SWP 4/92 CONSUMER INVOLVEMENT WITH GROCERY BRANDS:
AN EMPIRICAL STUDY OF THE FACTORS
INFLUENCING CHOICE

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by

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MEASURING CONSUMER INVOLVEMENT WITH GROCERY PRODUCTS

1. INTRODUCTION

The concept of involvement has played an increasingly important role in explaining consumer behaviour. The level of consumer involvement has been hypothesized as affecting brand loyalty, information search, decision process complexity and the predictive ability of attitude models (Assael 1987). Early attempts at empirical verification of the concept as a mediator of purchasing decisions have been of limited value. Problems in definition and measurement techniques have reduced much of this research to a rather qualitative level (Cohen 1983, Antil 1984, Costley 1988). Recently, significant progress has been made in clarifying the definition and providing new methods of measurement (Bloch and Richin (1983), Laurent and Kapferer (1985), Mittal and Lee (1989), Mittal (1989)). Whilst these measuring devices have proved to be robust, their application has been very limited, particularly in grocery product markets.

The research question posed in this paper is whether or not contemporary measurement techniques are sufficiently sensitive to detect significant differences in consumer involvement with grocery products. The paper opens with an evaluation of the converging theory on consumer involvement and its application in the grocery sector. Whilst recognising

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that researchers are divided in their opinions about how involved consumers are with these products, we argue that, in principal, differing levels of involvement could be detected.

In the second part of the paper, we discuss the research procedures that we used to measure consumer involvement across a number of grocery product categories. Through correlation analysis, we were first able to reduce the number of items measured whilst maintaining the structure of the original measurement device. The results stemming from this modified approach are then presented and cross-comparisons between products discussed. Although the product categories were all considered medium to low involvement, significant differences in the levels of involvement were found.

Finally, we discuss how the revised measuring device can be used by marketing management and academics to advance understanding of grocery product purchasing.

2. CONSUMER INVOLVEMENT: A CONVERGING THEORY.

Despite differences in nuances, there seem to be some common threads emerging from the multifarious definitions of consumer involvement. A number of authors [Antil (1984), Zaichkowsky (1985), Celsi and Olson (1988)] emphasise the importance of product possession, usage and purchasing situation to the consumer. This reflects the perceived value attached to the particular stimulus or situation that manifests as consumer interest. Peter and Olson (1987) also recognize the saliency of perceived consequences that may result. Their definition of involvement is: "the degree of personal relevance which a stimulus or situation is perceived to help achieve consequences and values of importance to the consumer". So involvement with a product can be regarded as the extent to which consumers' product knowledge is related to their self-knowledge about desirable values and needs. They argue that the more closely that product knowledge about attributes and functional consequences is connected to abstract psychosocial and value consequences, the more involved the consumer is with the product. Product involvement can thus be expressed as a means-end of product knowledge. (Fig.1) Consumers probably perceive relatively few products to be directly linked to their terminal values. Most products are strongly linked to functional and psychosocial ends and, occasionally, instrumental values (de Chernatony and Knox 1989). Product (or enduring) involvement develops as the means-end relationships are established through the experiences gained in possessing, using or consuming the product. Purchasing involvement (situational involvement), on the other hand, is the interest taken in making the brand selection and is context specific. For instance, buying a gift may activate certain values and goals that are not relevant in other use situations. The level of situational involvement is temporarily felt and is fashioned by the association of brand knowledge (attributes and functional consequences) with relevant self-knowledge appropriate to the purchasing context. Consumer involvement (Fig.2) is considered to be a function of the base level of enduring involvement interacting with the level of situational involvement caused by the physical and social context of purchase (Bloch and Richins 1983).
Fig. 1: Product Involvement as a Means–End Chain

Source: Adapted from Peter and Olson (1987).
Source Influences

Involvement forms

### Consumer characteristics
- Self concept
  - basic values and needs
- Personality traits

### Product characteristics
- Symbolic meanings
- Hedonic value
- Utility
- Perceived price and risk

### Situation context
- Time pressure
- Social environment
- Purchase situation
- End-use

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**Fig. 2: Basic model of Consumer Involvement**

