychologically based assessments were investigated:

- the overall level of perception of selected psychological variables in the commercial by the test group
- the test groups evaluation of the commercial using a descriptive adjective rating system based on the psychological states of personal relevance, warmth, dislike and entertaining.
- the test groups level of perception of, and preference for the rational and emotional stimuli incorporated in the advertisement
- the inter-relationships between specific product attributes, derived from the advertising brief, and selected psychological variables from the model, as perceived by the test group.

The study demonstrates the possibility of developing new psychologically derived

techniques for an improved measurement of advertising effectiveness. This is an area where, notwithstanding the techniques of semiotics, day after recall, physiological procedures etc, the use of psychological measures in assessing effectiveness is still at an embryonic stage of development.

The techniques used in this study were aimed at:

- understanding more comprehensively which psychological criteria effectively influence consumer buying behaviour
- broadening the psychological techniques currently used in the advertising industry in assessing advertising effectiveness.

The results of the research indicate that

- new psychological techniques can be a valuable complement to the more traditional methods used in the evaluation of advertising effectiveness
- manipulation of specific psychological variables enhances viewer perception of selected product attributes.

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INTRODUCTION

The application of psychological variables has become paramount in modern advertising. An understanding of these variables, how they work and the extent to which they can be measured and manipulated, is crucial in the development of effective advertising.

Recent work within these fields of study has led to the development of a significant crossover between psychology, marketing and advertising. It is through this research on the application of psychology and psychological techniques and procedures that the transition can be made from descriptive models of how advertising works to simulation models that mirror the world of marketing communications.

However, notwithstanding these developments, not enough is yet known to allow for an accurate description of the following:

- what happens psychologically to the individual confronted with an advertisement
- how can scientifically valid empirical data from psychological experiments and observations be applied in the development of more effective advertising
- how does the individual respond psychologically in attending to the advertisement
- what does the individual learn and remember of what was intended to be communicated
- was the individual motivated by the advertisement
- what are the most persuasive psychological influences and how best can they be manipulated in advertising
- can psychological theory be applied to clinically elicit emotional and rational reassurance in an advertisement.

Deeper research into these areas will benefit the advertising industry by

- increasing our knowledge of marketing processes and how they work
- providing a scientific approach to marketing

- developing the crossover between psychology and marketing
- providing insights as to what specific applications to advertising can be made from psychological principles of communication
- providing increased creativity into assessing advertising effectiveness, broadening the presently limited definition of advertising effectiveness and eroding the attitude within the advertising industry regarding assessing effectiveness 'if we don't measure it, it doesn't exist.'

It is this dimension, primarily investigating the application of psychology in assessing television advertising effectiveness which concerns this study.

The aim of this study is to establish new psychological parameters for the assessment of television advertising. It is an attempt to establish new criteria to help broaden the presently used techniques in evaluating advertising effectiveness. It is an attempt to widen the definition of advertising effectiveness which currently prevails within the advertising industry. The methodology represents a significant departure from the major paradigms of research presently used in the assessment and evaluation of advertising effectiveness. Although these paradigms have been helpful to researchers and managers alike, they are still rather limited and require reappraisal in order to advance our understanding of advertising effectiveness.

However, before being able to assess the effectiveness of advertising one must understand what advertising is.

1. PSYCHOLOGY AND ADVERTISING

1.1 Advertising in general

1.1.1 What is advertising

Advertising is often regarded as a process of relatively indirect persuasion, based on information about product benefits, which are designed to create favourable mental impressions that 'turn the mind toward' purchase, Rossiter & Percy 1987.

Daniel Starch 1926 was the first marketing researcher to mention advertisements' Latin root 'Advertere' (to turn toward) as a means of explaining the term. The notion of 'turning the mind toward' purchase was first suggested by Dirksen and Kroeger 1960.

Dunn and Barban define advertising as

'paid, non-personal communication through various media by business firms, non-profit organisations, and individuals who are in some way identified in the advertising message and who hope to inform or persuade members of a particular audience.'

Hotchkiss 1940 states 'Advertising includes all sorts of public messages for commercial purposes, paid for and avowed by those who expect to profit from them.'

Advertising can be used to generate awareness, establish or change attitudes and stimulate purchase intentions. Advertising possesses the potential for building a 'consumer franchise' or relatively permanent preference for a brand, as well as for creating 'non-franchise' effects, in the form of temporary preference for a brand, Prentice, 1977.

1.1.2 Advertising types and techniques

In practice, advertising is most readily distinguished in terms of types and techniques.

Advertising can be categorised into different types based on who is advertising, within the marketing channel, and to what target the advertising is directed, Sandage and Fryburger 1975.

Jefkins 1991 identifies seven main categories of advertising, namely consumer, industrial, trade, retail, financial, direct response and recruitment. Each type of advertising requires its own treatment regarding creative presentation and use of media ie the twin skills described as the 'heart of advertising.'

In terms of techniques, advertising uses eight different approaches depending on its brand awareness objective (brand recognition versus brand recall coupled with its brand attitude objective and strategy) four combinations of low versus high involvement purchase decisions and informational versus transformational purchase motivations Rossiter and Percy op cit.

Cooke 1966 laid down six stipulations in an attempt to conceptualise the whole complex process of advertising. These are as follows:

- (1) Advertising can be effective
- (2) In the present state of research art, the effectiveness of advertising can be measured after the fact.
- (3) Advertising cannot literally create demand
- (4) Advertising cannot sustain a bad product or overcome a significant quality disadvantage in a product technically usable
- (5) If products are literally indistinguishable on any physical or psychological criterion which is or can be made meaningful to consumers, advertising alone cannot create product differentiation.

- (6) If we assume the competition has social value, then we must assume that competitive advertising which meets standards, also has social value.

1.1.3 The advertising business

The statistics show that advertising is a business. Advertising expenditure exceeded \$120 billion in the US alone in 1988. The top advertising category in 1989 was the food industry, which includes baby food advertisements. A total of 1,531.2 DM million was spent on food advertisements, 58% of this on television advertisements. See Table 1.1.

Table 1.1 Top advertising categories 1989

Rank	Category	Total Ad spend DM million	TV %	Press %	Radio %
1	Food	1,531.2	58	26.6	15.3
2	Automotive	1,530.2	9.6	84.7	5.8
3	Insurance	1,503.5	3.6	92.8	3.6
4	Finance	941	10.4	81.1	8.5
5	Cosmetics, health, hygiene	904.3	45.7	49.1	5.2
6	Media	818.1	7	85.3	7.6
7	Alcoholic beverages	618.4	28.9	59.3	11.8
8	Corporate image	576	7.9	88.6	3.5
9	Travel, tourism	565.3	7.8	84.5	7.7
10	Office equipment	544.1	3.5	94.6	1.9

Source: Irish Marketing Journal May 1991

Total advertising expenditure in local currency at constant 1985 prices (million DM) has increased from 12,562 million DM in 1980 to 16,577 million DM in 1989, an increase of 4,015 million DM in nine years. See Table 1.2.

Table 1.3 displays detailed analysis of the distribution of advertising expenditure through the different media types expressed as percentages from 1985 to 1989.

Table 1.2 Advertising expenditure in local currency at constant 1985 6 prices (million DM)

	Total	News- papers	Magazines	TV	Radio	Cinema	Outdoor/ transport
1980	12,562	5,960	3,835	1,517	540	138	572
1981	11,925	5,523	3,673	1,484	580	145	520
1982	12,127	5,352	4,048	1,510	598	134	484
1983	12,369	5,552	4,070	1,507	600	124	515
1984	12,837	5,682	4,332	1,552	611	134	521
1985	13,522	6,111	4,535	1,636	590	134	516
1986	14,028	6,350	4,618	1,677	650	157	576
1987	14,782	6,532	4,932	1,810	700	190	588
1988	15,616	6,801	5,058	2,026	876	207	648
1989	16,577	7,142	5,245	2,426	878	218	667

Source: Irish Marketing Journal March 1991

It is interesting to note that television advertising expenditure increased 2.5% to account for 14.6% of all advertising expenditure in 1989.

Advertising costs, and hence managers require details of how effective their company has been. In this attempt to create more effective commercials, advertising in the hands of some has become a science.

Table 1.3 Distribution of advertising expenditure (%)

	Total	News- papers	Magazines	TV	Radio	Cinema	Outdoor/ transport
1980	100	47.4	30.5	12.1	4.3	1.1	4.6
1981	100	46.3	30.8	12.4	4.9	1.2	4.4
1982	100	44.1	33.4	12.5	4.9	1.1	4.0
1983	100	44.9	32.9	12.2	4.9	1.0	4.2
1984	100	44.3	33.8	12.1	4.8	1.0	4.1
1985	100	45.2	33.5	12.1	4.4	1.0	3.8
1986	100	45.3	32.9	12.0	4.6	1.1	4.1
1987	100	44.2	33.4	12.3	4.7	1.3	4.1
1988	100	43.6	32.4	13.0	5.6	1.3	4.2
1989	100	43.1	31.6	14.6	5.3	1.3	4.0

Note: These data include agency commission, but exclude production costs and press classified advertising.

Source: Irish Marketing Journal March 1991

1.1.4 How advertising works: a science or not?

Claude Hopkins 1923 published 'scientific advertising' a book that began 'the time has come when advertising in some hands has reached the level of a

science.'

The concept of advertising as a science has attracted those who seek to impose a logic on the advertising process in order to establish dimensions against which advertising might be measured or to lay down rules governing its development.

It is with this in mind that Pierre Martineau 1956 stated 'advertising is no longer just a neat discussion of the products merits. Basically advertising attempts to create an illogical situation. You want the customer to fall in love with your product and have a profound brand loyalty when actually content may be very similar to hundreds of competing brands.' To create this illogical loyalty, the first task is one of creating some differentiation in the mind - some individualisation for the product which has a long list of competitors very close to it in content.

While competitors can often successfully imitate your product as to ingredients and claims of quality, a vivid personality image is much more difficult to imitate and so can be a more trustworthy sales factor.

This change in thinking about how advertising works, ie elevating it to the process of a science has led to a new conceptualisation of the consumer. Meadows 1983 in 'They consume advertising too' asserts that advertising is not something acting on a passive consumer. The consumer in question is in fact a quite conscious consumer of advertising in its own right, recognising its purpose and judging the product being advertised not only in terms of what the advertisement says but also by virtue of the advertisements own quality and environment.

Timothy Joyce 1967 also recognises that the 'consumer is not passive, helpless advertising fodder.'

However, not every one embraces the notion of advertising as a science. Meadows op cit describes how Bill Bernbach does not ascribe to this concept.

Bernbach founder of Doyle Dane Bernbach believes that the consumer is intelligent and discriminating and responds to advertising that speaks up to his/her level.

Leo Bogart 1989 in an article 'Advertising: Art, science or business?' states that 'Advertising decisions must be made, and they should be well informed ones, especially because the people who make them wield incredible power over communication, and over society. But in the final analysis, they are decisions based on judgment, good or bad, not on what might properly be called science. That judgement is the art of advertising, not the science. The advertising business is at peril when it pursues the opposite delusion.'

In conclusion, Richard Vaughan in 'How advertising works: A planning model revisited' 1986 states we may not now, or ever know definitely how advertising works. But we do know it works in some definable ways well enough to make more effective advertising.

It is now recognised that what we need is not a wholly comprehensive theory of advertising but a slightly more advanced theory, a framework for thinking about how different sorts of advertisements might work, for different people in different circumstances, at different stages of time. In 'Testing to destruction' 1974 Alan Hedges expresses the view that advertising should not be seen as a one way process, it should not be viewed as an instrument which an advertiser uses to scientifically do things to people. Hedges 1974 op cit asks 'perhaps one should think less about what advertising does to people and more about what people do with advertising.'

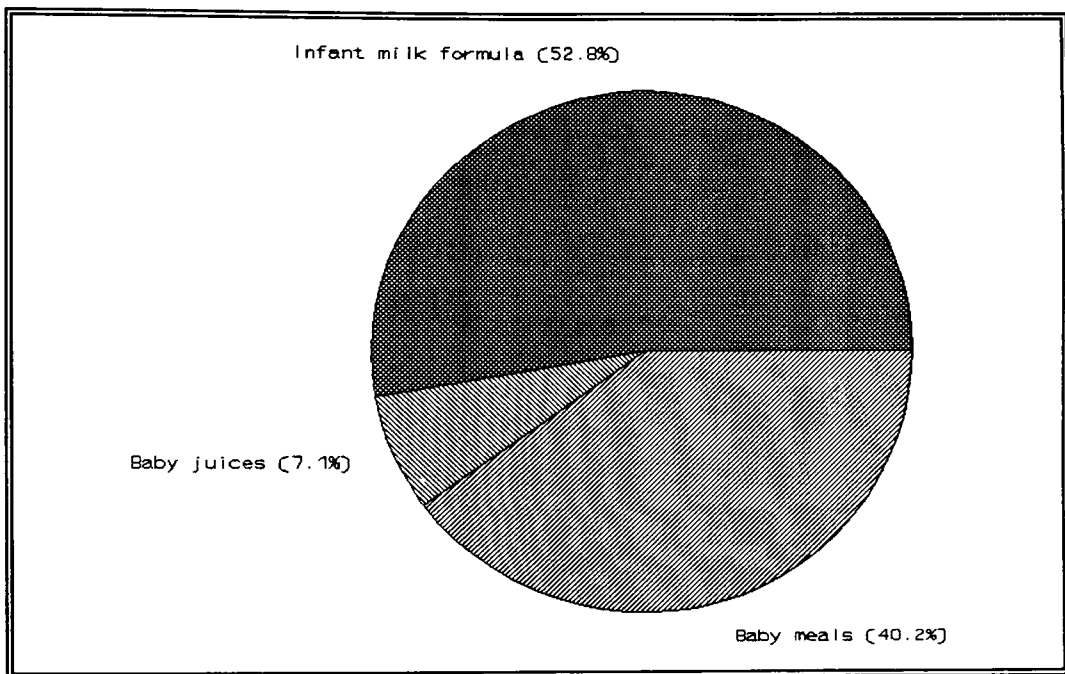
1.2 The infant food industry: markets and advertising

1.2.1 Background

The birthrate, in Ireland has been steadily declining since the early 1980s. But

although families are now smaller on average than they were a generation ago, Irish couples still have more babies than their European counterparts. It is, therefore, not surprising that the total market value for baby milks and baby meals total £12.7m on a national level see Fig 1.1. Both are highly competitive areas with market share aggressively fought for and protected.

Fig 1.1 Babyfood market - total value £12.7 million



Source: Retail News, June 1992 (competitive babyfoods market now valued £15 million).

Infant milk formula: £6.7 m

Baby juices: £0.9 m

Baby meals: £5.1 m

The baby meals market can be divided into wet and dry sectors. Estimates of the value of the meals market vary, but fall somewhere between £4.5m (Source: Farleys) and £5.2m (Source: Milupa).

Despite the decline in births over the past decade the value of the baby meal

market has grown consistently. Supported by the increased distribution of babyfoods through all outlet types, babymeals hold a 40% value share of the total babyfood market.

While statistics vary, most babyfood manufacturers agree that the babymeals market is valued at £5.6m, Milupa estimates the percentage share held by the main baby food companies as follows:

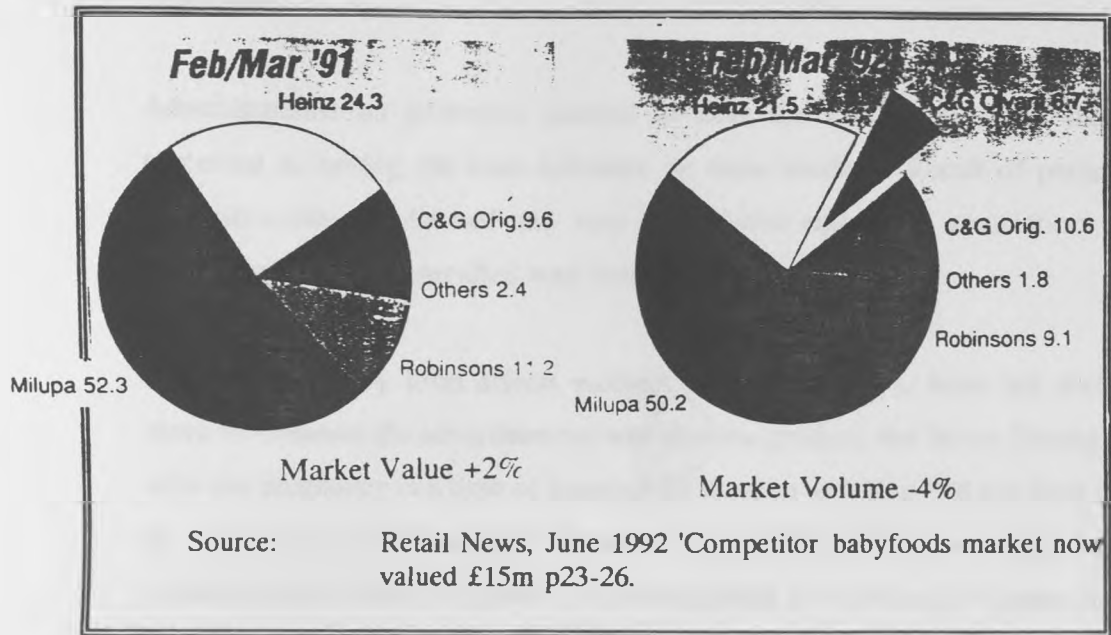
Table 1.4 Total market share of the baby food industry

Total market value:	£5.6m + 4% growth YOY
Total market volume:	1.17m kilos + 2% YOY
Brand market share by value y/e December 1991:	
Milupa	50%
Heinz	20%
Cow & Gate	16%
Others	14%

Source: Retail News June 1992

Fifty pence in every £1 spent on babyfoods is spent on Milupa babyfoods, 93% of which are sold through grocery outlets with an estimated split between wet and dry sections at 40% and 60% dry.

In a working paper by Irish Market Surveys (IMS) entitled 'A qualitative overview of the baby market,' Milupa was described as a particularly popular brand among a certain category of mother and for the most part, these were, in the main, middle-class mothers, although it should be said there were a number of working class mums who used it. Several mentioned being introduced to it by the district nurse or being given free samples by her.



The paper further went on to confirm Milupa has the advantages that certain new products enjoy; its packaging and varieties stand out on the shelf and it is the 'attractive, modern' brand. Other positive attributes mentioned included easy to measure out and ideal for small, controlled servings.

1.2.2 Advertising media influence on babyfoods choice

When asked what effect or influence advertising had on one's decision to purchase, the IMS survey revealed that there are many more sources of advertising than merely television and thus various degrees of influence. These were as follows:

- hospital
- press advertisements
- bounty box and bag
- television

Television

Advertisements on television seemed to have the least impact and thus is perceived as having the least influence on these mothers. Recall of particular advertisements was limited and very inconsistent and brand association with those advertisements recalled was even less likely.

Advertising in any form affects mothers in different ways. Most felt that the more informative the advertisement was about the product, the better. During and after the pregnancy is a time of learning for most so anything that can help them in this process is welcomed. However, they believe that manufacturers, on occasions, treat them like fools by expecting them to be taken in by some of the advertising material used, that is, those along the 'it's what's best for your baby' theme.

Advertising for baby foods also has the added difficulty of overcoming certain problems. Mothers claim that the baby dictates to a fair degree the brands and products one uses and having decided on a brand, switching or trying something new is not as easy as it is for an adult. If the baby does not eat the food or reacts badly to the food, then brands that solve these problems will be used and the mother will have great difficulty in being persuaded to use something else.

See Appendix G for the World Health Organisation (WHO) regulations on 'The marketing of infant formulae to the general public.'

1.3 Advertising and the consumer

1.3.1 Consumer behaviour and consumer psychology

The move towards, 'thinking more about what people do with advertising, led to the emergence of consumer behaviour and consumer psychology especially.

Consumer behaviour is the study of the decision making units and the processes involved in acquiring, consuming and disposing of goods, services, experiences and ideas, Mowen 1990.

Consumer behaviour considered broadly concerns the basic notion of choice. Psychologist Flemming Hansen 1977 describes three elements involved in a choice situation:

- There must be two or more choice alternatives
- The choice alternatives must arouse a certain amount of conflict
- Cognitive processes (awareness and judgement) aimed at reducing this conflict must occur.

The link between consumer behaviour and advertising now becomes obvious. Advertising attempts to influence consumer choice to create favourable mental impressions amongst consumers until there is an occasion to purchase. The application of psychology to consumer behaviour has resulted in the development of a better understanding of

- what happens psychologically to an individual confronted with an advertisement
- what psychological principles can be applied to increase the effectiveness of advertising.

The above development directly led to the emergence of consumer psychology.

Consumer psychology is defined as the utilisation of distinctly psychological concepts and methods to understand (explain and predict) the dynamics underlying, influencing and determining consumer behaviour, Jacoby 1976..

Consumer psychology has moved from a simplistic consideration of basic psychological constructs (eg motives, personality, attitudes) in isolation to a

highly cognitive, information processing, decision-making perspective. This reflects a move to encompass and integrate more of the determinant influences on consumer behaviour with more meaningful and applicable concepts involved in the consumer context.

An ESOMAR seminar on 'developments in consumer psychology' 1973 explains the importance of understanding consumer psychology as follows, 'Consumer psychology is a subject of great importance to all concerned with marketing research, whether engaged in quantitative research based on traditional questionnaire surveys, in complex qualitative studies, or in any other kind of investigation of consumer behaviour, we all base our work, one way or the other, on an idea of how the consumer we research acts and reacts.'

The advances in consumer psychology have led to an improvement in three static approaches dominant for so long in consumer behaviour. These approaches were as follows;

- large scale survey work, often of a longitudinal-panel nature, utilising diary entries as the data of primary interest
- the use of verbal report data collected post hoc, principally through recall
- verbal report data derived by asking the consumer how they think they would behave or feel if and when confronted with certain (sometimes hypothetical) situations.

The study of consumer behaviour now no longer involves one solitary approach for 'no single discipline is likely to solve the major problems or come close to approximating the 'truth' in isolation Jacoby 1976 op cit.

The study of the consumer is now an interdisciplinary orientation involving the fields of psychology, marketing, economics, architecture, law, medicine etc, operating within a variety of academic governmental and industrial contexts.

1.3.2 Areas of interest involving consumer psychology

An analysis of the current literature in consumer psychology indicates that the main research interests are in the following areas:

- Research on consumer judgement and choice is largely process-driven with attention paid to theoretically relevant task and contextual factors that often serve as real world constraints or mediators.
- Examination of consumer responses to market-initiated stimuli (eg advertising, packaging) draw on judgement and choice research, but they focus primarily on variations on the stimulus side.
- Descriptive research on patterns of consumption behaviour (ie consumer role enactment and how consumers assess consumption outcomes) provides food for thought for theorists interested in developing more realistic models of behaviour. Length constraints confine this discussion to highlighting these issues which receive detailed attention in the annual review of psychology vol. 41 1990, p243-288.

Research of the literature shows that the field of consumer psychology lacks depth in the development of new psychological parameters to assess advertising effectiveness. It lacks new attempts to establish different criterion to help broaden the presently used techniques in evaluating advertising effectiveness. The literature has dealt poorly with attempts to widen the definition of advertising effectiveness which currently prevails within the advertising industry. This unfortunately can only serve to nurture the attitude within the industry regarding assessing effectiveness 'if we don't measure it, it doesn't exist.' This study represents a departure from the major paradigms of consumer psychology. The aim of this study is to present certain selected theoretical, though scientifically supported psychological aspects of advertising and to use these parameters in the evaluation of a baby foods commercial. But first it is necessary to examine the

concept of 'advertising effectiveness.'

1.4 Advertising effectiveness

1.4.1 What is advertising effectiveness

Advertisements are persistent and persuasive and consistent on their theme - create desire, create desire, create desire ... For advertising to prosper it must create desire and continue to create an insatiable desire Zakia 1986. The promotion and sale of products is achieved by endowing a good with more than a corporal form in the mind of the consumer, implying that abstract benefits like emotions and feelings may be attained through the purchase of the advertised product. Television advertisements are designed to sell, however the central question remains whether consumers ie (the television audience) will buy X if they see product X being advertised.

Evaluation of the quality and likely effectiveness of advertising is very difficult. What does 'good' mean in advertising - intriguing, intrusive, indelible or effective in meeting objectives such as communicating an idea, touching an emotion or eliciting a response from the consumer C. Patti 1990.

Such questions of what makes effective advertising or rather what makes advertising effective asks for some kind of evaluation. Unfortunately there are few commonly agreed standards by which professionals in advertising evaluate good, great, successful or effective advertising.

Television advertisements attempt to influence ones propensity to purchase, yet marketers although interested in sales figures, do not use this as a method to evaluate a commercial's effectiveness. Several factors cause difficulties in assessing direct sales effects and advertising effectiveness.

For example, a delay in time between exposure of the advertisement and

purchase; use of multiple information sources by the buyer in his or her purchase decision and the spread of the advertisement message through word-of-mouth communication making it difficult to identify and effectively assess the impact of the advertisement Gronhaug 1991. It should also be noted that a small percentage of television advertisements prime purpose is not necessarily behavioural, but to make the audience aware and/or interested in and/or to create attitudinal changes, hence making sales figures redundant as a method to evaluate advertising.

Another difficulty involved in evaluating advertising effectiveness is 'When trying to assess the effectiveness of a television commercial is it necessary to use only information from respondents who say that they are users of the product in the advertisement?' Wheatley 1971. Research concerning this issue is not conclusive, even though Wheatley 1971 op cit did support the hypothesis that the effectiveness of a commercial can be evaluated without special consideration being given to the question of whether or not the respondents in the audience are recent or regular users of the product being advertised.

MacLachlan and Myers 1983 state that the effectiveness of an advertisement depends on two factors:

- how well the commercial communicates - whether it attracts attention and communicates clearly and memorably
- how motivating the message is - does it arouse a certain need in its intended audience and persuade them to fulfil the need in the direction advocated?

'Research has shown that two out of three advertisements are failures. Each failed campaign means a drain on finances and a loss of sales,' O'Connor 1992. If one understands this statement it is clear why the advertising industry is anxious to evaluate what makes one commercial more effective than another. The

impact of psychology on advertising evaluation can be seen in the fact that many of the techniques employed to assess advertising effectiveness have been devised chiefly by psychologists or psycholinguists. The following is a discussion of three such evaluative methods:

- Physiological measures
- Recall and brand preference
- Semiotics.

1.4.2 Physiological measures of advertising effectiveness

Advertising turned to psycho-physiological technology in fear of overlooking 'any potentially valuable knowledge that could help them or their competitors, Rice 1974.

Advertising tries, among other things to add 'more appeal to a product' Krugman 1964. However, consumers may be unable to articulate their feelings making it difficult to assess how well this goal is achieved. The use of psycho-physiological techniques eliminates this verbal communication problem, enabling psycho-physiologists to explore the consumers' emotional responses and reactions to both pleasurable and unpleasurable stimuli and 'since the arousal concept is so broad, advertisers can use it in assessing the affective impact in advertising,' Watson 1979.

'It is impossible for a consumer to feel for a commercial if he/she does not pay attention to it. Thus attention awareness and information processing are of key importance for the psycho-physiologist' and of paramount importance 'for advertisers, Krugman 1964, op cit.

1.4.3 Recall and brand preference

Two other measures that continue to serve as useful criteria to evaluate

advertising effectiveness are day-after recall (DAR) and brand preference (PREF), Gibson 1983, Warshaw 1980.

DAR and PREF measure two different constructs as evinced by the very low correlation between the two variables, Gibson 1983 reports it ranged from .00 to .32.

Higie and Sewall 1991 state that managers are likely to continue to use DAR as an advertising effectiveness measure for two reasons:

1. the conceptual argument that an advertisement must first command attention before it can persuade
2. empirically DAR is more reliable and has a greater ability to infer differences among commercials.

Higie and Sewall 1991 further comment that 'it is appealing to measure PREF because it is more closely related to actual purchase, but it is less reliable than DAR and that it is difficult to obtain significant differences on PREF based on a single exposure to an advertisement. Because PREF results frequently are inconclusive advertising managers may be tempted to resort to DAR to make choices among advertisements when their objective is to change brand preference. If brand preference is the aim, however, the expedient use of DAR to help select advertisements is an implicit change of objective. Although DAR results can provide a rationale for choosing among commercials, the outcome may not be consistent with the original intent. Thus it is paramount that managers set specific communications objectives and use appropriate measures and recognise the possible dysfunctional implications of using inappropriate measures to determine the selection of the most effective, the best advertisement for the objective,' the debate on recall and brand preference continues.

1.4.4 Semiotics

Culler 1981 defines semiotics as 'a metalinguistic enterprise. It attempts to describe the evasive, ambiguous, paradoxical language of literature in a sober, unambiguous metalanguage'. Langholz Leymore 1987 describes advertising as more than just mere tabulation stating it is a dynamic complex communication system a language no different from any other.

This language plays a persuasive role, influencing our behaviour by shaping our perceptions and hence our actions. Marketers need to know how the system works and when one considers social communication and culture one must inevitably consider semiotics. This is because in order to study society one must also study the signs in society Gomez-Mompart 1981, thus semiotics may be considered a valid, evaluative measure of advertisements.

