Who and Why? Demographic and Psychographic differences between consumers who have altered their shopping behaviour during a recession and those who have not

Dr Robin Pentecost*
Griffith Business School,
r.pentecost@griffith.edu.au

Dr Lynda Andrews,
Advertising, Marketing and Public Relations,
Queensland University of Technology
l.andrews@qut.edu.au

Abstract
Research suggests that people differ in terms of changing their shopping behaviour during a recession. This paper reports on a preliminary descriptive study assessing what influences those consumers who have altered their shopping behaviour during such times. Driving the alteration of shopping behaviour were both demographic (age, gender, education, and nationality) and psychographic variables (attitudes, and head vs. heart decision making). Overall, the findings show that there are statistically significant differences between the two groups’ that marketers can address in their marketing strategies during the recession.

* Contact and presenting author.
Who and Why? Demographic and Psychographic differences between consumers who have altered their shopping behaviour during a recession and those who have not

Background to the research

As the global economic recession in 2008/2009 continues its path, the importance of research in this area becomes imperative. For marketers in retail organisations whose budgets may be cut, the urgent challenge is to develop marketing programs with fewer resources yet still be capable of attracting customers who are now more hesitant to spend. Thus, understanding changes in consumers’ behaviour during a recession becomes vital for developing effective and efficient marketing strategies. However, marketing research on recessionary times is limited, particularly at the consumer behaviour level (Zurawicki and Braidot, 2005). Given this limitation, the significance of this study to the retail research literature is twofold. First, it identifies the percentages of those who perceive they have changed their retail behaviour due to the economic climate and those who have not. Second, the study evaluates and assesses both demographic and basic psychographic variables (attitudes, price consciousness, and decision making processes) on whether a respondent perceives they have altered their shopping behaviour or not.

Theoretical Development and Hypotheses

Most consumers are affected in some way during a recession, whether this is direct or indirect, financial or psychological (Goodell and Martin, 1992). For example, some consumers may start to explore trade-offs in their consumption decisions, making deliberate trade-offs between functional characteristics (e.g. price) and affective characteristics (e.g. quality). As such, they may trade down, meaning they will chose similar but less expensive brands that will satisfy their needs and wants (FitchRatings, 2008b; Johansson and Hirano, 1996). However, not all consumers may change their behaviour as not all consumers are affected in the same way by a recession (Goodell and Martin, 1992). For example, Zurawicki and Braidot (2005) found that certain socio-economic classes in Argentina were more likely to feel the effect of a recession sooner than other classes and start to change their consumption behaviour. Additionally, Shama (1981) found that over 50% of participants in the study had changed their purchasing behaviour during a recession. On the other hand, Weeks (2004) found that when considering economic hardship, consumers were unlikely to restrict their consumption behaviour. Since the findings are equivocal, an initial proposition to commence the study must be one that determines whether a sizable group of consumers have changed their shopping behaviour during the 2008/2009 recession. This leads to the following proposition framing the study: RP1: that a sizeable percentage of consumers have altered their shopping behaviour during the recession.

A major segmentation tool in marketing is demographics so it is considered important to know how these consumer characteristics may differ between behavioural groups during economic downturns. It has been suggested that during a recession the middle class and the young and unemployed consumers carry the economic burden (Shama, 1981), implying these demographic groups are more likely to alter their behaviour as they strive to make ends meet. Nationality may also differentiate consumer during a recession. For example, Poser and Shipchandler (1979) found similar directions of adjustments between German and US
consumers during a recession but significant differences in their scope between the two nationalities. Social class, and its income indicators (e.g. education level) were also differentially influenced during a recession. For example, Zurawicki and Braidot (2005) found that the lower to middle income bracket of the middle class consumers experienced the recession earlier and harder than middle to upper income group. Thus, there is evidence to suggest that the impact of the recession may differ on particular demographic variables. For the sake of parsimony, the following non-directional hypothesis is specified. **H1: Age, education level, income and nationality will differ significantly between those who have altered their shopping behaviour during a recession and those who have not.**

Psychographic factors are another area for differences. Shama (1981) found that economic downturns influenced consumers’ motives, attitudes and consumption behaviour in ways that separated them into two distinct groups. Zurawicki and Braidot (2005) also suggest that changes in attitudes towards certain products or product categories during a recession can create different groupings of consumers. Donthu and Gilliland, (1996) suggest that consumers can be separated based on their positive or negative attitude towards shopping, and that this factor contributes significantly towards predicting their behaviour. Thus it can be inferred that consumers’ attitudes towards shopping may change during a recession in ways that may separate the two behavioural groups. Given that attitudes have a positive relationship to consumption behaviour (Allport, 1935), the following hypothesis is proposed: **H2: Attitudes towards shopping will have a significant positive influence on the decision not to alter shopping behaviour during a recession.**

