## **Bibliography**

- ASTM E253 Terminology Relating to Sensory Evaluation of Materials and Products, ASTM International, W. Conshohocken, PA.
- ASTM E456 Terminology Relating to Quality and Statistics, ASTM International, W. Conshohocken, PA.
- Albaum, G., "The Likert Scale Revisited: An Alternate Version (Product Preference Testing)," *Journal of the Market Research Society*, Vol. 39, No. 2, 1997, p. 331.
- Armstrong, R. L., "The Midpoint on a Five-Point Likert-type Scale," Perceptual Motor Skills, Vol. 64, 1987, pp. 359-362.
- Baxter, I. A., Jack, Schroder, M. J. A., "The Use of Repertory Grid Method to Elicit Perceptual Data from Primary School Children," *Food Quality Preference*, Vol. 9, 1998, pp. 73-80.
- Bendig, A. W. and Hughes, J. B., II, "Effect of Amount of Verbal Anchoring and Number of Rating-Scale Categories upon Transmitted Information," J. Exp. Psychol., Vol. 40, No. 2, 1953, pp. 87-90.
- Booth, D. A., Thompson, A., and Shahedian, B., "A Robust, Brief Measure of an Individual's Most Preferred Level of Salt in an Ordinary Foodstuff," *Appetite: J. Intake Res.*, Vol. 4, 1983, pp. 301-312.
- Connor, M. T. and Booth, D. A., "Preferred Sweetness of a Lime Drink and Preference for Sweet Over Non-Sweet Foods," *Appetite*, Vol. 10, 1988, pp. 25-35.
- Coombs, C. H., "Psychological Scaling Without a Unit of Measurement," Psychol. Rev., Vol. 57, 1950, pp. 145-158.
- Coombs, C. H., A Theory of Data, John Wiley & Sons, Inc., New York, 1964.
- Cooper, L. G. and Nakanishi, M., "Two Logit Models for External Analysis and Preferences" *Psychometrika*, Vol. 48, 1983, pp. 607-620.
- Devlin, S. J. and Dong, H. K., "Selecting a Scale for Measuring Quality," Marketing Res., Vol. 5, No. 3, Summer 1993, p. 12.
- Dixon, P. N., Bobo, M., and Stevick, R. A., "Response Differences and Preferences for All-Category-Defined and End-Defined Likert-Formats," *Educ. Psychol. Measurement*, Vol. 44, 1984, pp. 61-67.
- Earthy, P. J., MacFie, J. H., and Duncan, H., "Effect of Question Order on Sensory Perception and Preference in Central Location Trials," J. Sens. Stud., Vol. 12, 1997, pp. 215-237.
- Ennis, Daniel M., Analytic Approaches to Accounting for Individual Ideal Points, IFPress, Vol. 8, No. 2, 2005, pp. 2-3.
- Epler, S., Chambers, E., IV, and Kemp, K. E., "Hedonic Scales are a Better Predictor than Just-About-Right Scales of Optimal Sweetness in Lemonade," J. Sens. Stud., Vol. 13, 1998, pp. 191-197.
- Gacula, M. C., Jr., "Analysis of Incomplete Block Designs with Reference Sample in Every Block," J. Food Sci., Vol. 43, 1978, pp. 1461-1466.
- Gacula, M. C., Jr., Rutenbeck, S., Pollack, L., Resurreccion, A., and Moskowitz, H. R., "The just-about-right intensity scale: Functional analyses and relation to hedonics," J. Sens. Stud., Vol. 22, 2007, pp. 194–211.
- Gacula, M. C., Jr., Singh, J., Bi, J., and Atlan, A., *Statistical Methods in Food and Consumer Research*, 2nd edition, Academic, San Diego, CA, 2009.
- Grapentine, T., "Problematic Scales: When Measuring Quality, Expectations Scales Exhibit Several Drawbacks," *Marketing Res.*, Fall 1994.
- Gridgeman, N. T., "A Comparison of Some Taste-Test Methods," J. Food Sci., Vol. 16, 1961, pp. 171-177.
- Holbrook, M. B., "Situation-Specific Ideal Points and Usage of Multiple Dissimilar Brands," *Res. Marketing*, Vol. 7, 1984, pp. 93-131.
- Jones, L.V., Peryam, D. R., and Thurstone, L. L., "Development of a Scale for Measuring Soldiers' Food Preferences," Food Res., Vol. 20, 1955, pp. 512-520.
