Contents

Chapter 1. The ASSIST Evaluation Project: An Overview	1
Introduction	
The ASSIST Evaluation	13
Summary	24
Conclusions	26
References	26
Chantar 2 The Strongth of Tahasaa Cantral Index	21
Chapter 2. The Strength of Tobacco Control Index	۱ ن دد
Development of the Strength of Tobacco Control Index	
Collection, Analysis, and Validation of SoTC Data	
Results of SoTC	
Use of the SoTC to Evaluate Individual State Programs	
Summary	
Conclusions.	
References	
NCIGICIICES	00
Chapter 3. Measuring Policy and Legislative Changes	87
Introduction	
State and Local Government Action for Tobacco Use Prevention and Control	90
The Value of Monitoring Policy and Legislative Changes	91
Methods for Rating the Comprehensiveness of Tobacco Control Laws	93
State and State+Local Rating Results	100
Summary	104
Conclusions	105
References	106
Chapter 4. Initial Outcomes Index	111
Introduction	
Tobacco Use Outcome Measures	114
Defining and Selecting Initial Outcomes	
Initial Outcomes Selected for the ASSIST Evaluation	
The IOI for Policy	
Summary	
Conclusions	
References	138

Chapter 5. State Facilitating Conditions and Barriers to Implementation of	
Tobacco Control Programs	141
Introduction	143
Overview of Influences	144
State Conditions Selected for the ASSIST Evaluation	145
Data Sources	
Other Potential Covariates	151
Summary	155
Conclusions	156
References	158
Chapter 6. Measuring the Impact of Tobacco on State Economies	163
Introduction	
Background	166
Studies on the Economic Impact of Tobacco	171
Measuring the Economic Impact of Tobacco for ASSIST	174
State Data and Trends	175
Summary	181
Conclusions	182
References	182
Chapter 7. The ASSIST Newspaper Tracking System	185
Introduction	
The Challenge of Measuring the Effect of Media Interventions	
Tracking the Articles	190
Trend Analyses	195
Summary	201
Conclusions	204
References	211
Chapter 8. Evaluating Tobacco Industry Tactics as a Counterforce to ASSIST	213
Introduction	
Expert-based Conceptual Map of Industry Tactics	217
Review of the Published Literature on Tobacco Industry Tactics	224
Review of Tobacco Industry Documents	
Tobacco Industry Tactics: An Evaluation Challenge	254
Summary	
Conclusions	256
References	257

Chapter 9. Final Outcomes: Analytical Methods and Results	265
Introduction	
Overall Considerations for Analysis	
Adult Smoking Prevalence	
Per Capita Cigarette Consumption	
Primary Results	
Secondary Results (SoTC and IOI Analyses)	
Summary	
Conclusions	
References	302
Chapter 10. Cost-effectiveness of ASSIST	305
Introduction	
A Cost-effectiveness Analysis: The Basic Approach	308
Cost-effectiveness: ASSIST	310
Summary	
Conclusions	323
References	323
Chapter 11. The ASSIST Evaluation: Contributions to Evaluation of Complex Public Health Initiatives	325
Introduction	
Challenges to Evaluating ASSIST	
Response to Evaluation Challenges	
Key Findings of the ASSIST Evaluation	
What Do These Results Mean?	
The Legacy of the ASSIST Evaluation	334
The Future of Tobacco Control	336
Using the ASSIST Evaluation Approach for Other Public Health Initiatives	338
Summary	339
Conclusions	340
References	344
Index	351
Case Study	
Case Study 7.1. Editorials Promote a Stronger Youth Access Law in North Carolina	201