Also, given such an economic climate, it makes logical sense that people are more cost conscious. Ailawadi, Neslin and Gedenk (2001) found that price consciousness is positively related to consumers’ decisions to purchase store brands rather than national brands. Industry reports and research evidence, (e.g. Zurawicki and Braidot 2005) discussed earlier suggest that this consumer behaviour holds true in a recession. On the other hand Weeks (2004) found that when considering economic hardship, participants in her study reported they would be less likely to reduce spending on categories such as clothes as they believed they were already using value retailers. It could be reasonably inferred, however, that price consciousness may also be a point of difference between the two groups. This leads to the following hypothesis: **H3: Price consciousness will have a significant positive influence on the decision to alter shopping behaviour during a recession.**

As noted earlier, not every consumer is affected by a recession. To some extent, this may be influenced by their subjective perceptions of how the downturn is likely to affect them and how they make trade-offs between product categories or price/quality (i.e. Zurawicki and Braidot 2005). In turn, this may impact on whether a rational or emotive decision-making process underpins their change in shopping behaviour (Shiv and Fedorikhin 1999). Research shows that when consumers have access to more processing resources they are more likely to be influenced by cognitions related to the consequences of their decisions, thus their head would rule rather than their heart (Shiv and Fedorikhin 1999). During an economic recession consumers are likely to be subject to and more involved in information on the recession through the media. As higher involvement entails higher cognitive processing (Zaichowsky, 1985) such processing is therefore likely to influence the decision making process. Thus, for those who have altered their shopping behaviour it then makes intuitive sense that cognitive factors may underpin their decision to change. This leads to the following hypothesis: **H4:***
Cognitive decision making will have a significant positive effect on the decision to alter shopping behaviour during a recession.

Research Design

Using a field study approach, a team of trained research assistants walked through and randomly intercepted shoppers in a retail mall located in a major city in Southeast Queensland, Australia. These shoppers were asked to complete a self administered survey as suggested in current research in this area (e.g. Taylor and Cosenza, 2002). This data was collected at a range of different times during the day. Given the research is looking at those who have altered their shopping behaviour not those who have ceased shopping, the use this convenience sampling technique was considered to be a valid approach.

Measurements: The behavioural groups were identified by the following statement: “The economic situation has altered my shopping behaviour” with a dichotomous Yes/No response format. While there may be concerns over such a simple question, given that the research is only looking at whether the respondent perceives that he or she has altered their behaviour, rather than the degree to which they have altered their behaviour, the use of such a question was felt to be sufficient. To help with statistical analysis this response was coded into 1 if altered behaviour, 0 if not. Standard parametric and non-parametric demographic questions were also asked. These consisted of: age, gender marital status, education, nationality and income, which were dummy coded appropriately.

Psychographic variables: Items for attitude towards shopping were adapted from Donthu and Gilliland (1996) and items for price consciousness were adapted from Ailawadi, Neslin and Gedenk (2001). Both scales were measured using a 7-point Likert scale anchored with strongly disagree (1) strongly agree (7). Items for the decision making processes (Head vs. Heart scale) were adapted from Shiv and Fedorikhin (1999) with a 7 point semantic differential scale. For this scale a lower figure means more cognitive decision making. Reliability tests on the multi-item constructs all have alphas ≥ .70 (Nunnally and Bernstein, 1994). All relative items were aggregated and averaged for further analysis.

Results

The final sample consisted of 440 respondents of whom 39% males and 61% were females. While this gender imbalance is not representative of the general population in Australia and may be considered a limitation to be addressed, it is reflective of the gender distribution of those who shop at malls (Westfield Workbook, 2008). Average age for the sample was 33 years with a standard deviation of 15.1.

The underlying research proposition for the study was supported as 53% of the respondents reported having altered their shopping behaviour due to the recession. Supporting Shama (1981) that at least 50% of his sample had altered their shopping behaviour, our finding suggests that there are two viable groups in the study to test the hypotheses.

To test the hypotheses a logistic regression was run. This technique was chosen over cross-tabulation because it allows for each of the scalar predictor constructs (i.e., attitudes towards
shopping, price consciousness and head vs. heart) as well as the both the parametric and non-parametric demographic variables to be included in the analysis. Using the behavioural groupings as the dependent variable, the results show a good fit for the logistic model with the log-likelihood of the initial model (-2LL = 460.05) decreasing with the addition of the predictor variables (-2LL = 398.27). This was confirmed with the fit between the actual model and predicted model, as indicated by the Hosmer and Lemeshow value, having an insignificant Chi-square ($\chi^2 [8 \text{ df}] = 10.97$, sig. = .203). Approximately 23% of the variance in the model may be explained by the predictor variables ($\text{Nagelkerke } R^2 = .23$). The results of the analyses are depicted in Table 1.