The use of semiotics to assess and evaluate advertising is not without criticism. Leiss et al 1986 criticise this technique on three levels:

- Semiotics is 'heavily dependent on the skills of the individual analyst.' If the analyst is skilled the results are illuminating, however, if the analyst is not all he or she does is 'state the obvious in a complex and pretentious manner.' Bell 1990 defends semiotic analysis stating that 'in the past analysis has come from the guru on high' but further says that the future does not necessarily repeat the past.
- The second criticism Leiss et al 1986 offer is that there is no quantification of results, just impressions. However, semiotics is a qualitative not quantitative science, and many criticisms of 'qualitative research' as subjective have to a large degree been derived by researchers who fail to acknowledge the communication model which drove their research procedure and influenced their interpretation, Bell 1990.

- Semiotic analysis cannot be applied with equal success to all kinds of advertisements, Leiss et al 1986.

To conclude, Berger 1987 states that it will be semiotics with its sophisticated means of unlocking the meaning buried in texts that will help us to understand how magazine advertisements work and what they tell us about our culture and society.

1.4.5 Evaluative techniques incorporated by this study

The discussion this far has provided a background analysis concerning different techniques currently used within the advertising industry in assessing advertising effectiveness.

This study does not propose that the techniques of physiological measurement brand name recall and semiotics are ineffective methods in evaluating advertising effectiveness. However, this study would advocate that the psychological techniques used in this study be used in conjunction with semiotics, recall etc. The benefits of this approach would be twofold,

- (1) It would widen the narrow limited definition of advertising effectiveness, currently prevailing within the industry.
- (2) It would also stimulate research into developing more precise psychological methods in evaluating advertising effectiveness.

The procedures used in the evaluation of the Milupa baby foods commercial in this study are as follows:

- An assessment of the level of perception of selected psychological variables within the sample audience tested, after viewing the advertisement. The psychological variables are scientifically valid and are incorporated in this study to represent a modified version of S.H. Britts

1978 psychological model of communication. The psychological variables selected and the stages of communication to which they pertain used in this study will follow in 2.1, which discusses the use of different psychological models of communication in evaluating advertising effectiveness.

- An assessment of viewer perception of the Milupa commercial using descriptive adjectives (full discussion in 2.3).
- An investigation of the level of perception within the sample tested of both rational and emotional reassurance (full discussion in 2.2).
- An investigation of whether it is possible to assess the level of inter-relationships between product attributes and psychological variables (full discussion in 2.4).

The following chapters discuss these four avenues of advertising effectiveness individually, commencing with the use of different psychological models of communication culminating with a discussion of the modified Britt 1978 model of communication used in this study.

2. PSYCHOLOGICAL TECHNIQUES AND THE ASSESSMENT OF ADVERTISING EFFECTIVENESS

2.1 A communications approach

2.1.1 Different models of communication

The use of psychological models of communication in attempting to evaluate advertising effectiveness is not a new concept, the earliest work dating back to 1898. The heart of current understanding is the hierarchy of effects model. The hierarchy model deals with the ways in which target audiences process and ultimately use advertising information to influence product and brand choices (Schmalensee 1983).

The importance of the hierarchy of effects is twofold:

- Its relevance to a diversity of interests including those in advertising, marketing research, sociologists, communication theorists, cognitive psychologists etc.
- It is well established and well accepted among researchers and professionals. It was first published in 1898.

Scores of hierarchy-of-effects models have been proposed. The majority of them merely offer changes in nomenclature to the traditional model, hypothesising that an audience responds to a message in a cognitive, affective and conative sequence.

The most cited hierarchy model was posited by Lavidge and Steiner (1961) and is presented in Table 2.1.

Table 2.1 The Lavidge-Steiner traditional order hierarchy of effects

Model stage	Model order
Conative	Purchase
	Conviction
Affective	*Preference
	*Liking
Cognition	*Knowledge
	Awareness
* Indicates a stage not presented in predecessor models	

Prior to the development of the Lavidge Steiner model, there were many proponents of the cognition - affect-conation sequence. The International Journal of Advertising 1990 p9-10 lists the proponents and their models in Table 2.2. The most well-known is AIDA (attention-interest-desire-action).

Many of these models merely constitute a change in nomenclature of their predecessors or simply adding or deleting stages and while not possessing any empirical validation early theorists believed the way to developing effective marketing communications followed the route of cognition affect and conation and only in that order.

While the Lavidge-Steiner 1961 model developed independently of its predecessors it still clearly advocated the traditional ordering notion. However, it differed under the following criteria.

Table 2.2 A summary of popular hierarchy models preceding the Lavidge-25 Steiner model

Year		Model	Developer	Comment
1898	AID	Attention, Interest, Desire	E. St Elmo Lewis	Developed as a sales guide for salesmen to be successful in moving a prospect to buy.
Circa 1900	AIDA	Attention, Interest, Desire, <i>Action</i> ^a	E. St Elmo Lewis	Added the action stage as necessary to convince salesmen to move buyer prospects through complete selling process.
1910	AICA	Attention, Interest, <i>Conviction</i> , Action	<i>Printer's Ink</i> Editorial	The first mention of the hierarchy model for advertising use; a complete advertisement must follow this model of persuasion.
1911	AIDAS	Attention, Interest, Desire, Action, <i>Satisfaction</i>	Arthur F. Sheldon	Added 'Permanent satisfaction' as a necessary part of the persuasive and long-run selling process; this final stage not carried through to contemporary literature.
1915	AICCA	Attention, Interest, <i>Confidence</i> , Conviction, Action	Samuel R. Hall	The necessary steps in writing a good, persuasive advertisement.
1921	AIDCA	Attention, Interest, Desire, <i>Caution</i> , Action	Robert E. Ramsay	Mentioned this model at the beginning of his book on how to write effective direct advertising although the model is not developed in the book.
1921	AIDCA	Attention, Interest, Desire, Conviction, Action	Harry D. Kitson	Used this model in writing about how the mind of the buyer works.
1922	AIIA	Attention, Interest, <i>Judgement</i> , Action	Alexander Osborn	Writing about the creative/persuasive process in advertising.
1940	AIDCA	Attention, Interest, Desire, Conviction, Action	Clyde Bedell	For advertising to sell, it must follow these 'proved selling stratagems' as formulated by Kitson in 1921.
1956	AIDMA	Attention, Interest, Desire, <i>Memory</i> , Action	Merrill DeVoe	Referred to the importance of different psychological sequences in constructing advertisements (AIDCA and AIDMA) but does not develop these in his book.

^a italics indicate change in stage/nomenclature from previous model(s).

Source: International Journal of Advertising 1990

- It posited the hierarchy steps were not necessarily equidistant from each other.
- Consumers could move 'up' several steps simultaneously.
- Lavidge and Steiner (1961) were the first to refer to the notion of respondent involvement.

Recent publications also advocate the traditional hierarchy framework. The most important are illustrated in Table 2.3. Included among these is the work of Colley (1961) who wrote DAGMAR (defining advertising goals for measured advertising results). Colley (1961) theorised that a hierarchy of advertising objectives should be used by managers to measure advertising effects as opposed to focusing on sales alone.

Table 2.3 A summary of recent hierarchy models supporting the traditional cognitive-affective-conative ordering

<i>A summary of recent hierarchy models supporting the traditional cognitive-affective-conative ordering</i>			
Year	Model	Developer	Comment
1961	ACCA Awareness, Comprehension*, Conviction, Action	Russell H. Colley	Proposed this model as important to the development of specified advertising goals and measuring advertising effectiveness.
1961	EPCCA Exposure, Perception, Communication (Knowledge), Communication (Attitude), Action	Advertising Research Foundation	The model supported by the foundation of advertising practitioners and researchers to be used for developing more effective advertising campaigns.
1962	AAPIS Awareness, Acceptance, Preference, Intention, Sale Provocation	Harry D. Wolfe, James K. Brown, C. Clark Thompson	Illustrated how business used the hierarchy concept as a guideline to develop advertising strategy.
1962	AIETA Awareness, Interest, Evaluation, Trial, Adoption	Everett M. Rogers	Proposed the first application of a hierarchy-type model to the process of new product adoption.
1963	PACTRB Presentation, Attention, Comprehension, Yielding, Retention, Behaviour	William J. McGuire	The first to suggest that probabilities could be associated with the stages of the hierarchy models to show ultimate behavioural impact of advertising.
1971	ACALTA Awareness, Comprehension, Attitude, Legitimation, Trial, Adoption	Thomas S. Robertson	Expanded on the adoption hierarchy of Rogers, this model more based on Howard and Sheth buyer behaviour model (attention, comprehension, attitude, intention, purchase).
1982 1983 1984	The Association model and the expanded Association model	Ivan L. Preston Esther Thorson	Proposed more comprehensive hierarchy model that preserved the traditional order: <i>distribution, vehicle exposure, advertising exposure, advertising awareness, advertising elements awareness, association evaluation, product perception, integrated perception, products evaluation, prior evaluation, integrated evaluation, product stimulation, prior stimulation, integrated stimulation, search, search perception, search evaluation, search stimulation, trial, trial perception, trial stimulation, adoption, adoption perception, adoption evaluation, adoption stimulation.</i>

**Italics indicate change in stage/nomenclature from previous model(s).*

DAGMAR stated 'all commercial communications that aim at the ultimate objective of a sale must carry a prospect through four levels of understanding from awareness to awareness-comprehension conviction-action Meadows 1983.

While researchers are in agreement regarding the importance of the three stages of the hierarchy, significant disagreement exists regarding the order of the stages. This has been the area of the most intense criticism concerning the hierarchy of effects. Briefly, researchers appear to have provided a foundation for at least six different hierarchial models with the potential for explaining consumption-related activities, in general and responses to advertising specifically. These hierarchial models are as follows:

- cognition - affect - conation
- cognition - conation - affect
- affect - conation - cognition
- conation - affect - cognition
- conation - cognition - affect
- affect - cognition - conation

2.1.2 Evaluating the hierarchy of effects model

The hierarchy of effects model has received criticism from many sources. Timothy Joyce 1967 states 'advertising rarely works in such a logical manner.' 'To indulge in a process of conscious deliberation on every purchase would take an enormous amount of time and mental effort which not unnaturally there is a strong drive to avoid' John Fanning 1986.

One immediate problem encountered is that there does not appear to be an accepted means of distinguishing between cognition and affect which is devoid of criticism. This can be attributed to two related concerns:

- uncertainty over how to define cognition and affect precisely

- a difficulty in using measures which fully incorporate all possible dimensions of the constructs.

As a result of such criticism concerning linear sequential learning and a hierarchy of advertising effects, a new conventional wisdom took shape - loosely organised around the following concepts:

- Trying to accurately unravel the precise effects of an individual advertisement on sales was aborted and was replaced by an understanding that advertising works by helping to bring about the context and states of mind in which desire and actions are possible. As Alan Hedges (1985) states 'we know advertising works with the kind of certainty that is not supported by our ability to prove it with direct links.'
- A greater awareness of the limitations of advertising developed ie 'applying too much rationality to the way advertising works is to lose sight of how it actually works best' J. Fanning op cit.
- An understanding that conscious learning may take place which may not manifest itself until a purchase decision is made, and that the actual purchase itself acts as the catalyst which brings out some of the unconscious learning that has occurred up to that point.
- That advertising can create awareness, promote trial purchase - provide reassurance after purchase ie helping people recall the benefits their product has over product Y.

However, despite its shortcomings and criticism we do need to know about the sequential hierarchy of effects in advertising for the following reasons:

- Determining hierarchial processes allows prediction of behaviour. (Preston and Thorson 1983)

- Understanding the hierarchy provides information on what advertising strategy to emphasise (Vaughan 1986).
- The hierarchy of effects has proven valuable for helping to organise planning, training and conceptual tasks within a firm. (Barry and Howard 1990).

2.1.3 The Britt model of communication

D. Lucas and S. Britt (1950) outlined the psychological objectives concerned with increasing advertising effectiveness. To begin with, every advertisement to be effective and successful must make a sufficient number of contacts to

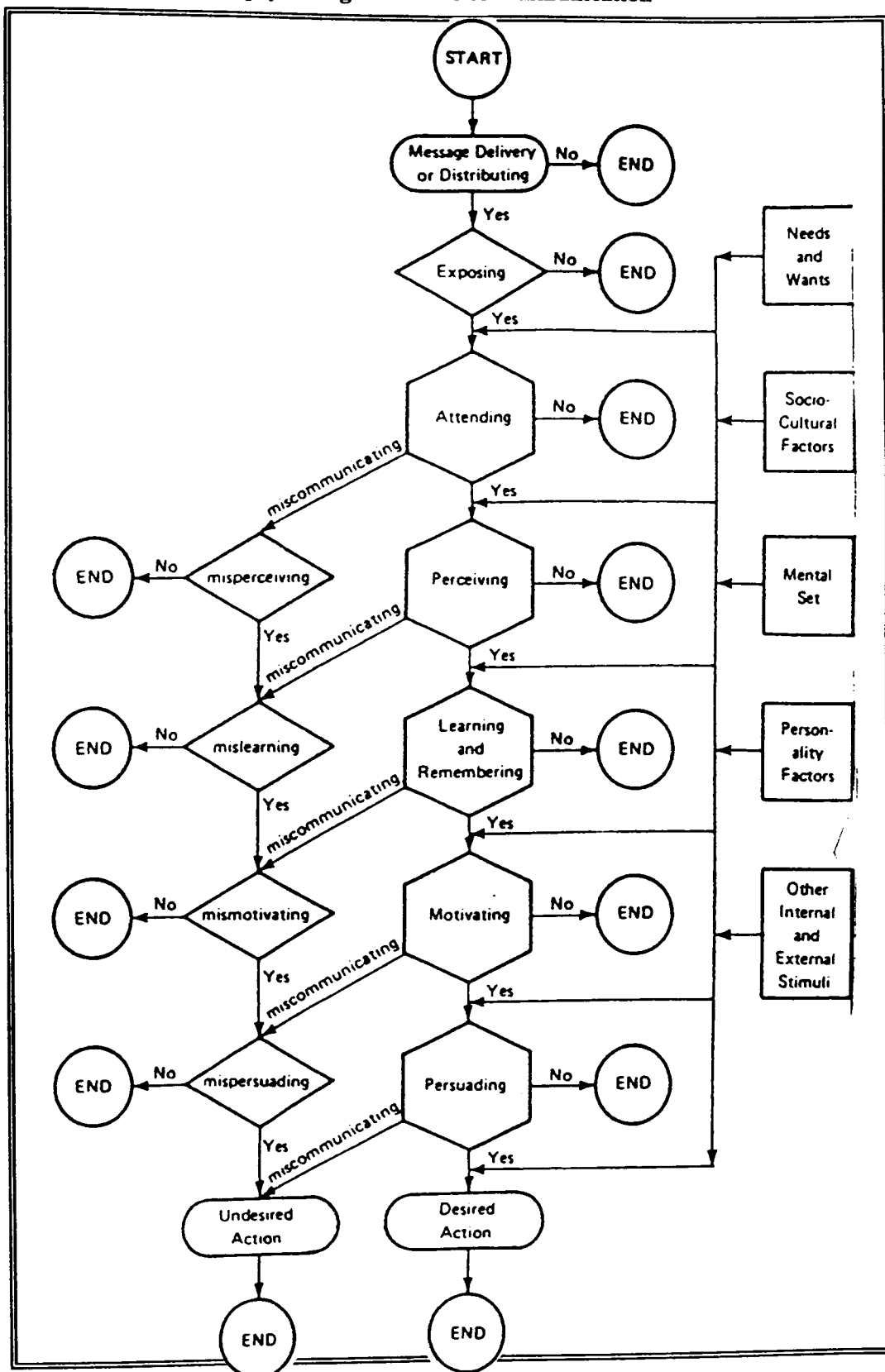
- capture attention
- hold attention
- make a useful lasting impression. This impression should have a selling value and must last until there is an occasion to buy.

These objectives are directly related to such psychological terms as attention, interest, desire, emotion, belief, conviction association and memory. Unlike the vague and general objective of sales, many of these factors are capable of measurement, to some degree. This greatly increases the possibilities of measuring how effective an advertisement is.

2.1.4 A new psychological model of communication

'The psychological principles of marketing and consumer behaviour' (S. Britt, 1978) is dedicated to the development of a new psychological model of communicating. See Fig. 2.1. The psychological model described is different from other models of communication in two ways,

Fig 2.1 Britt's psychological model of communication



- The emphasis of the communicating process revolves around individual behaviour rather than group behaviour. (Individual in the sense of members of various audiences, thus experimental conclusions are based on composite findings about many individuals).
- The new psychological model revolves around cognitive psychological principles, which must be tapped by advertisers in order to maximise the psychological effectiveness of the advertisement.

Understanding the model

Britt's, model is divided into the following six stages:

(1) Exposing:

This, the first stage can only occur when the audience members come into direct contact with the message. In this experiment, this involves turning on the television and viewing the advertisements.

(2) Attending:

This process happens when the individual becomes actively aware of the message. Positive attending occurs only if the individual is fully aware of his reception of the stimuli. Negative attending i.e. not attending completely leads to misperceiving.

(3) Perceiving:

This process is best described as the organisation and interpretation of the stimuli which previous to now have been only sensory data. Positive perceiving involves the audience member organising these stimuli into the manner the communicator desired. However, the reverse, negative perceiving, involves organising the stimuli into a pattern different to the one desired. If the subject fails to perceive, then no organisation of sensory material takes place.

(4) Learning (and remembering):

Britt in his text described this process as the 'bringing together and relating the message to the framework of the communicatee.' Put simply, the subject relates the information to himself, storing it for possible use. Again positive learning and remembering occurs if the subject relates the situation in the message to himself.

Mislearning occurs if the audience member understands the situation in the advertisement but fails or cannot see any relevance in it to his situation.

(5) Motivating:

After being exposed to the advertisement, the process of motivation takes place, leading the subject to some action. The whole process of motivating involves reinforcement of beliefs, attitudes and opinions. Positive motivating leads the subject to act in the way intended by the communicator.

(6) Persuading:

Persuading is characterised by acting, functioning or reacting in different ways, with actual changes in behaving occurring. An unfavourable change in audience members' desires results from mispersuading. However, no behaviour occurs if the audience member experiences no changes in beliefs or attitudes.

Britt 1978 states

'It is not enough to say that there is a process of perceiving; this process is an aspect of a broader process or series of processes, all interrelated. My model is an attempt to analyse in detail the variables in each of six stages of the communicating process in order to form

basic principles about the complete communicating process' (S.H. Britt. 1978).

The division of the model into six stages makes it easier to understand the communicating process as a whole. It is also important to note that the six key words all end in 'ing'. The word is exposing, not exposure ... attending not attention ... perceiving not perception ... learning and remembering not memory ... motivating not motivation ... and persuading not persuasion. Britt said 'We are not dealing with things or entities, but with processes or activities' (1978).

Britt also stated that individuals can enter the process at any stage just as they can exit it. The organisation of the stages does not mean that the communication process actually occurs in six discrete parts. In fact, considerable overlap occurs among the stages with some factors - e.g. needs and wants - apply to all stages of the process.

The psychological model of communication takes into account the possibility of audience members misunderstanding the message at some stage of the process. Should this happen (i.e. misinterpreting), the process will continue, resulting, however, in undesired action.

At this point, it is important to distinguish the psychological differences between the processes of motivating and that of persuading. Both of these are related to the audience members beliefs and attitudes. Both deal with the interactions of audience - message - object characteristics, while they also influence behaviour in a specific direction. However, motivating involves a message already congruent with the audience members beliefs and attitudes and thus reinforces them. In comparison, persuading tries to change existing beliefs and attitudes. Persuading tends to achieve a re-evaluation of peoples' beliefs and attitudes.

Persuading people is the ultimate aim of advertising; persuading the target audience to buy the advertised product, persuading people to re-examine their

existing set of beliefs and attitudes, etc. Positive persuasion leads to increased sales and profits, a sure indication that the campaign has been a success. However, for products which already dominate their own market e.g. Levis 501 or Coca Cola, manipulation of the psychological variables concerned with motivating could be sufficient i.e. the advert reinforces already existing beliefs about the product. But for new or pioneering products, trying to achieve a niche in a competitive market, manipulation of the psychological variables concerned with persuasion is the ultimate aim.

2.1.5 Developing the study model

This study employs a modified version of S.H. Britt's 1978 psychological model of communication. It attempts to investigate the degree of audience perception of the manipulation of different psychological variables within cognitive psychology. Using Britt's psychological model a total of 18 psychological variables were selected for analysis. See Table 2.4.

Table 2.4 The psychological variables used in this study and their stages of communication

Stages	Attending, variables	Learning and remembering variables	Motivating variables
Variables	Music Colours Lighting Symbols Complexity Novelty	Limit stimulus cues Curiosity Language Non-verbal cues Culture Personality and physical aspects of the communicator	Autistic motivating Order of presentation Desirable information Familiarity Fairness of presentation Communicator credibility

The basic cognitive psychological principles from Britt's model that were used in this study have various types of evidence of validity in their support are as

follows:

- (1) Experimental evidence relating directly to some specific phase of communication
- (2) Experimental evidence relating to mass communication in general
- (3) Experimental evidence relating to small group communication
- (4) Expert opinion
- (5) No evidence to the contrary.

All of Britt's psychological variables have experimental evidence to qualify them which increases their reliability and validity enabling more accurate analysis of their effectiveness in advertising.

While Britt's model identifies 6 stages in the communication process, this study confines itself to only 3 of these stages. Stage one - the exposing stage has been purposely excluded because under the experimental conditions the tested subjects were deliberately 'exposed' to the television advertisement, (this study was carried out in a test laboratory situation, subjects were instructed to view an advertisement and to pay attention to it) and no part of exposing, as defined, was required to reach this stage of the process. The perceiving and persuading stages were also left out.

The three cognitive stages under examination for this study, therefore are the following:

- the attending stage
- the learning and remembering stage
- the motivating stage

Contained within each of these cognitive stages are various cognitive psychological variables which theoretically if properly elicited in television advertising will in theory, produce the responses desired by the advertisers.

One of the underlying purposes of this study was to assess the level of perception, within the test audience, of the following psychological variables after viewing the Milupa commercial. The psychological variables and the stages they are related to can be seen in Fig 2.2.

2.1.6 The psychological variables for this study in greater detail

Stage 1: Attending

1a Music

Music performs tasks and duties far beyond mere melody and harmony. Properly applied, it becomes an integral part of the visual image, even though it is an aural experience. Music can give colour, emotional content and meaning. It can add life, style and selling impact. It is music's unique ability to speak everybody's language that makes the correct use of it paramount to the success of a commercial.

1b Colours

Most individuals have established associations regarding different colours, a consistent and significant relationship exists between the colours used in a message and the meanings that may be attached to it. Colours then, have a psychological effect upon and a symbolic meaning to each audience member, Britt 1978 opt cit.

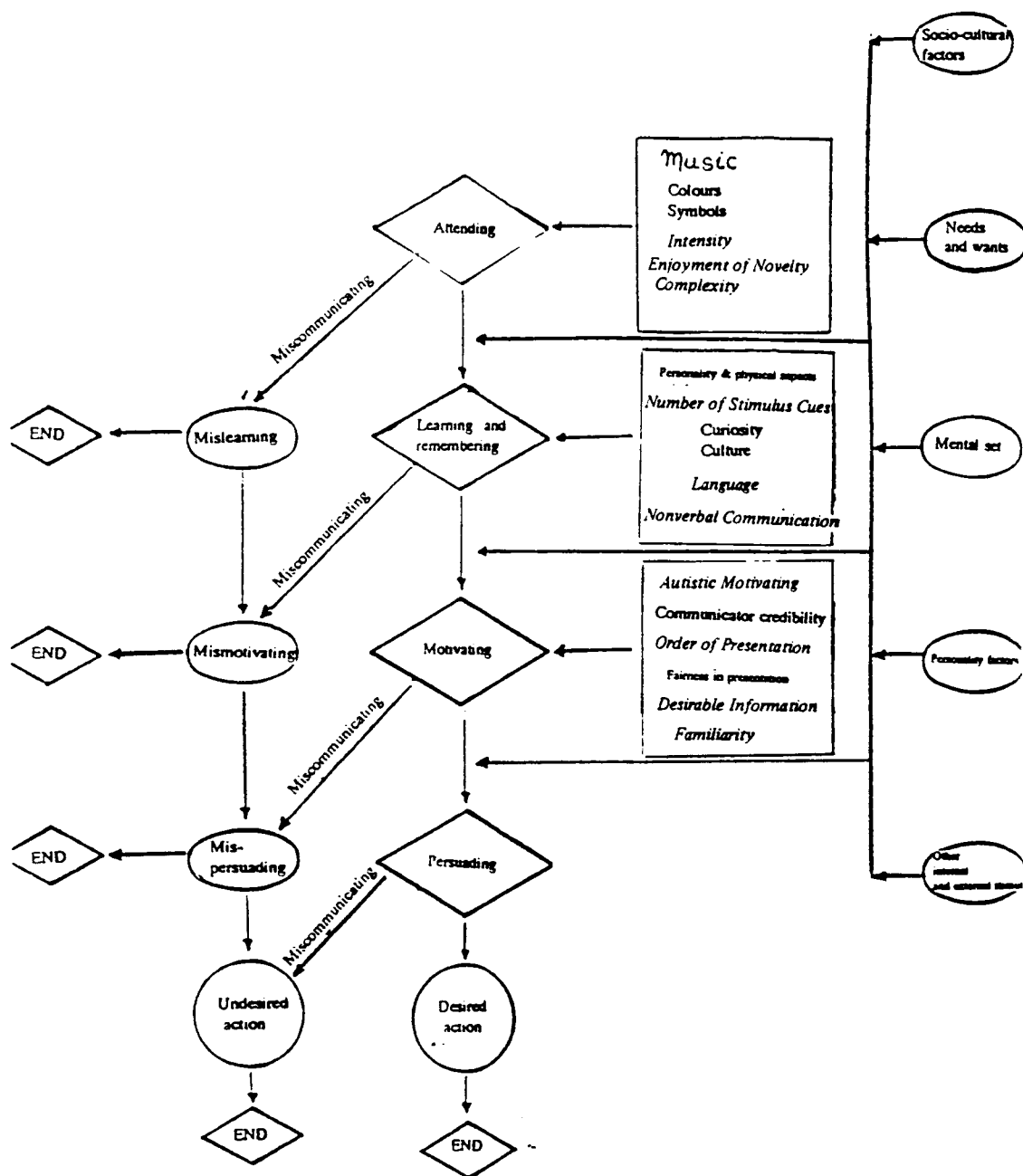
The most common colours are generally perceived along the following lines:

Red:	danger, warning, warmth, excitement, fire
Blue:	calmness, peace

} *survive?*

Fig 2.2

The psychological model and psychological variables used in this study



Green:	nature, fertility
Black:	death, evil, mourning, formality
Grey:	old age, conservation
White:	purity, health, medicine, cleanliness.

1c Intensity *L.M.*

An intense message will be more likely attended to by audience members than a message that lacks intensity, that is, lacks strength and emphasis. ?

Researchers have long established associations intensity and attention, in so far as a significant relationship exists between increased attention and messages depicting visual realism and exceptional clarity.

1d Symbols

Each of three types of symbols - conventional, accidental and universal - specify a distinct range of communicability to all possible audience members for a message, Britt 1978 op cit. p150.

All advertisers should be fully aware of these types of symbols if they wish to create messages that will be perceived correctly by the target audience.

The majority of conventional symbols are visual. Taylor 1960 suggested five basic functions for visual symbols:

- To identify events in time and space
- To characterise the qualities of objects
- To evaluate by producing positive or negative feelings
- To prescribe a form of behaviour
- To provide a general frame of reference for comparison purposes.

Accidental symbols, or personal symbols relate to an individuals experiences in the past with objects, events or people. Such symbols reinforce themselves every time they recur to the individual.

Universal symbols are mainly facial expressions of basic reactions. Examples of such include happiness, fear, embarrassment, disappointment, disbelief, trust, anger, detachment, anguish and amusement.

1e Complexity

A more complex message will not have as high a level of attending as a simple one, unless it is novel or it is of high interest to the audience, Britt 1978 op cit. p64.

The degree of complexity depends upon the relationship of all the message elements, Berlyne 1960. Complexity increases in two ways

- too many distinguishable elements in the message
- too much dissimilarity amongst the elements.

The more easily the information is organised into distinguishable features, the more successfully and completely it will be attended, Miller 1956. Put quite simply, people have a limited span of attention.

1f Enjoyment of novelty

Novel stimuli, although at the outset irrelevant, may become relevant or pleasant, audience members are more interested in pleasant messages. Psychologists have attempted to determine whether novel stimuli are effective in increasing attention. Results show that novelty may be useful if used to make the message become relevant; but may be detrimental if carried to an extreme.

Stage 2: Learning and remembering

2a Personality and physical aspects of the communicator

Certain personality characteristics and physical aspects of the communicator may interact with more objective characteristics to either increase or decrease the chance of the audience members learning and remembering the message, Britt

1978 op cit. p366.

Mehrabian and Wiener 1966 are strong believers that people do not always behave as totally rational beings and that some aspects of the communicator (that bear no relevance to the product or topic of the communication) can influence communicator credibility as much as relevant aspects of credibility.

