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An Exploratory Study of Consumer Psychology

Using the Process Descriptive Approach.

A thesis presented in partial fulfilment
of the requirements for the degree of
Master of Arts in Psychology at
Massey University.

Patrick Alfred Smyth.

1985.

ABSTRACT.

Information chunking under Brand Name and the ability to predict attribute preference were investigated, using a simple paired comparisons test with an expected value decision criteria, and a behavioural search process. Subjects in condition one were presented with eight different product attributes (including Brand and Manufacturer's Name), while subjects in condition two were given only six different attributes (Brand and Manufacturer's Name were unavailable). Both groups completed a simple paired comparison test and two weeks later each subject was allowed to select product information, item by item, from an information displayboard corresponding to the experimental group to which they belonged. Evidence for the chunking of information under the guise of the Brand Name attribute was found - more information was sought when Brand Name was available than when it was not. It was also found that Brand Name information was accessed more than any other type of product information, and when this information was not available, attribute preferences changed and Cents/gram information was accessed most. This caused a change in product selection. Subjects were found to adopt a satisficing approach to the information search task, accessing only a small subset of the total available information, and only a subset of the attributes presented to them. The simple paired comparison test with its expected-value decision criteria accurately predicted the order of attribute selection in the behavioural search. The results suggest the existence of choice heuristics for consumer decision making as outlined by the information processing approach to consumer psychology.

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Chapter One :

Introduction.

1.1 OVERVIEW.

The process descriptive approach to the study of consumer behaviour was developed by Jacob Jacoby (1975) and the members of the research team at Purdue University. The approach is part of the information processing approach to consumer psychology and was developed in response to a number of problems resulting from the use of verbal protocols and the modelling methodology within the use of decision nets by Bettman (1974).

Traditional approaches to studying information acquisition behaviour have relied on self-administered questionnaires and interviews with recent buyers. Such approaches have a number of weaknesses:

- (1) they measure what consumers say they do, and not what they actually do in the purchase situation. (Jacoby, Chestnut, and Fisher, 1978)
- (2) the correlation between self-reports and behaviour provides a low positive correlation. (Jacoby, Chestnut, and Fisher, 1978)
- (3) self-report measures misrepresent the search process by collapsing the flow of information acquisition into a static cross-sectional mould. That is, data relevant to selective exposure and the sequencing of information acquisition are obscured by the process. The investigator is left to draw inadequate inferences about what actually happened in the temporal sequence leading up to the purchase decision. (Jacoby, Szybillo, and Busato-Schach, 1977)
- (4) interviews and questionnaires provide, at best, only crude micro-assessment, in that consumers typically remember only the

outlines of their behaviour, not the item by item search.
(Jacoby, Szybillo, and Busato-Schach, 1977)

The process descriptive approach assumes the expectancy-value approach, as it attempts to discover the value imparted by consumers to certain types of product information.

In an attempt to answer why the decision-makers behaves as they do, the process descriptive approach can be enhanced by integration with psychological scaling methods. Depending on the scaling technique, it is possible to obtain prior estimates of an individual's preferences for items of information ultimately accessed during predecision information search. The approach allows the researcher to study information search and product choice under the condition of the self-selection of information when the preference for the information acquired is already known.

Previous attempts to link scaling techniques with the process descriptive approach have been made by Sheluga, Jaccard, and Jacoby, (1979), with some success. As a result of this, the present study will, in an exploratory fashion, attempt to provide a more parsimonious method of obtaining attribute preference ratings (using the simple paired comparisons test) than that provided by Sheluga, Jaccard, and Jacoby, (1979).

The present study will also look at a number of findings made by researchers using the process descriptive approach, with a view to adding support to previous research.

1.2 CONSUMER PSYCHOLOGY

Consumer psychology as defined by the bylaws of the Division of Consumer Psychology (Division 23) of the American Psychological Association is:

"The study of human behaviour as it relates to the consumption of goods and the use and acceptance of services." (Twedt, 1965)p.266.

Possibly the greatest similarity that consumer psychology has with any other branch of psychology is with organisational psychology. In the process of trying to understand human behaviour, both consumer and organisational psychology trace a large amount of their conceptual and methodological heritage back to social psychology. While consumer psychology has drawn very heavily from social psychology in the areas of attitudes, communication and persuasion, organisational psychology has also used social psychological studies of leadership and group behaviour as a basis.