**Source:** Adapted from Block and Richins (1983)
3. INVOLVEMENT WITH GROCERY PRODUCTS

Many marketing practitioners seem to believe that consumers choose their products and brands in a highly discriminating and deliberate fashion. None more so than marketers of grocery products. McKinsey have estimated that some 23% of costs for a major food manufacturer were directly or indirectly attributable to building their brands' added-values (Davis 1986). If consumers were not in some sense prepared to pay for that differentiating activity or if the brand differences were not sufficiently valued, they argue there would not be the economic justification for either manufacturers or retailers to engage in expensive branding exercises. Recent research on price recall of grocery brands and own labels suggests that consumers can readily discriminate between product categories in assessing price-perceived value relationships (de Chernatony and Knox 1991). Whether this level of discrimination exists between individual brands within product categories has yet to be reported for grocery products. Clearly, manufacturers and retailers subscribe to this view (perhaps based on proprietary consumer research) since brands within product categories are differentially priced in store. McWilliam (1991) presents a very strong argument for carrying out this type of research amongst consumers using involvement to establish whether brand differentiation translates into differentiated values based on brand knowledge.

Academics do appear divided in their views about consumer involvement with grocery products. For instance, the Kassarjians have stated categorically that consumers simply "don't give a damn" about most grocery products (Kassarjian and Kassarjian 1979). Barwise and Ehrenberg are of a similar view (Barwise 1984). They argue that most grocery goods are so risk-free and, through direct experience of them, so similar that any perceived difference (no matter how trivial) is likely to generate some trial on a "why not" basis. In contrast, Kapferer and Laurent (1984) are able to distinguish between grocery product categories based on their involvement profile approach (p.8, measuring involvement). For instance, they found that consumers showed significant differences in the level of situational involvement when purchasing pasta or shampoo. The latter was found to be more highly involving. In a similar study, Mittal (1989) showed significant differences in situational involvement when wine was bought for a special occasion rather than as an ordinary purchase. However, neither researchers measure enduring involvement, so the level of felt involvement (Fig.2) remains unclear.

In addition to enduring and situational involvement, there are a number of source influences that are regarded by academics as having an effect on the level of felt involvement with grocery products. They are categorised in Fig.3 according to the direction of influence on the involvement continuum and discussed in the next section.
Fig. 3: Involvement continuum for grocery products
3.1 SOURCE INFLUENCES AND HIGH INVOLVEMENT.

Source influences that contribute towards high involvement with grocery products have been discussed in the literature for the past twenty years. However, empirical validation is scant. There are only a few product studies that provide evidence to support the involving argument. For example, Knox, Tait and Amps (1989) cite the case of UK mineral waters being positioned as "bistro" brands to exploit social recognition and sports drinks as being associated with fitness and health. Both are examples of lifestyle products that provide routes to self-concept enhancement through product symbolism (Lannon and Cooper, 1983). Laurent and Kapferer (1985) report differences in the pleasure values associated with chocolate and detergents, with high and low ratings respectively. In the same study, detergents were also found to be devoid of any risk components. In his meta-analysis of risk and information search, Gemunden (1985) concludes that, for convenience goods in general, perceived risk usually seems to remain below a tolerated threshold. However, this may be due to the fact that manufacturers of grocery products have clearly understood the importance of consistency and quality to remove the threat of adverse functional consequences. However, psycho-social risk may still remain within the family and among friends.

In contrast to the research on consumer durables, the evidence for grocery products points towards low enduring involvement if the effects of source influences are any guide. However, it would be inappropriate to be too categorical since consumer involvement is multifaceted and the source factors cited here do not take into consideration the situational influences discussed in the next section.