In 1970, Gudger analysed this notion from the point of the sex of the communicator. His results showed that at least for Western culture male communicators are more effective than females.

2b Number of stimulus cues

Audience members are more likely to remember an illustration if it has a minimum number of cues and separate actions. Brevity of form and appealing pictures increase the chances for both audience attending and learning. Spangenberg's 1971 experiment results reaffirm the superiority of pictures over verbal groups of information regarding learning and remembering.

2c Curiosity

Curiosity facilitates more learning in an audience member and thus improves remembering of the product.

Novelty seems to be the key to curiosity. Baradowski's 1967 study shows that incidental learning is caused by the attention-getting ability of novel stimuli.

The main implication for curiosity seems to be, that unexpected or novel attributes of advertisements elicit a seeking of information on the part of the prospective consumer.

2d Language

In order to communicate effectively with the intended audience the advertiser must tailor his language to both the product and customer involved to maximise

learning and remembering of the message.

Language is a learned cultural response, a medium of communication encompassing an individual's total environment. It includes national tongue, various dialects, regional colloquialisms, slang and jargon. Used precisely the language of an advertisement is an essential element in communicating the point of view of the advertiser.

2e Non-verbal communication

Meaning of a message is conveyed not only by verbal but by non-verbal cues, such as tonal quality, facial expressions, physical behaviour etc.

∴ they are given // same value and 2 contr.
p 39

Television commercials contain important non-verbal elements that are likely to be decoded affectively and, consequently, to affect probability of purchase. Research on interpersonal communication suggests that non-verbal factors are more important than cognitive, factual, literal communications.

2f Culture

A message or communication that is significant to members of an audience because of their cultural background is more likely to be learned and remembered, Britt 1978 op cit. p296.

Learning ability is affected by one's cultural background and experiences. Every individual is a product of his/her culture. Culture is shared by members of society and, in turn, affects their behaviour. In short, messages or communications that are important to consumers because of cultural training are more likely to be learned and remembered than messages that are not important.

Stage 3: Motivating

3a Order of presentation

A message is more likely to motivate or change the attitudes of audience

members if they are made aware of their needs for a solution before this solution is presented in the message. Studies conducted by Cohen 1964 indicate that when an audience member is unaware of a need, a message has to establish a need before the presentation of a solution would change one's attitude.

3b Desirable information

Audience members will be more likely to be motivated by a message if the most desirable information for them is presented first. Research by McGuire 1964 reveals that advertising messages which present desirable information first elicited more total agreement, because when audience members disagreed with the initial subject of the message attention waned and consequently so did learning and remembering of the message. (also see old note!)

3c Familiarity

When the topic of a message is familiar to audience members the strongest arguments to motivate them should be placed near the end of the message in climatic order. Cromwell 1950 reported that if attention is maintained, the presentation of strong arguments at the outset leads to expectations that are frustrated by the subsequent presentation of weak arguments.

3d Fairness of presentation

The more fair the members of the audience perceive the communicator to be in the presentation of their message, the more they will be motivated to agree with the position advocated by the communication, Britt 1978 op cit.

Kelman and Hovland (1953) investigated the theory that the perceiving of communication as being biased in its presentation affected its acceptance adversely but has little effect on the learning of the content. Their results indicate that attitudes toward fairness and trustworthiness played a greater role in determining credibility than did attributes related to expertness. By 1964 Cohen went so far as to say 'that fairness may well be the most important element in a communicator's make up'.

3e Communicator credibility

A message delivered by a communicator perceived to be of high prestige initially will be learned better by audience members than a communication perceived to be of low prestige, Britt 1978 op cit.

No other part of message presentation has been more widely disputed than communicator credibility. The main researchers behind this variable are Hovland and Weiss 1951-52 who tested the importance of communicator credibility in message learning. Their results showed that audience members considered statements from the high-credibility source more fair and factually justifiable than statements from a low credibility source. However, one month later differences between retention of high/low credibility source messages had faded.

3f Autistic motivating

A communicator can use autistic motivating i their message to draw the audience members into the communicating process and to move them to associate the realities of the message with their own hopes and dreams.

Young mothers hope and dream for a happy, healthy and contented baby, the Milupa commercial clearly relates to their needs hence increasing the learning and remembering of the advertisement.

To re-capitulate, one of the aims of this study is to assess the effectiveness of the Milupa advertisement by investigating the level of perception of these psychological variables within the test audience of mothers. Five point rating scales (1 - agree strongly, 5 - disagree strongly) were incorporated in the assessment of the level of perception. The results obtained are detailed in full in 5.2.

2.2 The rational and emotional debate

2.2.1 Rational and emotional: explaining the differences

An advertisement has to generate both 'heat' and 'light', an effective advertisement, as it is being processed, stirs the prospective buyers emotions and enlightens him or her about the brand, Mandler, 1978.

A vital contribution of creative input in advertising lies in selecting advertising stimuli of both an emotional nature (eg pictures, music, colours) and a rational nature (eg the wording, the constructional order of presentation, the information). Brands competing in the same product category offer essentially the same benefits. What differentiates the effectiveness of their advertisement is the ability of the brands' agency to state how or show the products' benefits in both an emotionally and rationally compelling and engaging way.

Rational and emotional responses elicited by an advertisement are a type of processing response. Emotions elicited by elements in the advertisement 'feed' learning and acceptance. Emotional responses are necessary whenever an element relates to a motivation and thus to an attitude. Emotional responses are critical to the attainment of category need, brand attitude, brand purchase intention and purchase facilitation objectives, Rossiter and Percy, 1987. Rational responses occur necessarily when the audience members evaluate sensibly the products merits, based on reason and the information provided in the commercial.

Emotional elements are the surface means used in the advertisements to confront, energize and stimulate the prospective buyers purchase motivations. Rational elements are also an intrinsic part of advertising belonging however at a deeper level compared to the emotional elements.

Emotional responses are automatically made to certain stimuli, they don't have to be learned by consumers because they are innate and pre-learned. Rational

responses are not pre-learned or genetically programmed Percy et al op cit 1987. Rational responses are arrived at after a deliberate weighing up of the information provided in the advertisement.

Difficulty exists in defining exactly what an emotional response is. This is because emotional responses are non-verbal and hard to describe in words. However, emotional responses are primarily a bodily response technically occurring in the autonomic (sympathetic and parasympathetic) nervous system.

There may be concurrent cognitive responses which occur in the brain or central nervous system; verbal labelling of a feeling or visual imagery. Both these processes ie verbal labelling, visual imagery can heighten the emotional experience although they do not change its quality - it remains a bodily, physiological response.

Measuring emotional responses during the processing of an advertisement is very difficult, for three reasons:

- the testing situation is often artificial in a laboratory setting unlike the natural surroundings of the real world
- audience members find it difficult to express and often embarrassing to report their emotions as opposed to their rational thoughts
- recordings using physiological techniques to measure emotional responses still suffer from the inability to scientifically state without any doubt what the recordings mean, Percy et al 1987 op cit.

Zeitlin and Westwood, 1986 state, however, that two types of emotional responses need to be distinguished:

- responses to the product as seen through the advertisement
- responses to the advertisement itself.

Zeitlin 1986 further states 'advertising effectiveness might be greatly enhanced given an understanding of which emotions to build into advertising how and when.'

2.2.2 Milupa's need for rational and emotional reassurance

The creative brief decided upon by Milupa clearly distinguishes the need for both rational and emotional reassurance within the television advertisement. (See Appendix B for complete copy of the creative brief). The advertising brief stated the following:

'Research emphasises the need to provide mothers with reassurance both in terms of the nutritional content (the 'rational' element) and acceptability (the emotional element). It also emphasises the need for a careful balance of these two elements in the advertising.

The core proposition for this advertising is based on nutrition (already perceived as one of Milupa's core values) providing the rational element of reassurance. It is *essential*, however, that the advertising also provides emotional reassurance in terms of taste and enjoyment. Emotional warmth is key to this advertising to invite involvement and is best provided visually by happy, contented, cute babies.

The Milupa creative brief explicitly indicates that the commercial should reassure mothers both rationally and emotionally that their brand of baby food will provide the mother with all that is good for her baby.

The brief further states that both taste and enjoyment should be communicated strongly in copy terms using rational arguments and visual emotional warmth.

Research carried out on Milupa infant foods by Davies Riley-Smith MacLay (OR-SM Job No. P/1846) identifies the existence of three core elements which determine the feelings of mothers towards the package foods they feed to their

babies. See Appendix H. These elements are:

- the relationship between a mother and her baby
- her feelings about packaged foods in general and dried foods in particular
- and the imagery of individual brands.

Together, the expression of these elements provide both the rational and emotional reassurance a mother needs when choosing foods for her baby.

With regard to advertising the emotional values are particularly important in involving the mother and drawing her into the commercial and hence the brand. The key element with which to communicate such values is the mother/baby relationship.

The brand personality of Milupa must be communicated in a clear, relevant manner which easily distinguishes it from other competitive brands. Milupa's brand image is centred on natural foods providing balance in babies diets and nutrition. These three core values can only be effectively communicated in a television advertisement by eliciting both emotional and rational reassurance within its target audience. On successful completion of this the brand will emerge as a natural, nourishing baby food which offers nutritionally balanced meals.

Emotionally, the involvement stems from the executional details which lift the commercial beyond the purely rational. Overall, the execution conveys the appropriate brand image via emotional and rational reassurance in a motivating, involving style.

2.2.3 Assessing mothers perception and preference of rational and emotional stimuli

This thesis to examines the concepts of rationality and emotionality in the Milupa advertisement from two platforms:

- firstly, the audience's perception or lack of perception of rational and emotional reassurance after viewing the advertisement
- secondly, an examination of mothers preferences for emotional elements and rational elements in television advertising.

2.3. Descriptive adjectives and advertising effectiveness

2.3.1 Assessing effectiveness using descriptive adjectives

The use of descriptive adjectives to ascertain how test audiences describe television commercials is not a new concept in evaluating advertising effectiveness. The greatest influence was conducted by a Leo Burnett group whose research was reported by Wells, Leavitt and McConville 1971 and by Leavitt, 1970.

The empirical evidence and psychological theory that has developed from using such techniques to evaluate advertising suggests 'that well-liked commercials are more effective than commercials that are neither liked nor disliked.', Aaker and Bruzzone, 1981.

However, the empirical evidence and theory regarding disliked advertising is not as conclusive. Silk and Vara, 1974 state 'advertising that generates strong negative reactions has been effective in part by generating high levels of attention and recall.'

A detailed knowledge of why people like or dislike a commercial is useful in interpreting advertising effectiveness. It can help to show scientifically why and how the more effective commercial differs from the less effective commercial.

Furthermore, there exists a need to know viewer reactions to establish if they mirror what was intended to be communicated. Was the commercial really appealing? Did the advertisement generate reactions that could support or create

desirable (or undesirable) associations.

O'Toole, 1980 states 'knowing and understanding viewer reactions to a commercial is becoming even more critical as new video technologies provide people with greater opportunities to watch commercial free television. To reach this audience for which commercial viewing is a controllable option, commercials will have to provide a reason to be viewed.'

Aaker and Bruzzone, 1981 op cit conducted a study of 524 prime-time television commercials in order to ascertain such an understanding of viewer reactions to advertisements. The Aaker Bruzzone 1981 study used 20 listed adjectives requiring the audience to tick the adjectives which most accurately reflected their own feelings about the television commercials they had viewed. The results from this study suggests that viewer reaction is generally positive and can in part be captured by four factors. The four factors are:

- 1 entertaining
- 2 personal relevance
- 3 dislike
- 4 warmth.

The 20 adjectives are sub-divided into these four factors. 'An understanding of these four factors should help advertisers structure copy alternatives and design diagnostic copy tests,' Aaker and Bruzzone, 1981. Table 2.5 lists the four factors and the adjectives pertaining to each.

2.3.2 The descriptive adjectives in this study

Descriptive adjectives are used in this study in an effort to profile the mothers' responses towards the Milupa infant foods television commercial.

A total of ten adjectives were selected from the Aaker and Bruzzone twenty. The

copy 101

Table 2.5 A listing of the Aaker Bruzzone 1981 20 descriptive adjectives and their related factors

Entertaining	Personal relevance	Dislike	Warm
Clever Imaginative Amusing Original Uninteresting Lively Dull Easy to forget	Worth remembering Convincing Effective Informative Interesting	Irritating Silly Pointless Phoney	Appealing Gentle Well done

ten adjectives chosen for this study and their related factors shown in Table 2.6.

Table 2.6 The ten descriptive adjectives used for this study and their related factors their related factors

Entertaining	Personal relevance	Dislike	Warm
Dull Uninteresting Imaginative	Convincing Worth remembering	Silly Phoney Irritating	Appealing Well done

The test subjects were asked to rate the Milupa advertisements using each of the descriptive adjectives under a five point scale ranging from *agree strongly* to *disagree strongly*. *→ why??*

2.4 Inter-relationships between product attributes and psychological variables

2.4.1 Assessing the possibilities

A review of all relevant literature indicates that little research has attempted to assess the possible inter-relationships between different psychological variables and product attributes in television advertising. This study will examine the possibility that such inter-relationships exist.

The study examines three core product attributes which Milupa wanted to convey in their television advertisement. These were:

- nutrition
- a warm and caring approach between mother and baby
- the use of natural and safe ingredients in manufacturing the product.

The research takes twelve psychological variables and attempts to investigate the degree to which each of the psychological variables definitely do, probably do, probably do not and definitely do not convey the impressions of nutrition etc. (See Table 2.7 for list of the psychological variables used)

The aim is to ascertain whether or not a scientific approach can be established, to convey certain core attributes of a product via specific psychological stimuli incorporated in the commercial to eventually generate a matrix of the inter-relationships between specific product attributes and selected psychological stimuli. If such a specific relationship can be demonstrated it would greatly facilitate the integration of psychological factors in advertisements for specific purposes.

Table 2.7 The psychological variables used to assess inter-relationships with product attributes

Music
Colours
Symbols
Intensity
Culture
Language
Non-verbal cues
Limit number of stimulus cues
Order of presentation
Desirable information
Familiarity
Autistic motivating

3. THE STUDY METHODOLOGY

3.1 Test material

The material used for this study was a video of the most recent Milupa television promotion for its baby foods. The video cassette contained four copies of the advertisement and was shown to a sample of one hundred and three mothers and mothers-to-be. After viewing the video the women were asked to complete a questionnaire. See Appendix A.

3.2 The sample size and its composition

A total of 103 women were interviewed for this research. The total population was sub-divided into three separate categories of mothers and mothers-to-be. The three category classifications of women were as follows:

- pregnant women
- first time mothers
- subsequent mothers.

All subjects were chosen solely on these classifications, no demographic considerations eg age, education etc were taken into account. All participants took part in this study on a voluntary basis.

3.3 Test locations

Initial requests to conduct the field research in Rottenrow Maternity Hospital Glasgow were refused and hence the research took place in Dublin, Ireland over a three-week period, from February 7th to February 21st, 1993. Thirteen testing sessions were conducted totalling one-hundred-and-three subjects. The test locations for the research were the following:

- The Coombe Maternity Hospital, Dublin
- The Newbridge Community Centre, Co. Kildare

- Pre-natal classes, Churchtown, Dublin
- The Creche in Trinity College Dublin
- Various individual households in Dublin.

Table 3.1 displays the details of field research.

Table 3.1 The field research schedule

Date	Total	Pregnant women	First-time mothers	Subsequent mothers
Feb 7	1		1	
Feb 8	7	7		
Feb 8	8		2	6
Feb 9	5	5		
Feb 10	8	8		
Feb 11	5		1	4
Feb 12	1			1
Feb 17	25		18	7
Feb 17	12	12		
Feb 18	1			1
Feb 18	4		4	
Feb 20	15		7	8
Feb 21	11		8	3
	103	32	41	30

The testing was carried out on a voluntary basis under both formal group sessions in the Coombe Maternity hospital and informal gatherings in various households.

3.4 The test procedure

The test procedure was as follows:

- instructions were given to all individuals regarding what was required of

them

- subjects were then shown the Milupa baby food advertisement using a video and television four times. The advertisement was 30 seconds long hence four showings took two minutes
- after the fourth showing of the Milupa advertisement, everybody present was issued a questionnaire to be completed. The whole test procedure averaged twenty-two minutes in total.

3.5 The questionnaire

The questionnaire (See Appendix A) employed in this research was specifically developed for this study. It was comprised of both open and closed ended questions. A uniform 5-point scaling system was used throughout the questionnaire giving the mothers a range of agree strongly to disagree strongly to choose from.

The purpose of the questionnaire was to assess the mothers level of perception of the psychology behind the advertisement.

Discussions with Alliance Advertising (the agency who created the commercial) and analysis of the creative brief set forth by Milupa baby foods established that the psychology behind the advertisement was to convey well established rationale and emotional attributes, such as nutrition (already perceived as one of Milupa's core values) acceptability, taste, warmth and caring, involvement, enjoyment etc.

The questionnaire was structured to investigate the mothers level of perception of the psychology behind the advertisement from two levels. These were:

- At a primary level, to establish whether the mothers indicated a preference for either the rational or emotional elements of the Milupa commercial
- To assess the mothers rating of the Milupa advertisement using

descriptive adjectives.

Secondly, at a deeper level the questionnaire was structured to

- analyse the mothers level of perception of rational and emotional reassurance after viewing the advertisement.
- to assess the mothers level of perception of psychological variables incorporated in the advertisement to create the psychological states of attending, learning and remembering and motivation.
- finally, to investigate the mothers perception of what psychological variables were manipulated to reinforce Milupa's advertising objectives eg nutrition, a warm and caring approach, the use of natural and safe ingredients.

4. HYPOTHESES

The following hypotheses were investigated in this study.

Hypothesis 1

- That there was a lower overall level of perception of the psychological variables from all three stages of the communication model ie the attending stage, learning and remembering stage and motivating stage, incorporated in the Milupa advertisement by the group classified as pregnant women in comparison to the other two groups ie first-time mothers and subsequent mothers.

Hypothesis 2

- That the adjectives 'well done' and appealing will receive a higher level of agreement from the entire population in rating the Milupa commercial, in comparison to the other adjectives.

Hypothesis 3

- That the rational elements in the Milupa baby foods commercial would receive a more positive response from the total sample tested than the emotional elements.

Hypothesis 4

- That first-time mothers would display a more positive preference for the rational elements in comparison to the groups, pregnant women and subsequent mothers.

Hypothesis 5

- That the product attributes concerning rational reassurance were more easily perceived by the entire population than the attribute concerned with emotional reassurance.

Hypothesis 6

- That the rational element 'nutrition' would receive the highest level of perception by the entire population sampled.

Hypothesis 7

- That from the 3 categories sampled, the group 'first-time mothers' would display a higher perception of rational reassurance in comparison to the other groups ie subsequent mothers and pregnant women.

RESULTS

5. ANALYSIS OF RESULTS

5.1 General analysis

This chapter provides a general analysis of selected results obtained from this study. Results are presented in two parts, firstly by an overall aggregate response and secondly by response category ie pregnant women, first-time mothers and by subsequent mothers. The general analysis covers 4 main areas, as follows:

- 1 Mothers' impressions of the product after viewing the Milupa advertisement.
- 2
 - an evaluation of the product versus its closest competitors,
 - an assessment of likelihood of purchase,
 - an evaluation of whether or not Milupa has managed to clearly differentiate its product from its competitors
- 3 a general analysis of two open-ended questions:
 - were there any particular features of the advertisement which especially appealed to you?
 - were there any particular aspects/features of the product you would like to have been informed of which were not included in the Milupa commercial
- 4 an assessment of which aspects of the Milupa advertisement the test subjects most responded to.

5.1.1 Impressions toward Milupa after viewing the commercial

Question one provides feedback of the impressions the subjects have about Milupa infant foods after viewing the advertisement.

It is interesting to note that overall 87% of the tested mothers agreed that the advertisement helped convince them that 'Milupa is nutritious.' The importance of this result is reflected in the creative brief where Milupa stated that 'the core proposition for this advertising is based on nutrition (already perceived as one of Milupa's core values).' See Appendix B for the advertising brief.

90% of pregnant women agree Milupa is nutritious along with 80% of subsequent mothers.

The Milupa advertisement received a less enthusiastic response when the mothers were asked if after viewing the commercial that 'Milupa evokes cuteness and fun.' Only 53% agree or agree strongly about this statement. This breaks down as 50% of pregnant women, 44% of first-time mothers and 70% of subsequent mothers.

A comprehensive analysis of the overall impression towards Milupa using the 13 statements from question 1 can be seen in Fig 5.1.

The breakdown of these impressions towards the product by the 3 different categories of mothers expressed as percentages can be seen in Table 5.1.

5.1.2 Is Milupa the best baby food for your baby?

Question 2 in the main questionnaire asked respondents their opinions on whether they agree having viewed the commercial 'that in comparison to other baby products, Milupa is the best baby food for their baby?'

Fig 5.1

Overall mothers' impressions about Milupa baby foods after viewing the advertisement in percentages

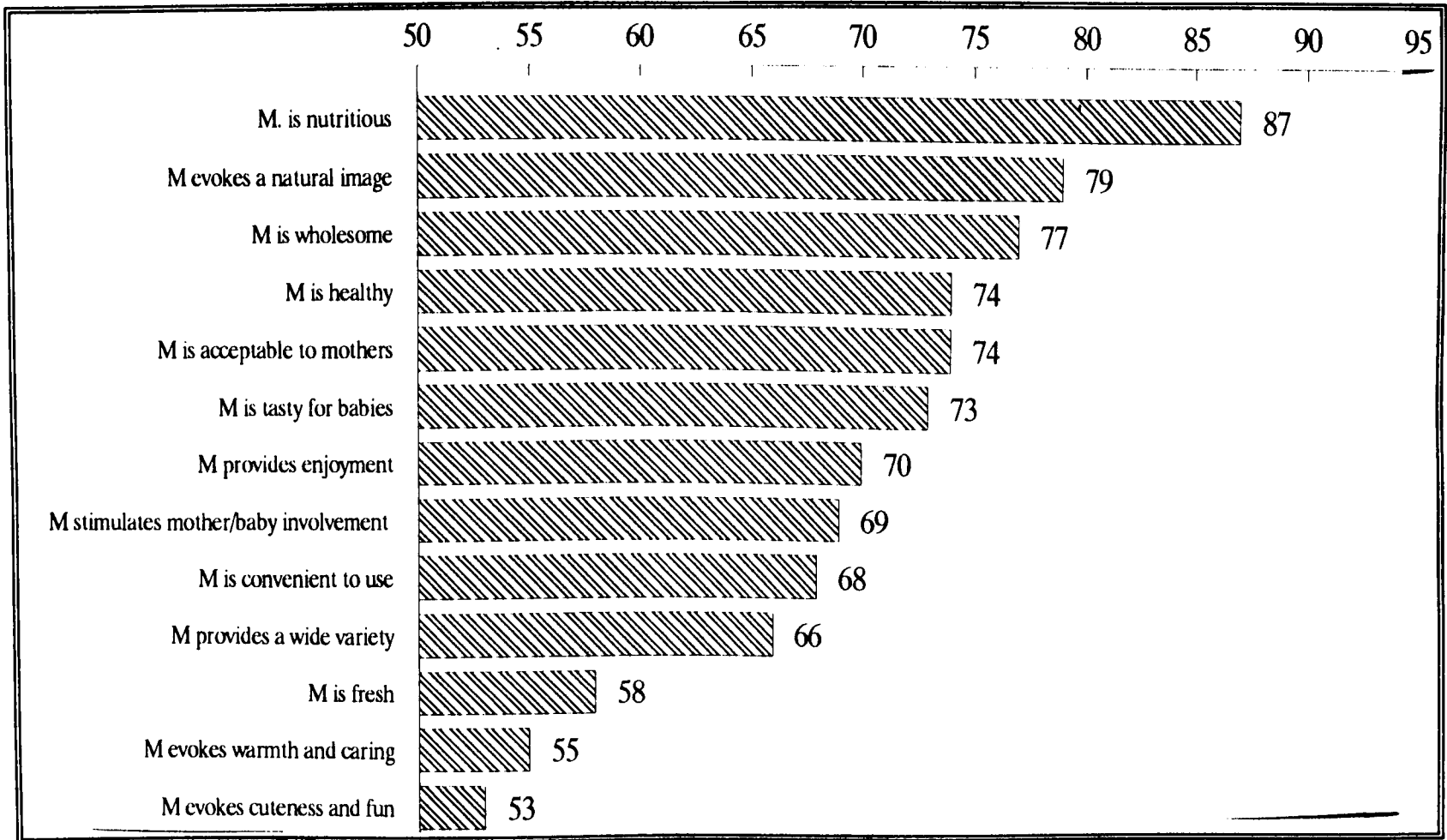


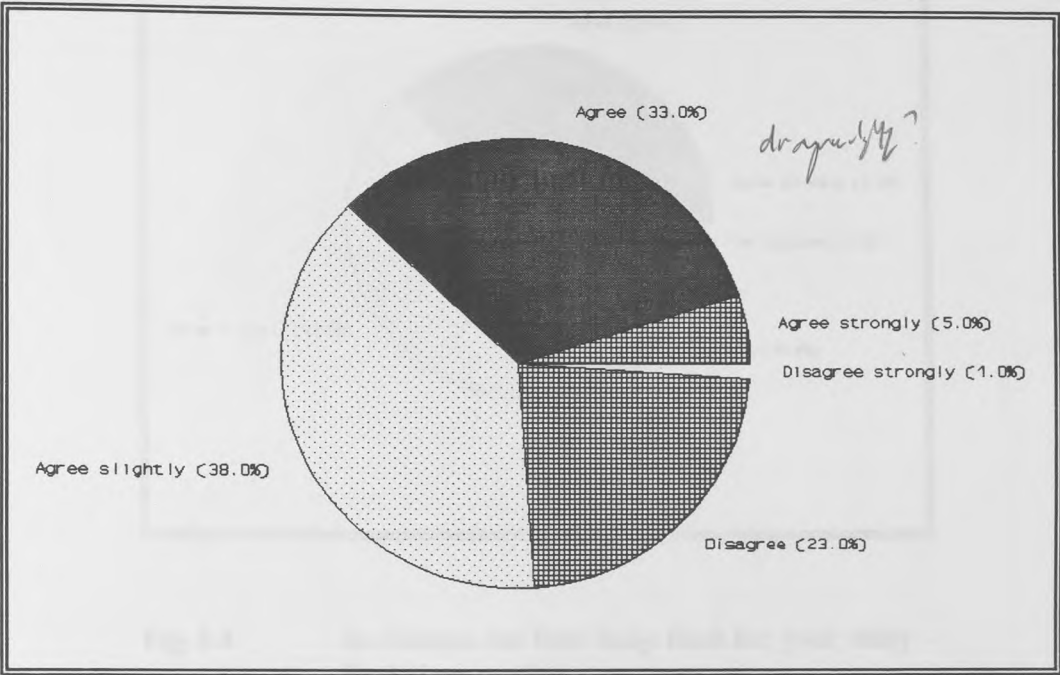
Table 5.1 Impressions about Milupa after viewing the advertisement by response category expressed in percentages

Pregnant women	%	First time mothers		Subsequent mothers	%
Milupa is nutritious	90	Milupa is nutritious	80	Milupa is nutritious	93
Milupa is wholesome	81	Milupa evokes a natural image	75	Milupa stimulates mother/baby involvement	90
Milupa evokes a natural image	78	Milupa is convenient to use	73	Milupa is acceptable to mothers	87
Milupa is acceptable to mothers	78	Milupa is healthy	73	Milupa evokes a natural image	86
Milupa provides enjoyment	75	Milupa is tasty for babies	71	Milupa evokes warmth and caring	83
Milupa is tasty for babies	75	Milupa stimulates mother/baby involvement	71	Milupa is wholesome	80
Milupa is healthy	72	Milupa is wholesome	70	Milupa is healthy	80
Milupa is convenient to use	59	Milupa provides a wide variety	68	Milupa is tasty for babies	77
Milupa provides a wide variety	56	Milupa provides enjoyment	63	Milupa provides enjoyment	77
Milupa is fresh	53	Milupa is acceptable to mothers	63	Milupa is convenient to use	73
Milupa stimulates mother/baby involvement	50	Milupa is fresh	54	Milupa provides a wide variety	73
Milupa evokes cuteness and fun	50	Milupa evokes warmth and caring	46	Milupa is fresh	70
Milupa evokes warmth and caring	40	Milupa evokes cuteness and fun	44	Milupa evokes cuteness and fun	70

Note: Only responses of agree strongly and agree were used to establish percentages

The use of pie charts displays the results obtained.

Fig 5.2 Is Milupa the best baby food for your baby - overall response



The overall analysis (see Fig 5.2) reveals that only 5% agree strongly that Milupa is the best baby food for their baby. Interestingly 23% disagree that Milupa is the best baby food. Further research is required to establish precisely why 23% of the sample disagree.

On analysis of the responses by mother type, the group of pregnant women agree less than the subsequent mothers and first time mothers that Milupa is the best baby food. This breaks down as 37.6% of pregnant women agree strongly and agree that Milupa is the best food compared to 60% of subsequent mothers and 59% of first time mothers. See Figs. 5.3, 5.4 and 5.5.

