

MAGNITUDE SCALING

Quantitative Measurement of Opinions

MILTON LODGE

State University of New York at Stony Brook

Technische Hochschule Darmstadt
Fachbereich 3
Fachgebiet Psychologie
61 Darmstadt, Hochschulstr. 1

Inv.-Nr. 9106976

6.4 SAG 25



SAGE PUBLICATIONS Beverly Hills London

Institut für Psychologie TU Darmstadt



56431241

CONTENTS

1. **Introduction to the Magnitude Scaling of Social Judgments** 5
2. **Overview of Psychophysics** 7
 - Exercise A: Numeric Estimation of Metric Stimuli 8
 - The Power Law 12
 - Exercise B: The Category Scaling of Metric Stimuli 13
 - Exercise C: Comparison of Magnitude to Category Scales 16
 - Exercise D: Numeric Estimation of Social Stimuli 18
3. **The Validation of Magnitude Scales** 24
 - The Cross-Modality Matching Paradigm 26
 - The Transition from Sensory to Social Psychophysical Scaling 30
 - An Adjectival Scale for Measuring Political Support 32
 - A Laboratory-Derived Scale of Support 33
 - Testing the Support Scale in the Real World 39
4. **The Magnitude Scaling and Validation of Social Opinion Scales in Survey Research** 42
 - General Procedures for Survey Research Applications 42
 - Response Modalities 42
 - The Survey Instrument 43
 - The Calibration of Response Modalities 44
 - Instructions for the Calibration of the Line and Number Response Measures 44
 - Preparation of Calibration Data 46
 - Calculation of the Geometric Mean 46
 - Analysis of the Cross-Modal Matches to the Calibrating Metric 47
 - Error-in-Both-Variables Regression 50
 - Survey Instructions for the Magnitude Scaling of Social Items 50
 - Analysis of the Matches to Social Scale Items 52
 - Guidelines for the Correction of Regression Bias 54
 - Calculation of Social Scale Values 54
 - The Analysis of Individual-Level Response Data 56
 - Employing Stimulus-Type Magnitude Scales in Survey Instruments 57
 - Problems and Prospects of the Scale-Building Approach 58

5. The Direct Magnitude Scaling of Political Judgments	59
General Scaling Procedures	60
Survey Instructions for Direct Magnitude Scaling	61
Calculation of Scale Values	64
The Plotting and Analysis of Direct Magnitude Judgments	65
Analysis of Ratio Relationships	68
6. Comparing Category to Magnitude Scales of Social Opinion	69
7. Research Decisions	72
Comparability	73
Time Costs	73
Alternative Strategies to the Cross-Modality Matching Paradigm	74
Skipping the Calibration Procedure	74
One Response Measure Without Calibration	75
The Use of One Calibrated Response Measure	75
8. Conclusion: The Relative Utility of Magnitude Over Category Scales	76
Notes	79
References	83