3.2 SOURCE INFLUENCES AND LOW INVOLVEMENT

The source influences which mediate low consumer involvement tend to be situational for grocery products. In other words, they relate more to the level of information processing associated with brand choice and purchasing decisions. However, there is an inherent paradox associated with each one of these source effects. Cognitive efficiency, for example, implies that consumers strive to minimise effort in decision making, particularly when purchasing grocery products (Hoyer, 1984); the role of the brand in this process is potentially considerable. Essentially this role is a re-coding process (Millar 1956) whereby each "bit" of information is organised by learning into "chunks". It is the "chunk" which is subsequently used as shorthand for a compendium of information; brands can be viewed as "informational chunks" for functional performance, pleasurable experiences, self-concept etc. Millar's logic suggests that the stronger the brand's added-values, the lower the situational involvement! It is quite possible that low situational involvement (in terms of cognitive effort) masks a good deal of high enduring involvement. Routine purchasing, a consequence of routine selection, implies that repeat purchasing becomes the norm unless poor product performance or a simple desire for "change" forces a re-analysis of the original decision. For example, a new advertising campaign from a competing staple (e.g. fruit sugar rather than common sugar) may just be sufficient to trigger such a purchasing switch and a new process of information "chunking" through user experiences.

It would seem from this brief literature review that consumers could, in principal, exhibit differing levels of involvement with grocery products. What little empirical evidence there is seems to point towards some differences in both the enduring and situational forms, judging from the arguments presented about source influences.

In carrying out the exploratory research reported in this paper, our main objective has been to determine whether significant variations in the levels of consumer involvement can be obtained for grocery products, i.e. to test the sensitivity of the most appropriate
measurement device. We wished to measure both situational and enduring involvement directly as well as the saliency of source influences, so it was necessary to validate not only the measurements across product categories but also at the brand-decision level.

In the next section we review the measuring devices that have been developed in recent years and discuss their application to grocery products.

4. MEASURING INVOLVEMENT

In early research when quantitative indicators of involvement were used, the instruments were often single scale [Vaughn (1980); Zaichkowsky (1985)] or a single-item measurement of perceived importance [Agostini (1978); Lastovicka and Bonfield (1982)]. More recently, in their seminal paper on involvement measurement, Laurent and Kapferer (1985) challenge this assumption and posit the idea of an "Involvement Profile" as a more appropriate measurement device. They argue that since their profile is multidimensional, it must provide a more complete description of the relationship between the consumer and the product. The authors identify four sources of involvement derived both from the literature and from interviews with marketing management; the profile is based on a measurement of each of these four sources. Whilst their work represents a significant step forward, their modelling approach is vulnerable to criticism. Knox and Walker (1990) argue that because the researchers implicitly define involvement by source, there can be no distinction between situational and enduring involvement in their theory. This is important when considering products which are to be consumed in radically different situations. For instance, compare wine purchased by the layman for personal consumption to wine purchased by the same person for a dinner party or the wine purchased by a connoisseur. In each case, the characteristics of purchase are different yet the consumer remains the same in two out of the three cases. Mittal and Lee (1989) offer two other criticisms. Firstly, they argue that the perceived product importance measured by Laurent and Kapferer as a source is, in fact, a part-measure of enduring involvement itself. They give the example of a refrigerator which can be perceived as important but may not evoke much interest i.e. be involving. Secondly, they point out that it is artificial not to explicitly distinguish between sources and forms of involvement. In their paper, Mittal and Lee present a causal model of involvement derived from the work of Laurent and Kapferer (1985) and Bloch and Richins (1983) but which takes into account both sources and forms of involvement. The model is outlined in Fig.4.
Fig. 4: A Casual Model of Consumer Involvement

Source: Adapted from Mittal & Lee (1989)
In the study, the levels of involvement across twenty products were measured amongst a convenience sample of 100 consumers. They were then able to validate the causal network using LISREL IV. In essence, they recognise both forms of involvement (as per Fig.2) and establish that enduring involvement is an antecedent of situational involvement. Their three source influences of enduring involvement are remarkably similar to three of the items identified previously by researchers (Fig.3, p.6). (Product utility in the causal model identifies category benefits and opportunity loss of not using these products rather than a direct measure of perceived risk). With regard to sources of situational involvement, the consumer's cognitive processing (or lack of it) is replaced by evaluations of functional and psychosocial consequences of brand selection and purchase. The researchers make no attempt to explicitly measure the extent of information processing or the degree of satisfaction in the choice procedure that have been identified in prior theory. Whilst we could level this as a criticism of the model, we also recognise the enormous complexity of providing suitable measuring devices. In the end, researchers need an instrument that is practicable, straightforward for consumers to understand and is quick to complete.