Fig 5.3

Is Milupa the best baby food for your baby - pregnant women

65

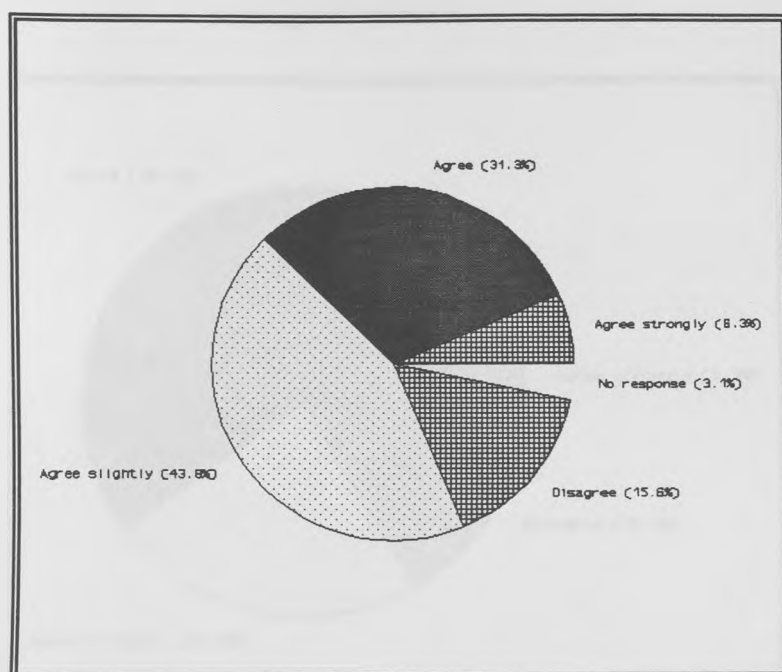


Fig 5.4

Is Milupa the best baby food for your baby - first time mothers

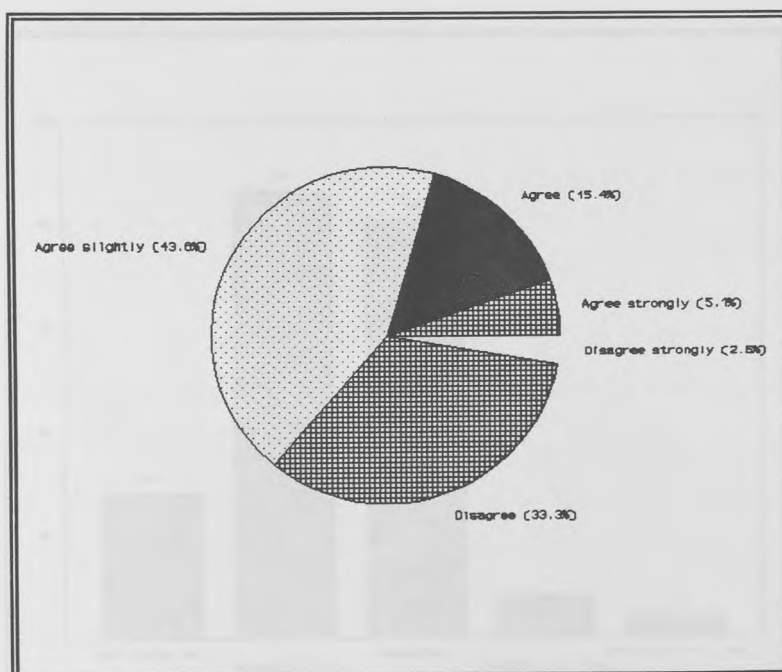


Fig 5.5 Is Milupa the best baby food for your baby - subsequent mothers

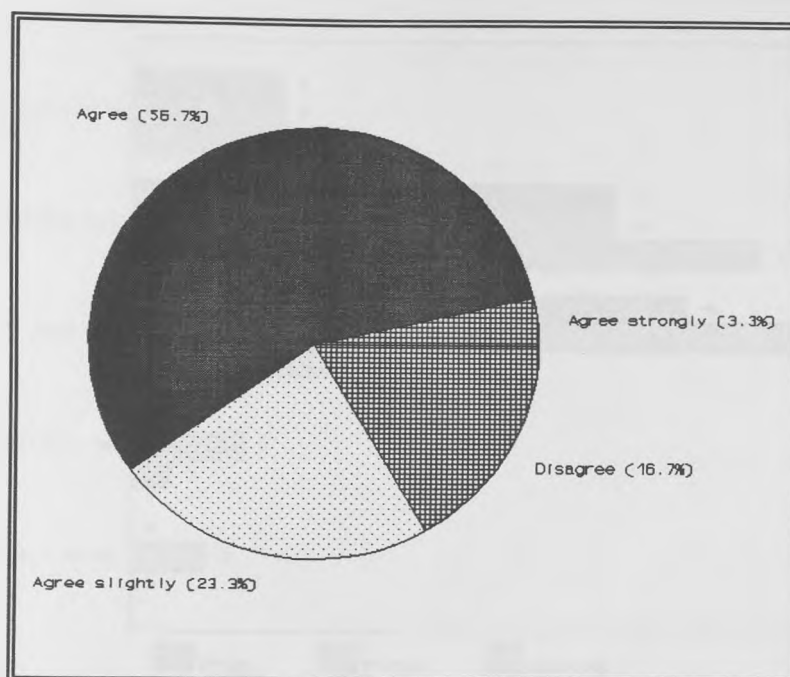


Fig 5.6 Overall likelihood of purchase

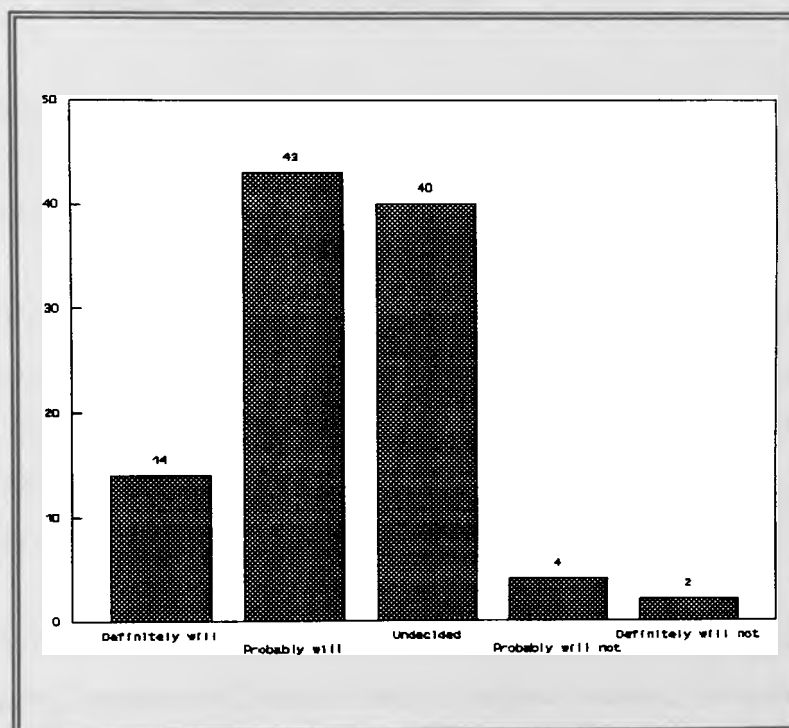
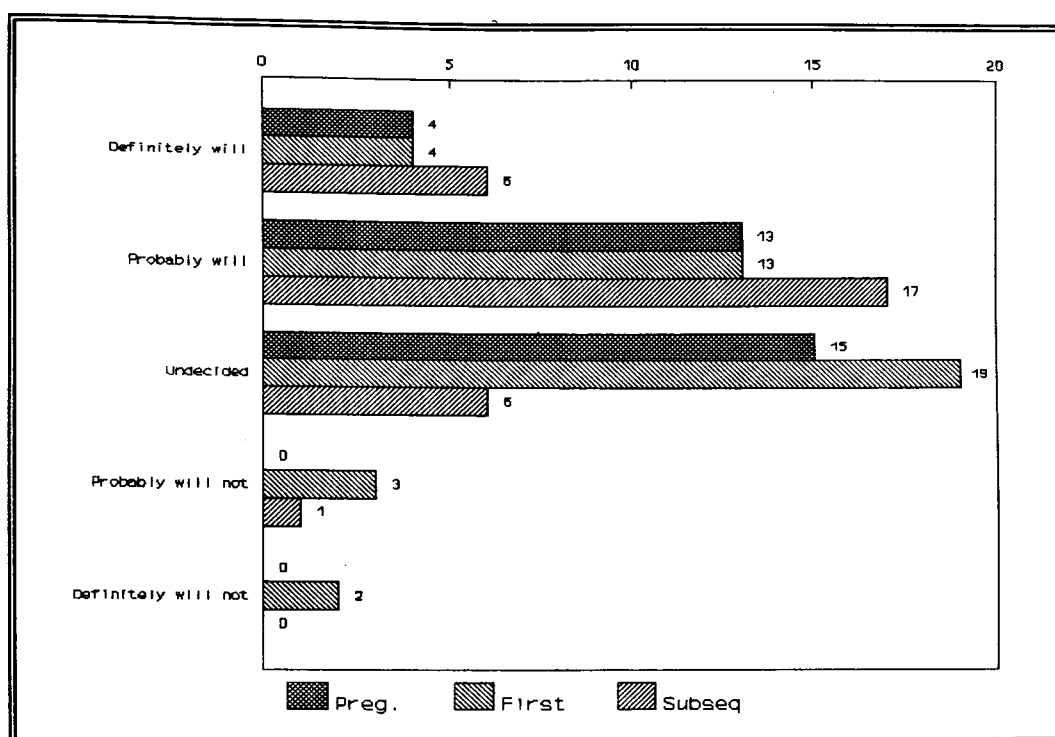


Fig 5.7 Likelihood of purchase by types of mother



5.1.3 Assessing likelihood of purchase

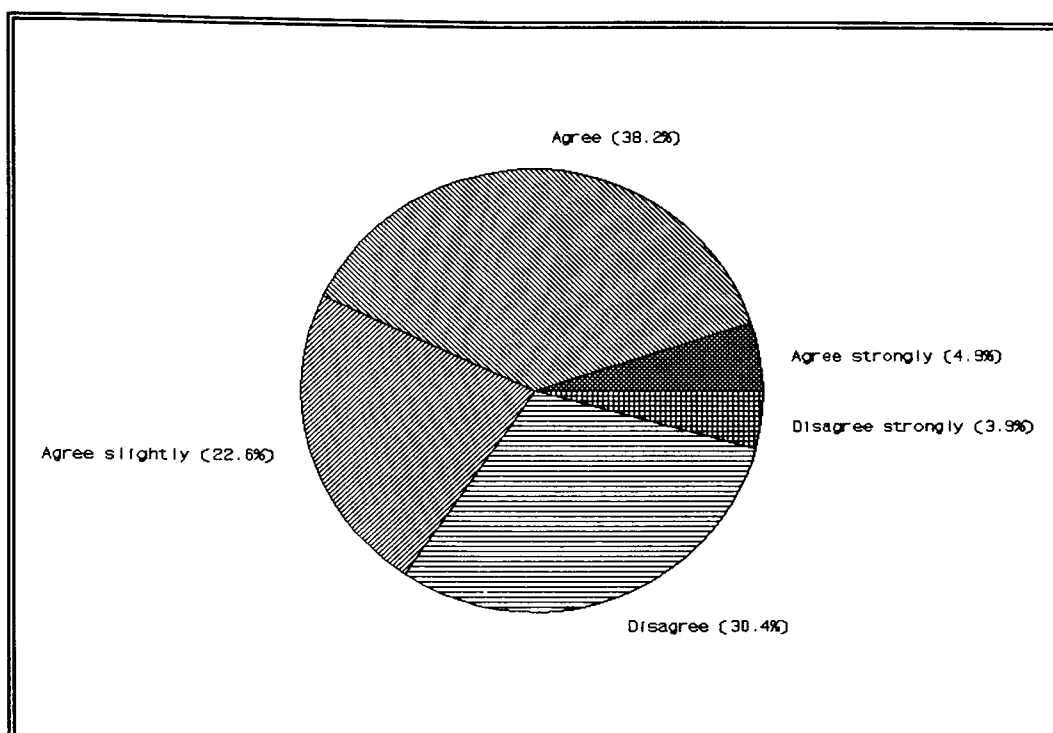
Question 3 of the questionnaire asked the mothers 'having viewed the Milupa advertisement what is the likelihood of you buying the product for your baby or future baby'?

Fig 5.6 displays the overall response indicating that 14 of the mothers sampled indicated they 'definitely will' buy Milupa. 43 mothers probably will, 4 probably will not and 2 definitely will not. However, 40 mothers out of the 103 total sampled remained undecided. Further research should be conducted in order to assess in depth what would deter them from buying the product.

Fig 5.7 analyses the likelihood of purchase responses broken down in the three different categories of respondents, ie pregnant women, first-time mothers and subsequent mothers.

Fig 5.8

Did Milupa clearly differentiate its product - Percentage overall response

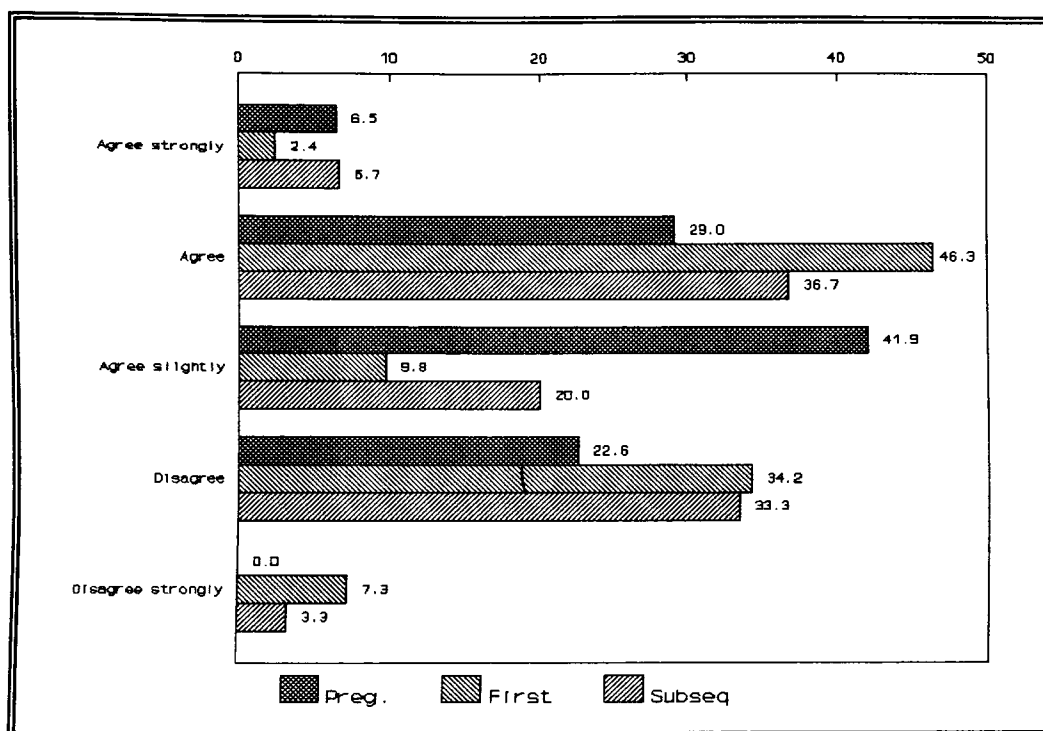


5.1.4 Did the advertisement clearly differentiate Milupa from its competitors

Question 34 asked the respondents 'after viewing the advertisement do you agree that Milupa has managed to clearly differentiate its products from other baby food products'? Using a five point rating scale (1 agree strongly 5 disagree strongly) Fig 5.8 I displays using a pie chart in percentages the overall mothers responses. 30.4% disagree that Milupa clearly differentiates itself from its competitors. Only 4.9% agree strongly that the Milupa commercial clearly differentiates Milupa from its competitors.

Fig 5.9 analyses further this question by displaying the responses to question 34 by category of mother.

Fig 5.9 Did Milupa clearly differentiate its product by mother type



Analysis of the open-ended questions - audience feedback

This section of analysis will confine itself to discussing the feedback obtained from two of the open-ended questions (Q8 and Q20) in the questionnaire.

5.1.5 Features of the Milupa commercial perceived as especially appealing

Firstly question 8 asked respondents the following 'In the Milupa advertisement which you've just seen, were there any particular features of the advertisement which especially appealed to you?'

Overall 68.9% of the mothers responded to this question. Further analysis reveals two particular features of the Milupa advertisement were especially appealing to the test group: These were:

- the depiction with vivid clarity of fresh fruit and vegetables
- the visually happy, contented cute baby.

33% of all the mothers tested, indicated that the visual clarity of the fruit and vegetables was especially appealing to them.

This can be analysed further into responses from the different categories of mothers tested.

28% of subsequent mothers agreed the visual clarity was especially appealing

40% of pregnant women agreed the visual clarity was especially appealing

31.7% of first-time mothers agreed the visual clarity was especially appealing

29.1% of all the mothers tested stated that pictures of the visually happy contented cute baby especially appealed to them. Again this can be analysed by examining responses given from the different categories of mother.

19% of subsequent mothers found the cute baby especially appealing

33% of the pregnant women found the cute baby especially appealing

34% of the first-time mothers found the cute baby especially appealing.

Analysis of the other responses to Q8 reveals a wide spectrum of features which were especially appealing to the mothers. Amongst these features mentioned were the natural image portrayed, the mother used for the advertisement including a comment on her hair and skin, the use of the weighing scales, the implication of a warm safe environment, the music used, the baby's laugh and the colours used.

5.1.6 Aspects the audience would like to have been informed of not included in the Milupa commercial

Question 19 asked the mothers the following: 'Would you agree that the advertisement provided all the information you needed to know about Milupa

baby foods.' Analysis of the results shows 39.8% disagreed to some extent. This breaks down as 32% disagree and 8% disagree strongly that the commercial provided all the information they wanted to know.

Following this question the respondents were asked then 'If you disagree, could you please indicate what particular aspects/features of the product you would like to have been informed about?

39% of the mothers responded to question 20 supplying details of information that they would have liked to have been informed of.

28% of the subsequent mothers responded to this question.

Two areas are of interest.

- Firstly 19% of subsequent mothers would like more information concerning instructions of the preparation of Milupa.
- Secondly 9% required more information regarding a clarification of the make-up or form of Milupa baby food ie was it a powder or jar format.

Other comments from the subsequent mothers included a desire for a prolonged exposure of the packet/product in the commercial, more details of the sugar content, information of its shelf-life and the varieties available for purchase.

36% of the responses from the pregnant women also highlight the desire for more information to be given concerning instructions of preparation. Also 16.7% of the pregnant women wanted more information concerning the varieties available for purchase.

49% of the first-time mothers responded to question 20. Their responses mirror these given by the pregnant women. The first-time mothers expressed an interest for more instruction to be given about the preparation of Milupa foods. Also 12% wanted more details about the different varieties available.

Some of the other responses from the first-time mothers included the following:

- how long do you use it for?
- how much does it cost?
- when do you start your child on Milupa?
- is Milupa a breakfast, dinner or tea or all three?

Finally, some mothers questioned the wording of 'all we add are ...' saying if Milupa is a natural baby food why should anything be added to the ingredients at all?

5.1.7 Features of the Milupa advertisement the audience most responded to

Question 39 of the questionnaire attempted to probe which aspects of the Milupa advertisement the mothers most responded to.

Overall, 44% of the subjects gave a very positive response to 'the symbols used in the advertisement eg images of fresh fruit, the weighing scales etc.'

At the opposite end of the spectrum only 13% of the mothers gave a very positive response to 'the colours used in the advertisement.' See Table 5.2.

Collective analysis of both negative and very negative responses reveals that 18% of the mothers indicated a negative response to 'the extent to which the advertisement improved or changed their understanding of infant nutrition. See Table 5.3.

An examination of the aspects in the Milupa commercial by classification type which the mothers responded to most is interesting for two reasons. See Table 5.4.

(1) all 3 categories (pregnant women, first-time mothers and subsequent mothers)

reported responding most positively to the same aspect 'the emphasis on a carefully balanced diet for babies'. Of the pregnant women $N = 30$, 47% gave a very positive response, 41% recording a positive response, first-time mothers $N = 41$, 36.5% very positive, 41% positive and the subsequent mothers $N = 32$, 33% very positive, 57% positive.

However, on analysis of only the very positive responses given by the subjects, the 'symbols used in the advertisement' received the most acclaim. 50% of the pregnant women group, 34% first-time mothers and 53% of the subsequent mothers recorded a very positive response.

(2) all 3 categories of mother responded most negatively to the same aspect - 'the extent to which the advertisement improved or changed your understanding of infant nutrition. 15.6% of the pregnant women, 26.8% of the first-time mothers, 10% of the subsequent group responded negatively to this aspect of the Milupa commercial.

The percentage of first-time mothers who responded negatively to the extent to which the advertisement improved or changed your understanding of infant nutrition is high at 26.83%. This problem should be readdressed by Milupa for future advertising campaigns. Q20 of the questionnaire asked the mothers what would you like to have been informed of about Milupa that was omitted from the commercial. 48.8% of first-time mothers responded to this providing information on what they would like to see included in a Milupa infant foods advertisement. See 5.1.6 for the results obtained.

Table 5.2 Aspects of the Milupa advertisement receiving very positive responses

Aspects of the advertisement	V. positive response %
Symbols used	44
Emphasis on a carefully bal. diet	38
Exceptional visual clarity	29
Use of non-verbal cues	27
Music used	22
Information provided	21
Construction of the advert.	20
Language and wording used	18
Extent of understanding improved	14
Colours used	13

Table 5.3 Aspects of the Milupa advertisement receiving negative responses

Aspects of the advertisement	Negative response %
Symbols used	3
Emphasis on a carefully bal. diet	5
Exceptional visual clarity	5
Use of non-verbal cues	6
Music used	10
Information provided	8
Construction of the advert.	11
Language and wording used	7
Extent of understanding improved	18
Colours used	8

Table 5.4 Aspects of the Milupa commercial receiving a positive response by category of mother

Aspects of the advertisement	Pregnant women		First-time mothers		Subsequent mothers	
	V. positive response	Positive response	V. positive response	Positive response	V. positive response	Positive response
Symbols used	50	34	34	51	53	30
Emphasis on a carefully bal. diet	47	41	37	49	33	57
Exceptional visual clarity	22	47	22	39	47	40
Use of non-verbal cues	28	41	24	49	30	47
Music used	16	41	20	44	33	30
Information provided	13	59	20	39	33	53
Construction of the advert.	19	50	17	49	27	40
Language and wording used	19	47	20	49	17	73
Extent of understanding improve	16	25	12	22	17	43
Colours used	6	66	10	54	27	43

5.2 Audience perception of the psychological variables

5.2.1 The findings

In applying to S.H. Britt's theory to the practical world of advertising this study hypothesised as follows:

- *that there was a lower overall level of perception, of the psychological variables, from all 3 stages incorporated in the Milupa advertisement, by the group classified as pregnant women, in comparison to the other two groups ie first-time mothers and subsequent mothers.*

The reasoning behind this hypotheses is as follows;

- Question 14 of questionnaire completed by Alliance advertising (the agency who created the Milupa commercial see Appendix C) asked which category of mother do you think the Milupa commercial appealed to least of all? The response stated 'It is least relevant and so arguably least appealing to pregnant women who are concentrating on, and thinking no further than the birth.'

However, the results from this study question this statement.

Firstly, a one way analysis of variance was conducted separately between the 3 categories of mother and all three stages of the model of communication, see Appendix D. The results indicate that

- no two groups are significantly different at the .05 level regarding perception of the psychological variables from the attending stage.
- no two groups are significantly different at the .05 level in their level of perception of variables from the learning and remembering stage.

- no two groups are significantly different at the .05 level in their level of perception of psychological variables from the motivating stage.

Stated simply, no significant difference exists at the .05 level between the different categories of mothers in their level of perception of variables from the psychological stages of Britt's model of communication, assuming the scales are a perfect indication of the psychological concepts.

Mean responses for each category of mother for each of the three stages of the communication model, were also analysed.

The results obtained mirror those obtained by analysis of variance ie very little difference exists between the means of the different categories of mothers for each of the three stages, attending, learning and remembering and motivating.

For the attending stage, the highest mean is 2.38 for first-time mothers. Only 0.14 separates first-time mothers from the lowest mean of 2.24 obtained by subsequent mothers. The differences between the means, for the three categories of mothers, for the attending stage, is insufficient to state that any one category perceived the psychological variables within that stage better than the other two categories. See Table 5.5.

Analysis of the group means obtained for the learning and remembering stage and the motivation stage are also very similar to those obtained for the attending stage. The results indicate that none of the 3 categories of mothers perceived the psychological variables within that stage any better than their contemporaries. See Table 5.5.

It is also interesting to note that the means obtained by each individual category of mother for each of the three stages of the communication process are also very similar.

Table 5.5 Mean level of perception of the psychological variables, from each stage of the communication model by category type

STAGE	Pregnant women	First-time mothers	Subsequent mothers
Attending	2.28	2.38	2.24
Learning and remembering	2.49	2.64	2.43
Motivating	2.35	2.43	2.34

This is important because Britt '78 hypothesised that 'individuals can enter the process at any stage just as they can exit it' and with the average perception of variables (attained by the audience in this study) being so similar this facilitates being able to enter the communication process at any stage.

A series of box plots were conducted for each of the three stages of the psychological model of communication. Box plots provide a simple graphic means of comparing the cells in terms of central location and spread.

These box plots provide further evidence to refute the hypotheses that there was a lower overall level of perception of the psychological variables from all 3 stages by the group classified as pregnant women in comparison to the other two groups.

On examination of the box plots, two points of interest are worthy of discussion:

Firstly, the median response for all three categories of mothers for each of the three stages of communication are very similar. This serves to further emphasise that the perception of psychological variables in the Milupa commercial by all three categories of mothers was very similar. (See Figs 5.10a, 5.10b, 5.10c).

