

## **Annotated Summary of:**

Singh, Jagdip (1990), "A Typology of Consumer Dissatisfaction Response Styles," *Journal of Retailing* 66(1): 57–99.

Chapter 8: Cluster Analysis

Multivariate Data Analysis, Sixth edition

"The world's leading authority on applied multivariate data analysis based on number of citations, as reported by Google Scholar"

The author utilized cluster analysis, as well as factor analysis and discriminant analysis, to develop a categorization system of consumer complaint behavior (CCB) styles. The research design closely follows the recommended six-step process in the text. The author identifies three dimensions of complaint intentions/behaviors that differ based on the type of response (actions directed at the seller, negative word-of-mouth, or complaints to third parties). Based on these three complaint-intentioned behaviors, the author uses cluster analysis to develop groups of similar individuals. Testing whether the response styles would reproduce differences in actual behavior is offered as support for the result's validity. Finally, a number of demographic, personality/attitudinal, and situational variables—identified in prior research as important to understanding consumer complaints—are used to profile the CCB styles.

To form the clusters, the author splits the sample in two using the analysis sample to derive the number of clusters and their centroids and the holdout sample to confirm the stability of the clusters. Using the initial centroids obtained from Ward's clustering method and the Euclidean measurement of distance, a K-means nonhierarchical approach is used. This results in four unique styles of consumer groups: (1) no-action, (2) voice actions only, (3) voice and private actions, and (4) voice, private, and third-party actions. This study uses a coefficient of agreement between the two subsamples to determine the optimal number of clusters. The validity of these results is supported by actual behaviors correctly identified by response styles. The final step involves interpretation and profiling of the cluster membership. Additionally, the author uses multiple discriminant analysis to determine the relative importance of each of the factor and demographic variables for each of the clusters. This study extends previous research and demonstrates the multifaceted nature of complaint styles. Such findings should be of interest to retail managers by increasing knowledge about customers and improving the handling of customer complaints.