A second similarity is that both of these fields of study have provided excellent testing grounds for general social psychology propositions. Together, the working-producing and buying-using contexts account for most human waking hours. It is only natural, then, that social psychological concepts be incorporated into and tested in these domains in order to establish construct validity, or the generality of the findings.

Since both consumer and organisational psychology have developed out of social psychology, what can be said of their relationship to each other? Firstly it must be emphasised that it has only been in the last

ten years that there has emerged a systematic, programmatic orientation to consumer behaviour research. Because of this there exists a lack of replication of many of the discoveries made by researchers. There also exists a questionable generality concerning findings. As such, many findings should be regarded more as hypotheses than verified statements of fact.

A second point to note about the relationship between consumer and organisational psychology is that while they have existed for a comparable length of time, both the speed of development and the amount of published literature differs. Organisational psychology has easily surpassed consumer psychology in these aspects. Reasons for this may be:

- 1) that while business firms may be willing to share knowledge gained about the management of people, they are less willing to divulge information about consumer reactions and promotional developments.
- 2) it was not until the early 1960's that the Journal of Advertising Research and the Journal of Marketing Research were developed. It is only relatively recently (1974) that the Journal of Consumer research has appeared.

Finally, in considering the relationship between organisational psychology and consumer psychology it is noted that some of the discoveries made in consumer psychology may be considered as out of date to organisational psychologists. Jacoby (1969) views this as a desirable state of affairs since it reflects a certain degree of construct validity for both fields.

Numerous different approaches have been taken in the investigation of this area of human behaviour. Some of these will now be outlined.

The psychobiological approaches to consumer behaviour.

This approach looks at the relationship between behaviour and the physiological processes of the nervous system, in particular the physiological processes which take place in the brain. Psychobiology emphasises that psychological processes originate from physiological ones and that there are biological limits to the conscious and deliberate control of behaviour. (Kroeber-Riel, 1979) This rationale supplies a number of insights for consumer research. The most prominent insight is that to a large extent the consumer responds automatically according to biologically determined patterns of behaviour.

The main practitioner criticisms of the approach are that it is too costly in terms of both time and money, it is too complicated requiring specialist skills, and the equipment used is very expensive to implement.

A behaviourist approach to consumer behaviour.

Much of the work performed by behaviourists in consumer research is based around the Pavlovian learning model, with its four components of drive, cue, response, and reinforcement.

Behaviourism within consumer research suggests the pairing of environmental stimuli with the attributes of a particular product, brand, or store (Ehrenberg, Goodhardt, and Collins, 1975). The approach does not provide a complete theory of behaviour. For instance it leaves out such considerations as the role of perception, the subconscious, and

interpersonal influences.

The use of attitude research in respect to the consumer.

The area of attitude research has received more attention and interest from consumer researchers than any other. Most research conducted along these lines has been centered around the Fishbein Extended Attribute Behaviour Model (Fishbein and Ajzen, 1975).

$$A_j = \sum_{i=1}^n b_{ij} \times a_{ij}$$

where,

A_j = the individuals attitude toward an object j,

b_{ij} = the individuals belief that object j is associated

with some other object i,

a_{ij} = the individuals affective orientation towards that

that object,

n = the number of salient beliefs about object i.

In these models, consumer behaviour is seen as simply being a human action which involves a choice among various alternatives and for which no hidden or unique processes have to be invoked in order to account for the behaviours displayed. It is believed that the needs or motives a person has, influence the information that a person seeks about a product. These

needs also influence the person's attention to, and perception of the product's attributes. However, these needs and motives can also be changed or modified by means of exposure to the product, to the advertising, or to other social and cultural forces.

The cognitive response approach to the study of consumer behaviour.

Cognitive response is an attempt to develop a conceptual understanding of the psychological processes which mediate attitudinal acceptance of the information provided by marketers. (Wright, 1973)

Cognitive response, especially as proposed by Wright (1973), assumes the model of perception proposed by Gibson (1966). It contends that if the receiver is an active information seeker and processor, then the person can be expected to attempt to compare the external information to his or her existing structure of beliefs and values. These relational activities are seen as generating a body of cues (spontaneous cognitive responses, or critical thoughts) which research suggests are the actual primary mediators of message acceptance.