Fig 5.10a **Box plots for perception of psychological variables for the attending stage**

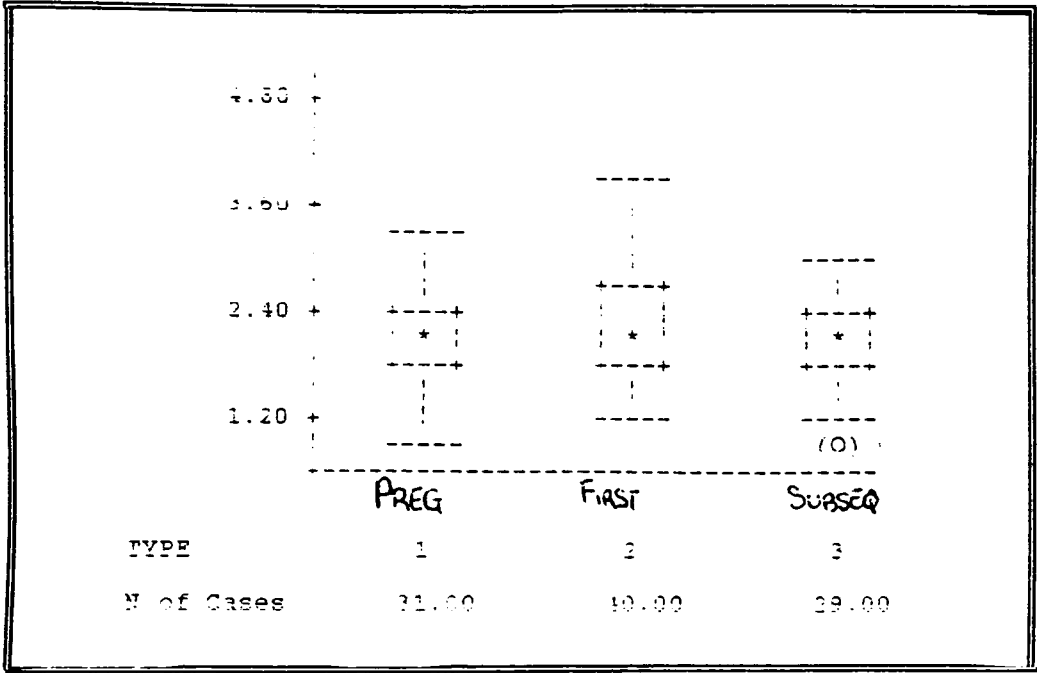


Fig 5.10b **Box plots for perception of psychological variables for the learning and remembering stage**

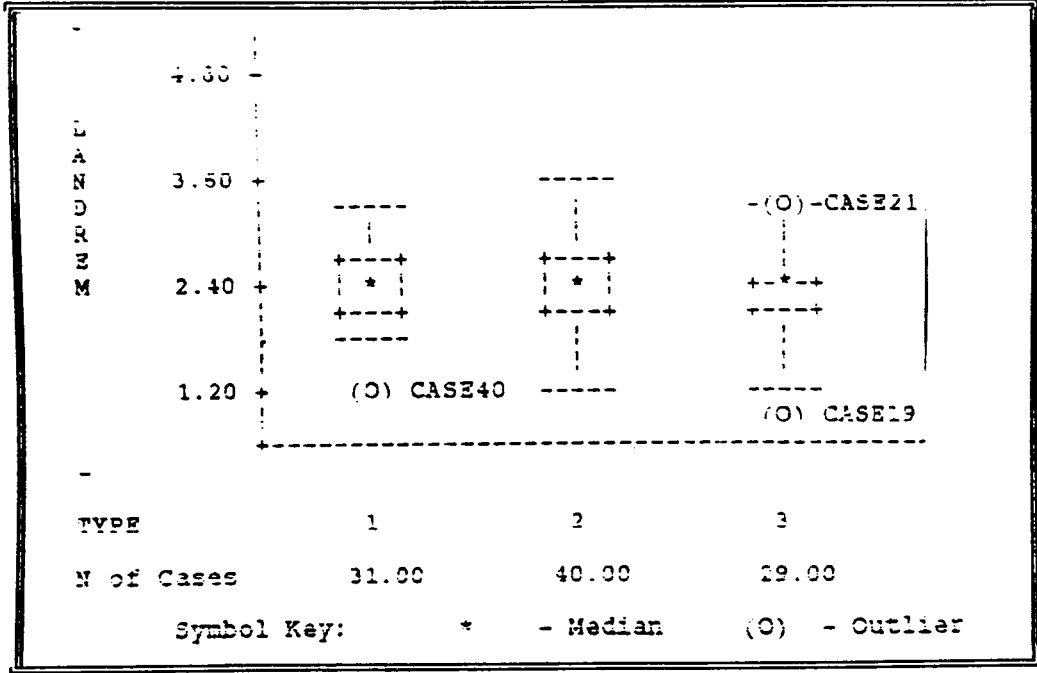
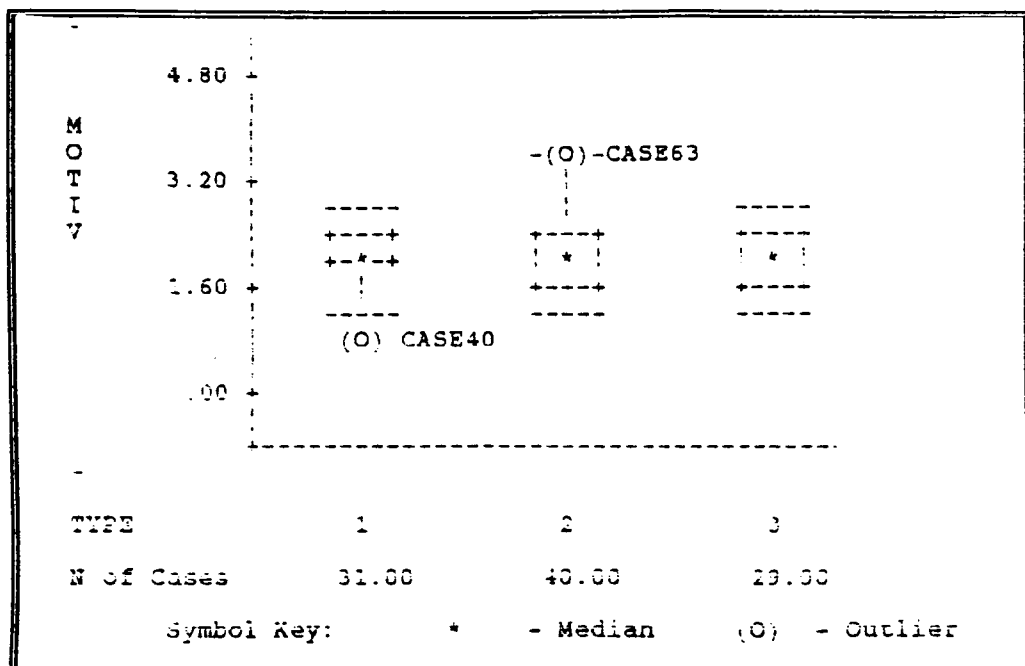


Fig 5.10c **Box plots for perception of psychological variables for the80 motivating stage**



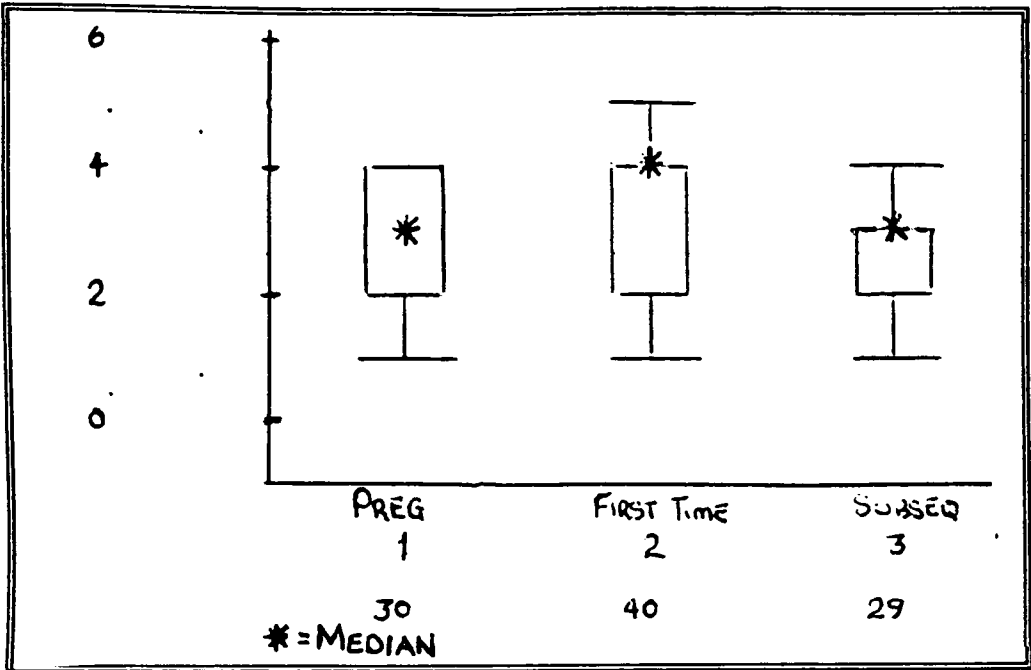
Secondly, that the group of first-time mothers displayed a greater range of values for all three stages of the communication process.

Further analysis using box plots was carried out on each individual psychological variable from each of the three stages. Analysis of the results indicates that there is very little discrimination in the perception of the variables between the three categories of mothers. However, the results obtained from two of the psychological variables is worth mentioning.

Firstly language, one of the learning and remembering variables, clearly displays a higher median of four for first-time mothers than the other two groups of mothers whose median is 3. This serves to highlight that first-time mothers disagree that the advertisement provided all the information they needed about Milupa baby foods. See Fig 5.11.

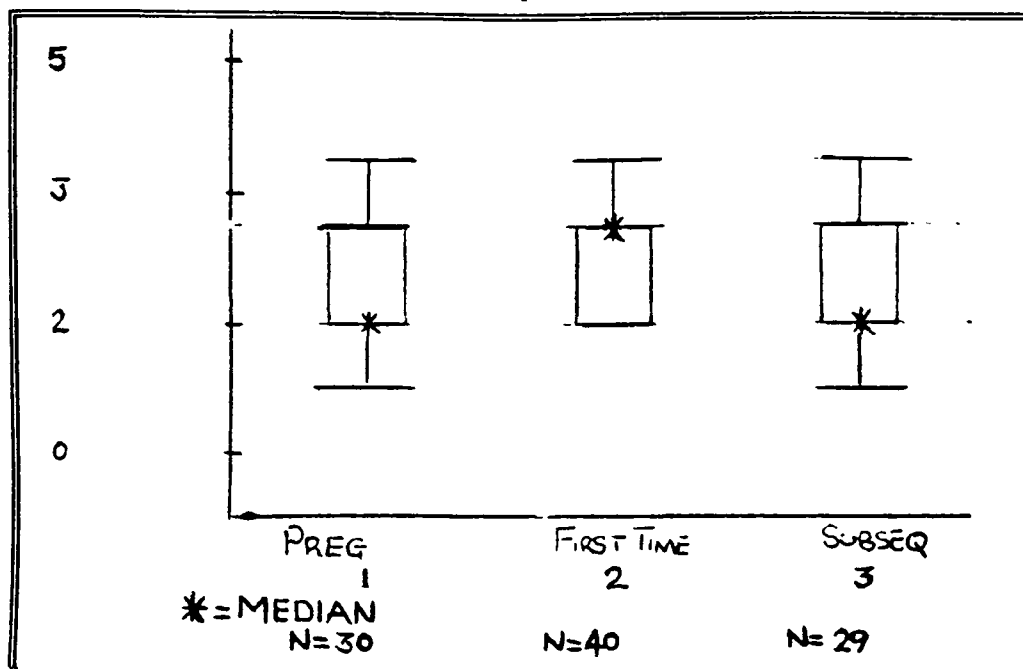
Secondly, analysis of one of the motivating variables shows that the first-time mothers' responses to 'fairness of presentation' differs significantly to the

Fig 5.11 Box plots for language



responses given by subsequent mothers and pregnant women. (The first-time mothers median being higher in comparison). Stated simply, in comparison to subsequent mothers and pregnant women the first-time mothers do not agree that the Milupa advertisement was fair and objective in its presentation.

Fig 5.12 **Box plots for fairness of presentation**



The statistical procedures used so far to examine the 3 groups' responses to the psychological variables within the 3 stages of the communications model have ascertained the following:

- that the 6 psychological variables from each stage of the communication model received the same high level of perception, hence implying that in the Milupa advertisement all three psychological states of attention, learning and remembering and motivation were evenly elicited.
- that there is no significant difference involved in the perception of the psychological variables, used in the Milupa advertisement between the three categories of mothers. Any differences that do exist are statistically negligible.

The results obtained this far have ascertained that there was a similar level of perception of the psychological variables within the audience across all 3 stages of the model of communication ie no one stage possesses psychological variables

which are easier to perceive.

Factor analysis was carried out to investigate whether it may be possible to describe the set and psychological variables involved in the Milupa commercial, in terms of a different number of indices or factors and hence elucidate the relationship between these variables.

A varimax rotation was used to transform the original governing factors of the psychological variables in order to find new factors that may be easier to interpret. See Table 5.6 for summary of the factor loading scores.

Table 5.6 Factor loading scores obtained for the psychological variables

Psychological variables	Factor 1	Factor 2	Factor 3	Factor 4
Colours	0.83			
Symbols	0.75			
Music	0.73			
Non-verbal cues	0.68			
Visual intensity	0.59			
Cultural influences	0.5			
Complexity		0.83		
Autistic motivating		0.73		
Limited no. of stimulus cues		0.61		
Order of presentation		0.48		
Curiosity			0.67	
Desirable information			0.45	
Novelty			0.77	
Language			0.76	
Fairness of presentation				0.68
Communicator credibility				0.55
Personal/physical aspects of the communicator				0.48

On analysis of the factor loading scores obtained in the rotated factor matrix, six of the psychological variables are strongly related to factor 1. These six variables are as follows:

colour, symbols, music, non-verbal cues, visual intensity and cultural influences. This factor accounts for 32.8 percent of the variance. It could be argued that these six psychological variables clearly relate to the emotional content of the message.

Factor two accounts for 9.2% of the variance. This factor is concerned with audience understanding and comprehension of the message being communicated. This, the second factor is comprised of the following 4 psychological variables:

complexity, autistic motivating, limit of stimulus cues and order of presentation.

The third factor relates strongly to the presentation of the commercial. Accounting for 7.9% of the variance it is made up of the following psychological variables:

novelty, the language used, curiosity and desirable information.

The final factor is concerned with the credibility of the message being communicated. This factor accounts for 7.2% of the total variance and is comprised of three main psychological variables. These variables include the following:

fairness of presentation, communicator credibility and personality and physical aspects of the communicator.

To recapitulate, the psychological model of communication used for this study is a modified version of S. Britt's 1978 model of communication. This study uses only 3 of Britt's 1978 stages of communication. These stages are as follows:

- the attending stage
- the learning and remembering stage
- the motivating stage.

Six psychological variables pertaining to each of the three stages were selected for analysis ie a total of 18 psychological variables. See Table 2.4.

The scientific and psychological validity of these variables is not in any doubt, however, one may enquire about their importance in the field of advertising and why they have been developed into a model of communication?

The answer to these questions is that not enough is yet known by advertisers to allow for an accurate description of the following:

- how does the individual respond psychologically in attending to the advertisement
- what does the individual learn and remember of what was intended to be communicated
- was the individual motivated by the advertisement.

In brief, the advertising community does not understand or comprehend fully what happens psychologically to an individual exposed to an advertisement.

This apparent lack of understanding has led to detailed investigations in order to understand what are the most persuasive psychological techniques that can be applied by the advertising world to elicit/enhance the psychological states of attending, learning and remembering and motivating.

If one attempts to understand the psychological processes at work when an audience member is exposed to an advertisement this will enable development of psychological models of behaviour that accurately mirror human behaviour during exposure to an advertisement. Within these models of communication will exist the psychological variables, which if elicited properly have the best chance of producing the action desired by the advertisers.

5.2.2 Conclusions

The results obtained by this study, concerned with the manipulation and perception of psychological variables in the Milupa baby foods commercial can be summarised as follows:

- the overall level of perception, of the three stages of the psychological model of communication, was relatively high for the entire population tested, hence the Milupa advertisement evenly elicited the three psychological states of attention, learning and remembering and motivation
- there was no significant difference in the level of perception of psychological variables in the Milupa advertisement between the different categories of mothers tested
- analysis of audience responses to the eighteen psychological variables using box plots indicates that of the three categories of mothers tested, first time mothers differed in their responses to two variables. These two variables were
 - the language used - first time mothers disagree that the advertisement provided all the information they needed to know about Milupa baby foods
 - fairness of presentation - first-time mothers disagree that the advertisement was fair and objective in its presentation.
- Factor analysis using varimax rotation reveals that the eighteen psychological variables of the research model for the study can be described using a different number of indices. These new factors are:

1. emotion eliciting psychological variables
2. psychological variables concerned with audience comprehension and understanding of the message being communicated
3. psychological variables involved with the presentation of the message
4. credibility eliciting psychological variables.

5.3 Descriptive adjective rating of the commercial

5.3.1 The findings

This chapter will examine the effectiveness of the Milupa baby foods advertisement, by reference to the descriptive adjectives used by the viewers.

After viewing the Milupa advertisement, the subjects were presented with a table of ten descriptive adjectives. Five of these adjectives had a positive connotation, five had a negative connotation. The audience were asked to rate, (using a five-point scale), the Milupa commercial, by recording their level of agreement to each of the 10 descriptive adjectives.

The hypotheses for this chapter of analysis is as follows:

that the adjectives 'well done' and 'appealing' will have received a higher level of agreement from the entire population in rating the advertisement in comparison to the other adjectives.

The reasoning behind this hypothesis is as follows. In an article entitled 'viewer perceptions of prime-time television advertising' by Aaker and Bruzzone 1981 op cit a factor analysis with varimax rotation of audience responses to 524 commercials resulted in four factors receiving eigenvalues over 1.0. One of these 4 factors was called 'warm' which included the two adjectives 'well done' and 'appealing.' Relating the results of the Aaker Bruzzone 1981 study to the

specifications of the creative brief by Milupa explains the logic behind this hypothesis.

In the creative brief decided on by Milupa baby foods (see Appendix B) paragraph, five line 6 states 'emotional warmth is key to this advertising to invite involvement.' Also in the questionnaire completed by Alliance advertising (see Appendix C) the agency who made the commercial, Alliance stated that in creating the advertisement they devoted the most effort to eliciting only three of the briefs objectives stating 'it would be too confusing' to elicit them all. Emotional warmth was one of the 3 objectives which received the most effort by the agency to elicit in the advertisement.

It can, therefore, be hypothesised that in rating the Milupa advertisement that the two adjectives 'well done' and 'appealing' will receive a greater level of agreement from the entire population because emotional warmth received the highest amount of effort to elicit by the Alliance Agency, in the Milupa commercial.

A means analysis was used first to ascertain response ratings of the Milupa advertisement for the entire population. Table 5.7 displays the mean responses to both sets of descriptive adjectives.

Table 5.7 Overall mean responses for both sets of descriptive adjectives

	Positive adjectives			Negative adjectives	
	Mean	Standard Dev.		Mean	Standard Dev.
Well done	2.04	0.88	Phoney	3.96	0.77
Appealing	2.04	0.86	Irritating	4.07	0.78
Convincing	2.46	0.76	Uninteresting	4.13	0.69
Worth remembering	2.53	0.88	Dull	4.16	0.73
Imaginative	2.54	0.89	Silly	4.2	0.57

Two points of interest are worthy of discussion on examination of table 5.7.

Firstly, an initial analysis of the responses obtained indicates that there was a higher level of agreement between subjects that the Milupa advertisement was 'well done' and 'appealing.'

This point is further emphasised on analysis of the percentages in table 5.8.

Table 5.8 Overall percentage responses to the positive adjectives

	Agreed strongly	Agree	Agree slightly	Disagree	Disagree Strongly
Well done	26.5	52	17	4	2
Appealing	22.8	54.5	14.9	6.9	1
Convincing	6	51	35	7	1
Worth remembering	7.8	46.1	34.3	8.8	2.9
Imaginative	10	41	36	11	2

Secondly in attempting to comprehend the responses to the negative adjectives

Aaker and Bruzzone 1981 op cit stated that 'people are more likely to check negative words in the privacy of their own home than when they are checking adjective lists in the presence of an interviewer who has just shown the commercials. This tendency appears in all types of commercials. Of course, norms can be used to compensate, but when interpreting the absolute values of the resulting scores, interviewer bias can be significant.'

However, this study only examined one commercial, and given that the commercial was for baby foods and the samples tested were highly involved this may account for the means obtained for the negative adjectives, in table 5.7.

This stated, analysis of the percentage responses given using the negative adjectives can be seen in table 5.9. Note the very low percentage of respondents who agreed - using the negative adjectives.

Table 5.9 Overall percentage responses to the negative adjectives

	Agreed strongly	Agree	Agree slightly	Disagree	Disagree Strongly
Phoney	2	0	19.8	56.4	21.8
Irritating	1	3	11.9	56.4	27.7
Uninteresting	0	2	12	57	29
Dull	1	1	10.9	55.4	31.7
Silly	0	1	5	67.3	26.7

Factor analysis using principle components of analysis and varimax rotation with Kaiser normalisation was carried out to further examine how the mothers rated the Milupa advertisement. Two factors emerged with eigenvalues over 1.0. See Table 5.10 for the factor loading scores.

Table 5.10 **Factor loading scores obtained for the descriptive adjectives**

Descriptive adjectives	Factor 1	Factor 2
Appealing	0.67	
Convincing	0.79	
Worth remembering	0.77	
Well done	0.76	
Imaginative	0.61	
Silly		0.84
Uninteresting		0.72
Irritating		0.71
Phoney		0.67
Dull		0.59

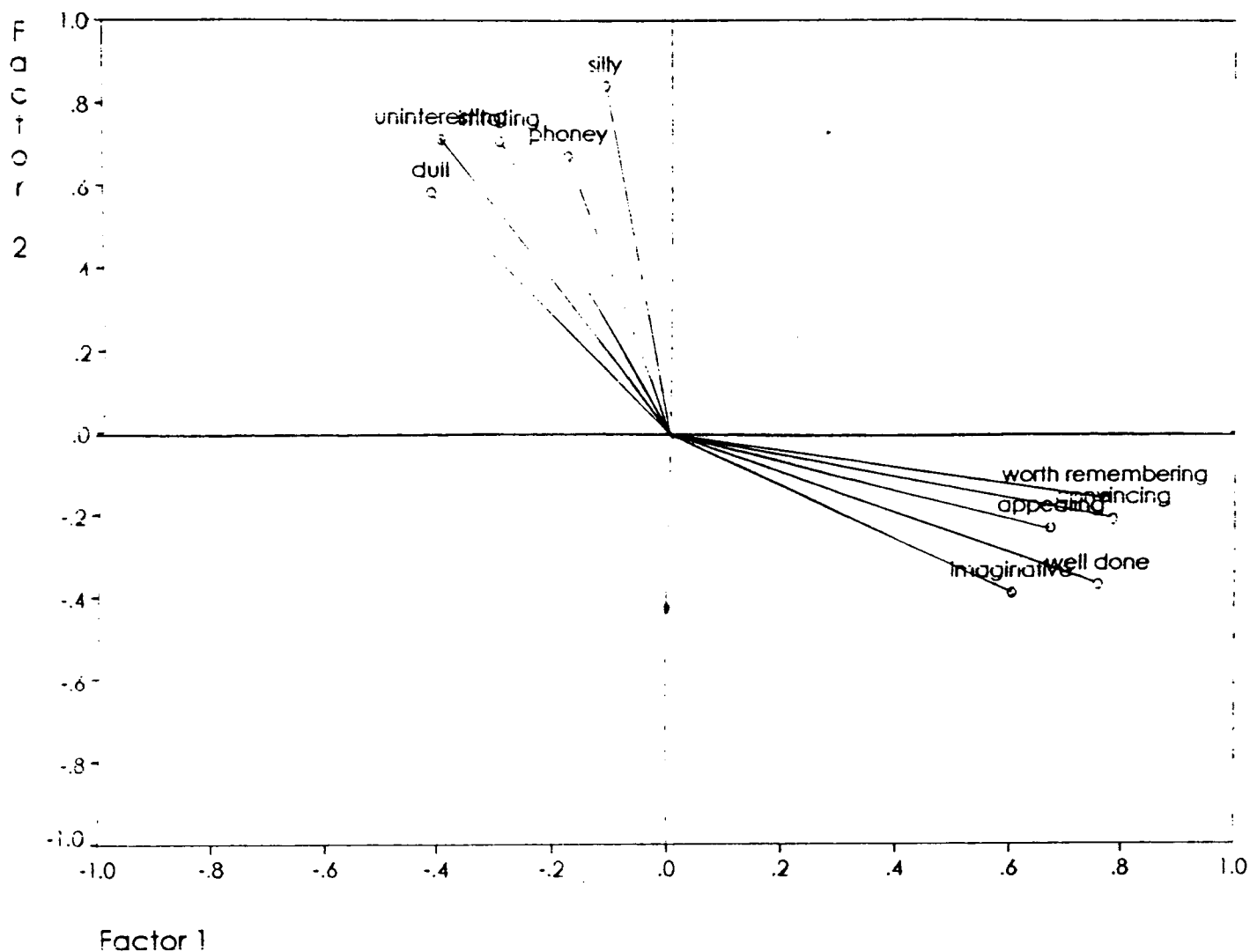
The first factor explains 50% of the variance and combines the concepts convincing worth remembering well done appealing and imaginative.

Factor two explains 11% of the variance and combines the following concepts silly, uninteresting, irritating, phoney and dull. Analysis of the rotated factor matrix reveals that the results obtained are very two dimensional.

A factor plot of the adjectives in rotated factor space emphasises this point (see Fig 5.13). Examination of Fig 5.13 does reveal two points for discussion.

Firstly, the angles between the vectors representing the positive descriptive adjectives indicate that the subjects showed little discrimination between them.

Secondly, analysis of the angles for the negative adjectives reveals that the mothers showed greater discrimination when using them in their evaluation of the commercial.

Fig 5.13 **Factor plot in rotated factor space**

In a final attempt to accept or refute the central hypothesis concerning audience rating of the Milupa baby foods advertisement, two t-tests for paired samples were carried out. See Appendix D.

The first t-test paired the variables convincing and appealing. The results obtained indicate that there was a significant difference at the .05 level between the use of these variables in rating the Milupa commercial.

The descriptive adjective 'convincing' recorded a mean of 2.5 whereas 'appealing' received a mean of 2.1. Stated simply, the audience tested believe that the Milupa commercial was more appealing than convincing.

The second t-test paired the adjectives 'worth remembering' and 'well done'. A t-value of 5.63 was obtained. This implies that there was a significant difference at the .05 level between the use of these adjectives in rating the Milupa advertisement.

Results from the second paired t-test reveal that the sample tested believe that the Milupa commercial was 'well done' more than 'worth remembering.' This is reflected in the mean scores recorded for both adjectives 'well done' 2.0 versus 'worth remembering' 2.6. (See Appendix D).

5.3.2 Conclusions

In an age when commercial viewing is a controllable option, commercials will have to provide a reason to be viewed, O'Toole, 1980 op cit.

In attempting to evaluate advertising effectiveness, understanding viewer reactions to a commercial is paramount. Empirical evidence and psychological theory suggest that well liked commercials are more effective than commercials that are neither liked nor disliked, Aaker and Bruzzone 1981 op cit.

This study attempted to ascertain viewer perceptions of the Milupa baby foods advertisement through the use of descriptive adjectives. Whilst the results obtained using these adjectives cannot categorically state that the advertisement was effective it does, however, act as a good indicator, if used in conjunction with other measurement techniques, eg perception of psychological variables.

To summarise, four main points of interest from the analysis may be emphasised.

- 1 Means analysis indicates that the Milupa advertisement was rated highly by the entire population using the positive descriptive adjectives.
- 2 Analysis of responses using the negative objectives reveals two issues:
 - the means obtained suggest that very few subjects rated the Milupa commercial negatively
 - that there was a greater discrimination using the negative adjectives in rating the advertisement by the entire population in comparison to the positive adjectives.
- 3 That the two positive adjectives 'well done' and 'appealing' received a higher level of agreement by the entire population in rating the Milupa advertisement in comparison to the other positive adjectives.
- 4 That there is a high correlation between the positive rating of the Milupa commercial and the subjects perception of the psychological variables within the advertisement.

5.4 The perception and preference of rational and emotional stimuli

5.4.1 Background

Emotional elements are the surface means used in advertisements to contact energize and stimulate the prospective buyers purchase motivations. Rational elements are also an intrinsic part of advertising belonging however at a deeper level compared to the emotional elements.

The selection and manipulation of emotional stimuli eg music, colours, pictures and rational stimuli eg the wording of the advertisement, the constructional order of presentation etc. is paramount in the creation of effective advertising. Brands competing in the same product category offer essentially the same benefits. The

overall effectiveness of a baby food commercial is determined by the ability of the brands advertising agency to state how or show the products benefits in both an emotionally and rationally compelling and engaging way.

This study does not attempt to measure the viewers' emotional responses to the Milupa commercial using psychological techniques eg pupillary response, electrodermal response etc for three reasons:

- induced artificial laboratory situations hinder results
- audience difficulty in reporting emotions
- difficulties involved in interpretation of recordings.

With these difficulties in mind it was decided that this study would instead evaluate the different parameters of the rational emotional debate from two platforms.

1. Ascertain viewer preferences for rational and emotional stimuli in the Milupa commercial.
2. Evaluate viewer perception of emotional and rational reassurance after viewing the Milupa advertisement.

The discussion of these two areas will occur separately. Firstly, we shall examine the mother's preference for rational and emotional stimuli.

Analysis of the creative brief (see Appendix B) set out by Milupa states (paragraph 4 page 1). 'research emphasises the need to provide mothers with reassurance, both in terms of the rational element and the emotional element.'

With this in mind this study selected five rational and five emotional elements from the Milupa commercial. It asked the mothers to rate their level of response (using a five-point scale 1 = agree strongly, 5 = disagree strongly) to each of

these ten elements individually.

5.4.2 Preference for rational or emotional stimuli

In assessing viewer preferences for rational and emotional elements the following two hypotheses were postulated:

- *that the rational elements in the Milupa baby foods commercial would receive a more positive response than the emotional elements*
- *that from the three categories sampled, the group labelled first-time mothers would display a more positive preference for the rational elements in comparison to the groups pregnant women and subsequent mothers.*

The rationale behind these hypotheses stems from two sources:

Firstly, it follows Oglivy's 1963 reasoning that 'content is more important than form. What you say in advertising is more important than how you say it'

And secondly, Alliance advertising agency who created the Milupa advertisement stated that the commercial 'is most relevant to first-time mother with babies 3-6 months old.'

Table 5.11 displays the ten aspects of the advertisement under study, their means, standard deviations and whether they are an emotional or rational element.

Following this a t-test for paired samples was conducted for the entire population to further investigate whether the subjects tested showed a preference for the rational elements of the Milupa advertisement over the emotional elements of the commercial. An examination of the results obtained concludes that overall the mean obtained for the rational elements was higher than that for the emotional

Table 5.11 The 10 elements, their status, mean, and standard deviation

	Status	Mean	Standard
			Dev.
The information provided	Rational	2.17	0.88
The colours used	Emotional	2.28	0.85
The extent the ad. improved/changed understanding of infant nutrition	Rational	2.64	1.03
The music used	Emotional	2.3	1.03
The language/wording used to present the information	Rational	2.14	0.8
The symbols used in the advertisement	Emotional	1.73	0.79
The construction of the advertisement	Rational	2.23	0.9
The use of non-verbal cues	Emotional	2.06	0.88
The emphasis on a carefully balanced diet	Rational	1.8	0.82
the exceptional visual clarity of the advertisement	Emotional	2.05	0.88

elements (2.19 compared with 2.10 for the emotional elements). However, with the difference between the means being .09 obtaining a t-value of 1.44 there is no significant difference displayed by the sampled tested for the rational elements over the emotional elements, of the Milupa commercial. In other words, the rational elements did not receive a significantly more positive response than the emotional elements of the commercial. See Appendix D for results of paired t-test.