Interestingly, the researchers were able to demonstrate that these source influences were able to explain a substantial portion of the variance in situational involvement for consumer durables; sufficient evidence to accept the model for our exploratory purposes. Measures of all eight involvement-related constructs (six source, two form) lead to the final identification of three scale items for each construct. So, in total, twenty-four items were measured in their self-administer questionnaire p.389).

Given that this questionnaire had been developed using involving products, our second research objective was to test the suitability of this measurement tool among grocery products. Prior theory suggests that the majority of these products are likely to be medium to low involvement. Consequently, we felt that such a detailed level of intra-construct measurement would lead to significant levels of data duplication. The research procedure described in the next section was designed firstly to identify any such unnecessary measurement items and then to validate the adapted questionnaire across several grocery product categories.

5. RESEARCH PROCEDURES AND DATA INTERPRETATION

Seven high-penetration product categories were selected for inclusion in the research. They had previously been considered by expert opinion as representative of the full range of involvement levels amongst grocery products. They are grouped below according to how they had been categorised prior to field research:

<table>
<thead>
<tr>
<th>Low</th>
<th>Level of Involvement</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>kitchen towels</td>
<td>detergents</td>
<td>toothpaste</td>
</tr>
<tr>
<td>tinned tomatoes</td>
<td>breakfast cereals</td>
<td>newspapers</td>
</tr>
</tbody>
</table>

A random, convenience sample of twenty-five respondents was then asked to complete the Mittal and Lee questionnaire for each of these product categories. Respondents were selected only if they were responsible for the household grocery purchases and had bought/used three or more of the products in the last four weeks. The self-complete questionnaire (24 items) was left with respondents and collected 2 days later. All items were recorded on a 7-point, bi-polar scale (strongly agree ... strongly disagree) and comments
about the length and content of the questionnaire were collected in an open-ended question at the end. The data was then analysed using the Genstat 5.21 suite of programmes.

Since both users and non-users answered the questionnaire, the data for cigarettes was difficult to interpret as they had strong, dichotomous views about the product category; aggregate data tended to mask the polarised scores of these two sub-groups. This observation was fully supported by the extreme comments made by non-smokers in the open-ended question at the end. For this reason, we felt it prudent to exclude the product category from any further analysis.

Before the aggregated involvement scores were calculated, we wished to look at the communality of the measured items for data reduction purposes. Principal components analysis was undertaken and the correlations between these items determined. An examination of the non-rotated solutions did not enable us to interpret the meanings of the components since factor loadings were low (< 0.3), we therefore applied an orthogonal (varimax) rotation. Again, factor loadings were low (< 0.3) which implies there is no simple, underlying structure to the data. However, inspection of the correlation matrix revealed high levels of correlation between items for the individual constructs. Given the amount of prior theory available and the adoption of a null hypothesis (i.e. that the items were uncorrelated), we concluded that items with the highest correlations (c > 0.6, p < .001) were so closely related that respondents had interpreted them to mean the same thing. This was also confirmed in the open-ended comments where they stated that the questionnaire was repetitive since items (within constructs) seemed very similar indeed. Table 1 shows the intra-construct correlations and the second/third items that were dropped prior to further analysis.

In order to reduce respondent fatigue in other involvement surveys related to grocery products, we recommend that the original Mittal and Lee questionnaire is shortened to these fourteen items (Appendix 1).