Tables

Table 1.1. Comparison of COMMIT and ASSIST	12
Table 1.2. Key Constructs and Variables Initially Proposed for the ASSIST Evaluation	
Table 1.3. Research Questions Guiding the ASSIST Evaluation	21
Table 1.4. Final Constructs and Variables Used for the ASSIST Evaluation	25
Table 2.1. The Constructs, Domains, and Measures of the Strength of Tobacco Control Index Table 2.2. Standardized Strength of Tobacco Control Index and Construct Scores,	
1999–2000, by State, Sorted by SoTC Scores	
Table 2.3. Correlation of Legislative Scores (1999) with SoTC Scores (1999)	
Table 2.4. Correlation of Tobacco Use Prevalence (2000) with SoTC Scores (1999)	
Table 2.5. Inputs: Resources and Capacity, Sorted by Funds	
Table 2.6. Components of the Efforts Construct, Sorted by Efforts Score	52
Table 2.E.1. Within-method Correlation Analysis of Domain-level Strength of Tobacco	
Control Variables	79
Table 2.E.2. Within-method Correlation Analysis among Three Constructs and Overall	0.0
Strength of Tobacco Control for Full Model	80
Table 2.E.3. Within-method Correlation Analysis among Three Constructs and Overall	
Strength of Tobacco Control for Reduced Model	80
Table 2.E.4. Amount of Variability Explained by First Three Factor Loadings in Principal	0.1
Components Analysis	81
Table 3.1. Target Criteria Rated with 4 Points for Items in the Youth Access Policy Area	94
Table 3.2. Target Criteria Rated with 4 Points for Items in the Clean Indoor Air Policy Area	95
Table 3.3. Summary Scores for Youth Access Legislation, All States, 1993–99	100
Table 3.4. Summary Scores for State Clean Indoor Air by Preemption Score Adjustment and	
Year, All States, 1993–99	101
Table 3.5. State+Local Clean Indoor Air Summary Scores by Year, 1993–98	103
Table 3.6. State+Local Summary Scores for Clean Indoor Air for ASSIST and	
Non-ASSIST States, 1993–98	103
Table 4.1. Real Price of Cigarettes, 1992–99	121
Table 4.2. Legislative Score Including Preemption and Local Adjustment	
Table 4.3. Percentage of Indoor Workers with Smoke-free Workplaces	
Table 4.3. Percentage of Indoor Workers with Smoke-free Workplaces	127
Table 4.4. Correlations among Initial Outcomes in 1992—93 and 1998—99	127 129
Table 4.4. Correlations among Initial Outcomes in 1992—93 and 1998—99 Table 4.5. Initial Outcomes Index	127 129
Table 4.4. Correlations among Initial Outcomes in 1992—93 and 1998—99 Table 4.5. Initial Outcomes Index Table 4.6. Correlation of Initial Outcomes with Final Outcomes and Change in	127 129 131
Table 4.4. Correlations among Initial Outcomes in 1992–93 and 1998–99	127 129 131 133
Table 4.4. Correlations among Initial Outcomes in 1992–93 and 1998–99	127 129 131 133
Table 4.4. Correlations among Initial Outcomes in 1992–93 and 1998–99	127 129 131 133

Table 7.1. Examples of Key Words for Search Strategy	192
Table 7.2. Definitions of Coded Variables	
Table 7.3. Examples of Tobacco Topics	
Table 7.4. Average Rate Variables for Each Year Analyzed (District of Columbia Excluded)	
Table 8.1. Clusters and Statements in Descending Order, by Average Importance Rating	221
Table 8.2. Lobbying and Legislative Strategy	
Table 8.3. Legal and Economic Intimidation and Creating the Illusion of Support	
Table 8.4. Usurping the Agenda	
Table 8.5. Harassment	
Table 8.6. Undermining Science	230
Table 8.7. Media Manipulation and Public Relations	231
Table 8.8. Industry Tactics to Oppose Specific Public Health Initiatives	232
Table 8.9. Tobacco Industry Behavior at State and Local Levels	
Table 9.1. Baseline Characteristics of ASSIST and Non-ASSIST States	270
Table 9.2. Covariates at Individual and State Levels	275
Table 9.3. Results of Regression Analysis of Smoking Prevalence for ASSIST Status,	
by Sex and Age	277
Table 9.4. Adjusted Differences in per Capita Cigarette Consumption between ASSIST and	
Non-ASSIST States during the Intervention Period	281
Table 9.5. IOI Analyses of the Impact of SoTC, as a Main Effect, on IOI and	
the Components of IOI	282
Table 9.6. Results from Regression Analysis of Smoking Prevalence for Strength of	
Tobacco Control	285
Table 9.7. Results from Regression Analysis of Smoking Prevalence for	
Initial Outcomes Index	285
Table 9.8. Results from Regression Analysis of per Capita Cigarette Consumption for	
Strength of Tobacco Control	286
Table 9.9. Results from Regression Analysis of per Capita Cigarette Consumption for	
Interactions of Strength of Tobacco Control and ASSIST Status	287
Table 9.10. Results from Regression Analysis of Temporal Pattern of per Capita	
Cigarette Consumption for Strength of Tobacco Control	288
Table 9.11. Results from Regression Analysis of per Capita Cigarette Consumption for	
Initial Outcomes Index	288
Table 9.12. Results from Regression Analysis of per Capita Cigarette Consumption for	
Interactions of Change in Initial Outcomes Index and Its Components with ASSIST Status	289
Table 10.1. ASSIST Total State Expenditures	
Table 10.2. ASSIST per Capita Expenditures (Adult Population, 18 Years Old and Older)	
Table 10.3. Life-years Gained Attributable to ASSIST: Women	
Table 10.4. Cost-effectiveness with Various Recidivism Rates	
Table 10.5. Cost-effectiveness with Various Changes in Women's Prevalence Rates	
Table 10.6, Fraction of Lifetime Smoker Quits Attributable to ASSIST	314

