

# A Multidimensional Approach to Measuring Attribute Importance

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## EXTENDED ABSTRACT

### Abstract

Identifying product attributes that are important in consumer judgments is a key objective of consumer research. Unfortunately, the many available methods to identify important attributes often lack convergent and nomological validity. The objective of this research is to gain a better understanding of the determinants of this lack of validity and to outline a framework that will provide convergence for future studies. As such, this research is an important first step in identifying and developing methods that enable both practitioners and scholars to improve the validity of attribute importance measurement.

### Introduction

Identifying product attributes that are important in consumer judgment and choice is a key objective of consumer research, both for practitioners and for scholars. Although there are a wide variety of methods to identify important attributes, the convergent validity among and nomological validity of different methods is often low (e.g., Jaccard, Brinberg, and Ackerman 1986; Heeler, Okechuku, and Reid 1979).<sup>1</sup> Low levels of validity can cause serious empirical and practical problems. Investigating consumer decision-making and behavior (as well as developing new products) strongly depends on understanding the importance of attributes.

### Theoretical Background

Research on attribute importance measurement generally takes a *unidimensional approach* to attribute importance (e.g., Van der Pligt et al. 2000). Building on the work of Meyers and Alpert (1968), we provide a *multidimensional* research framework of attribute importance for understanding the lack of convergent validity among and nomological validity of methods for identifying important attributes. The research framework differentiates between three dimensions of attribute importance: the salience, the relevance and the determinance of attributes (Myers and Alpert 1968, 1977).<sup>2</sup> *Salience* reflects the degree of ease with which attributes come to mind when thinking about or seeing a certain product. The *relevance of attributes* reflects the general importance of attributes for consumers, and is largely determined by consumer desires. The *determinance* of attributes reflects the importance of attributes in judgment and choice.

The rationale for taking a multidimensional approach is that we expect that there is lack of convergent validity among and nomological validity of available methods for identifying important attributes because they identify different dimensions of attribute importance.

<sup>1</sup>Convergent validity identifies whether different measurements reflect the same construct (i.e., are positively correlated). Nomological validity examines whether measures are related to other constructs in a theoretically meaningful way (i.e., predictive accuracy).

<sup>2</sup>We use the term "relevance" instead of "importance," as proposed by Myers and Alpert (1968), and use this latter term to reflect the general concept of attribute importance.

We use the framework to formulate hypotheses regarding which method identifies which specific dimension(s) of attribute importance. We focus on twelve common methods for identifying important attributes: 1) direct-rating method,\* 2) direct-ranking method,\* 3) point-allocation method,\* 4) analytical hierarchy process,\* 5) means-end chain method,\* 6) multiattribute-attitude model, 7) trade-off method, 8) swing-weight method, 9) free-elicitation method,\* 10) conjoint method, 11) information display board,\* and 12) the use of verbal protocols\* (due to space limitations, we cannot discuss each method in detail in this abstract). We hypothesize that the methods marked with an "\*", identify attributes that are salient and valuable to consumers. The other methods are hypothesized to identify determinant attributes.

### Method, Results and Conclusions

Our hypotheses are subsequently tested through a critical and integrative review of seemingly divergent findings in the literature. In line with hypotheses, the results suggest that there is *convergent validity* among and *nomological validity* of methods that identify the *same* dimension(s) of attribute importance. For instance, Srivastava, Connolly, and Beach (1995) report convergent validity among the direct-rating (1) and the analytical-hierarchy process methods (4), both of which we hypothesized that they identify salient and valuable attributes.

Additional evidence for our proposition was obtained by investigating the *discriminant validity* between methods that are hypothesized to identify *different* dimensions of attribute importance. In line with expectations, we find evidence for *discriminant validity* between methods that identify *different* dimensions of attribute importance. For instance, the lack of convergent validity among the direct-rating method (1) and the trade-off method (7) in Fischer's (1995) study may be attributed to the fact that the direct-rating method identifies salient and valuable attributes, while the trade-off method identifies determinant attributes.

Overall, we conclude that there is convergent validity among and nomological validity of methods that identify the same dimensions of attribute importance, while there is discriminant validity between methods that identify different attribute-importance dimensions. These results suggest that taking a multidimensional approach to attribute importance, and relating these dimensions to different methods, may actually be a first step toward more valid attribute importance measurement.

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