Using the reduced-item questionnaire, mean scores for enduring and situational involvement were calculated for the six product categories. The three source values for each form of involvement have also been reported in Table 2 for comparative purposes. Building upon the premise that enduring involvement is the more influential form of involvement (Mittal and Lee 1989), we anticipated significant differences in the mean scores between product groups for this construct. This was found to be the case for toothpaste, detergents, newspapers and cereals when compared to either kitchen towels or tinned tomatoes. However, there were no significant differences between these four product categories on this construct measurement. At the source level (product sign, hedonic and utility), the data is more revealing. For instance, the sign value of newspapers was significantly higher than for toothpaste, detergents or cereals which, in turn, were each more significant than for tinned tomatoes. Similarly, the product utility value of toothpaste was significantly above cereals (as was detergents). So our measurement of enduring involvement, when linked with source influence, indicates a hierarchy of product categories which becomes more pronounced when situational involvement is also considered. Newspapers with the highest situational interest, scored significantly above cereals which, again, were significantly different to tinned tomatoes (or kitchen towels). At source level, broadly the same pattern emerges; newspapers had significantly higher brand sign and hedonic values than cereals which, in turn, had higher brand values across these constructs than tinned tomatoes.

Whilst there are variations in the hierarchy of the product groupings based on either enduring or situational involvement scores (particularly if source influences are also considered), there is an underlying consistency that is more apparent than any differences. By considering both forms of involvement as a continuum and by placing each product category in order, three clusters emerge (Fig.5).
Legend
- items 1,2,3 of the construct "enduring involvement"
- item(s) dropped within the construct. Correlation > .6, p=0.001
- item(s) retained within the construct. Correlation ≤ .6, p=0.001
<table>
<thead>
<tr>
<th>Form</th>
<th>Source</th>
<th>Product Categories/Mean Scores</th>
<th>Six category Mean</th>
<th>S.E.D.</th>
<th>L.S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Kitchen towels</td>
<td>Tinned Cereals</td>
<td>Detergents</td>
<td>T'Paste</td>
</tr>
<tr>
<td>Enduring</td>
<td></td>
<td>5.54</td>
<td>4.90</td>
<td>3.83</td>
<td>3.44</td>
</tr>
<tr>
<td>Involvement</td>
<td></td>
<td>5.47</td>
<td>4.79</td>
<td>3.79</td>
<td>3.44</td>
</tr>
<tr>
<td>Situational</td>
<td></td>
<td>5.79</td>
<td>5.86</td>
<td>5.11</td>
<td>4.79</td>
</tr>
<tr>
<td>Involvement</td>
<td></td>
<td>6.40</td>
<td>6.53</td>
<td>5.57</td>
<td>6.46</td>
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<tr>
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<td>3.92</td>
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<td></td>
<td></td>
<td>5.36</td>
<td>4.97</td>
<td>4.82</td>
<td>4.17</td>
</tr>
</tbody>
</table>

Legend:  
*** Low scores, more involving; high scores, less involving. 
** S.E.D. Standard error of difference. 
* L.S.D. Least significant difference (p = 0.05).

Table 2: Forms and Sources of Involvement for Grocery Products.
Figure 5: Clustering Product Categories on the Involvement Continuum
Both tinned tomatoes and kitchen towels are low involvement categories according to either measure. Cereals can be distinguished as more involving primarily due to attributed sign values, whilst detergents, toothpaste and newspapers are the most involving of the six product categories. The final positioning of the latter three categories depends upon involvement form; toothpaste generates the most enduring involvement whilst newspapers the most situational interest.

In comparison to the measurements of situational involvement carried out by Mittal (1989), all the six grocery product categories here have medium to high scores relative to the consumer durables in that particular study [e.g. eyeglasses (0.73); lawnmower (1.53); bicycle (1.97) .... newspapers (2.90); kitchen towels (5.47)]. This implies a medium to low level of situational involvement for grocery products. Intuitively, we would expect this to be the case but it is very reassuring to find this level of separation in the scores between durables and groceries. We are not aware of any other empirical studies where such direct comparisons can be made (Laurent and Kapferer's questionnaire approach and involvement profile scores remain proprietary).