Figures

Figure 1.1. Trends over Time in Tobacco Control Projects and Their Evaluation	
Figure 1.2. NCI's Five Phases of Cancer Control Research	
Figure 1.4. ASSIST Evaluation Timeline	
Figure 1.5. Final Conceptual Framework Used for ASSIST Evaluation	
Figure 2.1. Heuristic Map of Components Proposed for Strength of Tobacco Control Index	37
Figure 2.2. Strength of Tobacco Control Scores by State	
Figure 2.3. Resources Construct Scores by State	
Figure 2.4. Efforts Construct Scores by State	
Figure 2.5. Capacity Construct Scores by State	
Figure 2.6. Change in Tobacco Control Funding (in Dollars), 1991–98	
Figure 2.E.1. Factor Analysis for Full Model	
Figure 2.E.2. Strength of Tobacco Control—Full ModelFigure 2.E.3. Strength of Tobacco Control—Reduced Model	
Figure 2.F.1. Basic Conceptual Framework	
Figure 3.1. Mean Youth Access Summary Scores by Year and Preemption Status	
Figure 3.2. Mean Clean Indoor Air Summary Scores by Year and Preemption Status	102
Figure 4.1. Real Price of Cigarettes Versus Adult Smoking Prevalence, 1992–93	122
Figure 4.2. Real Price of Cigarettes Versus per Capita Cigarette Consumption	
Figure 4.3. Legislative Score Versus Adult Smoking Prevalence	
Figure 4.4. Legislative Score Versus per Capita Cigarette Consumption	
Figure 4.5. Workplace Smoking Ban Versus Adult Smoking Prevalence	
Figure 4.6. Workplace Smoking Ban Versus per Capita Cigarette Consumption	
Figure 4.7. Initial Outcomes Index Versus Adult Smoking Prevalence	
Figure 4.8. Initial Outcomes Index Versus per Capita Cigarette Consumption Figure 4.9. Change in Initial Outcomes Index Versus Change in Adult Smoking Prevalence	
Figure 4.10. Change in Initial Outcomes Index Versus Change in Per Capita	134
Cigarette Consumption	134
Figure 4.11. Trends in per Capita Cigarette Consumption for States in Each Tertile	101
Group of Tobacco Control Initial Outcomes Index	135
Figure 5.1. Interactions of Forces Acting to Influence Tobacco Use	
Figure 6.1. Tobacco Leaf Production	
Figure 6.2. Tobacco Leaf Production and Cigarette Production, Consumption, and Exports	
Figure 6.3. Tobacco Leaf Production and Exports, and Imports' Share in U.S. Use	
Figure 6.4. Tobacco Farming and Manufacturing as Share of Gross State Product, 2000 Figure 6.5. Tobacco Farming and Manufacturing as Share of Gross Domestic Product,	170
United States	178
Figure 6.6. Tobacco Farming and Manufacturing as Share of Gross State Product,	1, 0
North Carolina	178

Figure 6.7. Tobacco Growing and Manufacturing as Share of Gross State Product,	
Kentucky	179
Figure 6.8. Tobacco Farming and Manufacturing as Share of Gross State Product, Virginia	179
Figure 6.9. Tobacco Farming and Manufacturing as Share of Gross State Product,	170
Georgia	180
Figure 6.10. Tobacco Farming and Manufacturing as Share of Gross State Product,	100
South CarolinaFigure 6.11. Tobacco Farming and Manufacturing as Share of Gross State Product,	180
Tennessee	181
Figure 7.1. Article Type by Year, 1993–2000	197
Figure 7.2. Policy Topic by Year, 1993–2000	
Figure 8.1. Point-cluster Map Showing the Multidimensional Scaling Arrangement of	
the 88 Statements with the Eight-cluster Solution Superimposed	223
Figure 8.2. Concept Map Showing Clusters and Relative Importance Ratings	224
Figure 8.3. Experts' Interpretation of the Industry Tactics Concept Map	225
Figure 9.1. Bimonthly per Capita Cigarette Consumption in ASSIST and	
Non-ASSIST States	278
Figure 9.2. Crude Difference in Bimonthly per Capita Consumption of Cigarettes between ASSIST and Non-ASSIST States	280
Figure 9.3. Yearly Initial Outcomes Index Average for ASSIST and Non-ASSIST States	
Figure 9.B.1. Examples of States with Nonlinear Trends in Bimonthly per Capita	
Cigarette Consumption after 1993.	297
Figure 9.B.2. Random Effects Analysis with 95% Confidence Interval of Difference in	200
per Capita Cigarette Consumption (Non-ASSIST Minus ASSIST)	Z98
Appendices	
Appendix 2.A. Assessment Rating of Variables	
Appendix 2.B. Key Elements of Strength of Tobacco Control Efforts	
Appendix 2.C. Agency Worksheet	
Appendix 2.E. Validation of the Strength of Tobacco Control Model	
Appendix 2.F. Construct Validation of Strength of Tobacco Control	
Appendix 5.A. Baseline Values for Variables Considered in the ASSIST Evaluation Analyses	157
Appendix 7.A. Coding Topics	205
Appendix 7.B. Search Strategies	207
Appendix 9.A. Issues Related to Selection of Methods for Analyzing Smoking Prevalence	
Appendix 9.B. Approaches to Analyzing per Capita Cigarette Consumption Data	296

Appendix 9.C. Outcome Measures: Per Capita Cigarette Consumption (Packs/Month) and	
Adult (18 Years and Older) Smoking Prevalence (%)	301
Appendix 11.A. Crude Prevalence, Initial Outcomes Index, and Strength of	
Tobacco Control Index, by State	342