Table 1: Logistic regression results for demographic and psychographic factors

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>Sig.</th>
<th>Exp[B]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trade education</strong></td>
<td>-.873</td>
<td>.012*</td>
<td>.418</td>
</tr>
<tr>
<td>Tertiary education</td>
<td>-.346</td>
<td>.260</td>
<td>.708</td>
</tr>
<tr>
<td>Single</td>
<td>-.034</td>
<td>.919</td>
<td>.967</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>1.084</td>
<td>.001**</td>
<td>2.957</td>
</tr>
<tr>
<td>Student</td>
<td>-.089</td>
<td>.854</td>
<td>.915</td>
</tr>
<tr>
<td>Blue collar</td>
<td>.264</td>
<td>.603</td>
<td>1.303</td>
</tr>
<tr>
<td>White collar</td>
<td>.583</td>
<td>.198</td>
<td>1.790</td>
</tr>
<tr>
<td><strong>Australian</strong></td>
<td>-1.076</td>
<td>.000**</td>
<td>2.933</td>
</tr>
<tr>
<td>Low income (&lt;30,000)</td>
<td>.508</td>
<td>.246</td>
<td>1.663</td>
</tr>
<tr>
<td>Middle income (30,000-60,000)</td>
<td>.105</td>
<td>.775</td>
<td>1.111</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>.026</td>
<td>.036*</td>
<td>1.026</td>
</tr>
</tbody>
</table>

**Attitudes towards shopping**
-313 .002** .731

Price consciousness .045 .599 1.046

**Head vs. Heart**
-350 .001** .705

*Sig < .05; ** Sig. < .01

The change in shopping behaviour between the two groups may be explained by four demographic and two psychographic variables. H1 is supported as the demographic findings show that age, employment status and nationality significantly differ between the two behavioural groups. Specifically, young (B .026, sig < .05), non-trade educated (B -.873, sig < .05), Australian (B -1.076, sig < .01) respondents were shown to be less likely to have changed their behaviour during the recession. Gender was also significant; in that males (B 1.084, sig. < .01), were more likely to have changed their behaviour. However, income was not influential with low income and middle income showing no significant difference (sig > .05). In terms of the two psychographic factors, attitudes towards shopping and head vs. heart were found to both have a significant effect (sig. < .01). H2 was supported as the results show a more positive attitude towards shopping lessened the likelihood of changing behaviour during a recession (B -.313, sig. < .01). H4 was supported also, as those respondents less likely to have changed their behaviour during the recession were more likely to be influenced by affective decision making, e.g. their hearts (B -.350 Sig. < .01). H3 specifying that those who had changed their behaviour would be more price conscious was not supported.
Discussion

In partial corroboration with previous research (e.g. Shama, 1981), education (non-trade), and age (more mature) did differ between behaviour groups during a recession, but income did not. This is in contradiction to Zurawicki and Braidot (2005) who found the lower to middle income bracket of the middle class consumer to experience the recession earlier and harder. This may be explained by the fact that while consumers’ may have experienced the current recession they may not have actually changed their shopping behaviour given that Government stimulus packages were passed on to the population with a major focus on the lower to middle income bracket. The insignificance of income supports Weeks (2004) who found respondents’ less likely to reduce spending in an economic downturn as they believed they were already using value retailers. In contrast to Shama (1981), in our study it was the elder population who are more likely to change their shopping behaviour. This makes sense as many of the elderly would have experienced a drop in the value of their superannuation funds. In an effort to match the change in income this would then require a change in their shopping behaviour Nationality was significant with those who identified themselves as Australian nationals less likely to have changed their behaviour.

Those with a more positive attitude towards shopping and using affective decision-making were found to be less likely to have changed their behaviour. This corroborates earlier research (see Donathu and Gilliland, 1996) who found a positive attitude towards shopping to have a positive effect on behaviour. From a recessionary marketing perspective one cannot then deny the importance of attitudes in such times given their evaluative nature and their positive relationship to consumption (Fiske and Taylor, 1991; Eagly and Chaiken, 1993).

From a managerial perspective it may be more effective then to focus on those consumers who have a more positive attitude towards shopping to make more efficient use of resources. This may be even more so, given the lack of significance for price consciousness in influencing consumers’ decisions to change their shopping behaviour. When taken together with the lack of significance of income on behaviour change, marketing managers wishing to survive the recession would need to focus on customer value. This means they should be responsive to changes in the market environment in ways that create value for customers (Ailawadi, Neslin, and Gendenk, 2001) rather than entering into a price war. Additionally our findings support Roberts (2003) who suggests that marketing spending should not be cut during a recession, however, companies need to ensure that such spending is effective, based on a sound understanding of their consumers and what they perceive as value for money.

Limitations/Further Research

An important limitation is the fact that only one geographical region was researched. Further research at both a national and international level is required to corroborate and extend these findings. Additionally, more research on consumers’ decision making processes during a recession is required. A significant influence on behaviour was the psychological factors of attitudes and head vs. heart decision making. Differing levels of cognitive thought could indicate altered levels of involvement with shopping during a recession for some consumer groups. Thus, campaigns based upon either central or peripheral routes to persuasion (Petty, Cacioppo and Schumann, 1983) may be more effective. Finally, comparative cross-cultural research into changes in consumer behaviour would also help to inform retail marketers in terms of potential strategies to encourage purchasing during a recession.
References