- Johnson, J. and Vickers, Z., "Avoiding the Centering Bias or Range Effect When Determining an Optimum Level of Sweetness in Lemonade," J. Sens. Stud., Vol. 2, 1987, pp. 283-292.
- Kamakura, W. K., "Estimating Flexible Distributions of Ideal-Points with External Analysis of Preferences," *Psychometrika*, Vol. 56, pp. 419-431.
- Kim, W., Ennis, D., and O'Mahony, M., "A New Approach to Category Scales of Intensity II: Use of *d* Values," *J. Sens. Stud.*, Vol. 13, 1998, pp. 251-267.
- Lawless, H. T. and Heyman, H., Sensory Evaluation of Food Principles and Practices, Chapman and Hall, New York, 1998.
- Lawless, H. T. and Malone, G. J., "The Discriminative Efficiency of Common Scaling Methods," J. Sens. Stud., Vol. 1, 1986, pp. 85-98.
- Likert, R., "A Technique for the Measurement of Attitudes," Arch. Psychol., 1932, p. 140.
- MacKay, D. B., "Probabilistic Unfolding Models for Sensory Data," Food Quality Preference, Vol. 12, 2001, pp. 427-436.
- MacKay, D. B., Easley, R. F., and Zinnes, J. L., "A Single Ideal Point Model for Market Structure Analysis," *J. Marketing Res.*, November 1995, pp. 32, 433-443.
- McBride, R.L., "Range Bias in Sensory Evaluation," J. Food Technol., Vol. 17, 1982, pp. 405-410.
- McBride, R. L., "Stimulus Range Influences Intensity and Hedonic Ratings of Flavour," Appetite, Vol. 6, 1985, pp. 125-131.

- McBride, R. L. and Booth, D. A., "Using Classical Psychophysics to Determine Ideal Flavour Intensity," *J. Food Technol.*, Vol. 21, 1986, pp. 775-780.
- McKelvie, S. J., "Graphic Rating Scales-How Many Categories?," Br. J. Psychol., Vol. 69, 1978, pp. 185-202.
- Meilgaard, M., Civille, G.V., and Carr, B.T., Sensory Evaluation Techniques, 4th Edition, CRC Press, Boca Raton, FL, 2006.
- Moskowitz, H. R., "Subjective Ideals and Sensory Optimization in Evaluating Perceptual Dimensions in Food," J. Appl. Psychol., Vol. 56, 1972, pp. 60.
- Moskowitz, H. R., Food Concepts and Products: Just In Time Development, Food & Nutritions Press, Trumbull, CT, 1994.
- Moskowitz, H. R., "Learning from the Competition through Category Appraisal: One Practitioner's Keys to Faster and More Efficient Product Development," *Food Service Technol.*, Vol. 1, No. 2, 2001a, pp. 103-118.
- Moskowitz, H. R., "Sensory Directionals for Pizza: A Deeper Analysis," J. Sens. Stud., Vol. 16, No. 6, 2001b, pp. 583-600.
- Moskowitz, H. R., "On the Analysis of Product Test Results: The Relation among Liking, Sensory and Directional Attributes," http://www.mji-designlab.com/articles/lang6.htm.
- Moskowitz, H. R., Munoz, M. S., and Gacula, M. C., Viewpoints and Controversies in Sensory Science and Consumer Product Testing, Food & Nutrition Press, Inc., Trumbull, CT, 2003.
- Moskowitz H. R., "Just About Right (JAR) Directionality and the Wandering Sensory Unit. In Data Analysis Workshop: Getting the Most Out of Just-About-Right-Data," *Food Quality Preference*, Vol. 15, 2004, pp. 891-899.
- Myers, R. H. and Montgomery, D. C., *Response Surface Methodology: Process and Product Optimization using Designed Experiments*, John Wiley & Sons, Inc., New York, 1995.
- Pangborn, R. M. and Giovanni, M. E., "Dietary Intake of Sweet Foods and of Dairy Fats and Gustatory Responses to Sugar in Lemonade and to Fat in Milk," *Appetite*, Vol. 5, 1984, pp. 317-327.
- Pangborn, R. M., Guinard, J. X., and Meiselman, H. L., "Evaluation of Bitterness of Caffeine in Hot Chocolate Drink by Category, Graphic, and Ratio Scaling," J. Sens. Stud., Vol. 4, 1989, pp. 31-53.
- Parducci, A. and Perrett, L. F., "Category Rating Scales: Effects of Relative Spacing and Frequency of Stimulus Values," J. Exp. Psychol. Monogr., Vol. 89, 1971, pp. 427-452.