The use of an attribution theory approach to consumer research.

Attribution theory attempts to describe the information people use in making causal inferences and how they use that information, by dealing only with the processes by which attributions are derived from information input (Kelley, 1967).

In respect to consumer behaviour, attribution theory states that an

individual will attribute observable events to their underlying causes on the basis of covariation of cause and effect. For example, a persuasive message such as an advertisement can be regarded as an observable effect by the receivers of the message. Principal among the causes to which it might be attributed are:

- a) the desire of the advertiser to sell his product,
- b) the actual characteristics of the product being advertised.

If the brand is always being praised by the advertiser, and if the message content does not vary over product characteristics, then the effect would covary with the advertiser and would be attributed to the advertiser's desire to sell the brand of product. If, instead, the advertiser claimed that the product was superior to some other products in some respects and not in others, then the effect would be seen to covary with the characteristics of the product, rather than with the advertiser. The message would be attributed to the actual characteristics of the product, and would lead to a higher degree of certainty about the claims made about the product and an increased probability of purchase. (Settle and Golden, 1974)

Cognitive dissonance in consumer research.

The application of the theory of cognitive dissonance to consumer research was made by Festinger (1976). Festinger claimed that the individual strives toward being consistent. The individual's opinion and attitudes tend to exist in clusters that are internally consistent. Consistency is regarded as being the desirable state of affairs within the individual, that is, the state the individual strives to attain.

However, when an individual encounters inconsistencies which cannot be rationalised, psychological discomfort or dissonance occurs. The person is then motivated to resolve such states of tension.

The application of this theory to consumer behaviour can be viewed in a number of ways. For example, a consumer purchasing an item will seek to buy that item which will cause the least possible dissonance with his or her beliefs about the attributes that a product of this kind should have. Dissonance may also occur between what a consumer expects of a certain product and what the product is actually like. In such cases dissonance reduction is attempted by further study of the advertised attributes or by changing to another brand of that product.

In another case, a consumer may be faced with the following situation. Person A may like person B. Person B may also like brand X, however person A may dislike this brand. What then is person A to do? If person A buys brand X to please person B, then this will cause dissonance, but also not buying brand X will cause dissonant feelings for person A. In this case person A's desire to buy brand X will be weighed up against the desire to remain entirely consistent with feelings towards person B.

The family decision making approach to the study of consumer behaviour.

As of yet no overall theories have been constructed to guide this approach. However research seems to have progressed along three distinct lines.

- 1) the involvement of family members in economic decisions.
(Davis, 1976; Kassarian and Robertson, 1981)

- 2) the process by which family decisions are made.
(Robertson and Zielinski, 1981; cited in Kassarian, 1982)

- 3) the consequences of different family structures and decision making styles. (Alderson, 1965)

The study of pupil dilation in the consumer.

The idea of taking pupillary dilation as a measure of the amount of load on memory and the amount of effort involved in the storing of information was devised by Hess and Polt (1960). Initially the approach was very popular, however the inability to replicate many findings caused it to fall into disuse (Rice, 1974). Recently (Watson and Gatchell, 1979) it has been used together with measures of electrodermal activity and heart rate to good effect.

Brain hemisphere lateralisation.

This approach studies the differing activities of right and left brain hemispheres and relates this to consumer behaviour (Weinstein, Appel, and Weinstein, 1980). It has been known for some time that humans show some specialisation in the use of the right and left hemispheres of the brain. The left hemisphere is primarily responsible for traditional cognitive activities relying on verbal information, symbolic representation, sequential analysis, and the ability to be conscious and to report what is happening. The right hemisphere is more concerned with pictorial, geometric, timeless, and non-verbal information (Hansen and Lundsgaard, 1981; cited in Kassarian, 1982).

From research in this area it has been proposed that, even when attention is not present, the individual is still able to receive and store information. This process is regarded as being particularly efficient with respect to pictorial material, since it is stored in a holistic, unedited, and non-verbal fashion (Hansen and Lundsgaard, 1981).

While this list is by no means exhaustive, it does serve to emphasise the large number of approaches that have been taken from within psychology to the study of consumer behaviour.

Probably the most widely respected approach to the study of consumer behaviour is the information processing approach. The approach has provided the basis for much research and is also the foundation for the present study. A description of the approach is therefore necessary for an understanding of the present research.