 Means-End Theory has been developed in order to understand how consumers link attributes (A) of products with particular consequences (C), and how these consequences satisfy their personal values (V). The associations in the mind of the consumer between A’s, C’s, and V’s are labeled means-end chains (MEC). The MEC data (called laddering data) are collected, content analyzed, and summarized in the form of A-C-V ladders, displayed as rows of a 0/1 ladder matrix $L$ whose columns correspond to A, C, and V laddering categories. Matrix $L$ is traditionally converted to a Summary Implication Matrix, $SIM$, where $SIM = L'L$. The elements of a $SIM$ represent the number of times each laddering category leads to another category.

Numerous studies have shown that techniques using MEC are suitable for analysis of consumer perceptions regarding various products, market segmentation, development of advertising strategies, etc. Despite this abundance of applications, there is no agreement among the researchers as to the way MEC data should be analyzed.

In this paper, we review methods of analysis of such data and suggest the most appropriate procedures. We consider three methods: multidimensional scaling (MDS) of a $SIM$, multiple correspondence analysis (MCA) of a ladder matrix $L$, and canonical correlation analysis (CCA) of $L$. We compare the results of these analyses with the structure depicted by the Hierarchical Value Map ($HVM$), which is the most popular method of analysis of laddering data. For this purpose, we introduce two new measures of structure similarity. The two measures are based on a Summary Ladder Matrix ($SLM$), presented, for the first time, in this paper. A $SLM$ shows the number of times each triad (rather than pair) of the laddering categories was directly associated by all respondents. Matrices $SLM$ and $SIM$ are related. One can obtain the $SIM$ from the $SLM$ but the reverse procedure is impossible. A $SLM$ may, therefore, be considered more important in laddering research than a $SIM$.

The results suggest that, for market segmentation purposes, the $HVM$ can be enhanced by MDS of a summary implication matrix expanded by consumer/product characteristics ($SIM_E$). Other data reduction techniques (e.g., MCA, NCCA, or CCA), applied directly to a ladder matrix expanded by consumer/product characteristics ($L_E$), although inferior to the MDS of $SIM_E$, may shed some additional light on the relationships among the laddering categories and the consumer/product characteristics. Finally, one should always perform MCA, NCCA, and/or CCA, on the consumer/product characteristics alone. The patterns emerging from such analyses should be matched against the patterns found in the previous (aggregated) analyses. Only the patterns that are present in all outcomes may be considered for segmentation purposes.