

Comparing and contrasting three brand image measures

Submission for the Award of Masters of Business (Research)

Carl Barrie Driesener

**Marketing Science Centre
University of South Australia**

Supervisors: Dr Jenni Romaniuk and Dr Byron Sharp

February 2002

Abstract

The present study explores the area of brand image measurement. It tests three different brand image measures in order to determine whether they produce the same results. The three measures are a ranking technique, a rating (Likert) technique, and a 'pick any' technique. The study tests the three techniques in a subscription market in Australia at both the aggregate and the individual level. The research involves testing six brands and ten attributes as part of a replication and extension of earlier research in the field.

Brand image has long been of interest to both marketing practitioners and academics, being a key component for both brand equity, and brand positioning. Most brand image research in the past has focused on Scaling techniques, which seek to determine whether there is an association between a brand and an attribute, and, if so, the strength of that association. This group of techniques includes rating (Likert), ranking, Thurstone, and semantic differential scales. The other main grouping is Sorting techniques, which simply seek to ascertain if there is an association. The main technique in this group is the 'pick any' measure. Prior research comparing these two groups has shown that they tend to produce very similar results. In addition, patterns related to brand usage observed in data produced by the pick any technique were also observed in the rating and ranking technique's data.

An important component of the extension of previous research is the individual level analysis. Prior work had focused on a split sample of respondents, each being exposed to a single brand image technique. Individual level comparisons require that each respondent be exposed to at least two of the three techniques, meaning that the individual's usage of the three techniques could be examined in addition to the usual aggregate level patterns.

It is necessary to allow a period of time to elapse between each measurement stage. Brand image has been shown to be affected by usage, hence, if a respondent changed their brand during the research, this would affect their brand image scores. As this research is attempting to determine if respondents use the three techniques in a consistent manner, it would not then be possible to determine if the differences are due to purchases or the different techniques. The advantage offered by the consumer vehicle market used in this research is its long inter-purchase periods, which removed this possibly confounding effect.

Overall, the aggregate level analysis of an initial split sample found the expected brand image patterns. Users were found to score brands higher than non-users, and brand ordering on attributes generally reflected usage. The initial analysis of the data showed a mean brand order correlation between the three techniques of 0.90. This high correlation was present both when the brand ordering of the techniques for an attribute matched that of usage, and when it did not. Regardless of technique, it was found that users of a brand generally give a higher score for that brand than do non-users. This is consistent with previous findings. As part of the expansion of previous research data from each of the techniques was used as the input for correspondence analysis. This type of analysis provides a low (typically two) dimensional, graphical representation of the data. It is also one of the only analytical techniques that can use categorical data as input. While the interpretation of such charts is somewhat subjective, they are useful to show comparable associations between brands and attributes.

Further, brand image patterns were also noted when individual level data was examined. The average brand order correlation between the three techniques was 0.93, the high inter-technique correlations being maintained whether the ordering matched that of usage. Users of a brand tended to score that brand higher than did non-users, regardless of technique. The ranking technique required respondents to rank all brands, which possibly had an effect as the technique had a lower than expected correlation with the other techniques, and a higher than expected correlation with usage. The overall findings, however, were consistent with the first phase of analysis, and with earlier research.

The final phase of the analysis aimed to determine if individual respondents used the techniques in a similar fashion. The results showed a general pattern of scale point correspondence for the positive ratings, and the higher rankings. However, this pattern was not as consistent at the lower or negative end of the ratings. A comparison of means was used to determine if the scores of the ranking, and rating techniques corresponded to the results of the pick any technique. On average, 97% of score differences showed this pattern, and 63% showed a significant difference at the 0.05 significance level. These results reveal that respondents are consistent when using the different brand image measurement techniques.

Overall, the results of this study indicate that the three brand image measurement techniques produce comparable brand orderings. Correspondence analysis reveals similar results regardless of technique, and the individual respondent data demonstrates clear consistencies in the usage of the three techniques. The implications of this finding are that marketers can compare the results of brand image research when different stages have been conducted with different techniques, and that the most suitable technique can be chosen according to needs. In using the ranking technique,

however, it should be noted that it may indicate differences where none exist as a consequence of the technique itself. Requiring the respondent to rank all available brands exacerbates this problem.

The outcomes of this research indicate that there is no 'better' technique, each displays previously observed patterns. All techniques place brands in the same order, thus demonstrating that users are more likely to make an image response about a brand than non-users, and provide similar information when converted to perceptual maps. Therefore, there is no need to be concerned with the techniques producing different results, as this is not the case, with the exception of the ranking technique showing a higher tendency to follow the market share ordering. The advantages of one technique over another are primarily methodological. The difference between the pick any technique, and rating is that the pick any technique is considerably quicker, while the rating technique provides greater accuracy for a smaller sample size. It is the trade off between sample size, and length of survey that should determine the choice of technique.