- Pearce, J. H., Korth, B., and Warren, C. B., "Evaluation of Three Scaling Methods for Hedonics," J. Sens. Stud., Vol. 1, 1986, pp. 27-46.
- Piggott, J. R., Sensory Analysis of Foods, 2nd Edition, Elsevier Applied Science, New York, 1989.
- Pokorny, J. and Davidek, J., "Application of Hedonic Sensory Profiles for the Characterization of food Quality," *Die Nahrung*, Vol. 8, 1986, pp. 757-763.
- Popper, R., Rosenstock, W., Schraidt, M., and Kroll, B. J., "The Effect of Attribute Questions on Overall Liking Ratings," Food Quality Preference Vol. 15, 2004, pp. 853-858.
- Popper, R., Schraidt, M., and Kroll, B. J., "When do Attribute Ratings Affect Overall Liking Ratings," presented at the Sixth Pangborn Sensory Sciences Symposium, Harrogate International Center, York, August 7-11, 2005.
- Poulton, E. C., "Models for Biases in Judging Sensory Magnitude," Psychol. Bull., Vol. 86, 1979, pp. 777-803.
- Riskey, D. R., "Use and Abuses of Category Scales in Sensory Measurement," J. Sens. Stud., Vol. 1, 1986, pp. 217-236.
- Rothman, L. R., "The Use of Just-About-Right (JAR) Scales in Food Product Development and Reformulation," in *Consumer* Led Food Product Development, Woodhead Publishing Limited, Cambridge, England, 2007.
- Schutz, H. G., "Consumer DataSense and Nonsense," 1999, http://147.46.94.112/journal/sej/full/fqp9907v10i4-503.pdf.
- Shepherd, R., Farleigh, C. A., Land, D. G., and Franklin, J. G., "Validity of Relative-to-Ideal Rating Procedure Compared with Hedonic Rating," *Progress in Flavor Research*, 4th Weurman Flavour Research Symposium, 1984.
- Shepherd, R., Farleigh, C. A., and Wharft, S. G., "Effect of Quality Consumed on Measures of Liking for Salt Concentrations in Soup," J. Sens. Stud., Vol. 6, 1991, pp. 227-238.
- Shepherd, R., Griffiths, N. M., and Smith, K., "The Relationship Between Consumer Preference and Trained Panel Responses," J. Sens. Stud., Vol. 3, 1988, pp. 19-35.
- Stewart, D. W., Shamdasani, P. N., and Rook, D. W., Focus Groups: Theory and Practice, 2nd Edition, Thousand Oaks California: Sage Publications, 2007.
- Stone, H. and Sidel, J. L., Sensory Evaluation Practices, 3rd Edition, Academic, San Diego, CA, 2004.
- Stone, L. J. and Pangborn, R. M., "Preferences and Intake Measures of Salt and Sugar, and Their Relation to Personality Traits," *Appetite*, Vol. 15, 1990, pp. 63-79.
- Takane, Y., "Ideal Point Discriminant Analysis and Ordered Response Categories," Behaviormetrika, Vol. 26, 1989, pp. 31-46.
- Tang, Chen, Heymann, and Hildegarde, "Multidimensional Sorting, Similarity Scaling and Free-Choice Profiling of Grape Jellies," J. Sens. Stud., Vol. 17, No. 6, 2002, 493-509.
- Teas, R. K., "Expectations, Performance Evaluation, and Consumers' Perceptions of Quality," J. Marketing, Vol. 57, 1993, pp. 18-34.
- Teas, R. K., "Expectations as a Comparison Standard in Measuring Service Quality: An Assessment of a Reassessment," J. Marketing, Vol. 58, 1994, pp. 132-139.
- Thurstone, L. L., "Attitudes Can Be Measured," Am. J. Sociol., Vol. 33, No. 4, 1928, pp. 529-552.

van Trip, H., Punter, P., Mickartz, F., and Kruithof, L., "The Quest for the Ideal Product," *J. Food Quality Preference*, 2007.
Vickers, Z., "Sensory Specific Satiety in Lemonade using a Just Right Scale for Sweetness," *J. Sens. Stud.*, Vol. 3, 1988, pp. 1-8.
Vickers, Z., Holton, E., and Wang, J., "Effect of Ideal-Relative Sweetness on Yogurt Consumption," *Food Quality Preference*, Vol. 12, No. 8, 2001, pp. 521-526.