In a further, more detailed attempt to investigate the hypothesised preference for rational elements over emotional elements in the Milupa commercial, the following hypothesis was forwarded.

That from the three categories of women sampled, the group labelled first-time mothers would display a higher positive preference for the rational elements of the advertisement in comparison to the other two groups labelled pregnant women and subsequent mothers.

The following statistical techniques were used in attempting to ascertain whether to accept or refute this statement.

Firstly, a one way analysis of variance for the variables - preference of rational elements by type of mother was carried out. See appendix D. The f-ratio obtained was 2.26, degrees of freedom 2 (not high enough to have a low probability) indicating that no significant difference exists between the 3 types of mothers concerning preference for rational elements within the commercial.

Secondly, a contrast coefficient matrix (see Appendix D) was used to see if the first-time mothers indicated a higher preference for rational elements. The results obtained from the pooled variance estimate displays a t-value of 1.89. This value is not significant and so cannot state that a significant difference exists between the three categories sampled.

Finally, a multiple range test using the Newman-Keuls technique was carried out. Analysis using this method reveals conclusively that no two groups are significantly different in their preference for rational elements in the Milupa commercial at the .05 level, see Appendix D.

The statistical evidence obtained, therefore, clearly shows that the subjects did not indicate, by type, a preference for the rational elements.

The study also investigated if any one of the three categories displayed a higher preference for the emotional elements.

As before, a one way analysis of variance was carried out. Again the F-ratio score obtained being 2.18 was not high enough to reveal any significant difference between the 3 categories. See Appendix D.

The contrast coefficient matrix displays a t-value of 1.32 from the pooled estimate variance. This again indicates no significant difference exists. See Appendix D.

And finally, using a Newman-Keuls method, results indicate that no two groups

are significantly different in their preference for emotional elements in the Milupa advertisement at the .05 level. See Appendix D.

5.4.3 Perception of rational and emotional stimuli

The second area under scrutinisation, involved the mother's perception of emotional and rational reassurance after watching the Milupa advertisement.

On examination of the creative brief (see Appendix B) decided upon by Milupa, this study extracted thirteen separate product attributes which Milupa identified and required to be incorporated in the commercial to effectively communicate the benefits of their product.

Seven of these product attributes were concerned with emotional reassurance. The remaining six attributes were involved with rational reassurance.

To ascertain the level of perception of each attribute, the audience were asked to record their opinions using a five-point scale, (1 - agree strongly 5- disagree strongly).

In assessing the mother's perception of rational and emotional reassurance the following hypotheses were postulated:

- *That the product attributes concerning rational reassurance were more easily perceived than the attributes concerned with emotional reassurance.*
- *That the rational element 'nutrition' already perceived as one of Milupa's core values received the highest level of perception by the entire population sampled.*
- *That from the three categories sampled the group 'first-time mothers'*

would display a higher perception of rational reassurance in comparison to the other groups of subsequent mothers and pregnant women.

To investigate the first hypothesis, a paired t-test was carried out. This test compared the means obtained for the perception of both rational and emotional variables for the entire population. See Appendix D.

The mean obtained for the perception of the rational variables at 2.25 is slightly better than the 2.28 mean for the emotional variables. However, the paired t-test indicates the difference between the means as -.03, considerably lower than the .47 standard deviation. This resulted in a t-value of -.60 revealing that there was no consistent difference between the perception of emotional and rational reassurance. Thus, we can state that the Milupa product attributes concerned with rational reassurance in the commercial were not more easily perceived than the attributes concerned with emotional reassurance.

The second hypothesis attempted to ascertain whether the product attribute 'nutrition' concerned with rational reassurance received the highest level of perception overall by the entire population. As stated in the creative brief (see Appendix B) 'the core proposition for this advertising is based on nutrition already perceived as one of Milupa's core values.' this study wanted to ascertain the validity of this statement.

Table 5.12 shows the means recorded by the entire population for each of the thirteen product attributes required by Milupa to be incorporated in their baby foods advertisement. It clearly indicates that the product attribute nutrition recorded the highest level of agreement overall.

The third hypothesis postulates that from the three categories sampled; first-time mothers would display a higher perception of rational reassurance in comparison to their contemporaries.

Table 5.12 **The means and standard deviations recorded for the thirteen product attributes incorporated in the Milupa commercial**

Product attributes		Standard	
		Mean	Dev.
1	Milupa is nutritious	1.9	0.69
2	Milupa evokes a natural image	2.07	0.71
3	Milupa is wholesome	2.06	0.69
4	Milupa provides a wide variety	2.39	0.98
5	Milupa is fresh	2.56	1.02
6	Milupa is healthy	2.18	0.74
7	Milupa provides enjoyment	2.28	0.93
8	Milupa is acceptable to mothers	2.17	0.73
9	Milupa is tasty for babies	2.11	0.77
10	Milupa stimulates mother/baby involvement	2.29	1.1
11	Milupa evokes warmth and caring	2.49	0.86
12	Milupa evokes cuteness and fun	2.5	0.95
13	Milupa is <u>convenient</u> to use	2.36	1.23

Firstly, a one way analysis of variance was carried out for perception of rational variables by mother type. The results obtained revealed an F-ratio of 3.54 with the F-probability being .03. This F-probability score is less than .05 indicating that a significant difference exists. Stated simply, somewhere along the line one of the three categories of mothers has recorded a higher level of perception for rational reassurance than the other groups. See Appendix D.

In order to identify and locate which group this was, a contrast coefficient matrix was established. This contrasted first-time mothers with the other two groups of mothers tested ie pregnant women and subsequent mothers.

The t-value obtained from the pooled variance estimate was 2.25 indicating a significant difference ie responses from first-time mothers to rational reassurance are different from the other two groups combined. See Appendix D.

Another statistical technique, a multiple range test was carried out to examine the differences in rational reassurance perception between the 3 types of mothers sampled. Results obtained from the student Newman-Keuls test reveals that only a significant difference at the .05 level will exist if one carries out a t-test between first-time mothers and subsequent mothers. However, analysis of the means obtained by the three categories of mothers reveals that it is the subsequent mothers who indicate a higher level of rational reassurance perception significant at the .05 level, and not first-time mothers as was originally hypothesised (see Table 5.13).

Table 5.13 Subsequent mothers showing a higher perception of rational reassurance

Mean	Type	Subsequent mothers	Pregnant women	First-time mothers
2.06	Subsequent mothers			
2.24	Pregnant women			
2.38	First-time mothers	*		

* Indicates significant difference at .05 level

A factor analysis was carried out to investigate whether it may be possible to describe the thirteen product attributes involved with emotional and rational reassurance in terms of a different number of indices or factors, and hence elucidate the relationship between these variables.

A varimax rotation was used to transform the original governing factors of the product attributes in order to find new factors that may be easier to interpret.

The factor analysis produced four factors with eigenvalues greater than unity, accounting for 67.5 cumulative percent of the variance.

On the analysis of the factor loading scores obtained in the rotated factor matrix,

see Table 5.14 five product attributes relate strongly to factor 1. Accounting for 31.5% of the variance they relate strongly to the notion of healthy natural safe ingredients. They are as follows nutrition, wholesome, healthy, natural image, freshness.

Table 5.14 Factor loading scores obtained for the 13 product attributes involved with rational and emotional reassurance

Product attributes	Factor 1	Factor 2	Factor 3	Factor 4
Nutrition	0.83			
Healthy	0.79			
Wholesome	0.76			
Natural image	0.74			
Freshness	0.67			
Does not provide enjoyment		0.81		
Does not provide variety		0.75		
Does not stimulate involvement		0.68		
Is inconvenient to use		0.56		
Cute/fun			0.94	
Warm/caring			0.79	
Tasty for babies				0.83
Acceptable to mothers				0.61

The second factor relates strongly to any possible negative product attributes that could be associated with Milupa. Factor two accounts for 15.9% of the variance and includes the variables 'Milupa does not provide a wide variety', 'Milupa does not provide enjoyment', 'Milupa does not stimulate involvement between mother and baby', 'Milupa is inconvenient to use'.

The third factor is concerned with the emotional warmth of the Milupa commercial. It accounts for 11.6% of the variance and includes two variables, Milupa evokes warmth/caring and Milupa evokes cuteness/fun.

Finally, the fourth factor accounted for 8.6 of the variance relating to involvement consisting of two variables. These are as follows; Milupa is

acceptable to mothers and Milupa is tasty for babies.

5.4.4 Conclusions

In summary, the following conclusions can be drawn from this analysis on mother's preference and perception of rational and emotional stimuli after viewing the Milupa baby foods advertisement.

- In attempting to ascertain whether the mothers displayed a preference for the rational element instead of the emotional element in the commercial. This study found that no significant difference existed displaying a greater preference for either.
- This study hypothesised that first-time mothers would display a higher preference for rational elements ie more informative information about the product Milupa in comparison to pregnant women and subsequent mothers. The results obtained reveal that none of the 3 categories sampled, displayed a significantly different, higher preference for the rational elements in the Milupa commercial.
- This study attempted to investigate whether one of the categories of mothers sampled displayed a higher preference for the emotional elements in the Milupa commercial in comparison to the other two groups sampled. Again results indicate that none of the 3 categories of mothers sampled displayed a significantly higher preference for the emotional elements in the Milupa commercial in comparison to their contemporaries.

After investigating the samples of mothers, to ascertain possible differences in preferences for rational or emotional elements within the Milupa commercial, this study went on to further establish if any differences occurred in the perception of rational and emotional reassurance. Some of the results obtained mirror those

found earlier.

- This study hypothesised that the sample population would display a greater perception of rational reassurance. Results obtained, however, reveal that no significant difference existed displaying a higher perception of either.
- This study postulated that the rational product attribute 'nutrition' would receive the highest level of perception by the entire population sampled. The results obtained revealed two issues.
 1. Analysis of the overall results indicate that nutrition received the highest level of perception
 2. By category analysis, however, first-time mothers did not mirror their contemporaries. Their results indicate a higher perception for the emotional attribute that 'Milupa is tasty for babies.'
- This study proposed that first-time mothers would display a higher degree of perception of rational reassurance than the other groups. However, on analysis of the results obtained this hypothesis was refuted. The group of subsequent mothers displayed a higher degree of perception of rational reassurance.
- Finally, results obtained by factor analysis indicates that the 13 product attributes involved in the perception of rational and emotional reassurance can be grouped under four new indices. These four new indices accounted for 67.5% of the total variance. They are as follows:
 - healthy/natural and safe ingredients
 - negative product attributes
 - emotional warmth

- involvement.

5.5 The inter-relationships between psychological variables and product attributes

5.5.1 Background

This chapter investigates possible inter-relationships between a set of 12 constant psychological variables, as detailed below and 3 different Milupa product attributes. The questionnaire completed by Alliance advertising agency (see appendices) listed 3 objectives from Milupa's creative brief to which Alliance devoted the greatest effort to elicit in the Milupa commercial. These 3 objectives or product attributes were as follows:

- nutrition
- a natural image
- a warm and caring approach.

The questionnaire completed by the test sample of mothers extracted 12 psychological variables from Britt's 1978 op cit communications model. See Table 5.15.

Table 5.15 The 12 psychological variables used to assess inter-relationships between product attributes and variables

Music
Colours
Symbols
Lighting
Culture
Language
Non-verbal cues
Limited stimulus cues
Order of presentation
Desirable information
Familiarity
Autistic motivating

Four of the twelve psychological variables belonged to the attending stage, four from the learning and remembering stage and four from the motivating stage.

In order to establish the parameters concerning inter-relationships between variables and product attributes the test subjects were asked the same question for each of the 3 product attributes ie 'to what extent do you feel that the psychological variables listed below helped to get across to you:

- that Milupa is a highly nutritious product
- the impression of a warm and caring approach between mother and baby
- the impression of the use of natural and safe ingredients in manufacturing the product.

Responses were confined to a 5-point scale, 1 indicating definitely did 5 indicating definitely did not. Thus, by keeping the 12 psychological variables constant for each question it could be possible to elucidate the inter-relationships between the variables and product attributes.

A review of relevant literature reveals no previous efforts to investigate such inter-relationships. Therefore, it was agreed that this study would not forward any

hypotheses but would, however, assimilate the results obtained and base a discussion on these findings.

5.5.2 The findings

In attempting to ascertain possible inter-relationships between psychological variables and different product attributes, table 5.16 analyses the means for each variable obtained from this study, for the entire population for each of the three product attributes.

Table 5.16 Means for the entire population for each psychological variable and product attribute and how each variable ranks in comparison to the other eleven psychological variables

Physiological variables	Highly nutritious product		Warm and caring approach		Natural and safe ingredients	
		Rank		Rank		Rank
Music	2.87	12	1.77	2	2.85	12
Colour	2.16	6	1.85	3	2.29	8
Symbols	2.12	5	2	4.5	2.11	4.5
Lighting	2.53	11	2.12	7	2.55	10.5
Culture	2.4	10	2.28	11	2.55	10.5
Language	2.21	7	2.21	10	2.04	1.5
Non-verbal cues	2.04	4	1.69	1	2.14	6
Limited stimulus cues	1.84	1	2	4.5	2.08	3
Order of presentation	2.03	3	2.01	6	2.11	4.5
Desirable information	2	2	2.14	8	2.04	1.5
Familiarity	2.24	8	2.39	12	2.37	9
Autistic motivating	2.26	9	2.17	9	2.24	7

On examination of table 5.16 several issues arise

- The high level of agreement between the test sample that the psychological variable music fared worst in conveying the impression that 'Milupa is a highly nutritious product' and also in conveying the impression of the 'use of natural and safe ingredients in manufacturing

the product.'

This is in contrast to the high level of agreement displayed by the mothers rating it as the second most important variable to convey the impression of 'a warm and caring approach between mother and baby.'

- That the emotionally orientated psychological variables eg non-verbal cues, music, colours and symbols scored very highly only in creating the impression of a warm and caring approach.

This is in contrast to the psychological variables rated by the mothers which best conveyed the rational dimensions of nutrition and natural safe ingredients.

- The perceived level of agreement by the entire population that the cultural variable ie presenting information and images in the advertisement which are closely associated with your own social/cultural environment, fared badly in conveying all three of the product attributes.

Further analysis using the means was conducted to examine possible relationships between the three different stages of the modified psychological model of communications and the three different product attributes. Table 5.17 displays the overall mean obtained for each of the product attributes relative to the three different stages of the psychological model of communication.

Table 5.17 indicates the following:

- The psychological variables which combine together to form the attending stage were deemed more efficient than the variables from the learning and remembering stage and motivating stage in conveying the impression of warmth and caring.

Table 5.17 Inter-relationships between the stages of communication and the 3 product attributes

Psychological variables	Psychological stage of communication model	Product attributes		
		Nutrition	Warm and caring approach	Natural safe ingredients
Music Colours Symbols Lighting	Attending	2.39	1.93	2.43
Culture Language Non-verbal cues Limit no. of stimulus cues	Learning and remembering	2.11	2.03	2.18
Order of presentation Desirable information Familiarity Autistic motivating	Motivating	2.11	2.15	2.18

- Also associated with the last point it is worth mentioning that the psychological variables pertaining to the attending stage (which is composed mostly of emotional eliciting stimuli) were deemed more efficient in conveying the impression of a warm and caring approach between mother and baby than in conveying nutrition and the use of natural and safe ingredients.
- The psychological variables belonging to the stages of learning and remembering and motivating were deemed equally more efficient in conveying 'nutrition' and 'the use of natural safe ingredients' in comparison to the variables from the attending stage.

An independent panel of six experts (see Appendix E) with backgrounds in marketing psychology and advertising were also required to complete this section of the study questionnaire.

This was required to establish a professional opinion regarding which psychological variables were employed to create the impressions of nutrition, a warm caring approach between mother and baby and the use of natural safe ingredients in the Milupa advertisement.

The Figures 5.14, 5.15 and 5.16 display in graphic form the means recorded by the 3 categories of mother and the panel of professionals for each psychological variable regarding its level of involvement in eliciting each of the 3 product attributes.

Fig 5.14 The level of involvement between the psychological variables and nutrition

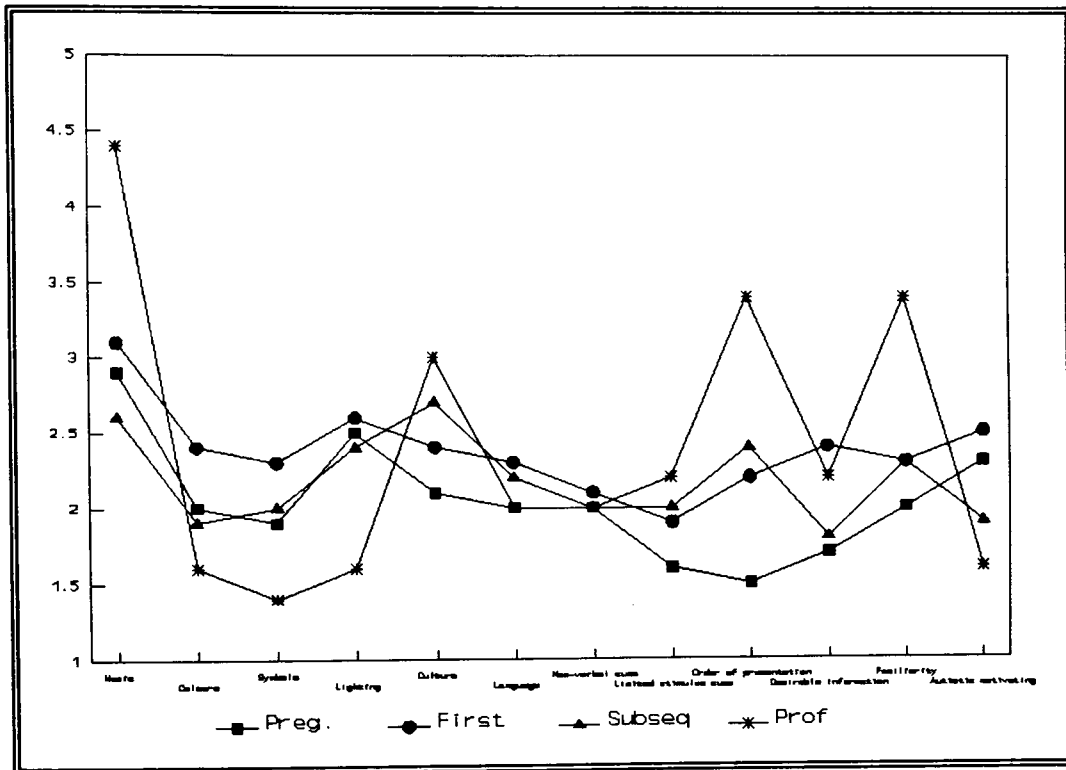


Figure 5.14 examines the perceived role of the psychological variables in conveying the impression that Milupa is a highly nutritious product. The following points are worth mentioning.

Fig 5.15 **The level of involvement between the psychological variables and warm and caring approach**

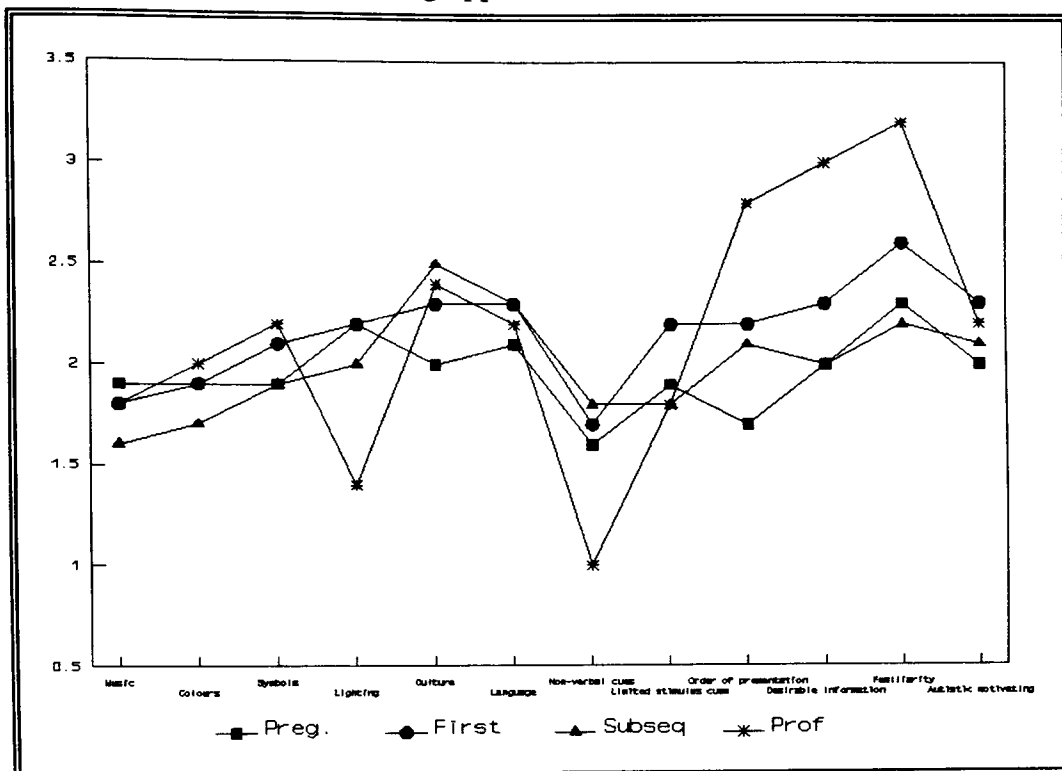
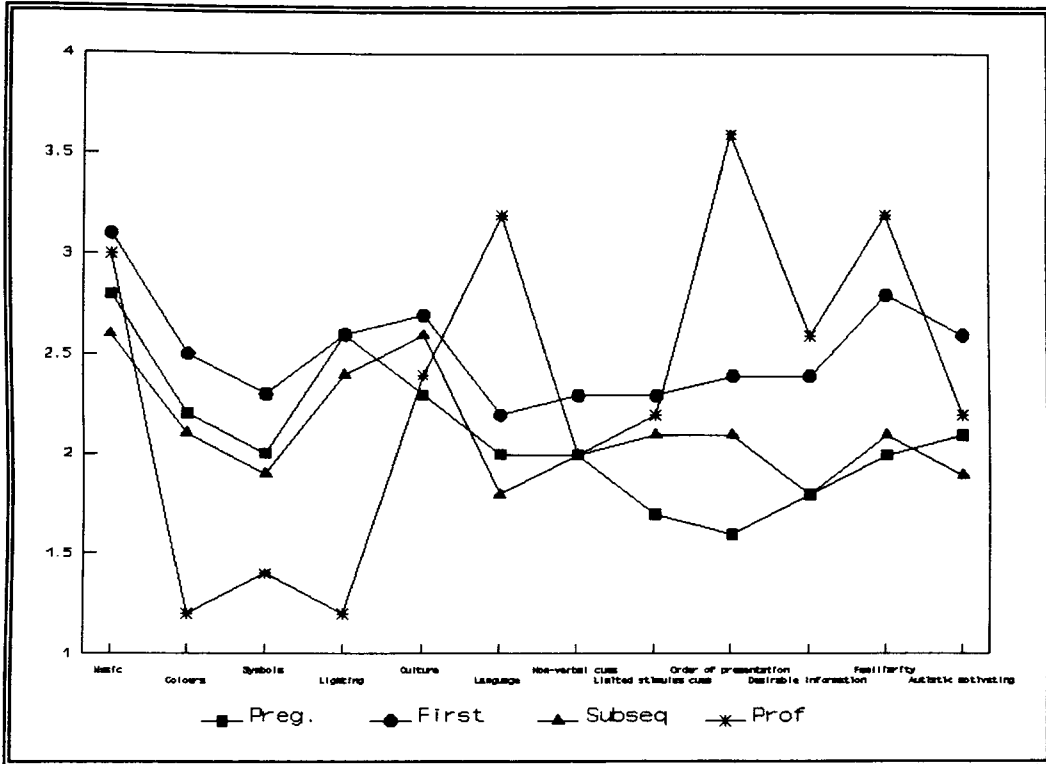


Fig 5.16 The level of involvement between the psychological variables and the use of natural and safe ingredients



- The clear cut agreement amongst the professionals that the music definitely does not help convey the impression of nutrition. The pregnant women and first-time mothers are unsure of its role whilst subsequent mothers believe the music probably did help convey that Milupa is a highly nutritious product.
- First-time mothers display an unconvincing belief that the colours symbols and lighting in the commercial helped convey nutrition. This contrasts strongly to the view of the professional who very strongly indicated they definitely did help convey the impression of nutrition.
- A very similar belief amongst the entire population tested exists indicating that the language used and the non-verbal cues employed most probably did get across the impression of nutrition.

- The first-time mothers indicate more strongly than the other groups especially the professionals that the psychological principles of limiting the number of stimulus cues, the order of presentation, desirable information and familiarity helped convey nutrition in the Milupa commercial.

On analysis of Figure 5.15 examining the psychological variables involved in eliciting a 'warm and caring approach' the following points are evident.

- A very similar high level of agreement exists between all the mothers and professionals that the music colours and symbols involved in the commercial definitely helped convey the impression of a warm and caring approach between mother and baby.
- The mothers are not as convinced as the professionals that the lighting and non-verbal cues definitely conveyed warmth and caring.
- Only the subsequent mothers and first-time mothers very closely mirror the profession opinion regarding the role of culture in the commercial.
- All three categories of mothers indicate that the order of presentation, desirable information and familiarity variables, did convey warmth and caring. The professionals, however, remain more sceptical regarding their involvement.

Finally, on examination of the extent to which the psychological variables helped elicit the impression of 'the use of natural safe ingredients' the following points can be made. See Figure 5.16.

- A similar agreement is displayed by all tested that the music probably did not help convey the use of natural safe ingredients in the Milupa commercial.

- Like the nutrition figure, the professionals state definitely that the colours, symbols and lighting definitely did convey the use of natural safe ingredients. Also, mirroring the nutrition figure, the first-time mothers displayed the highest level of scepticism regarding their role in the portrayal of this product attribute.
- Finally, the professionals indicate a higher level of unlikelihood regarding the role of the variables 'order of presentation', 'desirable information' and 'familiarity' in conveying natural safe ingredients. This point of view is displayed by the professionals across all 3 product attributes. However, it is interesting to note that the pregnant women indicate that these psychological variables definitely did convey the impression of the use of natural safe ingredients. In fact, the pregnant women group mirror this opinion for all three product attributes in comparison to their contemporaries.

A factor analysis was carried out with principal components using varimax rotation in order to transform the original 12 psychological variables into new factors that may be easier to interpret and analyse, as opposed to using the stages from the modified psychological model of communication.

The principal component analysis produced two factors with eigenvalues over 1.0 accounting for 55.5 cumulative percent of the total variance. When a third factor (corresponding to an eigenvalue of .82) was introduced, it did not prove to be easily interpretable and was discarded.

Examination of the factor loading scores obtained from the rotated factor matrix reveals that seven psychological variables relate strongly to factor 1. Accounting for 40% of the variance they are related to the notion of 'informative message enhancing psychological variables.' These seven variables are as follows: the order of presentation, desirable information, the language used in the commercial, limiting the number of stimulus cues, familiarity, culture and finally autistic

motivating., See Table 5.18.

Table 5.18 **Factor loading scores for the 12 psychological variables**

Psychological variables	Factor 1	Factor 2
Order of presentation	0.76	
Desirable information	0.73	
Language	0.72	
Limited stimulus cues	0.69	
Familiarity	0.67	
Cultural influence	0.66	
Autistic motivating	0.59	
Lighting intensity		0.82
Colours		0.81
Music		0.79
Symbols		0.67
Non-verbal cues		0.56

The second factor 'non-informative message enhancing psychological variables' accounts for 14.9% of the total variance. It is combined of five individual variables. These variables are as follows: the lighting intensity, colours used, the music, symbols and lastly non-verbal cues.

On completion of this a two-way analysis of variance was carried out, on factor 1. See Appendix D.

The results indicate the following:

- Firstly, regarding the 'informative message enhancing psychological variables' ie Factor 1 and whether they helped elicit the three Milupa product attributes, a significant difference at the .05 level was displayed between the 3 types of mothers in their responses.

Analysis of the cell means obtained shows that the group 'pregnant women' differed significantly from the other two groups. The pregnant women constantly displayed a stronger conviction that the psychological variables from Factor 1 helped elicit the 3 product attributes, in comparison to subsequent mothers and first-time mothers in that order.

- There was no significant difference obtained at the .05 level in the use of the psychological variables from Factor 1 across the three product attributes.

On analysis of the cell means it is evident that the sample tested displayed similar impressions regarding the extent to which the psychological variables from Factor 1 elicited all 3 Milupa product attributes.

A second two way analysis of variance was carried out on the second factor (the non-informative message enhancing psychological variables) obtained from the factor analysis. See Appendix D.

The results indicate two points.

- No significant difference exists at the .05 level between the 3 types of mothers. Analysis of the cell means reveals that no one group constantly displayed a stronger conviction that the psychological variables from Factor 2 helped elicit the 3 Milupa product attributes.
- A significant difference exists at the .05 level concerning the subjects responses using these psychological variables from Factor 2 over the 3 Milupa product attributes.

