INTRODUCTION BY GUEST EDITOR:

The State-of-the-Art in Marketing Research

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Marketing research is a rapidly growing field. It is developing an interdisciplinary posture. Scholars from several disciplines contribute to as well as look to the marketing research literature for advances in research methodology. Over the last few years, new developments have taken place in several areas of marketing research. Hence, this special issue on the state-of-the-art in marketing research is very timely and appropriate. This volume brings together significant contributions which describe, analyze, synthesize and evaluate current developments as well as provide proactive directions for future research in several important areas. In particular, attention is focused on six issues, which provide the motivation and stimulation for this special issue.

1. The Current State-of-the-Art

The current state-of-the-art in marketing research is presented by Malhotra (1988). This is done by reviewing the primary and secondary thrust of articles published in the *Journal of Marketing Research* during 1980-1986 to identify important substantive and methodological areas of inquiry. In each of these areas, Malhotra (1988) summarizes the recent developments, highlights the state-of-the-art, offers critical observations, and identifies directions for future research. These areas include consumer behavior, advertising and media models, channels, salesforce management, survey research measurement, econometric models, scaling (including conjoint analysis and MDS), and regression and other statistical techniques. In a recent study by Wheatley and Wilson (1987), Malhotra was ranked number one in terms of Publications in the *Journal of Marketing Research* during 1980 to 1985.

2. New or Relatively Unknown Techniques

This special issue presents several techniques which have not been commonly employed in marketing research. Green and Carroll (1988) provide an intuitively simple method for finding a composite of several multidimensional scaling (or factor analysis) configurations for a common set of stimuli. Their GENCOR and GENCOM procedures utilize a singular value decomposition of a set of standardized input matrices and hence, are computationally convenient. These procedures are a simpler way of implementing Carroll’s (1968) generalized canonical correlation procedure, CANCOR. These procedures are a welcome addition to the arsenal of MDS tools, as in many instances researchers are interested in comparing and examining commonalities exhibited across two or more MDS configurations.

In a somewhat related paper, Zinkham and Locander (1988) propose the use of ESSCA, external single-set component analysis, for examining the relationships between groups of predictors and groups of criterion variables. They also compare this approach with canonical correlation and redundancy analysis. ESSCA is otherwise similar to canonical correlation but is different in that, instead of maximizing the correlation between observed variates, the sum of squared interset loadings is maximized. Unlike canonical correlations, this method ensures that the shared variance between predictor variables and criterion variables is maximized. ESSCA is also similar to redundancy analysis in terms of its purpose. However, unlike redundancy analysis ESSCA implies directionality. Zinkham and Locander (1988) argue that ESSCA is more theory driven and provides for more flexible rotation as compared to the other multiple criterion multiple predictor techniques.
The technique of correspondence analysis has recently appeared in marketing research literature (Hoffman and Franke 1986; Caroll, Green, and Schaffer 1986). This is an exploratory data analysis technique for the graphical display of contingency tables and multivariate categorical data. It scales the rows and columns of a rectangular data matrix in corresponding units so that each can be displayed graphically in the same reduced space. Fox (1988) presents a perceptual mapping procedure using the basic structure matrix decomposition which is essentially equivalent to classical correspondence analysis. This procedure should make correspondence analysis more accessible, particularly as a technique for exploratory data analysis.

Recent advances in computer technology and software design have enhanced the visual display and analysis of multivariate data. Darden and Dorsch (1988) advocate graphical component analysis (GCA) as a method to detect useful general components. They conceptualize the relationship between general component solution and Fourier Series (Franklin 1949) and show that Fourier plots of multivariate data are a visual presentation of all general component solutions. Visual presentation of general components offers advantages over principal component analysis and rotated factor solutions. GCA can be useful in evaluating scales, searching for discriminant functions, developing classifications, evaluating factor solutions, and a variety of other applications.

3. Evaluation of Statistical Techniques

It is only befitting that we pause and critically evaluate the techniques which have recently become popular in marketing research. Causal modeling has certainly gained in popularity. It provides marketing researchers with a useful methodology for assessing two basic components of theory, namely, a mechanism for investigating the hypothesized relationships between and among constructs, and a means for assessing the adequacy with which the constructs have been measured (Bagozzi 1980). However, the issue of how structural equation models should be evaluated has not received due attention. Hence, the paper by Bagozzi and Yi (1988) discussing the evaluation of structural equation models is particularly noteworthy. Bagozzi and Yi define, critique and illustrate the criteria for evaluating structural equation models. The complexities of the model assessment process require a consideration of statistical, philosophical, historical and theoretical elements.

4. Fundamental Issues in Data Analysis

Marketing researchers are sometimes prone to miss the forest for the trees. At times, there is a strong tendency to apply sophisticated techniques of data analysis. However, the more fundamental issues related to the nature of the data being analyzed do not get adequate attention. Babakus and Ferguson (1988) are different in this respect when they examine the appropriateness of various correlation measures based on ordinal data as input to multivariate analysis. Their simulation results indicate that the polychoric correlation outperformed product moment, Spearman’s rho and Kendall’s tau-b measures on the basis of bias and squared error criteria.

5. Modeling of Choice and Market Response

Modeling of consumer choice and market response remain important topics in marketing research (Malhotra 1986, 1987). Kumar (1988) proposes a choice model based on the von Neumann Morgenstern utility function as well as the measurable value function. In the case of uncertainty, the utility function can order only preferences. In the case of certainty, the measurable value function can order both preferences as well as preference differences. He presents a methodology for obtaining responses to the utility function and then transforming that function to a measurable value function. His paper also contains a comparison of utility theory and other popular approaches to measuring consumer utility.

Once the consumers utility or preference functions are estimated, they are invariably used as input to choice simulators in order to determine the share of choice or market shares. Green and Krieger (1988) discuss the issues related to the selection of different buyer choice rules: maximum utility, the Bradley-Terry-Luce model, and the logit model. They describe six different types of sensitivity analysis techniques that can be readily incorporated in choice simulator models. Their paper makes a notable contribution as little has been published on choice simulations. More research is needed on comparing alternative buyer choice rules and on developing other sensitivity analysis procedures. As different choice rules usually lead to different results, their behavior should be compared across different kinds of data.

Rao, Wind and De Sarbo (1988) develop a methodology for building models of marketing mix response to incorporate realistic restrictions and managerial prior information on the parameters. Toward this, they propose a stepwise, log-linear, distributed lag restricted model to estimate the effects of various elements of promotion expenditures on sales using time-series data. They discuss how their approach could be used in other areas of marketing research such as sales force allocation and media mix models. The usefulness of market response models can be greatly enhanced if the models are customized. Customization offers several advantages including the ability to compare market response models for several brands of a multibrand firm.

6. Generalizability of Measures and Findings

Marketing researchers often wish to generalize from the observations at hand to some broader class of observations to which they belong. Rentz (1988) proposes the use of generalizability theory in assessing the dependability of marketing measures. Generalizability theory offers several advantages over the classical reliability theory (Brennan 1983). The multifaceted view