It is clear from this pilot study that the 14-item questionnaire is sufficiently sensitive to produce significant variations in the levels of influencing sources and forms of involvement across the grocery products in question. The managerially-derived involvement hierarchy (p.10) for the product categories has been confirmed in four out of six measures of situational involvement. The measures of enduring involvement proved less sensitive overall. Nonetheless, significant differences between product categories at the medium and low end of the involvement continuum were observed. These differences also correspond to prior expectations. So within the confines of our research procedures (limited by sample size and representativeness), both our research objectives have been met.

In the concluding comments we draw together prior theory and discuss the practical implications of our findings for practitioners and academic researchers.

6. CONCLUSIONS

Recently, significant progress has been made by researchers both in reaching agreement about a suitable definition of consumer involvement and providing new methods of measuring it. Building on these recent works, Mittal and Lee have now developed a causal model that distinguishes between forms and sources of involvement which has been validated for consumer durables. The research question which we have addressed is whether or not this measurement device is sufficiently sensitive to detect significant differences in the levels of consumer involvement with grocery products. Prior theory suggested that, in principal, this should be possible despite the divided opinions that characterise the academic research in this area. Indeed, a number of individual researchers have identified differences in situational involvement and sources of enduring involvement in relation to grocery products. So far as we are aware, our exploratory study is the first time that both sources and forms of consumer involvement have been measured using a multiple-item device. Seven product categories were selected for testing and a twenty-four item questionnaire used to measure the involvement constructs. One product category and ten items from the questionnaire were subsequently dropped prior to analysis. Our results show that it is possible to measure significant differences in the sources and forms of consumer involvement with grocery products using a fourteen-item questionnaire. The measurement of situational involvement and its influencing sources was particularly sensitive. This finding will be of practical interest to practitioners since it relates to brand-decision involvement i.e. differences between brands within a product category. Eight of the fourteen items within the questionnaire relate to these constructs. Where appropriate, the questionnaire could be shortened in this way for use among consumers in developing promotional strategies to modify search and purchasing behaviour at the brand level. At the product category level,
the fourteen-item questionnaire could be used to segment the market. Rather than merely indicating medium-low involvement divisions of the market (as per p.10), the measuring device allows identification of consumers high on some source constructs but low on others. This provides a better understanding of the dynamics of consumer involvement i.e. a better understanding of where involvement originates and provides clues as to which types of appeals should be used in communications with each segment.

At a broader level, as the measure of involvement becomes more firmly established so can the causal relationships with behavioural consequences (such as purchase loyalty, purchase frequency and brand purchasing portfolios). In grocery product markets, such knowledge would undoubtedly become the key to effective and efficient management of brands and product groups.
APPENDIX 1
Measures For The Forms And Sources Of Involvement For Grocery Products

1. **Enduring Involvement**
   I have a strong interest in ..... 

2. **Situational Involvement**
   I would choose my ..... very carefully.

3. **Product Sign**
   3.1 Using ..... helps me express my personality.
   3.2 Knowing whether or not someone uses ..... tells a lot about that person.

4. **Product Hedonic**
   4.1 I would give myself great pleasure by purchasing ..... 
   4.2 To buy ..... would be like giving myself a present or treat.

5. **Product Utility**
   Using ..... would be beneficial.

6. **Brand Sign**
   You can tell a lot about a person from the brand of ..... s/he buys.

7. **Brand Hedonic**
   7.1 I believe differing brands of ..... would give different amounts of pleasure.
   7.2 All brands of ..... would not be equally enjoyable.
   7.3 No matter what brand of ..... you buy, you get the same pleasure.

8. **Brand Risk**
   8.1 When you buy ..... it is not a big deal if you buy the wrong brand by mistake.
   8.2 It is very annoying to buy a ..... which isn't right.
   8.3 A bad buy of ..... could bring you trouble.

All items used 7-point strongly agree/disagree scales.
REFERENCES