Analysis of the cell means shows that the sample tested believe the 'non-informative message enhancing psychological variables' played a greater part in

eliciting 'a warm and caring approach,' than the other two product attributes. The cell means also indicate that in comparing the 3 product attributes the subjects believe the variables from Factor 2 did not play as big a role in conveying the rational attribute of 'nutrition.'

In a further attempt to investigate the possibility of inter-relationships between product attributes and different psychological variables, this next stage of analysis will examine the interactions between the variables and attributes. This section of analysis differs to the techniques used so far which investigated the means and how they differentiated.

In attempting to ascertain the interactions between the variables across the three product attributes three correlation matrices were drawn up. This information was then examined using an Alscal multidimensional scaling procedure, producing a three dimensional solution. See Appendix D.

Analysis of the first dimension reveals a differentiation displayed by the entire sample of mothers between symbols, colours, lighting and music compared to the variables culture and language. This distinction was displayed, by the subjects, between these two sets of variables on analysis of the correlation matrices, regarding the extent to which the test sample felt that they conveyed the different product attributes.

The Alscal multidimensional procedure further states that this distinction between these two sets of variables from dimension 1 was displayed more by the subjects when evaluating the two concepts 'warm and caring approach' and 'the use of natural and safe ingredients' than for 'nutrition.'

Analysis of the second dimension indicates that the test subjects displayed a distinction in the use of the variables lighting, colours, non-verbal cues and music compared to order of presentation limit stimulus cues and familiarity.

Table 5.19 Stimulus coordinates for the configuration derived in 3 dimensions

Psychological variables	Dimension 1	Dimension 2	Dimension 3
Music	1.1	1.14	0.99
Colour	1.35	1.27	0.08
Symbols	1.5	0.15	0.2
Lighting	1.26	1.28	0.53
Culture	-1.5	-0.2	-1.27
Language	-0.9	0.08	-1.1
Non-verbal cues	-0.81	1.27	0.04
Limited stimulus cues	0.28	-1.22	-0.57
Order of presentation	-0.44	-1.41	-1.75
Desirable information	-0.66	-0.94	0.01
Familiarity	-0.45	-1.12	1.31
Autistic motivating	-0.73	-0.45	1.66

	Dimension 1	Dimension 2	Dimension 3
Nutrition	0.29	0.5	0.61
Warm caring	0.76	0.58	0.06
Natural safe ingredients	0.68	0.51	0.24

The Alscol analysis, however, implies that the distinction between these variables obtained from the second dimension is equally displayed across all 3 product attributes by the test sample.

Finally, the third dimension reveals that subjects display a distinction between the psychological variables autistic motivating and familiarity compared with culture, the order of presentation and the language used.

The Alscol scaling further suggests that this distinction was only displayed when the subjects evaluated which psychological variables conveyed the impression of nutrition.

5.5.3 Conclusions

- That emotionally oriented psychological variables were deemed more efficient in eliciting the impression warmth and caring than the impression of nutrition and the use of natural safe ingredients.
- Relative to the modified psychological model of communications the following was observed:
 - in conveying the impression of nutrition, the psychological variables belonging to the stages learning and remembering and motivating were deemed more efficient than the attending variables.
 - the variables belonging to the attending stage were deemed more efficient than the psychological variables from the other two stages in conveying the impression of warmth and caring.
 - the psychological variables pertaining to the learning and remembering and motivating stages were deemed more efficient in conveying the use of natural safe ingredients than the variables from the attending stage.
- Results obtained from factor analysis on the 12 psychological variables revealed the following
 - that the non-informative message enhancing psychological variables were deemed more efficient at the .05 level in conveying the product attribute warmth and caring than the other two product attributes.
 - the pregnant women group displayed a stronger conviction than

their contemporaries at the .05 level that the informative message enhancing psychological variables helped convey all 3 product attributes.

- Results obtained from the Alscal multidimensional procedure revealed the following.
 - the distinction displayed in the first dimension was displayed most when the subjects evaluated which variables elicited warmth and caring and the use of natural safe ingredients.
 - the distinction from the second dimension was displayed evenly across all the 3 product attributes.
 - Finally, the distinction displayed in the third dimension was most evident when the test sample evaluated the product attribute nutrition.

Analysis of the results obtained would suggest that certain inter-relationships do exist between product attributes and psychological variables. Further research must be conducted to investigate the feasibility of constructing matrices to highlight such inter-relationships.

6. CONCLUSIONS AND PROPOSALS FOR FURTHER RESEARCH

The aim of this study was to present certain selected theoretical, and scientifically supported psychological aspects of advertising and to use these parameters in the evaluation of an infant foods' commercial.

In the attempt to evaluate the effectiveness of this advertisement, this study does not deal with the economic factors governing the effects of advertising. Psychology and economics hold two essentially different though not opposing, viewpoints with regard to human needs and desires. It is not difficult to distinguish between these points of view, however, the difficulty arises in trying to draw a clear dividing line between those factors which are psychological and those which are economic. Lucas and Benson, 1985).

This stated, however, many advertising factors can be easily separated into those which concern psychology and those which pertain to economics. For example, the psychology of advertising seeks out such values as the level of attention accorded to the commercial, or the ease with which a slogan may be learned and remembered. Psychology determines the ease of reading and pleasantness aroused by a certain type face etc in print advertising. Psychology strives to measure the feeling tone which is left with the viewer in reaction to a television advertisement. The feeling tone refers to the pleasantness of the emotional and rational reaction of a person after viewing a commercial.

In effect, economic laws determine the limits within which advertisements may be used with profit. The laws of psychology govern the design of the advertisement and the choice of method of putting the advertisement before the public.

Psychologically, a television advertisement must be considered as a stimulus prepared for the purpose of eliciting a desired response from those who watch it.

The television advertiser should always make their appeal to the viewer. The product will interest the consumer only as a means to an end. To be effective it is essential to

establish in advance what the key message is to be and to focus attention on those points which make the message clear. Hence this should lead the viewer to the product ie the key message of the Milupa commercial was to evoke and provide both rational and emotional reassurance about their product by essentially conveying the impression of 'nutrition,' 'a warm and caring approach between mother and baby' and also 'the use of natural and safe ingredients in manufacturing the product.' The psychology of the viewer or potential consumer is, therefore, the first consideration in the psychology of advertising. An advertiser increases the level of effectiveness of a commercial by applying knowledge about any particular group in his appeals to that group, in this case, pregnant women, first-time mothers and subsequent mothers.

Psychological theory can also be applied to the mechanics of laying out an advertisement. Psychology evaluates the adaption of colours, symbols, sizes, music and other objective features. Psychology determines the amount of factual information which may safely be included with a reasonable chance of being remembered. Such psychological features are easily isolated and their values established through laboratory and field testing.

Other more general applicable psychological constructs such as autistic motivating, order of presentation etc are subtle and perhaps vague, but are too important to be overlooked. Yet the science of regulating and controlling their uses is not fully complete. In short, in order for an advertisement to be scientifically made up, it is necessary that it conform with every known psychological principle which may enhance its likelihood of attention learning and remembering and motivating. If the scientifically valid psychological variables are properly elicited in a television commercial, then that advertisement will be physically qualified to psychologically stimulate attention learning and remembering and motivation. It then remains for the appeal and the product to carry on the interest and complete the final decision and action steps leading to sales.

In effect, the psychology of advertising includes all of the specific applications of psychology to advertising and the business connected therewith. Psychology may guide in the choice and use of appeals to human desires the techniques and mechanics for carrying the stimuli to the public and finally in evaluating the effectiveness of the

advertised message.

It is this dimension of psychology and advertising, namely the application of psychology and psychological theory in evaluating television advertising effectiveness that concerns this study.

The controversy over whether recall, or a shift in purchase intention, or communication of copy points or some combination of the above is the optimum way to evaluate advertising has occupied the advertising industry over the last twenty years. This study examines the possibility that television advertising may have effects other than those which are usually measured by copy testing. There seems to be an unspoken assumption within the advertising industry that 'if we don't measure it, it doesn't exist.' Because of this attitude, the study of psychological aspects of advertising or the use of psychologically based assessment techniques has not developed to its full potential.

This problem appears to stem from a narrow definition of advertising effectiveness and on testing systems built on that definition. A conservative solution would be to expand the already existing decision criteria to include as yet different unmeasured psychological techniques in the evaluation of television advertising. At very least, the industry would benefit by learning what kinds of executional details evoke positive and negative responses from the public and hence enable the advertising industry to develop commercials that meet the communication criteria of psychologically eliciting attention, learning and remembering and motivation, amongst the viewing public and hence develop more effective advertising.

This traditional, inflexible approach displayed by the advertising industry, in evaluating television advertising effectiveness is also reflected in the approach taken by the industry when developing certain commercials from the creative brief.

Discussions with Alliance advertising, December 9th, 1992, the agency responsible for the development of the Milupa commercial further illustrates this point of view. With regard to the inclusion and manipulation of psychological principles in television

advertising Alliance stated that 'they may be important but are not deliberately 'built-in' or considered in the development of creative work.' Alliance further stated that their approach in developing television advertisement 'isn't done scientifically!'

In a further attempt to probe Alliance advertising regarding the inclusion of psychological variables in the Milupa commercial Alliance stated 'any such analysis would be a post-rationalisation of the creative development process. It doesn't reflect the way in which a commercial is conceived and developed. The transformation of a creative brief into a finished advertisement is based on lateral, unstructured thinking.'

The very nature of rejecting the possible inclusion of scientifically valid psychological variables in television advertisements has 2 important ramifications for the advertising industry.

- It restricts the possible avenues of creating psychologically effective advertisements and
- it further narrows the present definition of advertising effectiveness used by the advertising industry further displaying the attitude 'if we don't measure it, it doesn't exist.'

This study focuses on the perception of psychological variables within commercials and other aspects of psychological communication in order to establish new parameters in assessing the effectiveness of television advertising.

Starch 1926 states 'I am inclined to believe that a series of carefully conducted tests gives a more reliable measure of the effectiveness of a set of advertisements than records of inquiries or sales.'

This study carried out a series of tests to ascertain the effectiveness of one television advertisement and to hence elucidate whether these tests could be used to evaluate other similar types of commercials.

If advertising must first capture attention enhance learning and remembering of the message and create motivation to be effective then these are valid measurements of its effectiveness in communicating.

Anything that can be done to develop better understanding of what happens psychologically to an individual at the moment of exposure to a television commercial or any other marketing communication is significant for the future development of more creative and hence more effective advertising than at present.

Conclusions derived from the level of perception of the psychological variables

In trying to develop this crossover between psychology and measuring advertising effectiveness, this study extracted a series of psychological variables relating to the psychological processes of attending, learning and remembering and motivating.

The study attempted to ascertain the level of perception of these psychological variables within the selected test sample to establish

- whether the subjects responded psychologically by attending the Milupa advertisement
- did the individuals learn and remember what was intended to be communicated by Milupa
- were the individuals motivated by the Milupa commercial.

The following conclusions were derived from this study:

- the overall level of perception, of the three stages of the psychological model of communication, was relatively high for the entire population tested, hence the Milupa advertisement evenly elicited the three psychological states of attention, learning and remembering and motivation
- there was no significant difference in the level of perception of psychological

variables in the Milupa advertisement between the different categories of mothers tested

- analysis of audience responses to the eighteen psychological variables using box plots indicates that of the three categories of mothers tested, first time mothers differed in their responses to two variables. These two variables were
 - the language used - first time mothers disagree that the advertisement provided all the information they needed to know about Milupa baby foods
 - fairness of presentation - first-time mothers disagree that the advertisement was fair and objective in its presentation.
- Factor analysis using varimax rotation with Kaiser normalisation reveals that the eighteen psychological variables can be described using a different number of indices. These new factors are:
 1. emotion eliciting psychological variables
 2. psychological variables concerned with audience comprehension and understanding of the message being communicated
 3. psychological variables involved with the presentation of the message
 4. credibility eliciting psychological variables.

Finally, it is important to note that being 'consciously aware' of something ie the presence of psychological variables within an advertisement, does not guarantee elicitation of the desired action. Only the likelihood of behaviour is indicated in this study, not 100 percent correctness. All that any model can do is to specify the relevant variables and their functional relationships to each other under specific circumstances. Further research must be conducted in order to ascertain the correlation between the level of perception or psychological variables and likelihood of behaviour.

Conclusions derived from descriptive adjective rating

O'Toole, 1980 op cit stated that 'when commercial viewing is a controllable option, commercials will have to provide a reason to be viewed.'

Empirical evidence and psychological theory suggest that well liked commercials are more effective than commercials that are neither liked nor disliked. Suggestive evidence exists implying that advertising which consumers find irritating erodes the quality and credibility of brand images, and conversely advertising which individuals like has a positive effect on brand images. Bartos 1983.

Detailed knowledge of why people like or dislike a commercial can be useful in interpreting upon the findings about effectiveness. It can help show why and how the more effective commercial differs from the less effective commercial.

The use of descriptive adjectives was employed by this study to ascertain whether the Milupa commercial was liked or disliked using the results obtained to indicate how effective the commercial was. Was the Milupa advertisement really appealing? Did the commercial generate reactions that could support or create desirable (or undesirable) associations etc?

The following conclusions can be drawn from this study.

- Overall, the test sample displayed a high positive response to the Milupa commercial indicating that the advertisement was effective.
- The adjectives relating to the warmth of the commercial 'well done' and 'appealing' received a higher level of agreement from the entire population in rating the Milupa advertisement in comparison to the descriptive adjectives 'worth remembering' and 'convincing' which are related to personal relevance. Aaker and Bruzzone 1981 op cit state that the 'personal relevance' factor reflects more of a message oriented, rational impact and is associated with high cognitive activity. In contrast, the warm factor reflects more of an emotional, image

oriented impact involving less cognitive activity. In effect, this would imply the sample tested rated the emotional content of the Milupa commercial higher than the rational content of the advertisement.

- The conclusions that can be made on analysis of the samples responses using the negative adjectives must, however, be treated with caution. Aaker and Bruzzone 1981 op cit state 'people are more likely to check negative words in the privacy of their own home than when they are checking adjective lists in the presence of an interviewer who has just shown the commercials.

This analysis of responses using the negative adjectives in rating the Milupa commercial reveals two points:

- The means obtained imply very few subjects rated the Milupa advertisement negatively
- There was a greater discrimination displayed by the tested sample using the negative adjectives in rating the Milupa commercial in comparison to the positive adjectives.

Overall, analysis of how the mothers rated the Milupa commercial using the descriptive adjectives would indicate it was well liked and generated strong positive reactions. This suggests that the Milupa commercial was effective.

However, further research must be conducted to establish the reliability of subject responses using negative adjectives in the rating of advertisements.

Conclusions derived from perception and preference of rational and emotional stimuli

Oliver and Collett, 1976 state that for an advertisement 'to be effective it is essential to determine, in advance, what the key message is to be and to focus attention on the points that make the message clear.'

Milupa stated in their creative brief (see Appendix B) that research into baby food advertising 'emphasises the need to provide mothers with reassurance, both in terms of the rational element and emotional element with the need for a careful balance of these two elements in the advertising.' Milupa further state that 'the core proposition for this advertising is based on nutrition providing the rational element of reassurance. It is essential, however, that the advertising also provides emotional reassurance in terms of taste and enjoyment. Emotional warmth is key to this advertising to invite involvement.

Given that the key message points of the Milupa advertisement were to provide rational and emotional reassurance to be effective - then measuring the level of perception of rational and emotional reassurance within the sample tested would be a valid assessment of the effectiveness of the Milupa commercial.

The following conclusions were derived from an analysis of the results obtained.

- Overall, a relatively high level of perception for all the product attributes was displayed by the test sample. In particular, the audience tested perceived that the commercial was most convincing in conveying the impressions that 'Milupa is nutritious,' 'Milupa is wholesome' and 'that Milupa evokes a natural image.'
- No significant difference existed displaying a higher level of perception for the attributes concerned with rational reassurance over the attributes dealing with emotional reassurance at the .05 level.
- However, the Milupa advertisement was less impressive in conveying freshness, and that Milupa provides a wide variety.

Analysis of the open ended questions indicates that the mothers displayed negative connotations in associating freshness and packaged powder baby foods. However, the sample of mothers tested conveyed the impression that the 'jar format' of baby foods is fresher.

Furthermore the author believes that a more prolonged exposure of the 'pack shot (4 packets - one from each mealtime) towards the end of the commercial would help to convince mothers of Milupa's wide variety.

Results obtained from a factor analysis carried out on the 13 variables used to convey rational and emotional reassurance in baby food commercials provides an avenue available for future research. The four indices obtained from the factor analysis accounted for 67.5% of the total variance. The four factors are as follows:

- healthy/natural and safe ingredients
- negative product attributes
- emotional warmth
- involvement.

Future research could measure subjects level of perception of the variables within each of these four new indices. This would help ascertain the extent to which the key message points of the baby food commercial were perceived, hence establishing how effective the advertisement was.

In summary, any attempt to measure the level of perception of the key messages within test audiences after viewing a television advertisement should be accepted as necessary criterion in assessing advertising effectiveness. Only by expanding the existing narrow definition of advertising effectiveness will we be better able to develop better understanding of what happens to an individual at the moment of confrontation with an advertisement. The measurement of the level of perception, within the audience, of the psychological dimensions of rational and emotional reassurance after viewing a commercial has a part to play in assessing advertising effectiveness.

This study further examined whether the sample tested displayed a preference for either rational or emotional stimuli, with the advertisement they had viewed. This was carried out with the aim of being able to develop more effective baby food television commercials in the future. The study extracted 10 elements from the Milupa

advertisement 5 emotional and 5 rational and the mothers were required to indicate their level of responses (ranging from very positive to very negative on a 5-point scale) to each of the 10 aspects from the commercial.

The results obtained indicate that no significant difference existed at the .05 level within the sample, displaying a greater preference for the rational elements instead of the emotional elements.

The sample, displayed a positive response to all the elements, emphasising the need for a careful balance of the rational and emotional elements for future baby food television advertisements.

With regard to the Milupa commercial specifically the sample tested displayed a higher positive response to 'the symbols used in the advertisement' and the emphasis conveying that Milupa does provide a carefully balanced diet for babies.

However, the sample of mothers tested did not display a positive response regarding 'the extent to which the advertisement improved or changed their understanding of infant nutrition.' This is an important rational element of paramount importance in conveying a brand differentiating message. Stewart and Furse 1986 state that 'the role of advertising is to communicate something specific, unique to the product, and important to consumers. Many brands in a product category may make brand differentiating claims, but not all of them may be equally effective. Brands that make no differentiating claims in their advertising, however, are the most vulnerable.' Being able to improve and/or change consumer understanding of infant nutrition is essential in order to create a brand differentiating message for Milupa. The results from this study reveal, however, that the mothers were undecided in their convictions, regarding the extent to which this advertisement conveyed this factor. This dimension requires further examination for future advertising by Milupa in order to create a more effective commercial.

Conclusions derived from assessing inter-relationships between product attributes and psychological variables

Finally, this study adopted a technique unused in previous research, in an attempt to establish a new parameter to enhance television advertising effectiveness. Stated briefly, this study investigated the possible inter-relationships between specific product attributes and psychological variables. The aim was to ascertain whether or not a scientific approach could be established, in order to elicit certain core attributes of a product to be advertised via manipulation of certain psychological variables. The study assembled a matrix of perceived inter-relationships between a set of psychological variables and product attributes, for example, nutrition. Hence in the development of future television baby food advertisements this would serve as a checklist revealing which psychological variables definitely do, probably do, probably do not and definitely do not convey the impression of nutrition, a warm and caring approach, and the use of natural safe ingredients etc.

This scientific approach ie developing matrices to assess inter-relationships between psychological variables and product attributes, was not incorporated by Alliance in the development of the Milupa commercial. Alliance advertising stated that 'any such analysis would be a post-rationalisation of the creative development process. It doesn't reflect the way in which a commercial is conceived and developed. The transformation of a creative brief into a finished advertisement is based on lateral, unstructured thinking.'

The key points from this statement by Alliance advertising are:

- the creative development process and
- lateral, unstructured thinking.

The implications of such a statement (if it is the agreed standpoint of the entire industry) has 2 important ramifications for the advertising industry.

- It unquestionably dismisses the possibility that such a scientific approach can be incorporated into the development of television advertisements
- Secondly, it further serves to limit the already existing narrow definition of advertising effectiveness. The rejection that such parameters could be used to increase effectiveness again further emphasises the attitude 'If we don't measure it, it doesn't exist.'

However, these psychological variables taken from the work of S. Britt 1978 op cit has experimental evidence and expert opinion

- relating directly to some specific phase of communication
- relating to mass communication in general
- relating to small group communication.

Hence, such scientifically valid psychological aspects of communication cannot be so quickly dismissed when attempting to establish new platforms from which to evaluate television advertising effectiveness.

The results obtained from this study, reveal in fact that some inter-relationships do exist between certain psychological variables and some of the product attributes essential in conveying an advertisement for baby foods.

Further research must be conducted in this area incorporating a larger number of psychological variables and different product attributes. This must be carried out in order to ascertain whether the development of such matrices should be restricted to baby food advertisements or whether the results obtained could be incorporated across different types of television advertisements.

However, it is important for the advertising industry to widen the criterion deemed acceptable to assess and hence develop more effective television advertisements. The results and conclusions from this study would indicate that assessing relationships

between product attributes and psychological variables has an important role to play in the future evaluation of advertising effectiveness, both in the development of effective commercials and also in investigating the effectiveness of commercials.

To conclude, the aim of this study was to establish new psychological parameters to assess a television advertisement for a baby food commercial. It is an attempt to establish new criteria to help broaden the presently used techniques in assessing advertising effectiveness. It is an attempt to widen the definition of advertising effectiveness which currently prevails within the advertising industry. It is an attempt to challenge the attitude within the industry 'if we don't measure it, it doesn't exist.'

The research incorporated four main psychological techniques to assess the Milupa baby foods commercial with the aim of evaluating the practability of using these techniques across different television advertisements.

The four psychological techniques were as follows;

- To assess the audience perception of 18 selected psychological variables about human communicating that can be incorporated into television advertisements, that are based on and supported by empirical data.
- To evaluate viewer perceptions of the commercial using descriptive adjective rating.
- To investigate the level of perception within the sample of both rational and emotional reassurance.
- Finally, to ascertain whether its possible to develop matrices which emphasise the degree of inter-relationship between product attributes and psychological variables.

The results of this type of investigative analysis will benefit the advertising industry by

- increasing our knowledge of marketing processes and how they work
- providing a scientific approach to marketing

- developing a crossover between psychology and marketing
- providing insights as to what specific applications to marketing can be made from psychological principles of communication
- providing increased creativity into assessing advertising effectiveness, broadening the limited definition of advertising effectiveness and eroding the attitude within the industry 'if we don't measure it, it doesn't exist.'

However, it must be noted that only the likelihood of behaviour is indicated in this study, not 100% correctness. All that any research can do is to specify the relevant issues and their functional relationships to each other under specific circumstances.

This study would advocate that these techniques should be used in conjunction with already existing methods to assess the effectiveness of a television commercial. The advertising industry should be more receptive to the development of new techniques both psychological and non-psychological to help gain a deeper insight into the area of assessing effectiveness.

The whole realm of advertising effectiveness and the techniques which should be employed is still at an embryonic stage of development. Anything that can be done to develop better understanding of what happens to an individual before during and after confrontation with an advertisement is significant for future development of more effective advertisements and more effective ways to evaluate advertising effectiveness.

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APPENDICES

Appendix A: The test questionnaire

Tick one box only for each question

143A

*For office
use only*

ID no.

☐☐

Line no.

☐

Pregnant woman

☐

First time mother

☐☐

Subsequent mother

☐

After watching the video please complete the questionnaire. There are no right or wrong answers, it is your own opinions that we are interested in. All completed questionnaires will remain confidential.

Thank you for your cooperation.

David Higgins

2. Having viewed the Milupa advertisement do you agree that in comparison to other baby food products, Milupa is the best baby food for your baby?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

3. Having viewed the Milupa advertisement what is the likelihood of you buying the product for your baby or future baby?

Definitely will	Probably will	Undecided	Probably will not	Definitely will not

☐

4. Having viewed the Milupa advertisement do you agree that Milupa fully understands a baby's needs?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

5. Have you used a baby food product other than Milupa in the past Yes ☐ No ☐

☐

6. If yes - after viewing this advertisement would you now consider switching to Milupa Yes ☐ No ☐

☐

7. If no - state why _____

8. In the Milupa advertisement which you've just seen, were there any particular features of the advertisement which especially appealed to you?

9. Would you agree the advertisement clearly identified the needs of a baby first, and subsequently how these needs were best satisfied?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

10. Would you agree that the most desirable information in the Milupa advertisement was presented first?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

11. After watching the Milupa advertisement would you agree that the strongest arguments about the product were near the end of the message?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

12. Would you agree after watching the Milupa advertisement that it successfully portrays a happy healthy contented baby?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

13. Please rate the Milupa advertisement using the following criteria

	Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly
(a) Silly					
(b) Phoney					
(c) Irritating					
(d) Dull					
(e) Uninteresting					
(f) Imaginative					
(g) Convincing					
(h) Worth remembering					
(i) Appealing					
(j) Well done					

14. After viewing the Milupa advertisement would you agree that the music played an important role in getting the message across?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

15. After viewing the Milupa video do you agree that the colours used played an important role in getting the message across?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

16. Do you agree that the Milupa advertisement was presented with exceptional visual clarity?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

17. After viewing the Milupa video do you agree that symbols e.g. images of fresh fruit, a young mother, the weighing scales etc played an important role in getting the message across?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

18. Do you agree after viewing the Milupa advertisement that it was well related to your own social and cultural background?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

19. Would you agree that the advertisement provided all the information you needed to know about Milupa baby foods?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

20. If you disagree, could you please tell me what particular aspects/features of the product you would like to have been informed about?

21. Do you agree that the use of non-verbal cues e.g. movement, gestures, facial expressions, tone of voice etc in the Milupa advertisement was helpful in getting the message across to you?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

22. Do you agree that the Milupa advertisement was simple yet precise in its message?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

23. Do you agree that the Milupa advertisement was clear and easy to understand?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

24. Would you be curious to see the Milupa advertisement again?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

25. Did the Milupa advertisement present any new ideas which challenged your previously held beliefs and attitudes about baby foods?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

26. Which ideas of yours, about baby foods did the advertisement challenge most, if any?

27. Did you find any novelty in the way the Milupa advertisements was presented?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

28. What about relevance, did the advertisement answer the questions upper most in your mind about Milupa baby foods?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

29. After listening to the Milupa advertisement do you agree that the communicators tone of voice was believable?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

30. Do you agree that the personality and physical appearance of the mother in the Milupa advertisement enhances the advertising message?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

31. Do you agree that the structure of the Milupa advertisement was well organised and logical in its presentation?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

32. Do you agree that after viewing the Milupa advertisement it was fair and objective in its presentation?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

33. Do you agree that after viewing the Milupa advertisement you now perceive Milupa as a more desirable product to buy for your baby?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

34. After viewing the advertisement do you agree that Milupa has managed to clearly differentiate its products from other baby food products?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

35. Do you agree the Milupa advertisement presented only one side of the argument about the product?

Agree strongly	Agree	Agree slightly	Disagree	Disagree strongly

☐

[illegible]

37. To what extent do you feel that the factors listed below helped to get across to you the impression of a **warm and caring approach between mother and baby.**

ID no.

Line no.

☐

☐

2

WARM AND CARING APPROACH

- (a) The music of the advertisement
- (b) The colour used in the advertisement
- (c) The symbols used in the advertisement
- (d) The lighting effects used in the advertisement
- (e) Presenting information and images in the advertisement which are closely associated with your own social/cultural environment
- (f) The wording used in the advertisement
- (g) The use of non-verbal cues e.g. facial expressions, tone of voice etc.
- (h) Keeping the overall message simple yet precise
- (i) Identifying the babys needs first and subsequently suggesting how these needs can be satisfied
- (j) Presenting information on the desirable aspects of the product first
- (k) Leaving the strongest arguments for the product until the end
- (l) Relating the message in the advertisement to your own hopes and ambitions

1	2	3	4	5
Definitely did	Probably did	Unsure	Probably did not	Definitely did not

- (a) The music of the advertisement
- (b) The colour used in the advertisement
- (c) The symbols used in the advertisement
- (d) The lighting effects used in the advertisement
- (e) Presenting information and images in the advertisement which are closely associated with your own social/cultural environment
- (f) The wording used in the advertisement
- (g) The use of non-verbal cues e.g. facial expressions, tone of voice etc.
- (h) Keeping the overall message simple yet precise
- (i) Identifying the baby's needs first and subsequently suggesting how these needs can be satisfied
- (j) Presenting information on the desirable aspects of the product first
- (k) Leaving the strongest arguments for the product until the end
- (l) Relating the message in the advertisement to your own hopes and ambitions

[illegible][illegible]

39. Which aspects of the Milupa advertisement did you most respond to?

	1	2	3	4	5
	Very positive response	Positive response	Undecided	Negative response	Very negative response
(a) The information provided by the advertisement					
(b) The colours used in the advertisement					
(c) The extent to which the advertisement improved or changed your understanding of infant nutrition					
(d) The music used in the advertisement					
(e) The language and wording used to present the information					
(f) The symbols used in the advertisement e.g. images of fresh fruit, the weighing scales etc.					
(g) The construction of the advertisement i.e. the order the information was provided in					
(h) The use of non-verbal cues in the advertisement e.g. facial expressions, tone of voice etc.					
(i) The emphasis on a carefully balanced diet for babies					
(j) The exceptional visual clarity of the advertisement					

Appendix B: The creative brief

C R E A T I V E B R I E F

Client : Milupa Ltd. Job No. 4111
Product : Infant Foods Range
For : TV 30 second commercial (to be supported by colour press advertisements)
Proposed Air Date : Beginning May, 1991
Internal Review :
Presentation to Client :
Budget :

BACKGROUND

Recent research results regarding the Pan-European advertising and packaging have given us a very clear and direct steer for a new creative brief. A summary of conclusions and implications is ~~attached~~.

Milupa are launching their new Infant Foods packs in October 1991, which reflect the natural image of Milupa babyfoods, showing wholesome, fresh ingredients on front of pack.

However, we propose to launch a new advertising campaign in May 1991 on TV, supported by colour press, using the existing packaging. The new packs will have to be incorporated in this advertising in October 1991. This is important when considering use of pack shots, etc.

The research emphasises the need to provide mothers with reassurance, both in terms of the nutritional content (the 'rational' element) and the acceptability (the 'emotional' element). It also emphasises the need for a careful balance of these two elements in the advertising.

The core proposition for this advertising is based on nutrition (already perceived as one of Milupa's core values) providing the rational element of reassurance. It is essential however that the advertising also provides emotional reassurance in terms of taste and enjoyment. Emotional warmth is key to this advertising to invite involvement and is best provided visually by happy, contented, cute babies.

WE WANT

Pregnant women, first time mothers, subsequent mothers, with an emphasis on BC1C2 and mothers with babies 3/4 months +.

They are buying or considering buying babyfoods and they are looking for reassurance that the food they choose is right for their baby (ie balanced diet) and that it will be liked (ie taste and enjoyment).

TO DO/TO THINK

To be reassured that Milupa can help her provide what is good for her baby.

INSTEAD OF DOING/THINKING

Other competitive products are more suitable for her baby than Milupa.

BECAUSE

Milupa can give her baby the nourishment essential for healthy growth and development.

SUPPORT TO PROPOSITION

- Milupa Infant Foods are made with natural, fresh, wholesome ingredients.
- Milupa Infant Foods offer a wide variety of balanced meals, each containing the same amounts of protein, fat, energy, vitamins and minerals.
- Milupa Infant Foods are enjoyable to eat.

SUPPORT COPY PLATFORM

- Excellent taste (TV/Press).
- Lots of choice/variety whatever the time of day (TV/Press).
- Easy to prepare (Press only).
- Good value - mix as little or as much as you like (Press only).

VISUAL COMMENTS

- Taste and enjoyment should be communicated strongly not only in copy terms but also by visual implication. This is mandatory.
- Emotional warmth is key to invite the involvement of the mother in the advertising.

- 3 -

- Healthy, happy babies mandatory.
- Natural produce mandatory.

TONE/PERSONALITY

- Communication of 'partnership' between mother and Milupa.
- Reassuring.
- Caring and warm, emotionally involving.
- Natural.
- Cuteness/element of fun.

MANDATORY INCLUSIONS

- Milupa logo.
- Pack shot (4 packs - one from each mealtime).
- Fresh natural produce.
- Baby - baby and mother (different executions).
- Sample coupon to be confirmed.

END LINE

- The end line should be corporate and not product specific. It should reflect the core values of Milupa.
- 'Experts in Infant Nutrition' is currently the preferred line and we should see if we can improve on that.

It will be incorporated across all Milupa advertising for Milks, Drinks and Foods.

AL/rh
25.01.91

Appendix C: Questionnaire to Alliance Advertising

1 In establishing the Milupa advertisement, could you please rate from 1 to 4 (by putting a cross in the box) how important were the following.

	Unimportant: :Very Important
Motivating	
Comprehension	
Attending	
Learning and Remembering	

2 How did Alliance attempt to elicit audience attention in the advertisement?

3 How did Alliance attempt to achieve audience learning and remembering in the Milupa advertisement?

4 How did Alliance attempt to achieve audience motivation in the Milupa advertisement?

5 Was any particular model of advertising communication used in the development of the Milupa advertisement? If so, can you describe the model?

6 How important is the manipulation of psychological principles in television advertising?

7 Were any psychological principles deliberately manipulated in the creation of the Milupa advertisement? If so, please list and describe?

8 The objectives set forth by Milupa in their brief were to elicit the following. Please rate the degree to which psychological principles were used to elicit each objective, by putting an X in the box.

		Involvement of psychological principles Very High Very Low
A	Nutrition	
B	Natural Image	
C	Wholesome	
D	Freshness	
E	Healthiness	
F	Variety	
G	Acceptability	
H	Taste	
I	Enjoyment	
J	Involvement	
K	Warmth/Caring	
L	Cute/Fun	

9 Did Alliance devote the same effort to elicit each objective?

YES

NO

10 If not, using the objectives could you rank from the objectives in terms of the effort required to elicit. Put each Objective's letter from Q8, with the most effort objective first, and the least effort objective last.

11 How many of the objectives do you think were perceived on average by each member of the target audience?

12 Do you feel it is possible to comprehend the objectives of the Milupa advertisement if audience perception of the psychological principles used to elicit each objective is poor? Please state why?

13 The Milupa advertisement was specifically targeted at pregnant women, first time mothers, subsequent mothers and mothers with babies $\frac{3}{4}$ months +. Do you think it appealed to any one of the categories in particular?

14 Which category of mother do you think it appealed to least of all?

15 Did Alliance attempt to incorporate any single element from a previous Milupa advertisement to elicit the same response in audience members?

15b If so which of the briefs objectives did it attempt to re-elicite. Please list them.

16 Was there any deliberate form of repetition within the Milupa advertisement? If so please list which of the brief's objectives this repetition attempted to elicit.

17 Within the advertisement was there any attempt to incite anxiety within the intended audience?

YES

NO

Which of the briefs objectives did this anxiety attempt to elicit? Please list (Refer to Q8)

18 Did Alliance make any attempt for the message to lend itself to multiple interpretations by the intended audience?

YES

NO

If YES , please list which of the objectives this attempted to elicit.

19 Did Alliance attempt to make audience members aware of their needs for a solution before this solution was actually presented in the message?

YES

NO

If yes how was this achieved?

20 Did Alliance make any attempt of identifying reasons for action that audience members would find personally acceptable, so that later they may feel their behaviour was justified?

21 Did Alliance attempt to associate the realities of the message with the audiences hopes and dreams?

22 Did Alliance deliberately attempt to create a consistency among the message elements?

YES

NO

If yes please list which objectives this attempted to elicit.

23 Was the design of topography used to elicit any of the briefs objectives?

YES

NO

If yes, please list which of the objectives it attempted to elicit.

24 What position times on television do you think the Milupa advertisement would have received the most attending from audiences?

A.M.		P.M.			
7.00 - 9.00	<input type="checkbox"/>	12.00 - 3.00	<input type="checkbox"/>	7.00 - 9.00	<input type="checkbox"/>
9.00 - 11.00	<input type="checkbox"/>	3.00 - 5.00	<input type="checkbox"/>	9.00 - 11.00	<input type="checkbox"/>
11.00 - 12.00	<input type="checkbox"/>	5.00 - 7.00	<input type="checkbox"/>	11.00 & Later	<input type="checkbox"/>

25 Did Alliance deliberately attempt to limit the number of stimulus cues and separate actions in the Milupa advertisement?

YES

NO

26 Culturally, who did Alliance target the advertisement towards?

27 After creating the advertisement do you feel Alliance developed a brand differentiating image for Milupa?

Agree Strongly |___|___|___|___| Disagree Strongly

The following page contains a matrix. Milupa's objectives as outlined in their advertising brief are on the horizontal axis. The vertical axis contains a listing of the psychological principles.

What I require you to do is to complete the matrix. This involves individually taking each psychological principle and systematically moving along its rows only ticking the box if Alliance used that principle to elicit the corresponding attribute.

For example, if Music was used to elicit a natural image, healthiness and warmth then place a tick in each of those boxes. If that was all that the music attempted to elicit leave the rest of the boxes on that row blank and move on to the next psychological principle and so on until the last principle.

If you feel that some of the psychological principles were unused by Alliance leave the corresponding horizontal line blank and continue on to the next principle.

[illegible]

Appendix D:
Statistics from the study

Analysis of Variance					
Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	.8327	.4163	1.4085	.1493
Within Groups	100	29.5595	.2956		
Total	102	30.3921			
Page 9		SPSS/PC+			5/14/93

----- O N E W A Y -----

Variable LANDREM Learning and remembering
By Variable TYPE

Multiple Range Test

Duncan Procedure
Ranges for the .050 level -

2.81 2.95

The ranges above are table ranges.
The value actually compared with Mean(J)-Mean(I) is..
.3844 * Range * Sqrt(1/N(I) + 1/N(J))

No two groups are significantly different at the .050 level

Page 9 SPSS/PC+ 5/14/93

----- O N E W A Y -----

Variable MOTIV Motivation
By Variable TYPE

Analysis of Variance					
Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	.1725	.0862	.3166	.7294
Within Groups	99	26.9713	.2724		
Total	101	27.1438			
Page 10		SPSS/PC+			5/14/93

----- O N E W A Y -----

Variable MOTIV Motivation
By Variable TYPE

Multiple Range Test

Duncan Procedure
Ranges for the .050 level -

2.81 2.95

The ranges above are table ranges.
The value actually compared with Mean(J)-Mean(I) is..
.3691 * Range * Sqrt(1/N(I) + 1/N(J))

No two groups are significantly different at the .050 level

Page 11 SPSS/PC+ 5/14/93

----- O N E W A Y -----

Variable PSYRESP Psychological Response
By Variable TYPE

Analysis of Variance					
Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.

Final Factor Loadings

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
Q14	.70870	1	5.90838	12.8	12.8
Q15	.70559	2	1.66109	9.2	42.1
Q16	.46098	3	1.42747	7.9	50.0
Q17	.61677	4	1.29247	7.2	57.2
Q18	.74601	5	1.10280	6.1	63.3
Q19	.61049				
Q20	.59942				
Q21	.65989				
Q22	.70159				
Q23	.67759				
Q24	.62702				
Q25	.62818				

Rotated Factor Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Q14	.73070	.14390	.35157	-.02730	.17242
Q15	.82681	.02608	.04791	-.02730	.17242
Q16	.59629	.06515	.10756	.29464	-.09362
Q17	.75282	.13389	.11708	.13354	-.01886
Q18	.49291	.82536	.12449	.10529	-.03151
Q19	.12221	-.05918	<u>.59942</u>	.14839	-.05159
Q20	.50036	-.214	.03647	.47125	.27674
Q21	.13809	.20448	.76491	-.08214	.08474
Q22	.68172	.14948	.12120	-.30991	.06304
Q23	.19507	.61135	.31321	.09211	-.19282
Q24	.10130	.08748	.67463	.28087	.26664
Q25	.18919	-.13361	.08807	.48046	.46953
Q26	.09265	.00000	.44976	.33055	-.02700
Q27	.14925	.10045	.44976	.14645	-.04050
Q28	.02800	.12813	.11746	.05720	.88018
Q29	.02760	.77368	.08917	.15356	.31162
Q30	.42138	.55502	.25739	.54705	.06562
Q31	-.03155	.35170	.27888	.67468	-.15996

01 Jun 93

File: SPSS PC+

----- FACTOR ANALYSIS -----

Final Statistics:

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
Q13P1	.72170	1	4.96052	49.6	49.6
Q13P10	.71265	2	1.07333	10.7	60.3
Q13P2	.48933				
Q13P3	.60077				
Q13P4	.52361				
Q13P5	.67942				
Q13P6	.51371				
Q13P7	.65913				
Q13P8	.61643				
Q13P9	.50711				

VARIMAX rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization.

VARIMAX converged in 3 iterations.

Rotated Factor Matrix:

	Factor 1	Factor 2
Q13P1	-.12011	.54100
Q13P10	.75967	-.36517
Q13P2	-.15551	.67143
Q13P3	-.30795	.71125
Q13P4	-.42651	.55559
Q13P5	-.40955	.71514
Q13P6	.60606	-.35517
Q13P7	.75194	-.20710
Q13P8	.76253	-.15575
Q13P9	.67142	-.22561

Si

File: SPSS PC.

- - - t-tests for paired samples - - -

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
Q13P7 convincing	100	.405	.000	2.4600	.755	.076
Q13P9 appealing				2.0500	.561	.056

Paired Differences

Mean	SD	SE of Mean	t-value	df	2-tail Sig
.3500	.555	.059	4.29	99	.000
95% CI (.204, .556)					

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
Q13P10 well done	101	.469	.000	2.0396	.552	.055
Q13P6 worth remembering				2.5446	.566	.056

Paired Differences

Mean	SD	SE of Mean	t-value	df	2-tail Sig
-.5050	.901	.090	-5.63	100	.000
95% CI (-.683, -.327)					

--- Correlation for paired samples ---

Variable	Number of pairs	2-tail		Mean	SD	SE of Mean
		Corr	Sig			
ENTPREF	121	.574	.000	2.1256	.652	.064
EMOPREF				2.1268	.698	.066

Mean	Paired Differences		t-value	df	2-tail Sig
	SD	SE of Mean			
.0888	.624	.062	1.44	121	.152
95% CI (- .033, .211)					

Variable	Number of Cases	Mean	Standard Deviation	Standard Error
RATPER	93	2.2519	.503	.052
EMOPER	93	2.2814	.512	.053

Difference)	Standard	Standard	2-Tail	t	Degrees of	2-Tail
Mean	Deviation	Error	Corr. Prob.	Value	Freedom	Prob.
-.0294	.472	.049	.567 .000	-.60	92	.549

----- O N E W A Y -----

Variable RATPER
By Variable TYPE

Analysis of Variance					
Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	1.7334	.8667	3.5397	.0329
Within Groups	94	23.0160	.2449		
Total	96	24.7494			

----- O N E W A Y -----

Variable RATPER
By Variable TYPE

Contrast Coefficient Matrix

	Grp 1	Grp 2	Grp 3
Contrast 1	-.5	1.0	-.5

	Value	S. Error	Pooled Variance Estimate			Separate Variance Estimate			
			T Value	D.F.	T Prob.	S. Error	T Value	D.F.	T Prob.
Contrast 1	.2319	.1929	2.352	94.0	.027	.1959	2.190	70.3	.032

Variable RATPER
By Variable TYPE

Multiple Range Tests: Student-Newman-Keuls test with significance level .050

The difference between two means is significant if
 $|\text{MEAN}(J) - \text{MEAN}(I)| \geq .3499 * \text{RANGE} * \text{SQRT}(1/N(I) + 1/N(J))$
 with the following value(s) for RANGE:

Step	2	3
RANGE	2.92	3.17

(*) Indicates significant differences which are shown in the lower triangle

	3	3	3
	1	1	1
	2	2	2
	3	1	2
Mean	TYPE		
2.0619	Grp 3		
2.2414	Grp 1		
2.3835	Grp 2		

- - - - FACTOR ANALYSIS - - - -

Final Statistics:

Variable	Communality	* Factor	Eigenvalue	Pct of Var	Cum Pct
Q1P1	.71657	*			
Q1P2	.68685	*	1	4.09028	31.5
Q1P3	.62303	*	2	2.06647	15.9
Q1P4	.71296	*	3	1.50760	11.6
Q1P5	.48951	*	4	1.11292	8.6
Q1P6	.68000	*			
Q1P7	.69497	*			
Q1P8	.67990	*			
Q1P9	.76074	*			
Q1P10	.46627	*			
Q1P11	.83528	*			
Q1P12	.89215	*			
Q1P13	.53904	*			

- - - - FACTOR ANALYSIS - - - -

Varimax Rotation 1, Extraction 1, Analysis 1 - Kaiser Normalization.

Varimax converged in 6 iterations.

Rotated Factor Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
Q1P1	.82692	-.08419	.14036	.07733
Q1P2	.73973	-.00831	.27045	-.25775
Q1P3	.75990	.04405	.06403	.20337
Q1P4	.12013	.74882	-.15753	-.33612
Q1P5	.67367	-.00266	-.08374	.16923
Q1P6	.79700	-.10442	.10913	.14824
Q1P7	-.09460	.80782	-.17793	-.04228
Q1P8	.51736	.05810	.17646	.61460
Q1P9	.20355	-.11431	.10335	.33375
Q1P10	-.00280	.68203	.00285	.03291
Q1P11	.26676	-.18288	.78727	.32996
Q1P12	.07304	-.05925	.93074	.01396
Q1P13	-.21549	.56314	.11810	.40191

- - - - FACTOR ANALYSIS - - - -

Variable RATPREF
By Variable TYPE

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	1.8771	.9385	2.2613	.1095
Within Groups	100	41.5035	.4150		
Total	102	43.3805			

Variable RATPREF
By Variable TYPE

Contrast Coefficient Matrix

Grp 1 Grp 3
 Grp 2

Contrast 1 - .5 1.0 - .5

	Value	Pooled Variance Estimate			T Prob.	Separate Variance Estimate			
		S. Error	T Value	D.F.		S. Error	T Value	D.F.	T Prob.
Contrast 1	.2450	.1297	1.899	100.0	.062	.1394	1.757	64.5	.094

Variable RATPREF
By Variable TYPE

Multiple Range Tests: Student-Newman-Keuls test with significance level .050

The difference between two means is significant if
 $MEAN(J) - MEAN(I) \geq .4555 * RANGE * \sqrt{(1/N(I)) + (1/N(J))}$
 with the following value(s) for RANGE:

Step 2 3
RANGE 2.82 3.37

- No two groups are significantly different at the .050 level

146J

Variable ENCPREF
By Variable TYPE

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	2.0794	1.0397	2.1812	.1183
Within Groups	100	47.6659	.4767		
Total	102	49.7452			

Variable ENCPREF
By Variable TYPE

Contrast Coefficient Matrix

Grp 1 Grp 3
Grp 2

Contrast 1 -1.5 1.0 -1.5

	Value	S. Error	Pooled Variance Estimate			S. Error	Separate Variance Estimate		
			T Value	D.F.	T Prob.		T Value	D.F.	T Prob.
Contrast 1	.1938	.1390	1.322	100.0	.189	.1414	1.300	79.0	.197

Variable ENCPREF
By Variable TYPE

Multiple Range Tests: Student-Newman-Keuls test with significance level .050

The difference between two means is significant if:

$$|\text{MEAN}(J) - \text{MEAN}(I)| \geq \text{RANGE} * \text{SQRT}(1/N(I) + 1/N(J))$$

with the following value(s) for RANGE:

Step 2 3
RANGE 2.92 1.37

- No two groups are significantly different at the .050 level.

146K

- - - - FACTOR ANALYSIS - - - -

Extraction 1 for Analysis 1, Principal-Components Analysis (PC)

Initial Statistics:

Variable	Communality	#	Factor	Eigenvalue	Pct of Var	Cum Pct
Q36P1	1.00000	1	1	4.80160	40.0	40.0
Q36P2	1.00000	1	2	1.79346	14.9	55.0
Q36P3	1.00000	1	3	.81846	6.8	61.8
Q36P4	1.00000	1	4	.76897	6.4	68.2
Q36P5	1.00000	1	5	.68876	5.7	73.9
Q36P6	1.00000	1	6	.59253	4.9	78.9
Q36P7	1.00000	1	7	.55439	4.6	83.5
Q36P8	1.00000	1	8	.48285	4.0	87.5
Q36P9	1.00000	1	9	.43927	3.7	91.2
Q36P10	1.00000	1	10	.40008	3.3	94.5
Q36P11	1.00000	1	11	.34629	2.9	97.4
Q36P12	1.00000	1	12	.31334	2.6	100.0

Rotated Factor Matrix:

	FACTOR 1	FACTOR 2
Q36P1	.12845	.78817
Q36P2	.10831	.80573
Q36P3	.24242	.67076
Q36P4	.09864	.81710
Q36P5	.66234	.10583
Q36P6	.72125	.20480
Q36P7	.39064	.56368
Q36P8	.68978	.23276
Q36P9	.76316	-.01041
Q36P10	.73365	.18307
Q36P11	.67273	.17564
Q36P12	.59039	.33428

*** CELL MEANS ***

FS1 REGR FACTOR SCORE 1 FOR ANALYSIS 1
BY TYPE
QUESTION

TOTAL POPULATION

.00
(300)

TYPE	1	2	3
	.36	.25	.02
	91)	122)	(87)

	1	2	3
	-.09	.08	.01
	(99)	(100)	(101)

Configuration derived in 3 dimensions

Stimulus Coordinates

Stimulus Number	Stimulus Name	Dimension		
		1	2	3
1	V1	1.0972	1.1383	.9919
2	V2	1.3476	1.2673	-.0761
3	V3	1.4982	.1471	.2945
4	V4	1.2578	1.2764	.5345
5	V5	-1.4998	-.0232	-1.2575
6	V6	-.8950	.0774	-1.0958
7	V7	-.9149	1.2650	.0431
8	V8	.2823	-1.2194	-.5672
9	V9	-.4335	-1.4145	-1.7518
10	V10	-.6566	-.9436	.0114
11	V11	-.4450	-1.1235	1.3130
12	V12	-.7333	-.4472	1.6639

Subject weights measure the importance of each dimension to each subject.
Squared weights sum to RSQ.

A subject with weights proportional to the average weights has a weirdness of zero, the minimum value.

A subject with one large weight and many low weights has a weirdness near one.

A subject with exactly one positive weight has a weirdness of one, the maximum value for nonnegative weights.

Subject Weights

Subject Number	Weird- ness	Dimension		
		1	2	3
1	.5320	.2836	.5004	.6107
2	.5381	.1503	.5733	.0561
3	.1767	.6840	.5067	.2360
Overall importance of each dimension:		.3734	.2805	.1439

Appendix E:

The Panel of Experts

Dr. Steve Tagg, Marketing Dept., Strathclyde University Glasgow

Mr. Douglas Eadie, Advertising Research Unit, Strathclyde University, Glasgow

Mr. Phil Teer, Advertising Research Unit

Dr. Noel Shaw, Shaw and Company Ltd.

Dr. Tom Higgins, Managing Director, The CIRCA Group Ltd.

Mr. Brendan Wafer, Former Chairman, Marketing Institute of Ireland

Appendix F: Cover letters

148A

'The Knoll'
Kill Lane,
Foxrock,
Dublin 18.

12th August, 1992.

Mr. T. Bell,
Milupa Ltd.,
Milupa House,
Uxbridge Road,
Hillingdon,
Uxbridge,
Middlesex UB10 ONE.

Dear Mr. Bell,

I think you know about my interest in doing a masters thesis in marketing and basing it on the Milupa TV advertising campaign. I believe that Marie Carney may have recently spoken to you about this.

Basically, I would be examining the impact and perception of various psychological dimensions of this programme on a sample of Milupa users, both here and in the UK. For your information I am attaching a copy of my research proposal which has been accepted by the Marketing School at the University of Strathclyde in Scotland for an M.Phil by thesis in marketing.

I may want to speak at some stage with the people who made the TV advertisement to understand their utilisation of psychological variables in the programme. Your approval for this would help me to get an interview with them. Also, Milupa, might like to add some specific questions to my questionnaire, and I'd be very happy to do this.

To get my work underway, therefore I would like to have your permission to work with the Milupa advertisement (I have access to a copy) and to speak with the programme makers.

With best wishes,

Yours sincerely,

D. Higgins.

To Andy Lambert

Following our telephone conversation, Tuesday 3rd November, enclosed is a copy of the questionnaire designed to investigate as thoroughly as possible the thinking process involved in the advertisement of the last Milupa television advertisement.

The questionnaire contains a cross section of both open and closed ended questions, and will require some time and deliberation to comprehensively complete.

I appreciate that you are a very busy man and that your time is limited, however it is paramount for successful completion of this study, that on answering the open-ended questions, could you please elaborate as far as possible, in order that I can fully comprehend the internal mechanics behind the creation of the advertisement.

Should any difficulty arise in completing the questionnaire, please do not hesitate to contact me at 945-5830, Monday to Sunday, to answer any such queries. I would also be more than willing to forward you a copy of the research project next year.

I thank you in advance for your time and generous co-operation, without which completion of this research would not be possible.

Yours Faithfully

David Higgins



Student Research Projects*

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*The Knoll
Kill Lane
Foxrock
Dublin 18*

Ms Emelda Kestell
TCD Creche
University of Dublin, Trinity College
College Green
Dublin 2

9 February 1993

Dear Emelda

I am an Irish post graduate student currently studying for an M.Phil. in marketing at Strathclyde University, Glasgow.

My thesis is concerned with assessing advertising effectiveness. Basically this involves assessing viewer reactions to television advertising using a questionnaire and a video. The particular piece of advertising I have chosen to examine is the last Milupa baby solid foods advertisement, which is no longer being advertised on television. I should say that this is a totally independent piece of research and I am not being sponsored by Milupa or indeed any other company.

As discussed by phone, I would like to interview some of the mothers attending the Creche. The questionnaire takes about twenty minutes in total to complete. Enclosed is a copy for your information.

May I phone you in a few days to discuss further?

Yours sincerely

David Higgins

Enc

Appendix G:

WHO Guidelines on the Marketing of Infant formulae to the General Public

Article 5.0 The Marketing of Infant Formulae to the General Public

- 5.1 There must be no general advertising or advertising at point of sale of Infant Formulae to the general public.
- 5.2 Labelling or promotional literature should not imply that Infant Formulae are equivalent or superior to the milk of a healthy mother or include words or pictures designed to discourage a mother from breastfeeding, or suggest by any means that artificially-fed infants are more likely to be contented or to grow faster or larger than adequately breast-fed babies.
- 5.3 Samples of Infant Formulae should not be distributed by manufacturers or distributors directly to pregnant women, mothers of infants or their families.
- 5.4 Gifts of utensils or other articles that may discourage a mother from breastfeeding her infant should not be distributed to pregnant women, mothers of infants or their families.
- 5.5 Educational services and information related to Infant Formulae should be provided only through the health care system and by appropriately trained personnel. This will be without prejudice to the rights of mothers as consumers, to seek information from manufacturers or distributors on Infant Formulae and on artificial feeding. Manufacturers and distributors may meet such requests for information, provided that they conform to the provisions of Articles 4 and 5 of this Code.

**Appendix H: Research conducted on Milupa Infant Foods by
Davies Riley-Smith MacLay**

CONCLUSIONS I

1. Earlier research carried out on Milupa infant foods by Davies Riley-Smith Maclay (DR-SM Job No. P/1846) identified the existence of three core elements which determine the feelings of mothers towards the packaged foods they feed to their babies. These elements are the relationship between a mother and her baby; her feelings about packaged baby foods in general and dried foods in particular; and the imagery of individual brands.

Together, the expression of these elements provide both the rational and emotional reassurance a mother needs when choosing foods for her baby.

With regard to advertising, the emotional values are particularly important in involving the mother and drawing her into the commercial and hence the brand. The key element with which to communicate such values is the mother/baby relationship.

In addition, the brand personality must be communicated in a clear, relevant manner which distinguishes it from competitive brands. In the case of Milupa, the brand image should be of natural, nutritional, balanced foods which are manufactured by a company which understands the needs of mothers and babies. Using this understanding as a starting point, it talks to the mother as an equal; it is one person with expertise in feeding babies, talking to another.

2. All three executions are successful in achieving at least part of the objectives for the brand to a greater or lesser extent.

"I'll be there for you" taps into the mother/baby relationship and dramatises that emotional bond in order to involve the consumer. Although respondents clearly understand what the commercial is trying to say, its execution and tone have the effect of polarising response. For some it is warm and appealing, whereas others reject it as too sentimental and unrealistic. More importantly however, the commercial does not progress beyond the communication of generic baby food values. It does not convey specific Milupa values and therefore fails to distinguish the brand from the competition.

CONCLUSIONS II

3. "You are what you eat" is more successful in clearly communicating the Milupa values of natural, high quality ingredients. However, it is less emotionally involving overall. Although respondents can imagine the visual appeal of the greengrocery/body visual device, it is not emotionally involving. This is largely because the very cleverness of the device, together with the perfection of the visuals, sets up an image which goes beyond quality and nourishment. Rather, it becomes perfection and therefore is intimidating rather than involving. Because of this, the atmosphere of the commercial is described as 'cold' and 'dull' by many respondents, who simply switch off.
4. The final execution, "Balance" is the most successful of the three because it combines emotional involvement as in "I'll be there for you" with rational reassurance as in "You are what you eat".

The brand clearly emerges as a natural, nourishing baby food which offers nutritionally balanced meals.

Emotionally, the involvement stems from the executional details which lift the commercial beyond the purely rational. Particularly important in this is the relationship between the mother and baby which is suggested throughout the commercial, not only by the hugs but also by the mother's actions, she is preparing food for her child, which, although we do not see it being eaten, is assumed to be tasty as well as healthy. This relationship is taken further in the minds of respondents; when the baby looks to the camera, he is assumed to be looking at his mother, when he reaches out, he is reaching for his mother's support.

Other details which add to this sense of emotional involvement stem from the sense of the baby's personality, the expressions on his face and (especially) the sound of his laugh. Overall therefore, the execution offers the potential to convey an appropriate brand image in a motivating, involving style.